AN EXAMINATION OF THE INTERRELATION OF NARRATIVE AND EMOTION
PROCESSES IN EMOTION-FOCUSED THERAPY FOR TRAUMA

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Abstract

According to narrative-informed approaches to psychotherapy, self-narratives that no longer align with lived experience, and thereby impede coherent meaning-making, often bring individuals into treatment. Exposure to trauma can result in fragmented or disorganized self-narratives, and Emotion-focused Therapy for Trauma (EFTT) (Paivio & Pascual-Leone, 2010) is one treatment approach that helps trauma clients access, explore, and integrate traumatic memories into coherent personal narratives.

The Narrative-Emotion Process Coding System (NEPCS 2.0; Angus Narrative-Emotion Marker Lab, 2015) is a video-based coding system that consists of 10 narrative-emotion markers (i.e., client storytelling processes) that have been divided into three NEPCS marker subgroups, based on their degree of narrative-emotion integration: Problem, Transition, and Change markers.

The aim of the current study was to examine the relationship between NEPCS markers and outcome (i.e., recovered vs. unchanged) across stage of therapy in a complex trauma sample receiving EFTT (N = 12 clients). The key hypotheses included: recovered clients would have significantly higher proportions of Transition markers in the early and middle stages of therapy, and significantly higher proportions of Change markers in the late stage of therapy, while unchanged clients would have significantly higher proportions of Problem markers across all stages of therapy. Additionally, recovered clients would have significantly higher proportions of shifting (i.e., movement between one NEPCS marker and a different NEPCS marker), and significantly higher proportions of productive shifting (i.e., movement away from Problem markers), whereas unchanged clients would have higher proportions of unproductive shifting (i.e., movement to Problem markers).
Results suggested that, in line with theoretical expectations and previous NEPCS research applications, recovered clients showed significantly higher proportions of Transition and Change markers, whereas unchanged clients demonstrated higher proportions of Problem markers. Increased levels of NEPCS shifting, or flexibly moving between NEPCS markers, was also associated with recovery. Furthermore, recovered clients demonstrated significantly higher proportions of productive shifting, while their unchanged counterparts demonstrated more unproductive shifting, suggesting that the type of narrative flexibility may be an important prognostic indicator. A direction for future NEPCS research is to elucidate therapeutic interventions that facilitate client movement from unproductive to more productive modes of narrative-emotion processing.
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Introduction

Overview

The disclosure of personal experience through storytelling is a universal human phenomenon. By weaving together an assortment of lived experiences into a story-like structure, individuals create meaning from the events of their lives (Neimeyer, 2000). “Telling oneself about oneself is like making up a story about who and what we are, what’s happened, and why we’re doing what we’re doing” (Bruner, 2004, p. 4). Storytelling is also a relational act: we construct stories to make connections with others, to convey information, and to be understood (Singer & Rexhaj, 2006).

A reciprocal relationship exists between narrative and emotion processes. Indeed, Damasio (1999) contended that “the first impetus to story an experience is the awareness of an inner bodily felt feeling”. It is the narrative organization of salient emotional themes, and their related intentions, purposes, expectations, and desires that provides the lens through which we evaluate and understand our experiences and ourselves. This narrative organization helps one to identify what was felt, about whom, and in relation to what need or issue (Greenberg & Angus, 2004). As such, a therapeutic process that involves the “storying” of one’s lived experience through the dyadic exploration of emotions and their unique significance helps clients to clearly articulate and understand their own personal stories. Once an awareness and understanding of their own story emerges, from a radically reflexive position (Rennie, 2007), clients become better equipped to modify them in important and meaningful ways (Angus & Greenberg, 2011).

Not surprisingly, then, storytelling is a fundamental part of psychotherapy, and accordingly, one role of the therapist is to assist clients in mobilizing their agency to become active authors of their own personal story (White, 2007). A client’s identity may undergo
reconstruction as the individual has new self-experiences in the world and begins to articulate and reflect upon them during the therapy hour (Angus & McLeod, 2004).

The stories or narratives of trauma survivors are often disorganized, incoherent, overgeneral, and/or incomplete when disclosed in therapy sessions (O’Kearney & Perrott, 2006; Römisch, Leban, Habermas, & Döll-Hentschker, 2014; van der Kolk & Fisler, 1995). Trauma experiences are said to occur in nonverbal memory structures and to bypass the verbal level; as such, these experiences remain unintegrated within the broader life story (van der Kolk, Pelcovitz, Roth, Mandel, McFarlane & Herman, 1996). Emotion-focused Therapy for Trauma (EFTT) (Paivio & Pascual-Leone, 2010), however, provides an opportunity for trauma survivors to connect with emotionally-charged memories and imbue them with meaning through the symbolization of the experience in affectively-nuanced language that promotes new, more coherent views of self, others, and traumatic events (Paivio & Pascaul-Leone, 2010).

The individual contributions of narrative and emotion to psychotherapeutic process and outcome have been explored with increasing interest in recent decades; however, the integration of these two processes in psychotherapy is a topic rarely addressed in the literature, particularly with respect to the treatment of trauma. A study by Boritz and colleagues (2011) was the first to point to the integration of narrative and emotion processes as a vehicle for therapeutic change, revealing that increased autobiographical memory (ABM) specificity and expressed emotional arousal were predictive of recovery from depression (Boritz, Angus, Monette, Hollis-Walker, & Warwar, 2011). More recently, the narrative-emotion process (N-EP) model (Angus & Greenberg, 2011) and the Narrative-Emotion Process Coding System (NEPCS 2.0; Angus Narrative-Emotion Marker Lab, 2015; Boritz, Bryntwick, Angus, Greenberg, & Constantino, 2014; Carpenter, Angus, Paivio, & Bryntwick, 2016; Boritz, Barnhart, Angus, & Constantino,
have been developed to identify clinically significant narrative-emotion process events or “markers” (i.e., client storytelling processes, such as Same Old Storytelling) within psychotherapy sessions. Using this coding system and manual (NEPCS 1.0), Boritz and colleagues (2014) found that one subgroup of narrative-emotion process markers, in which under-regulated or over-regulated emotional states remain unintegrated or poorly integrated within client self-narratives, was associated with clinically significant depression scores at therapy termination. This cluster or subgroup of markers was termed NEPCS Problem markers. Another subgroup of markers, in which emotional states were integrated in adaptive ways within the personal story, was significantly related to recovery from depression at termination. This subgroup was termed NEPCS Change markers. In addition, shifting between one NEPCS marker and a different NEPCS marker across each minute of therapy, postulated to indicate flexibility in narrative-emotion processing, was found to be positively associated with recovery from depression (Boritz, 2012; Boritz et al., 2016).

In order to explore the role of narrative-emotion processing in a complex trauma population, Carpenter and colleagues (2016) completed a pilot study ($N=24$ sessions) which applied the NEPCS to a sample of 4 clients receiving EFTT, and found a large effect size for the proportion of Change makers and Problem markers on therapeutic outcome. In an effort to extend these preliminary findings, the present study applied a refined version of the NEPCS (NEPCS 2.0; Angus Narrative-Emotion Marker Lab, 2015) to an expanded sample of EFTT clients ($N=72$ sessions), which included the 4 clients from Carpenter et al.’s pilot study. The refined version of the NEPCS further differentiated the original NEPCS markers, identified several new NEPCS markers, and delineated and validated an additional subgroup of markers (i.e., NEPCS Transition markers).
The goal of the present study was to examine the relationship between NEPCS marker subgroups (e.g., Problem markers) and individual NEPCS markers (e.g., Same Old Storytelling) and therapeutic outcome (i.e., recovered vs. unchanged outcome groups) across stage of therapy (i.e., early vs. middle vs. late stages). Furthermore, the relationship between the amount and type of NEPCS shifting (productive vs. unproductive) and therapeutic outcome across stage of therapy was also examined.

In the sections to follow, a review of the literature regarding the role of narrative in the development of identity will be presented, including a discussion of the impact of narrative organization on psychological well-being. Next, the relationship between narrative processes and psychotherapy will be presented, as well as an exploration of the disruptions in narrative processes and emotion regulation that result from trauma. The benefits of the integration of narrative and emotion within therapy to clients suffering from trauma will then be explored, followed by a discussion of narrative and emotion processes in Emotion-focused Therapy (EFT). A description of the measures used in narrative-informed psychotherapy process research will follow, with particular emphasis on the development of the NEPCS used in this study. To conclude, a detailed description of the current study, and the research questions to which the study was directed, will be presented.

**Literature Review**

**Narrative Identity**

Gonçalves, Korman, and Angus, (2000) suggested that human beings are impelled to continuously make sense out of their experiences in the world, and this meaning-making occurs through the ordering of discrete life events into a narrative structure that provides a sense of stability, connectedness, and coherence to our lived experiences. The act of building stories
around our lived experiences “with intelligible plots...exemplifying underlying themes, and targeted toward abstract goals” (Neimeyer, 2006, p. 70) is central to identity formation. Noted literary theorist Paul Ricoeur (1986) coined the term “narrative identity” to describe the process by which the self comes into being through the act of narrating a life story. As such, narrative is conceptualized as not only the medium through which life experiences are represented, but also as serving a constructive function in the development of the self. “Personal narration gives continuity to self and meaning to action as it locates and values present activity in the context of past experience and projected outcomes” (Fireman, McVay, & Flannagan, 2003, p. 5). Bruner (2004) described this process as the development of an autobiography, and argued that attention must be given to what is conceptualized and articulated in the self-narrative, and in particular, how we tell ourselves and others about who we are, how this telling changes over time, and how our experiences are shaped by the narrative accounts we relay. The stories that shape our identity evolve across time as we encounter new people, experiences, and circumstances.

As individuals, we also adopt culturally sanctioned standards about who we should and should not be, and come to both know and speak about ourselves as though these standards reflect our true being. In addition, the recollection of a past event may be shaped as much by our experience now as by our experience at the time. As Bruner suggests,

...the ways of telling and the ways of conceptualizing...become recipes for structuring experience itself, for laying down routes into memory, for not only guiding the life narrative up to the present but directing it into the future...a life as led is inseparable from a life as told—or more bluntly, a life is not ‘how it was’ but how it is interpreted and reinterpreted, told and retold. (p. 708)

The self-narrative is therefore an internalized life story that helps individuals make sense of experiences both privately (to themselves) and publicly (to other people). Its development occurs as distinct life events are organized temporally and thematically with respect to intra- and
interpersonal subject matter (Angus, 2004; Angus, Levitt, & Hardtke, 1999; White, 2004), thus providing a sense of self-coherence by highlighting established and emerging patterns across experiences and within situations. It also functions to account for inconsistent aspects of the self that emerge in various relationships and situations (Greenberg & Angus, 2004), and as such, the self-narrative is subject to revision if new experiences challenge underlying assumptions or core beliefs.

Accordingly, the stories we construct are only one version of many possible versions of ourselves (Bruner, 2004), are not static, and may not be a completely accurate reflection of historical truth. McAdams (2010) posited that our narrative identity is like a "personal myth, an imaginative reconstruction of the past and anticipation of the future that aims to explain how a person came to be and where a person's life may be going." McAdams also underscored the flexibility of self-narrative construction when he suggested that it can be shaped and reshaped over time. The feelings provoked by an unexpected event often disrupt a sense of personal continuity, and an individual's capacity to integrate the new and discrepant information into the existing self-narrative, or conversely, to engage in the process of revision, results in differing psychological outcomes (Arciero & Guidano, 2000). In particular, individuals with incoherent or incomplete self-narratives are often vulnerable to psychological and emotional difficulties (Tuval-Mashiach, Freedman, Bargain, Boker, Hadar, & Shalev, 2004) because they lack a stable sense of self, making it difficult to self-reflect, regulate distressing emotions, or access adaptive action tendencies (Paivio & Pascual-Leone, 2010; Angus & Kagan, 2013).

From a developmental perspective, it has been proposed that the sharing of stories from autobiographical memory is an interpersonal process that emerges in the context of primary caregiving relationships in childhood (Cassidy, 1994; Nelson & Fivush, 2004) and that the
capacity to reflect on and understand emotional experiences and life events (termed \textit{reflective function}) is related to early interpersonal conversations or story sharing with responsive caregivers (Fonagy, Gergely, Jurist & Target, 2002). Early attachment patterning can shape an individual's attachment style over the course of development, through the formation of \textit{internal working models}, the mental representations of autobiographical memories and emotional states related to the self and others (Belsky & Fearon, 2008). Bateman and Fonagy (2013) theorized that secure attachments provide "security in mental exploration" and allow the securely attached individual to access, reflect on, and integrate painful and distressing personal memories.

Macaulay, Angus, Bryntwick, Carpenter, and Khattra (under review) postulated that clients with low reflective functioning may evidence narrative incoherence and emotional dysregulation when trauma memories are triggered in therapy sessions. As such, reflective functioning may be intrinsically linked to an individual’s narrative process.

\textbf{Narrative Organization of Subjective Experience}

\textbf{Narrative coherence.} Narratives are often evaluated by considering the extent to which they convey a coherent understanding of an event, or experience, with a greater degree of coherence indicating more adaptive, differentiated self-narratives (Adler, Skalina, & McAdams, 2008). For Habermas and Bluck (2000), narrative coherence is not a unitary construct. These authors advanced four different types of narrative coherence: (1) \textit{Temporal coherence} refers to the chronological ordering of memories with reference to other significant historical or personal life events; (2) \textit{Biographical coherence} sorts events using a culturally prescribed notion of expected life sequences, such as graduating high school, then embarking on a career, followed by getting married and starting a family; (3) \textit{Thematic coherence} refers to connecting events across the lifespan along thematic lines (e.g., central themes, metaphors, life lessons); and (4) \textit{Causal
coherence is exemplified by reflecting upon the ways in which the self is shaped by life events, thereby accounting for changes occurring in the narrator over time. When causal links between life events and the evolution of the self are lacking, "life appears to have been determined by chance and therefore to be meaningless" (p. 751).

To Adler and colleagues (Adler, Skalina, & McAdams, 2008), the concept of narrative coherence extends beyond the "mere intelligibility of text, [and] rather must be conceptualized from a phenomenological perspective" (p. 722). They argued that the use of emotional language in conveying a particular story emphasizes its importance and indicates why it is worth telling, as noted by Angus and Greenberg (2011). When an event is interpreted intellectually without reference to the emotional consequences, the significance remains ambiguous.

Baerger and McAdams (1999) devised a coding scheme to assess the degree of coherence in life stories along four key dimensions, including one that highlights the role of emotion: (1) **Orientation** refers to the ways in which the characters, events, and action of the story are located in a specific context; (2) **Structure** refers to the temporal sequences of goal-directed activity; (3) **Affect** refers to whether the story contains clear and comprehensible emotional expression; and (4) **Integration** refers to the ways in which the narrated event(s) is connected to broader meanings and themes. Of particular interest, the importance of emotional expression to the concept of narrative coherence has been underscored by both Adler and colleagues (2008) and Baerger and McAdams (1999), suggesting that emotional coherence, or the extent to which a story integrates what happened with how it felt, is another important domain of the construct of narrative coherence.

McAdams (2006) further broadened the landscape of narrative coherence by embedding it within a cultural context. He wrote:
Any consideration of narrative coherence must eventually come to terms with the characteristic assumptions regarding what kinds of stories can and should be told in a given culture, what stories are understandable and valued among people who live in and through a given culture. And the same consideration cannot be divorced from cultural expectations regarding what kind of lives people should live. (p. 123)

McAdams, then, suggested that narrative coherence is in part determined by the listener, or audience, who comes from a culture with implicitly defined expectations about how and why stories should be told. Accordingly, the "stories that defy structural expectations about time, intention, goal, causality, or closure may fail to elicit curiosity and interest and may strike audiences as incoherent, or at least incomplete" (McAdams, 2006, p. 111). When this happens, listeners may disengage, and these stories may remain unheard or even untold. In fact, it may be that these are the very kinds of stories that some individuals bring to therapy.

**Narrative pathology.** Drawing on Michael White’s (2007) Narrative Therapy Model, Ribeiro and colleagues (Riberio, Bento, Gonçalves, & Salgado, 2010) posited that problematic self-narratives are narrative accounts characterized by inflexible, problem-saturated themes that impede the emergence of alternative meanings and implications. Consequently, an “adaptive” narrative contains a variety of perspectives and plotlines, and allows for a complex, multidimensional view of the self and the world. A maladaptive narrative, alternatively, encompasses a limited or rigid set of perspectives within an often singular and overly simplistic plotline (Gonçalves et al., 2000). According to Gonçalves and colleagues (2000), problematic narratives are characterized by a rigid adherence to and re-articulation of old themes. Therefore, a pathological narrative is defined by “a strict and inflexible ruling of prototype narratives...the individual is stuck with a prototype narrative as an invariant aspect of meaning making where all the stories, current or past, are rendered meaningful within this same, inflexible plot” (p. 278). McAdams (2010) echoed this understanding, remarking: “stories that succumb to a single
dominant perspective, no matter how coherent they may seem to be, are too simplistic to be true; they fail to reflect lived experience” (p. 119). It therefore follows that, although narrative coherence plays an important role in adaptive psychological functioning, it should not come at the cost of neglecting the richness and diversity of lived experience (Gonçalves et al., 2000). The true challenge, then, becomes “finding a balance between a rigid adherence to a single voice and the risk of fragmentation when one attends to a multiplicity of narrative voices” (Singer & Rexhaj, 2006, p. 215).

The concept of impoverished narratives, as a specific kind of pathological narrative, has been advanced by Dimaggio and Semerari (2001). These authors argued that impoverished narratives lack important aspects of the lived experience – namely, they fail to convey the emotional impact of an event, lack imagistic detail, provide limited personal perspective or elaboration of one’s inner world, and lack a clear sense of relational dynamics with others.

Lysaker and Lysaker (2006) extended the concept of narrative impoverishment to include dimensions of narrative flexibility. This view arises from the dialogical model (Dimaggio, Salvatore, Azzara, & Catania, 2003; Hermans, 2004), which posited that a sense of self is achieved through the interaction of multiple, varied, and relatively independent ‘I’ positions, or “voices” that each contribute the story of their own experience, and may also exchange information from their respective positions (Hermans, 1996). As such, a narrative sense of self emerges from ongoing dialogues that occur both within ourselves and between ourselves. Within this model, then, psychopathology is thought to result from the dominance of one ‘I’ position over all others, or an extreme disharmony between ‘I’ positions that precludes adaptive integration (Avdi & Georgaca, 2007). In the view of Lysaker and Lysaker (2006), impoverished
narratives result from truncated dialogical processes between ‘I’-positions, and can take the form of barren, monological, and cacophonous narratives.

Barren narratives contain only details about an event, and are lacking in emotional language. Additionally, information about the self-experience may be limited and subscribing to an overly rigid predominant theme, which makes the coherent integration of novel events very challenging. Barren narratives are similar to the concept of *Empty Storytelling* from the narrative-emotion framework advanced by Angus and Greenberg (2011), in which client narratives focus on event details and lack the emotional content necessary to communicate personal significance. Monological narratives are similar to the notion of the “dominant narrative” conceptualization of White and Epston (1990) and Neimeyer (2006), in which experiences are framed and organized in a rigid thematic structure that resists revision and reduces “diverse interpersonal interactions into the same old story, replacing nuance with a single-minded and often misguided understanding of intentions and actions” (Singer & Rexhaj, 2006, p. 215). Monological narratives are similar to the notion of Angus and Greenberg’s *Same Old Storytelling*, or client narratives that represent an overgeneral description of a repetitive, maladaptive intra- or interpersonal theme(s). In contrast, cacophonous narratives occur when multiple voices or positions within the self begin to communicate simultaneously or in an illogical order, thereby creating a sense of internal confusion and incoherence.

**Narrative and Psychotherapy**

Within most forms of psychotherapy, clients rely on personal story disclosures to relay significant self- and other-related experiences to the therapist. Consequently, a central task of many approaches to therapy is to highlight and explore the internal processes that contribute to problematic client narratives, such that they may be revised to become more novel,
differentiated, coherent, and meaningful stories (Rosen, 1996). In the field of psychotherapy research (Angus & McLeod, 2004), the narrative approach is a burgeoning theoretical landscape that elucidates how individuals construct stories about their lives, the ways in which these stories are communicated to the self and others, and the processes by which understandings related to the self, others, and the world are both gleaned and represented (Singer, 2004).

Moreira, Beutler, and Gonçalves (2008) posited that narrative in psychotherapy is a trans-theoretical construct that represents the myriad ways in which individuals link language and psychological processes, including perception, emotion, memory, and analysis. From this narrative perspective, psychological problems are conceptualized as the result of self-narratives that fail to fully account for important aspects of the lived experience, and thus psychotherapy provides a unique opportunity for “story repair” in which incoherent, superficial, or incomplete self-narratives are reframed in more coherent, nuanced, and inclusive ways (Angus & Kagan, 2013; Angus & McLeod, 2004; Avdi & Georgaca, 2007).

Although increased narrative coherence may indicate productive processing in the therapeutic context, some degree of narrative incoherence is “inevitable and maybe even desirable in the course of therapy, where clients struggle to reformulate or recombine elements of their life stories” (Daniel, 2009, p. 310). Holmes (1999) argued that psychological health “depends on a dialectic between story-making and story breaking, between the capacity to form narrative, and to disperse it in the light of new experience” (p. 59). The therapist is faced with the challenge of helping clients to develop a more integrative and coherent life story when it has become too disjoined and disorganized, and additionally, to deconstruct a life story that has become too overarching and inflexible (Gonçalves, Ribeiro, Mendes, Matos, & Santos, 2011). *Narrative flexibility*, or the ability to shift between the constructive and destructive modes of
storytelling, is thought to be fundamental to the process of change in psychotherapy (Angus, Boritz, & Carpenter, 2013), and has recently been identified as a key indicator of recovery from depression in CCT, EFT, and CT therapy (Boritz et al., 2014).

An important distinction, then, must be made between narrative disruption and narrative development. Narrative disruption occurs when an individual’s ability to integrate a lived experience (i.e., life events and one’s emotional reactions to them) into a coherent self-narrative is compromised (Neimeyer, 2002; 2006, 2009). By contrast, narrative development is the process by which a person’s lived experiences are endowed with coherence and meaning through the self-organizing act of storytelling (Ribeiro, et al., 2010). An important task for a therapist is to understand this clinically relevant distinction in their role as “co-editor of the unfolding narrative” (Avdi & Georgaca, 2007, p. 408). As the importance of narrative processes to the therapeutic interaction becomes increasingly evident, psychodynamic, experiential, systemic, constructivist, and cognitive therapy practitioners and researchers use narrative perspectives to understand and explain the therapeutic process (e.g., Angus & Greenberg, 2011; Gonçalves, 1995; Schafer, 1992; White & Epston, 1990).

**Narrative Disruption and Trauma**

The capacity to articulate a coherent self-narrative may be disrupted by the heightened arousal that accompanies trauma, which impedes the integration of remembered events and emotion. Neimeyer (2006) postulated three types of narrative disruption that can occur in association with trauma: disorganized narratives, dissociated narratives, and dominant narratives. *Disorganized narratives* occur when fragments of memory, which are incompatible with an individual’s current life story and threaten the rules and assumptions by which one lives, intrude into consciousness much like “unmetabolized images or experiences.” For example, the
death of a loved one in a terrorist attack represents a traumatic loss that often challenges an individual’s existing worldview. In dissociated narratives, certain traumatic experiences and painful emotions are blocked or disconnected from awareness, and subsequently remain untold or unacknowledged to the self and others. As such, “critical aspects remain hidden, unintegrated, and without social validation or support” (p. 73-74). For example, an individual may attempt to recast the suicide of a loved one as death by accidental cause. Dominant narratives (White & Epston, 1990) are socially, culturally, or politically sanctioned descriptions of individuals or societal groups that are overly cohesive and reductionistic, and can quash more preferred self-narratives, such as when defining oneself as a “cancer patient” or “rape victim.”

Pierre Janet (1928, as cited in van der Kolk & van der Hart, 1995) wrote that the ease with which current experience becomes integrated into pre-existing mental schemas is related to an individual’s intersubjective interpretation of the event as familiar or novel. Therefore, if the event is commonplace, it will be effortlessly assimilated without much awareness of specific details. Conversely, unusual experiences, particularly those that evoke traumatic and/or frightening emotions, may not fit into existing mental schemas. Accordingly, these traumatic experiences may instead be encoded in a sensorimotor or affective mode (e.g., sensations, images, emotions, and movements) and remain unavailable for conscious recall, as they are unintegrated into existing meaning schemes, such as autobiographical memory narratives (Mollon, 2002). These unintegrated sensory/affective memories are often fragmented and, as such, are an important focus for narrative structure and new meaning-making (Paivio & Pascual-Leone, 2010) in therapy sessions focused on trauma.

Angus (2012) suggested that the interaction between narrative and meaning-making processes allows clients to symbolize and organize emotional experiences as integrated, coherent
stories. Exposure to trauma, however, may disrupt the integration of emotion, cognition, and memory systems, and prevent emotional and narrative coherence (Freer, Whitt-Woosley & Sprang, 2010; Newman, Riggs & Roth, 1997). As noted above, narrative incoherence can present as temporal confusion, impoverished detail, repetition, and unfinished thoughts (Halligan, Michael, Clark & Ehlers, 2003; Jelinek, Stockbauer, Randjbar, Kellner, Ehring & Moritz, 2010), and is speculated to result from the fragmented quality of trauma memories. Often, these memories are re-experienced as intrusive and jumbled recollections of bodily sensations, sounds, smells, and images that are disconnected from language (Beaudreau, 2007; Rubin, Feldman & Becham, 2004; Tuval-Mashiach, Freedman, Bargain, Boker, Hadar & Shalev, 2004; van der Kolk, Hopper & Osterman, 2001). Accordingly, failure to generate a complete, intelligible, and emotionally elaborated trauma story appears closely linked to trauma-related pathology. Traumatic memories are often difficult to weave together into a meaningful account, and can sometimes even disrupt an individual’s sense of self and life story (Wigren, 1994).

Angus and Greenberg (2011) postulated that narrative and emotion processes work in tandem to create meaning that can be explored and elaborated in psychotherapy. By forging connections between the body and mind, or affect and story, the process of narration helps to organize, contain, and regulate emotion. The powerful, intrusive, and repetitive quality of trauma memories may reflect a failure to integrate emotional content in narrative form, thereby impeding meaning-making and serving to maintain psychological symptoms that erode one's sense of stability, self-coherence, and emotional control (Angus & Greenberg, 2011).

A 2005 study examined the impact of trauma on narrative processing by comparing written trauma narratives of children who suffered sexual abuse to the same children’s written accounts of a different stressful life event (Mossige, Jensen, Gulbrandsen, Reichelt & Tjersland,
Trauma narratives were found to be more disorganized, and less coherent, elaborated, and contextualized than narratives of stressful events. The authors noted a key difference between the two categories of written accounts, namely the dearth of meaning-making which occurred in trauma narratives as a result of insufficient clarification of causal connections, and an inability to make sense of the event. It may be the case that trauma narratives carry less meaning than other narratives, due to the limited capacity of survivors to verbally articulate and reflect on their traumatic experience(s). For instance, a large survey conducted on the female employees, with and without a rape history, in a medical center and university in Arizona, found that rape memories were more emotionally disturbing, and less vivid, well-remembered, and meaningful, and less often discussed when compared to unpleasant, non-rape memories (Tromp, Koss, Figuerdo & Tharan, 1995). The authors proposed that memories associated with rape are often difficult to disclose to others due to feelings of shame and embarrassment, so that participants may have refrained from openly discussing the event. A number of studies have also reported a relationship between severity of post-traumatic stress disorder (PTSD) symptomatology and poor verbal recall, verbal learning, and verbal fluency (Bustamante, Mellman, David & Fins, 2001; Wild & Gur, 2008).

The quality of trauma narratives has also been used as an index of emotional processing of traumatic event(s) (Pennebaker, 1997). In particular, coherent narratives, or accounts which provide a sense of temporality, causality, and references to internal experience and significance, have been found to be predictive of resolution of trauma (Flese & Wamboldt, 2003). Narrative coherence is associated with the concept of experiencing, or the ability to attend to and explore one’s internal subjective experience. Kunzle and Paivio (2009), for example, analyzed the
trauma narratives of individuals who later received EFTT and found that lower levels of experiencing were related to increased trauma symptoms at pre-treatment. Accordingly, Paivio and Pascual-Leone (2010) stated that “trauma disrupts meaning…and the capacity of individuals to make sense of their experiences, to put trauma into perspective, and to fit it into their life.” Taken together, these results suggest that individuals whose trauma is unresolved may struggle to disclose and articulate in words the full experience of what happened. As such, narratives of trauma survivors are likely to be fragmented and incoherent, contain more negatively-valenced emotion, and reveal unsuccessful attempts at meaning-making.

**Emotion Regulation and Trauma**

In their discussion of complex trauma, Paivio & Pascual-Leone (2010) contended that the experience and symbolization of an emotion is foundational to the creation of meaning, serving to organize human experience and direct attention to issues of importance to survival and success. In the case of trauma, however, it has been theorized that individuals attempt to avoid or blunt emotional experience, often paradoxically exacerbating painful affect (Amstadter & Vernon, 2008; Angus & Greenberg, 2011; Seligowski, Lee, Bardeen, & Orcutt, 2015; van der Kolk, Roth, Pelcovitz, Sunday & Spinazzola, 2005). In line with this hypothesis, Amstadtr & Vernon (2008) found that emotional suppression, thought suppression, and avoidant coping mechanisms predicted the presence of psychopathology related to trauma. These results suggest that emotional over-control is a maladaptive emotion regulation strategy that may contribute to trauma-related distress.

A 2004 study by Paivio and McCulloch also highlighted the association between complex trauma, emotion dysregulation, and psychological distress. The results revealed that, among female undergraduate students, difficulty identifying and communicating emotional experiences
mediated the relationship between childhood maltreatment and self-injurious behaviour. Therefore, the ability to recognize emotional experience, but also to articulate the experience in words, may mitigate the negative psychological consequences of past traumas.

**Narrative and Emotion Processes in Psychotherapy**

It has been widely theorized that individuals process information through both a rational, analytical, and largely verbal system, and through an experiential, affective, and sensory system (Epstein, 1994). According to the dialectical-constructivist theory (Greenberg & Pascual-Leone, 1995; 2001), these two systems do not function in isolation, but rather meaning is generated through an on-going dialectic between immediate sensorimotor experience and iterative mental representations of that experience in consciousness. Accordingly, narrative construction may be viewed as a rapid integrative process that interconnects these dual modes of information processing (Epstein, 1994).

Angus and Greenberg (2011) recently introduced a narrative-informed approach to EFT that emphasizes the integration of embodied emotional experiencing and narrative organizational processes in psychotherapy. They drew on a dialectical constructivist model (Greenberg & Pascual-Leone, 1995, 2001), and proposed that individuals generate meaning through the narrative organization of their emotional experience. More specifically, Angus and Greenberg delineated the importance of narrative and emotion integration in psychotherapy for the facilitation of productive outcomes and self-narrative change (Greenberg & Angus, 2004). In the context of this framework, these authors argued that a sense of self is generated through an iterative process of identifying and symbolizing emotions and actions as one’s own, and constructing an embodied narrative that offers temporal stability and coherence to these experiences. These authors further argued that the organization of lived experience as a coherent
story is central to the formation of a sense of self. Theoretically, individuals come to understand who they are through the act of symbolizing their emotional experience in narrative form and telling themselves and others about who they are. Salient personal stories become part of a self-narrative that thematically organizes important intra- and interpersonal experiences, creating a sense of self-coherence and stable identity.

Accordingly, the construction of an emotionally rich and differentiated account of the self and others is seen to enhance self-reflection and emotional regulation, support the development of agency or a sense of control over one’s life experience, and provide the possibility for new interpersonal outcomes. As clients experience new and sometimes incongruous emotional responses and meanings through recounting events of the past, the beliefs, desires, and feelings previously attributed to actions of the self and others undergo significant transformation. In these moments, clients’ views of themselves and others are altered in important ways, providing the impetus to construct a new, emotionally coherent narrative which accounts for what happened and why, what was felt, in relation to whom, and about what need or issue (Angus & Greenberg, 2011). Effective psychotherapy, then, occurs through the dyadic experiencing, disclosure, and reflexive exploration of salient emotional themes and events, which promotes the generation of new meaning and the subsequent reconstruction of important personal narratives (Angus, 2004, 2012; Hollis-Walker, 2005).

**Benefits of Narrative and Emotion Integration in Trauma**

A growing body of literature on the narratives of trauma survivors indicates that because these individuals often struggle to integrate distressing events into their life story, their narrative accounts can be incoherent and devoid of meaning or personal significance. It has been suggested, however, that purposeful exploration of traumatic events, and experiential
engagement with the associated emotional content, may preclude the recurrence of intrusive
thoughts and avoidant coping, and may instead promote meaning-making and insight (Hayes,
Goldfried & Feldman, 2007). Accordingly, a primary goal in the treatment of trauma is to
encourage and facilitate clients’ exploration and articulation of fragmented trauma memories
such that a coherent and meaning-filled narrative is generated and can serve to order events, and
contain and regulate affect.

Greenberg and Pascual-Leone (1995) suggested that a life event is understood as a person
attends to, reflects upon, and symbolizes in language the “bodily felt sense” associated with the
lived experience of that event. From this, events are connected to characters and linked to one
another through causal chains, which evoke and account for emotion (Wigren, 1994). Angus
(2012) suggested that emotions are imbued with meaning when organized and understood within
a coherent narrative framework that identifies how one is feeling, about whom one is feeling that
way, and what particular issues or needs are involved. Moreover, when symbolized in a
narrative structure, emotional responses can be more easily regulated, promoting effective intra-
and interpersonal coping (Angus, 2012).

According to Paivio and Pascual Leone (2010), the trauma-related memories of survivors
are often disconnected from language, resulting in emotional dysregulation, “empty” narratives,
and difficulty integrating events and associated emotions in meaningful ways. The
symbolization of emotions through verbal expression is said to support regulatory capacities and
narrative coherence among trauma survivors, and may therefore be associated with the resolution
of trauma-related distress.

In a 1999 review of the literature, Esterling, L’Abate, Murray and Pennebaker examined
the benefits of translating emotional experiences into language. The authors concluded that
writing about trauma allows for significant emotional processing of a traumatic experience. In addition, participants who recounted the details of the trauma in connection with the accompanying affective responses, evidenced the most enduring mental and physical health benefits.

Based on the theory and research discussed, it is clear that the association between narrative and emotion plays an important role in the treatment of trauma disturbances. Although the benefits of translating traumatic emotional experience into written accounts of the event has been explicated in the literature, the impact of meaningful narratives articulated as part of the therapeutic dialogue within session remains largely unexplored. The section to follow will first present an overview of complex trauma, and then, discuss a specific emotion-focused treatment for complex trauma. Finally, the development of a tailored coding system to address narrative and emotion processes will be outlined (i.e., NEPCS), as well as its application to treatments of depression, generalized anxiety disorder (GAD), and complex trauma.

**Simple (Single Incident) and Complex Trauma**

According to the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; American Psychiatric Association, 2013), a traumatic event is one in which an individual experiences or witnesses actual, or threatened, serious bodily injury (including death) to the self or another, and subsequently suffers from extreme fear, helplessness, or horror. Conceptualizations of traumatic events have broadened over time to include not only exposure to the violence of war, but also to experiences of natural disasters, childhood abuse, domestic violence, accidents, and sudden loss of a loved one, among others (Courtois & Ford, 2012).

Trauma can be classified according to duration as simple trauma (Type I) or complex trauma (Type II). Simple trauma refers to a single, sudden, and highly distressing event that can
have lasting psychological sequelae. Complex trauma, conversely, involves recurring, expected, and cumulative exposure to trauma, is almost always interpersonal in nature, and typically results in a more complicated symptomatic and diagnostic picture (Courtois, 2004). Survivors of repeated or persistent trauma often exhibit symptoms which are more severe than those associated with simple posttraumatic stress disorder (PTSD). In addition, prolonged trauma can have a profound impact on personality functioning, creating disturbances in self-identity and social relatedness. Some of the symptoms most commonly associated with both simple and complex trauma include PTSD, depression, anxiety, dissociation, substance abuse, self-harm, and somatic complaints (Burns, Jackson & Harding, 2010; Courtois & Ford, 2012; Dyer, Dorahy, Hamilton, Corry, Shannon...McElhill, 2009; Van Ameringen, Mancini, Patterson & Boyle, 2008).

Of particular interest to the current study, emotion dysregulation and narrative incoherence have been associated with complex trauma (Ehring & Quack, 2010). Trauma survivors exposed to emotional, physical, and sexual maltreatment during childhood often go on to develop several psychiatric disturbances that adversely affect their sense of well-being as adults. As such, a profound necessity exists for intervention by mental health professionals who understand the injurious consequences of trauma, as well as the processes which promote resolution and recovery.

**Narrative and Emotion Integration in Emotion-Focused Therapy for Trauma (EFTT)**

EFTT is a brief experiential psychotherapeutic treatment (16-20 weekly sessions) that was specifically developed to address the symptoms and distress associated with complex, interpersonal trauma (Paivio & Pascual-Leone, 2010). To date, EFTT is the only empirically supported therapy for both men and women who are victims of childhood physical, emotional,
and sexual abuse and neglect (Paivio, Hall, Holloway, Jellis, & Tran, 2001; Paivio, Jarry, Chagiogorgis, Hall, & Ralston, 2010; Paivio & Nieuwenhuis, 2001; Paivio & Pascual-Leone, 2010).

The dual focus of EFTT is to address the symptoms of distress, and to resolve issues with the perpetrators of abuse and neglect (Paivio & Pascual-Leone, 2010). There is also growing evidence of its long-term efficacy in sustaining clinically significant gains in symptom reduction and abuse-related difficulties in intra- and interpersonal functioning (Paivio, et al., 2010; Paivio & Nieuwenhuis, 2001). The fundamental assumption underlying EFTT is that recovery from trauma involves the symbolization of traumatic experiences in language. Accordingly, an indicator of resolution and recovery is that narratives about traumatic events become more coherent, affectively-focused, meaningful, and self-reflective.

In trauma, emotional dysregulation is a core symptom. A central goal of EFTT, then, is to access, explore, and integrate traumatic memories and their related affect in order to regulate emotional experience, provide resolution to long inhibited feelings (such as anger, sadness, guilt, or shame) and unmet needs in relation to the perpetrator(s) of abuse/neglect, and to create new, more adaptive meanings associated with traumatic experiences (Paivio & Pascual-Leone, 2010). By accessing and re-experiencing the trauma-related emotions in the safety of a strong therapeutic alliance, new details regarding what happened and how it felt emerge for the client, which enables the creation of new meaning in relation to the self, others, and the traumatic event (Paivio & Pascual-Leone, 2010,). As such, EFTT highlights the importance of the integration of experiential and linguistic systems for recovery from trauma (Paivio & Kunzle, 2007). More specifically, as clients evoke, re-experience, and narrate traumatic material in EFTT, they are
able to reprocess memories, differentiate emotions, make sense of their experiences, and develop a coherent and complete personal narrative (Angus & Greenberg, 2011).

The efficacy of EFTT is supported by one outcome study (Paivio & Nieuwenhuis, 2001), and a more recent clinical trial (Paivio et al., 2010) in which significant improvements in client functioning across numerous domains were sustained through to follow-up. EFTT uses a marker-driven approach, in which therapists attend to and monitor the moment-by-moment processing of a client, and potential indicators for intervention (Paivio & Pascual-Leone, 2010). Similarly, the narrative-emotion process markers proposed by Angus and Greenberg (2011) draw on observable in-session client behaviours and utterances that reveal underlying narrative and/or emotional processes, and may indicate opportunities for effective therapist interventions in the context of EFTT. The use of reliable measures of narrative-emotion processes is critical for investigating mechanisms of change in EFTT, and will be discussed in the next section.

**Narrative-Informed Psychotherapy Process Measures**

**The dialogical model and the innovative moments coding system.** Over the past several decades, a number of systems have been developed which allow for the empirical investigation of narrative content and movement. The Innovative Moments Coding System (IMCS; Gonçalves, Matos, & Santos, 2009) arose within the context of Hubert Herman’s (1992) dialogical model, which posited that the ‘self’, as conveyed in narrative form, emerges from ongoing dialogues between various internal ‘voices’ or ’I-positions’ as they oppose, negotiate, inform, and align with one another. Drawing on Michael White’s Narrative Therapy Model (2001), Gonçalves and colleagues (2009) argued that dialogical disruption results from the dissolving of heterogeneous voices into one dominant and constricted monologue, termed the *problem-saturated story* (White and Epston, 1990). These narratives tend to prescribe rigid
guidelines for thoughts, feelings, and behaviours, and any experiences that fall outside of this narrow frame of reference tend to be overlooked or trivialized. Innovative Moments (IMs), then, are indicated when novel thoughts, feelings, or behaviours occur that are in opposition to, or disagreement with, the dominant problematic narrative. The IMCS is used to track the emergence of IMs within an unfolding therapy session (e.g., when a moment of insight occurs) or those which take place between sessions (e.g., discussing and reflecting upon a new, more adaptive behaviour that was sustained throughout the week).

The IMCS has five categories: (1) action IMs are behaviours that are in opposition to or incongruent with the problematic narrative; (2) reflection IMs are new understandings that contradict or refute the problematic pattern; (3) protest IMs occur when the individual begins to reject or disavow the problematic self-narrative; (4) reconceptualization IMs occur when an individual recognizes that a change has occurred within themselves, and begins to articulate the transformational process; and finally, (5) performing change IMs refer to instances of anticipating or planning new experiences at the personal, professional, or relational level. Performing change IMs also occur when an individual has participated in a new experience across one or multiple domains, and discusses an emergent behavioural shift.

From an IMCS perspective, the change process, in keeping with the principles of the dialogical model, is said to arise from movement between action, reflection, and protest IMs, which then interact with reconceptualization IMs to promote transformative narrative change. This is often an iterative process that may occur many times before lasting narrative change is reached (Gonçalves et al., 2009). IMs are unique opportunities for new, more tenuous narrative voices to gain strength in the face of deeply entrenched and often maladaptive dominant plotlines.
In 2010, Mendes, Ribeiro, Angus, Greenberg, Sousa, and Gonçalves investigated the change process in EFT for depression by examining the incidence of each IM category across good and poor outcome clients receiving EFT treatment. Of interest, the results revealed a significantly higher incidence and increased elaboration of reconceptualization and performing change IMs in the good outcome clients as compared to the poor outcome clients. As such, the authors suggested that these two IM subtypes appear important to the change process in EFT. Furthermore, they hypothesized that reconceptualization IMs allow for an integration of the problematic self-narrative and a newly emerging self-narrative, which supports a sense of empowered authorship through explication of the transformative process. Performing change IMs, then, represent the experiential record of substantive change(s) in one’s life (Mendes et al., 2010).

**The experiencing scale.** The Experiencing Scale (Klein, Mathieu, Gendlin & Kiesler, 1969) is a 7-point observer-rated measure that uses verbal communications in psychotherapy sessions, or client narratives, to identify the degree to which clients focus on and explore internal experience. Low levels (Stages 1 and 2) of client experiencing involve abstract, journalistic accounts of situations or ideas, with no reference to the client's feelings or internal perspective (e.g., "Someone elbowed me while I stood in line at the movies..."). Moderate levels (Stages 3 and 4) of client experiencing involve more personalized accounts of the client's feelings and points of view (e.g., "I felt completely worthless, like no one could ever love me"). High levels (Stages 5, 6, and 7) of client experiencing involve a more elaborated exploration of feelings that result in new meaning-making (e.g., "I've never felt comfortable with sadness, probably because my mother would walk out of the room when I became emotional as a child. I'm now starting to realize that it wasn't my sadness that was the problem, but her inability to handle it"). Empirical
investigations have revealed that higher levels of client experiencing and expressed emotional arousal are associated with better therapeutic outcomes (Goldman, Greenberg & Pos, 2005; Pos, Greenberg, Goldman & Korman, 2003).

The narrative-emotion process (NE-P) model and the Narrative-Emotion Process Coding System, version 1 (NEPCS 1.0). Contextualized within a dialectical constructivist framework (Greenberg & Pascual-Leone, 1999; 2001), Angus and Greenberg (2011) developed the narrative-emotion process (N-EP) model, a Humanistic (Angus, Watson, Elliott, Schneider, & Timulak, 2015) and narrative-informed Emotion-focused Therapy approach (Angus & Greenberg, 2011) to understanding the important contributions of narrative and emotion processes to successful psychotherapeutic outcomes. The N-EP emerged over several clinical training and psychotherapy research collaborations (e.g., Greenberg & Angus, 2004). According to Angus and Greenberg, personal storytelling is a primary channel through which human beings access, explore, and make sense of emotional experiences (Greenberg & Angus, 2004), and individuals often pursue therapy when troubled by discrepancies in their autobiographical sense of self, and the emotional and behavioural disturbances that are associated (Angus & McLeod, 2004). Angus and Greenberg suggested that the narrative organization of emotional experience that occurs through therapeutic dialogue helps clients to integrate what has happened with how it felt, and to reflect on and articulate what it means, promoting emotion regulation, reflective understanding, and self-narrative change (Angus, 2012). According to Angus and Greenberg’s (2011) theoretical conceptualization of narrative-emotion integration, a therapist’s tasks are two-fold: (1) develop a secure relational bond that facilitates moment-to-moment empathic attunement to client process and within session storytelling and emotional experiencing, and (2) implement
process-guiding interventions that meaningfully capture and reflectively integrate emergent emotions, action tendencies, and a view of self as the agent of therapeutic change.

To further enhance clinical practice and support future research studies, Angus and Greenberg (2011) initially identified and described a set of 8 clinically-derived narrative-emotion process markers (i.e., client storytelling processes) common to psychotherapy, for the purposes of further elucidating the role of narrative and emotion in psychotherapy practice and providing therapists with indicators of when to effectively intervene in therapy sessions. Compared to other narrative-informed psychotherapy process measures, this set of narrative-emotion process markers captures the manner in, and quality with which, emotional processing occurs in client narratives in a detailed and more fully elaborated way.

The 8 initial markers identified by Angus and Greenberg (2005, 2006) included: *Untold Storytelling*, which refers to descriptions of an emotionally salient personal memory that was previously unshared in therapy, because it was judged to be too embarrassing, painful, or unimportant by the client; *Same Old Storytelling*, which refers to overgeneral summaries of a negative, maladaptive, and repetitive intra-or interpersonal theme(s) accompanied by a sense of stuckness; *Empty Storytelling*, which refers to accounts of personal events in which emotional differentiation and experiential engagement is absent; *Unstoried Emotion*, which refers to emotions or bodily sensations that lack a narrative context or connection to a known external stimulus; *Broken Storytelling*, which refers to narratives that contain competing emotional plotlines that are unintegrated in the self-narrative and result in feelings of incoherence; *Healing Storytelling*, which refers to descriptions of specific memories of having one’s important relational needs met, with accompanying positive emotions, such as warmth, security, love, and/or trust; *Unexpected Outcome Storytelling*, which includes stories that document positive
change in daily living, accompanied by expressions of surprise, excitement, contentment, or inner peace, and often involve comparisons between past and present behaviour, emotional responses, and/or thought patterns; and finally, *Self-identity Change Storytelling*, which involves a description of the positive transformations associated with the narrative plotline of one's life story and/or view of self. The term *storytelling* is used to describe the markers, in place of the term *story*, in order to illustrate the emergent nature of the narrative-emotion processes captured by the NEPCS, which unfold over time throughout the course of a therapy session.

As will be detailed below, a systematic series of transcript (Bryntwick, 2008) and video-based psychotherapy research studies (Angus, 2012; Boritz et al., 2014; Boritz et al., 2016; Carpenter et al., 2016) have iteratively differentiated and further refined Angus and Greenberg's original narrative-emotion process markers, and have culminated in the Narrative-Emotion Process Coding System, version 2 (NEPCS 2.0; Angus Narrative-emotion Marker Lab, 2015), to be discussed shortly.

**Phase one of the NEPCS 1.0 development: A transcript-based coding system**

In an effort to validate the 8 narrative-emotion process markers identified by Angus and Greenberg (2011), Bryntwick, Angus, and Boritz (2008) elaborated and refined the markers in the context of therapy session transcripts. This effort resulted in the creation of a coding manual (Narrative-Emotion Integration Coding System (NEICS; Bryntwick, Angus, & Boritz, 2008) for the systematic identification of transcript-based narrative-emotion process markers.

The first version of the coding manual was derived from an empirical investigation of 4 clients seen in experiential therapies for depression, drawn from the York I Depression Study (Greenberg & Watson, 1998). A task analytic approach was undertaken, which involved the rigorous examination of two early, two middle, and two late phase session transcripts
(Bryntwick, 2008). In the empirical phase of the task analysis, three raters sought to identify the markers advanced by Angus and Greenberg in a subset of 4 of the 10 clients selected from the York I sample (two recovered, two non-recovered). These markers, described above, included: Untold Storytelling, Same Old Storytelling, Empty Storytelling, Unstoried Emotion, Broken Storytelling, Unexpected Outcome Storytelling, Healing Storytelling, and Self-identify Change Storytelling. From an examination of these transcripts, definitions of new and existing markers were elaborated and refined to include indicators (e.g., words, phrases, subject matter, etc.) and paradigmatic examples of each marker. In the final stage of the task analysis, two raters and one auditor met to discuss their codes for the 10 transcripts, with the aim of achieving consensual validation.

Using the transcripts coded with the NEICS, Bryntwick (2008) conducted a comparison of the narrative-emotion process markers by outcome group (recovered vs. non-recovered). Descriptive findings of the frequency of NEICS markers by stage of therapy and therapeutic outcome demonstrated that the frequencies of Same Old Storytelling, Empty Storytelling, Broken Storytelling, and Unexpected Outcome Storytelling differed between recovered and non-recovered groups. Specifically, non-recovered clients evidenced higher numbers of Empty Storytelling and Same Old Storytelling markers than did the recovered clients. Conversely, there were higher numbers of Broken Storytelling, Unexpected Outcome Storytelling, and Self-identify Change Storytelling in the narratives of recovered versus non-recovered clients. Unstoried Emotion and Healing Storytelling occurred infrequently in the entire sample.

**Phase two of the NEPCS 1.0 development: A video-based coding system**

The Narrative Emotion Process Coding System, version 1 (NEPCS 1.0; Boritz, Bryntwick, Angus, & Greenberg, 2010), which evolved from the narrative-emotion process
markers identified by Angus and Greenberg (2005; 2011) and the transcript-based NEICS, was developed to identify the verbal and non-verbal indicators underlying narrative-emotion processes in videotaped therapy sessions. The NEPCS is an observational coding system designed to identify and reliably code narrative-emotion process markers in videotaped therapy sessions using Noldus The Observer XT software.

The NEPCS 1.0 consisted of 8 mutually-exclusive and exhaustive client narrative-emotion process markers that were subsequently divided into two subgroups: NEPCS Problem markers and NEPCS Change markers. As previously discussed, NEPCS Problem markers demonstrate under-regulated, over-regulated, or un-integrated emotion within an unfolding narrative; Same Old Storytelling, Empty Storytelling, and Unstoried Emotion were classified in this way. Subsequently, Boritz (2012) added Abstract Storytelling to the Problem marker subgroup. This marker refers to narratives that provide vague or overgeneralized descriptions of intra- or interpersonal patterns, with limited evidence of reflective analysis. In contrast, NEPCS Change markers are indicators of adaptive narrative-emotion integration; Unexpected Outcome Storytelling was classified as a Change marker, and Boritz (2012) added Competing Plotlines Storytelling, Inchoate Storytelling, and Discovery Storytelling to the Change marker subgroup. Competing Plotlines Storytelling is similar to Broken Storytelling, and involves the presence of two opposing points of view, emotional reactions, or action tendencies, accompanied by an experiential sense of tension or incongruence. Although initially conceptualized as a Problem marker, pilot testing indicated that it was more prevalent for recovered clients in the early and middle stages of therapy and, as such, it was re-categorized. Inchoate Storytelling refers to half-formed narratives during which present-centered internal experience is symbolized in words. Discovery Storytelling involves the generation of new understandings or re-conceptualizations of
previously held beliefs about the self, others, and the world. In addition to these 8 markers, *Unclear Storytelling* represents a holding category for newly discovered narrative-emotion marker subtypes that do not fit within an existing category. *No Client Marker* (NCM) refers to video segments in which the therapist speaks for at least two-thirds of the time, or the client-therapist discourse is unrelated to therapy (e.g., scheduling).

**NEPCS 1.0 Empirical Findings: Treatment of Depression**

In the first study to use the observational (video-based) coding system, Boritz, Bryntwick, Angus, Greenberg, and Constantino (2014) applied the NEPCS 1.0 to the videotaped therapy sessions of a sample of 12 clients who had received brief therapy for depression. The purpose of the study was to examine the proportions and patterns of NEPCS markers and marker subgroups (i.e., NEPCS Problem and Change markers) in relation to therapeutic outcome and stage of therapy.

The NEPCS 1.0 was applied to one early, one middle, and one late-stage therapy session of the 12 clients that comprised the sample. The sample was drawn from two separate psychotherapy research studies that examined the efficacy of brief therapy for depression. Specifically, 8 clients were drawn from the York I Depression Study (Greenberg & Watson, 1998), 4 of whom received EFT and 4 of whom received client-centered therapy (CCT) for depression. The remaining 4 clients received cognitive therapy (CT), and were drawn from the University of Massachusetts Amherst Cognitive Therapy for Depression Study (Constantino, Klein, Smith-Hansen, & Greenberg, 2009).

These two clinical trials were similar with respect to selection of participants (e.g., eligibility criteria, diagnostic assessment), therapist training (e.g., supervised training in treatment model), duration of treatment (i.e., 16-20 sessions), and outcome measure used to
evaluate pre- and post-treatment levels of depression (i.e., Beck Depression Inventory). Outcome categorization of clients was achieved through Jacobson and Truax's (1991) method for demonstrating clinically significant change. This two-step formulation first required the establishment of a post-treatment BDI cut-off score that demarcated the functional from the dysfunctional population, followed by application of the reliable change index (RCI) to determine whether client BDI change scores from pre- to post-treatment were considered reliable, and not due to measurement error. Using these criteria, clients were classified as recovered (i.e., their scores were below the BDI cut-off and met the RCI criteria at termination) or unchanged (i.e., their scores were above the BDI cut-off and did not meet the RCI criteria at termination). The sample was comprised of two recovered clients and two unchanged clients from each of the EFT, CCT, and CT brief treatments for depression (i.e., 6 recovered and 6 unchanged clients overall).

The coding team used Noldus The Observer XT software in order to apply the NEPCS 1.0 to each session of therapy. In order to simplify the coding process, each session was segmented into one-minute "time bins." Three coders collectively watched each one-minute segment, and reached consensual agreement concerning which NEPCS marker was the modal or most salient for the segment. A forth coder was used as an arbiter when consensual agreement could not be reached by the other coders. Once coding was completed, hierarchical linear modeling (HLM) was used to analyze the relationship between NEPCS markers and marker subgroups, and therapeutic outcome status (recovered vs. unchanged), stage of therapy (early vs. middle vs. late stage), and treatment type (EFT vs. CCT vs. CT).

Several interesting findings emerged in this exploratory study. In line with the theoretical assumptions of the N-EP model, a higher proportion of NEPCS Problem markers was
observed among unchanged vs. recovered clients at the middle stage of therapy, $F(1, 20) = 11.26, p = .003$, irrespective of treatment modality. Furthermore, a higher proportion of NEPCS Change markers was observed in therapy sessions of recovered when compared to unchanged clients at all stages of therapy (early: $F(1, 20) = 6.62, p = .018$; middle: $F(1, 20) = 32.28, p < .001$; and late: $F(1, 20) = 10.25, p = .004$), again irrespective of treatment modality. Within the NEPCS Problem marker subgroup, a statistically significant difference emerged with respect to proportions of Abstract Storytelling at the middle stage of therapy, $F(2, 12) = 6.325, p = .013$, irrespective of treatment type. Boritz (2012) suggested that unchanged clients may become “stuck” in one dominant narrative-emotion process in the working phase of therapy (i.e., Abstract Storytelling) that functions as an unconscious avoidance strategy, and impedes opportunity for deeper emotional exploration.

Within the NEPCS Change marker subgroup, Inchoate Storytelling ($F(1, 6) = 7.041, p = .037$) and Discovery Storytelling ($F(1, 6) = 25.113, p = .002$) were significantly associated with favourable outcome, irrespective of treatment approach. Finally, the results revealed significantly higher proportions of Competing Plotlines Storytelling at the middle stage of therapy for recovered versus unchanged depressed clients who received EFT treatment, $F(1, 12) = 5.97, p = .031$. No significant relationship was found between Same Old Storytelling, Empty Storytelling, or Unstoried Emotion and therapeutic outcome across stage of therapy.

In a further elaboration of Boritz and colleagues’ (2014) study, Boritz, Barnhart, Angus, and Constantino (2016) examined the effect of NEPCS marker shifting, defined as movement from one NEPCS marker to a different NEPCS marker per minute of a therapy session. Specifically, these authors investigated the relationship between the probability of NEPCS shifting and therapeutic outcome in the previously coded sample of recovered and unchanged
clients receiving brief therapies for depression. Results revealed that the overall probability of shifting between NEPCS markers (i.e., a shift from one NEPCS marker to a different NEPCS marker, such as Empty Storytelling to Inchoate Storytelling, from one minute of a therapy session to the next minute) and marker subgroups (i.e., a shift between one NEPCS marker subgroup and a different marker subgroup, such as a Problem marker to a Change marker, or a No Client Marker to a Transition marker, from one minute of a therapy session to the next minute) was higher for recovered vs. unchanged clients (50.6% and 37%, respectively, Wald $\chi^2 = 43.7, p \leq .0001$). Furthermore, the likelihood of shifting remained constant over the course of a session for recovered clients ($\beta = -.0002, t = -0.53, p = 0.59$), whereas the probability of shifting decreased over the course of a session for unchanged clients ($\beta = -.002, t = -6.63, p < .001$). The results also revealed that the probability of shifting from one NEPCS marker to another decreased as a function of increased length of time spent in a single NEPCS marker, irrespective of outcome status; however, the average rate of decrease in the probability of shifting was sharper for unchanged clients (2.5% per minute, Wald $\chi^2 = 3.92, p = .048$). This result suggests that unchanged clients are more likely to remain “stuck” in a particular NEPCS marker the longer they have been in this mode of narrative-emotion processing. Moreover, recovered clients showed a significantly higher probability of shifting between NEPCS Problem and Change marker subgroups across sessions (38.7% and 24.4%, respectively, Wald $\chi^2 = 57.77, p \leq .0001$). Across both outcome status groups, the probability of shifting out of Problem markers was lower than the probability of shifting out of Change markers; however, this effect was significantly more pronounced for unchanged clients than for recovered clients (18.8% and 33.4%, respectively, Wald $\chi^2 = 33.03, p \leq .0001$). Finally, unchanged clients were more likely to
shift out of NEPCS Change markers and back into NEPCS Problem markers than their recovered counterparts (57.3% and 42.7% respectively, Wald \( \chi^2 = 4.73, p = .03 \)).

The results emerging from these exploratory studies demonstrated several statistically significant relationships, and pointed to the importance of continued examination of narrative-emotion processes in future research. There were, however, some limitations associated with this project. To begin, the sample size was relatively small (\( N = 36 \) therapy sessions), and only one session per stage of therapy (i.e., early, middle, and late) was examined for each client. Additionally, Boritz (2012) suggested that the NEPCS 1.0 manual required refinement, such as the further differentiation of the Abstract Storytelling marker, and that application of the NEPCS to different treatment modalities and client populations was desirable for future investigations.

**NEPCS 1.0 Empirical Findings: Treatment of Complex Trauma**

Several clinical researchers (Paivio & Pascual-Leone, 2010; van der Kolk, Hopper, & Osterman, 2001) have underscored the need for elucidation of the role of narrative and emotion processes in psychotherapy for trauma. To this end, Carpenter and colleagues (2016) conducted a pilot study on a sample of 4 clients who received EFTT for complex trauma (drawn from Paivio et al.’s, 2010 randomized control trial), in order to examine the proportions and patterns of NEPCS markers and marker subgroups (i.e., NEPCS Problem and Change markers) in relation to therapeutic outcome status and stage of therapy.

The NEPCS 1.0 was applied to two early, two middle, and two late phase videotaped therapy sessions for each of 4 clients (\( N = 24 \) sessions). Outcome status for each client was determined, once again, using Jacobson and Truax's (1991) method for demonstrating clinically significant change. Post-treatment cut-off scores were first established for two of the outcome measures used in the clinical trial, namely the Impact of Event Scale (IES; Horowitz, Wilner &
Alvarez, 1979) and the Resolution Scale (RS; Singh, 1994). The reliable change index (RCI) was used to determine whether a client's pre-treatment to post-treatment scores on these outcome measures was considered reliable. Using these criteria, the clients were classified as recovered (i.e., their scores were below the IES cut-off, above the RS cut-off, and met the RCI criteria at termination) or unchanged (i.e., their scores were above the IES cut-off, below the RS cut-off, and did not meet the RCI criteria at termination). The pilot study sample consisted of two recovered and two unchanged clients.

A similar coding procedure to the one employed by Boritz and colleagues (2014) was followed during this pilot study. Three coders collectively watched each one-minute segment of a therapy session, and applied the NEPCS 1.0 using Noldus The Observer XT software, and consensual agreement was reached for each NEPCS marker coded.

Examination of significant differences in the proportions of individual NEPCS markers and marker subgroups by outcome status was completed using independent samples t tests, followed by effect size calculations using eta-squared for each marker. In order to examine the effect of stage of therapy on the relationship between NEPCS markers and outcome status, a linear mixed model analysis was employed. Finally, a chi-squared difference test evaluated whether significant interactions between NECPS marker subgroups and outcome status by stage of therapy were present.

Some interesting and significant findings emerged from this study, highlighting the applicability of the NEPCS 1.0 to a complex trauma sample. First, although no statistically significant result emerged, \( t (24) = 0.92, \text{ns} \), a large effect size was found for the proportion of NEPCS Change markers and NEPCS Problem markers in relation to outcome status. Specifically, 18% of the variance in the proportion of NEPCS Change markers was attributable
to outcome status, where recovered clients were observed to spend a higher percentage of their sessions over the course of therapy in NEPCS Change markers (4.8%) when compared to unchanged clients (2.4%). Conversely, for NEPCS Problem markers, a significant difference in proportions was found between the recovered and unchanged clients \((t(24) = -1.70)\). Specifically, unchanged clients spent a greater percentage of sessions in NEPCS Problem markers (19.3%) when compared to recovered clients (15.6%). A large effect size emerged and revealed that 31% of the variance in the proportion of NEPCS Problem markers was attributable to outcome status.

In terms of the association between proportions of individual NEPCS markers and outcome status, several notable findings emerged, and several stage by outcome status interactions were also found. Specifically, a statistically significant difference in the proportion of Unstoried Emotion (i.e., an undifferentiated emotional state that is disconnected from, or unelaborated within, a narrative context) was evidenced for recovered vs. unchanged clients \((t(22) = -3.47, p < .05)\), with unchanged clients articulating this marker more frequently overall. Eta squared analyses revealed that 35% of the variance in Unstoried Emotion was attributable to outcome status. The results for Competing Plotlines Storytelling (i.e., captures tension and incongruence between two parts of the self) demonstrated that the overall proportions were not associated with outcome status; however, a significant stage by outcome interaction was found, wherein recovered clients demonstrated significantly higher proportions of Competing Plotlines Storytelling when compared to unchanged clients in the early and middle stages of therapy \((M = 0.08 \text{ and } M = 0.11; \ M = 0.05 \text{ and } M = 0.03, \text{ respectively})\).

Interestingly, in the late stage of therapy, unchanged clients articulated significantly higher proportions of Competing Plotlines Storytelling than their recovered counterparts \((M = 0.10 \text{ and } M = 0.06, \text{ respectively})\).
0.11 and $M = 0.00$). With respect to Unexpected Outcome Storytelling (i.e., a narrative-emotion marker that captures the articulation of new, adaptive responses to a specific event or context), recovered clients demonstrated a higher proportion in the late stage of therapy when compared to the unchanged group ($M = 0.15$ and $M = 0.01$, respectively). In terms of Discovery Storytelling (i.e., novel meaning-making that involves reconceptualised views of the self and/or the world), recovered clients showed significantly higher proportions of this marker in the early ($M = 0.03$) and late ($M = 0.07$) stages of therapy when compared to unchanged clients in the early ($M = 0.01$) and late ($M = 0.01$) stage. Recovered and unchanged clients did not differ in the middle stage of therapy, however.

Although some interesting findings emerged from this pilot investigation, an important limitation was the small sample size ($N = 24$ sessions). Application of the NEPCS to a larger sample of EFTT complex trauma clients would allow for more robust results, and the present study was undertaken in an effort to address this limitation.

**Refinement of the NEPCS 1.0 and the Development of the NEPCS, version 2 (NEPCS 2.0; Angus Narrative-Emotion Marker Lab, 2015)**

As reported in a preceding section, Boritz et al. (2014; 2016) established that the Abstract Storytelling marker, identified in NEPCS version 1.0, comprised 49.5% of codes identified in early, middle, and late stage therapy sessions selected from Client-centered, Cognitive Therapy and Emotion-focused treatments for depression. Additionally, a pilot study examining NEPCS 1.0 codes in EFTT (Carpenter et al., 2016), suggested that it may be important to represent different levels of client self-reflective focus, and enriched storytelling, in video-taped therapy sessions. In light of these research findings and recommendations, an initiative (i.e., Angus Narrative-Emotion Marker Lab, 2015) was undertaken to further refine the coding system and
manual. Changes included the identification and explication of three new NEPCS markers, as well as the addition of a new NECPS marker subgroup, resulting in the final version of the coding system - NEPCS 2.0.

More specifically, the Abstract Storytelling marker was subdivided into *Superficial Storytelling* and *Reflective Storytelling*, each of which captures important differences in the degree of meaning-making and experiential engagement of the client. Superficial Storytelling closely resembles the previous Abstract Storytelling marker and refers to overgeneralized narratives in which the client’s feelings, beliefs, and behaviours are discussed, but with limited evidence of reflective analysis. By contrast, Reflective Storytelling refers to narratives in which an analysis of the feelings, beliefs, or behavioural patterns of the client occurs, and previously recognized thematic connections and explanations are articulated.

Additionally, a new narrative-emotion marker was introduced, termed *Experiential Storytelling*. This code involves imaginal re-entry into a specific autobiographical memory during which the thoughts, feelings, and sensory details connected to the event are re-experienced by the client and vividly described in session.

Finally, a new subgroup of markers, termed *NEPCS Transition markers*, was created in order to differentiate client storytelling that is both theoretically and empirically associated with recovery at therapy termination and yet does not convey demonstrable changes in cognitive, emotional, or behavioural functioning, from those which do convey such changes and therefore belong in the NEPCS Change markers subgroup (i.e., Unexpected Outcome Storytelling and Discovery Storytelling). NEPCS Transition markers, then, are conceptualized as narrative-emotion events that are more flexible and emotionally-differentiated than those which belong to the NEPCS Problem markers subgroup (e.g., Same Old Storytelling), but that do not allude to
new ways of thinking, feeling, or behaving in the world. As represented in Table 1, the most recent version of the NEPCS includes 10 individual narrative-emotion process markers that are clustered into Problem, Transition, and Change marker subgroups. This table presents descriptions, indicators, and paradigmatic examples of each NEPCS marker.

To review, NEPCS Problem markers identify under-regulated, over-regulated, or undifferentiated emotional states that are often expressed through incoherent, rigid, repetitive, and maladaptive self-narratives. Problem markers are thought to reflect underlying processes that may be involved in the maintenance of the presenting clinical problem, and that are not facilitative of therapeutic change. There are 4 distinct Problem markers, including Same Old Storytelling, Empty Storytelling, Unstoried Emotion, and Superficial Storytelling.

NEPCS Transition markers represent client movement towards greater integration, through heightened reflectivity, the expression of differentiated emotional responses, and narrating more specific, exploratory personal stories. Transition markers highlight opportunities for therapists to enhance client reflection on: emerging bodily felt experience; significant episodic memories; emerging alternative or conflicting action tendencies and views of the self; and important intra- or inter-personal patterns and themes. There are 4 distinct Transition markers, including Competing Plotlines Storytelling, Inchoate Storytelling, Experiential Storytelling, and Reflective Storytelling.
Table 1.

**Narrative-Emotion Process Coding System (NEPCS 2.0) Descriptions (Angus Narrative-Emotion Marker Lab (2015))**

<table>
<thead>
<tr>
<th>Marker</th>
<th>Process Indicators</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same Old Storytelling</td>
<td>Expressing dominant, maladaptive, over-general views of self and relationships marked by lack of agency, stuckness.</td>
<td><em>She was never concerned about me, she was only concerned with herself. Behave, be good, don’t cause me any trouble.</em></td>
</tr>
<tr>
<td>Empty Storytelling</td>
<td>Describing an event with a focus on external details and behavior, and a lack of internal referents or emotional arousal.</td>
<td><em>I was crying on the floor. The lady next door, her daughter was our babysitter, she was 16. She made me some eggs with cheese on top.</em></td>
</tr>
</tbody>
</table>
| Unstoried Emotion       | Experiencing undifferentiated, under- or over-regulated emotional arousal, without coherent narration of the experience. | *T: Sad, so sad. [25 sec pause, client stares at ceiling]*  
*C: Yes. ‘Cause I have to take a bus later. I can’t be on the bus with tear-stained eyes.*  
Are you holding back right now?*                                                                 |
| Superficial Storytelling* | Talking about events, hypotheticals, self, others, or unclear referents in a vague, abstract manner with limited internal focus. | *The way that she talked to me and treated me in front of friends, and family. Even like my sister and father, just things that she says and does.*                                                           |
| Competing Plotlines     | An alternative to a dominant view, belief, feeling, or action emerges, creating tension, confusion, curiosity, doubt, protest. | *I have 3 healthy children, a house, we’re not wealthy but we’re okay, and I sort of go...why am I not...happier? I don’t know.*  
...things seemed ok on the outside. But inside, there’s...*  
[closes eyes, frowns]  
*a, like a [silence] black hole or a void, or...*                                                                 |
| Inchoate Storytelling   | Focusing inward, contacting emergent experience, 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. | *I walked and walked and walked like I was in a fog. It was raining and dark, and I got wound up, and I just had to walk it off. I was soaking wet but didn’t care.*  
There was nobody who cared, and so eventually I stopped showing them how I felt. Somewhere between there and here I stopped feeling it.* |
| Reflective Storytelling* | Explaining a general pattern or specific event in terms of own or others’ internal states (thoughts, feelings, beliefs, intentions). |                                                                                                                                                                                                       |
### Narrative-Emotion Process Coding System (NEPCS 2.0) Descriptions (Angus Narrative-Emotion Marker Lab (2015))

<table>
<thead>
<tr>
<th>Marker</th>
<th>Process Indicators</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change: Unexpected Outcome Storytelling</td>
<td>Describing a new, adaptive behavior (action, thought, feeling, response) and expressing surprise, pride, relief, contentment.</td>
<td><em>I was so anxious, but instead of wallowing in it like usual I thought ‘what can I do?’ So I [did] the muscle relaxation stuff...it felt so good. After, I felt like a different person.</em></td>
</tr>
<tr>
<td>Discovery Storytelling</td>
<td>Reconceptualizing, or articulating a novel understanding of the self, others, key events, behavior patterns, or change processes.</td>
<td><em>I’ve been thinking about the theme of being uninvited in the world. I think, I never did it consciously, but I realize that I’ve seen myself as an intrusion for a very long time, and...</em></td>
</tr>
</tbody>
</table>

* Represent differences between the NEPCS 1.0 and the NEPCS 2.0. These markers were introduced in the NEPCS 2.0.
Finally, NEPCS Change markers refer to client storytelling markers that represent evidence of productive narrative-emotion integration. These markers indicate the generation and integration of new understanding, meaning, and action tendencies, and capture client storytelling about experiences of change in action. The two NEPCS Change markers - Unexpected Outcome Storytelling and Discovery Storytelling - represent the 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.

**NEPCS 2.0 Empirical Findings: Treatment of Generalized Anxiety Disorder**

Macaulay (2014) applied the newly updated NEPCS 2.0 (Angus Narrative-Emotion Marker Lab, 2015) to a sample of 6 clients who received CBT for severe GAD, preceded by four weeks of motivational interviewing (MI) (Westra, Constantino, & Antony, 2016).

In this project, the NEPCS 2.0 was applied to two early, two middle, and two late stage videotaped therapy sessions from each client (\(N = 36\) sessions), three of whom were deemed recovered at therapy termination, and three of whom were unchanged using the previously described method of outcome categorization. This study followed the same procedure that was used in previous NEPCS investigations. Macaulay sought to determine whether NEPCS markers and marker subgroups (including the newly identified Superficial Storytelling marker, Reflective Storytelling marker, Experiential Storytelling marker, and NEPCS Transition markers category) were associated with therapeutic outcome across stage of therapy. To account for the structure of the data, multilevel modelling was used for the statistical analyses.

In line with previous findings, unchanged clients evidenced significantly higher overall proportions of NEPCS Problem markers as compared to recovered clients (\(t (32) = 2.73, p = 0.0101\)). With respect to NEPCS Transition markers, recovered clients demonstrated
significantly higher proportions overall when compared to their unchanged counterparts \( t(32) = 4.35, p = 0.0001 \). Within this subgroup, Competing Plotlines Storytelling occurred significantly more frequently for recovered clients overall \( t(32) = 2.05, p = 0.0491 \), and recovered clients also demonstrated significantly more Reflective Storytelling overall \( t(32) = 3.82, p = 0.0002 \).

In examining differences related to outcome status and stage of therapy within the NEPCS Change marker subgroup, recovered clients were found to have significantly higher proportions in the late stage of therapy when compared to unchanged clients \( t(32) = 4.42, p = 0.001 \). Furthermore, Unexpected Outcome Storytelling occurred more frequently in the sessions of recovered clients overall \( t(32) = 3.99, p = 0.0004 \), and Discovery Storytelling occurred at a significantly higher proportion in the late stage of therapy for recovered clients when compared to the unchanged group (mean difference = 13.3%).

Although the emergence of significant results within an MI-CBT for GAD sample supported the validity of the NEPCS 2.0 as a pan-theoretical, trans-diagnostic research tool, Macaulay’s small sample size may have precluded other statistically significant results from emerging.

**The Present Study**

The purpose of the current study was to extend and replicate the findings of Carpenter and colleagues (2016) pilot study by applying the NEPCS 2.0 to a larger sample of EFTT for complex trauma, which included the 4 clients used in the pilot study (Clients 18, 23, 405, and 416 – refer to Table 2). More specifically, the current study examined the relationship between the proportion of NEPCS marker subgroups (e.g., Problem markers) and individual NEPCS markers (e.g., Same Old Storytelling) and therapeutic outcome status across the early, middle, and late stages of therapy. Finally, the relationship between amount of NEPCS marker shifting
over each minute of therapy, and therapeutic outcome across stage of therapy was explored, as well as the relationship between the type of NEPCS marker subgroup shifting over each minute of therapy, and therapeutic outcome across stage of therapy. The type of NEPCS marker subgroup shifting was defined as unproductive (i.e., shifting from one Problem marker to another; a Transition marker to a Problem marker; a Change marker to a Problem marker; or a No Client Marker to a Problem marker) or productive (shifting from a Problem marker to a Transition marker; one Transition marker to another; a Transition marker to a Change marker; one Change marker to another; and a No Client Marker to a Transition or Change marker). The current study applied the NEPCS 2.0 to a sample of 12 clients receiving EFTT in a randomized control trial (Paivio et al., 2010), including 6 recovered and 6 unchanged clients. More specifically, two early, two middle, and two late phase videotaped therapy sessions (\(N = 72\) sessions) were selected from each client. The NEPCS 2.0 was applied using Noldus The Observer XT Software System.

**Research Hypotheses**

The current study addressed the following hypotheses:

1. In keeping with previous findings (Boritz et al., 2014; Carpenter et al., 2016), recovered clients were hypothesized to show a higher proportion of Change markers across middle and late stages of therapy, while unchanged clients were expected to show a greater proportion of Problem markers across all stages of therapy. Because Transition markers were associated with productive therapeutic processes in Macaulay’s (2014) investigation, recovered clients were hypothesized to show a higher proportion of Transition markers in the early and middle stages of therapy.
2. Based on the results from the previous applications of the NEPCS (Boritz et al., 2014; Macaulay, 2014; Carpenter et al., 2016), recovered EFTT clients were hypothesized to show a higher proportion of Competing Plotlines Storytelling (Transition marker) in the middle stage of therapy, and to evidence a higher proportion of Inchoate Storytelling, Reflective Storytelling (Transition markers), Unexpected Outcome Storytelling, and Discovery Storytelling (Change markers) across middle and late stages of therapy. Conversely, unchanged EFTT clients were predicted to show a higher proportion of Superficial Storytelling (Problem marker) across all stages of therapy. In keeping with the results of Carpenter and colleagues’ pilot analysis, unchanged EFTT clients were also predicted to demonstrate a higher proportion of Unstoried Emotion (Problem marker) across all stages of therapy.

3. a) In line with the findings of Boritz and colleagues (2016), it was predicted that recovered EFTT clients would demonstrate a higher proportion of shifting between NEPCS markers per minute of therapy than unchanged clients.

b) Unchanged EFTT clients were predicted to demonstrate a higher proportion of unproductive shifting (movement to a Problem marker) across therapy than recovered EFTT clients, and recovered EFTT clients were hypothesized to demonstrate a higher proportion of productive shifting (movement away from a Problem marker) across therapy than unchanged EFTT clients.

**Method**

**Participants**

**Clients.** The current sample consisted of a subset of 12 clients from a larger sample of 45 clients who participated in an EFTT research study conducted in the psychology department of
the University of Windsor, Ontario, Canada (Paivio et al., 2010). The original 45 participants received 16-20 sessions of EFTT aimed at the resolution of childhood physical, emotional, and/or sexual abuse or neglect. These participants were randomly assigned to receive either the Imaginal Confrontation (to be described below) or Empathic Exploration (to be described below) intervention in EFTT, and all sessions were videotaped. Please refer to Table 2 for demographic information regarding the subset of 12 clients used in the current study. All participants in the EFTT research study received remuneration of $25 upon completion of follow-up questionnaires used in the original study. Outcome measures were administered to participants at pre-, mid-, and post-treatment, as well as at a six-month follow up. The data used in the present study consisted of videotaped therapy sessions for 12 clients who completed EFTT, as well as the results of two self-report measures assessing trauma symptomatology and resolution.
Table 2.

*Client Characteristics*

<table>
<thead>
<tr>
<th>Client ID</th>
<th>Gender</th>
<th>Age</th>
<th>Marital status</th>
<th>Education level</th>
<th>Employment</th>
<th>Income</th>
<th>Abuse focus Type/perpetrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>Female</td>
<td>29</td>
<td>Married</td>
<td>Undergraduate</td>
<td>Full-time</td>
<td>&gt;60000</td>
<td>Sexual/Other</td>
</tr>
<tr>
<td>410</td>
<td>Female</td>
<td>58</td>
<td>Divorced</td>
<td>Undergraduate</td>
<td>Unemployed</td>
<td>40-59000</td>
<td>Sexual/Relative</td>
</tr>
<tr>
<td>18</td>
<td>Male</td>
<td>41</td>
<td>Married</td>
<td>Graduate</td>
<td>Full-time</td>
<td>&gt;60000</td>
<td>Emotional/Mother</td>
</tr>
<tr>
<td>308</td>
<td>Female</td>
<td>59</td>
<td>Divorced</td>
<td>Graduate</td>
<td>Part-time</td>
<td>40-59000</td>
<td>Sexual/Other</td>
</tr>
<tr>
<td>29</td>
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<td>47</td>
<td>Divorced</td>
<td>High School</td>
<td>Full-time</td>
<td>20-39000</td>
<td>Neglect/Mother</td>
</tr>
<tr>
<td>307</td>
<td>Male</td>
<td>49</td>
<td>Married</td>
<td>Undergraduate</td>
<td>Full-time</td>
<td>&gt;60000</td>
<td>Sexual/Father</td>
</tr>
<tr>
<td>418</td>
<td>Male</td>
<td>69</td>
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<td>Unemployed</td>
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<tr>
<td>405</td>
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<td>Undergraduate</td>
<td>Part-time</td>
<td>&gt;60000</td>
<td>Sexual/Mother</td>
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<tr>
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<td>Emotional/Other</td>
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<tr>
<td>316</td>
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<td>Undergraduate</td>
<td>Full-time</td>
<td>20-39000</td>
<td>Emotional/Father</td>
</tr>
</tbody>
</table>
Selection Procedure

Individuals who were considered for the original EFTT research study were first screened by telephone, and if they met the initial screening criteria, they participated in an in-person selection interview that included a detailed clinical interview regarding the presenting concern(s) and abuse history of the individual, as well as an assessment of PTSD symptoms using the PTSD Symptom Severity Interview (PSSI; Foa, Riggs, Dancu, & Rothbaum, 1993) and level of functioning using the Global Assessment of Functioning (GAF; DSM-IV, American Psychiatric Association, 1994). Individuals who were excluded from the study included those who were younger than 18 years of age, were currently receiving psychotherapeutic treatment, were at risk for suicide or in a current crisis, had received a psychiatric diagnosis (i.e., schizophrenia, eating disorder, bipolar disorder, dissociative disorder, etc.), were suffering from a substance abuse issue, had the dosage of their psychoactive medication changed within the past two months, were currently involved in an abusive relationship, or who had no conscious memories of their childhood abuse.

Treatment and Treatment Conditions in EFTT

EFTT (Paivio & Pascual-Leone, 2010) is a short term, semi-structured, manualized trauma-focused therapy. EFTT consists of four phases of therapy: establishing the therapeutic alliance, minimizing maladaptive fear and shame, resolving issues with perpetrators, and change consolidation and termination of therapy. The primary intervention was empathic responding to client feelings and meanings, along with anxiety management strategies for severe emotional dysregulation.

Participants were assigned to therapists based on schedule compatibility and were randomly assigned to the two conditions in EFTT, imaginal confrontation or empathic
exploration, after session three. Please refer to Table 3 for information regarding the assignment of EFTT condition to clients in the current sample.

**Imaginal confrontation (IC).** Based on the results of an empirically supported model of change that outlines the steps involved in resolving lingering negative feelings towards a significant other (Greenberg & Foerster, 1996), the IC procedure is introduced during Session 4 of therapy, once the therapeutic alliance has been established, and continues to be used throughout the course of therapy. 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 directly to the imagined other. The frequency and length of IC depends on the client’s processes and therapeutic needs. The goals of the IC condition are 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 is also introduced in Session 4, and is identical to the IC condition in terms of goals, process steps, intervention principles, and therapist actions. However, traumatic material is explored entirely through interaction with the therapist, rather than through chair work. Empathic responding is the primary intervention. As described earlier, the clients are encouraged to imagine the abusive and/or neglectful other in the “mind’s eye”, but to express their thoughts and feelings to the therapist.

**Client outcome categorization.** Therapeutic outcome for the randomized control trial was calculated using Jacobson and Truax’s (1991) method for determining statistically and clinically significant change. Based on this two-step formulation, cut-off scores were established for the
Impact of Event Scale (IES; Horowitz, Wilner, & Alvarez, 1979), which assesses trauma symptoms, and the Resolution Scale (RS; Singh, 1994), a measure of trauma resolution. These measures, which are described below, were selected for determining therapeutic outcome status for the current study from among the 8 measures used in the larger study, because of their utility in evaluating recovery from complex interpersonal trauma.

Clients who fulfilled the criteria for recovery at therapy termination had scores on these measures that were closer to the mean of the normal population than the mean of the dysfunctional population. The Reliable Change Index (RCI) was then used to determine whether the change in each client's score from pre- to post-treatment was statistically reliable, and not simply due to measurement error (McGlinchey, Atkins, & Jacobson, 2002).

In the randomized control trial sample, post-treatment scores above 18.1 on the IES and scores above 26.4 on the RS were used as cut-offs. In the current study, 6 clients whose cut-off scores were closer to the mean of the normal population and who demonstrated reliable change comprised the recovered group, and 6 clients whose cut-off scores were closer to the mean of the dysfunctional population and who did not demonstrate reliable change comprised the unchanged group. Please refer to Table 3 for information on outcome categorization and scores on the outcome measures of interest to the current study (i.e., IES and RS).

In the present study, the total sample of 12 clients consisted of 6 recovered and 6 unchanged participants selected from both the IC and EE conditions, such that each of these interventions were represented. As there was no statistically significant differences in outcome between the IC and EE conditions (Paivio et al., 2010), clients in the IC and EE condition were combined to increase power in order to compare recovered vs. unchanged clients across EFTT more generally.
**Therapists.** Eleven therapists (7 women, 4 men) were involved in the larger EFTT research study, including one master’s student, six doctoral students in clinical psychology, and four post-doctoral psychologists. Their ages ranged from 25 – 57 years, and all had previous clinical experience with a trauma population. In the current study, 5 female and 3 male therapists delivered therapy to the 12 clients who comprised the sample. One female post-doctoral therapist saw 3 of the 12 clients (two recovered and one unchanged client), and another female post-doctoral therapist saw 3 of the 12 clients (two recovered and one unchanged client). All other therapists saw only one of the 12 clients that comprised the sample in the current study. Please see Table 3 for therapist characteristics.

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

**Coders.** The coding team in the current study consisted of one female master’s student and two female doctoral students (including this author) in clinical psychology who collectively viewed videotaped therapy sessions from the sample and applied the NEPCS 2.0 to the sessions. This author and the master’s student coded 15 of the sessions independently in order to assess inter-rater reliability. Each coder had at least one year of experience applying the NEPCS 2.0 to videotaped therapy sessions. On occasion, a fourth coder, who is a registered psychologist, was
used as an arbiter when the other raters were uncertain of their coding decisions regarding narrative-emotion marker codes.

Measures

**Impact of event scale (IES; M. D. Horowitz et al., 1979).** The IES is a 15-item measure which 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 review article by Sundin and Horowitz (2002) supported the validity of the measure, with a reported mean internal consistency of $\alpha = .84$, and test-retest reliabilities ranging between .56 and .94.

**Resolution scale (RS; Singh, 1994).** This 11-item scale assesses the degree to which clients feel troubled by negative feelings and unmet needs, as well as how worthwhile and accepted they feel in relation to 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 on other outcome measures. Paivio et al. (2001) reported alpha reliability with an EFTT sample ($N = 51$) as .82.
### Table 3.

**Client Selection Criteria and Therapist Characteristics**

<table>
<thead>
<tr>
<th>Client ID</th>
<th>Outcome</th>
<th>Condition</th>
<th>Sessions Coded</th>
<th>Outcome Measure scores</th>
<th>Therapist Characteristics</th>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>IES</td>
<td>RS</td>
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<tr>
<td>23</td>
<td>Recovered</td>
<td>Empathic Exploration</td>
<td>Early: 3, 4 Middle: 10, 11 Late: 14, 15</td>
<td>35 5</td>
<td>47 16</td>
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<tr>
<td>410</td>
<td>Recovered</td>
<td>Empathic Exploration</td>
<td>Early: 3, 4 Middle: 10, 11 Late: 14, 15</td>
<td>21 6</td>
<td>43 21</td>
</tr>
<tr>
<td>18</td>
<td>Recovered¹</td>
<td>Imaginal Confrontation</td>
<td>Early: 3, 4 Middle: 10, 11 Late: 14, 15</td>
<td>31 5</td>
<td>46 23.5</td>
</tr>
<tr>
<td>308</td>
<td>Recovered¹</td>
<td>Empathic Exploration</td>
<td>Early: 3, 4 Middle: 10, 11 Late: 14, 15</td>
<td>26 6</td>
<td>34 14.5</td>
</tr>
<tr>
<td>29</td>
<td>Recovered²</td>
<td>Empathic Exploration</td>
<td>Early: 3, 4 Middle: 10, 11 Late: 18, 19</td>
<td>18 6</td>
<td>43 18</td>
</tr>
<tr>
<td>307</td>
<td>Recovered²</td>
<td>Empathic Exploration</td>
<td>Early: 3, 4 Middle: 10, 11 Late: 18, 19</td>
<td>31 5</td>
<td>48 19</td>
</tr>
<tr>
<td>418</td>
<td>Unchanged</td>
<td>Empathic Exploration</td>
<td>Early: 3, 4 Middle: 11, 12 Late: 14, 15</td>
<td>27 21</td>
<td>42 32.5</td>
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<tr>
<td>405</td>
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<td>Imaginal Confrontation</td>
<td>Early: 3, 4 Middle: 10, 11 Late: 14, 15</td>
<td>31 22</td>
<td>34 30.5</td>
</tr>
<tr>
<td>416</td>
<td>Unchanged</td>
<td>Empathic Exploration</td>
<td>Early: 3, 4 Middle: 10, 11 Late: 14, 15</td>
<td>35 27</td>
<td>40.5 41.5</td>
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<tr>
<td>316</td>
<td>Unchanged¹</td>
<td>Imaginal Confrontation</td>
<td>Early: 3, 4 Middle: 10, 11 Late: 14, 15</td>
<td>32 20</td>
<td>34.5 27</td>
</tr>
<tr>
<td>10</td>
<td>Unchanged</td>
<td>Empathic Exploration</td>
<td>Early: 3, 4 Middle: 10, 11 Late: 16, 17</td>
<td>34 19</td>
<td>39.5 26.5</td>
</tr>
<tr>
<td>305</td>
<td>Unchanged²</td>
<td>Empathic Exploration</td>
<td>Early: 3, 4 Middle: 10, 11 Late: 14, 15</td>
<td>19 24</td>
<td>40 41.5</td>
</tr>
</tbody>
</table>

¹ Clients seen by the same therapist
² Clients seen by the same therapist
Narrative and emotion process coding system, version 2 (NEPCS 2.0; Angus Narrative-Emotion Marker Lab, Appendix A). The NEPCS 2.0 is used to identify narrative-emotion process markers which occur, to date, in samples consisting of clients experiencing depression, GAD, or complex trauma. The NEPCS is a research tool designed to systematically identify these client markers through linguistic and paralinguistic cues in videotaped psychotherapy sessions.

At present, there are 10 empirically-derived, mutually-exclusive markers (i.e., storytelling processes) that differ with respect to narrative structure, content, and coherence, as well as the degree to which emotion (verbally or nonverbally expressed) is integrated. One holding category, termed Unclear Storytelling, is intended to be used when the coders feel that the narrative-emotion process occurring within a given segment of therapy is not captured by an existing category. In the current project, no segments were coded as Unclear Storytelling.

These markers have been conceptually organized into three subgroups (NEPCS Problem, Transition, and Change markers). The initial differentiation of unproductive vs. productive processes was set out by Angus and Greenberg (2011) according to the presence of under-regulated, over-regulated, or undifferentiated emotion within a narrative context (i.e., “Problem” markers) and the integration of primary emotional experience within a coherent narrative structure (i.e., “Change” markers). Subsequent differentiation between Transition and Change markers as two distinct categories of productive processes occurred in the context of further refinement of the coding system emerging from previous studies (Angus Narrative-Emotion Marker Lab, 2015). As previously stated, Transition markers are conceptualized as processes that assist clients in the transition from problem-saturated self-narratives towards those which express adaptive change.
The 10 narrative-emotion process markers of the NEPCS are briefly defined below. Detailed descriptions and linguistic and paralinguistic indicators of each marker, as well as transcript exemplars, are outlined in the manual in Appendix A.

**NEPCS problem markers.** This subgroup is comprised of markers in which emotion is under-regulated, over-regulated, or unarticulated, and narrative content is overly rigid, maladaptive, shallow, or absent. Taken together, this group of markers represent narrative-emotion processes that are said to maintain the presenting clinical issue(s), and do not facilitate therapeutic recovery.

**Same old storytelling.** Same Old Storytelling shares conceptual similarities with a maladaptive scheme (Greenberg, Rice, & Elliott, 1993) or negative core beliefs (Beck, 1995), and refers to over-general descriptions of intra- or interpersonal processes, including maladaptive behavioural, thought, and emotional patterns, accompanied by a sense of low personal agency (i.e., stuckness, hopelessness, or resignation). These problematic patterns are seen as unalterable and maintained by forces outside of the self.

**Empty storytelling.** Empty Storytelling is an overly detailed, factual description of an event, with minimal reflectivity or analysis. The term “empty” refers to absent or limited emotional expression in verbal content, vocal quality (i.e., externalizing voice (Rice, Koke, Greenberg, & Wagstaff, 1979), or body language, and as a consequence, the significance of the story remains unclear to the listener.

**Unstoried emotion.** The Unstoried Emotion marker refers to an undifferentiated emotional state (Paivio & Pascual-Leone, 2010) or affective experience that is disconnected from a narrative context. The emotion may be under-regulated (i.e., emotional overflow) or over-
regulated (i.e., dissociative emotion), but remains unacknowledged or unelaborated in the narrative, or conversely, no causal factor can be identified for the emotion.

**Superficial storytelling.** Superficial Storytelling refers to a generalized, vague, incoherent, or abstract narrative in which the client may discuss his or her own feelings, ideas, beliefs, or preferences in an intellectualized manner, but with little evidence of exploration or discovery. Content is also frequently depersonalized or other-focused.

**NEPCS transition markers.** This subgroup is comprised of markers that are conceptualized as the impetus for new meaning-making, and more adaptive, flexible self-narratives. These processes described by these markers are thought to pave the road towards therapeutic change.

**Competing plotlines storytelling.** Competing Plotlines Storytelling refers to the expression of competing or opposing emotional responses, lines of thinking, or behavioral 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. The concept of *problematic reaction points* (Greenberg et al., 1993), in which the client experiences puzzlement about their emotional reaction to a specific event, is a subtype of Competing Plotlines Storytelling. Furthermore, the opposing emotional reactions, beliefs, or action urges implicit in this marker often stem from a breach of deeply-held assumptions about the world, others, and/or the self.

**Inchoate storytelling.** The Inchoate Storytelling marker captures the process of accessing, making sense of, and articulating a present-moment internal experience. Attention is focused inwards on an unclear bodily felt sense (Elliott et al., 2004), a process akin to the *focusing* exercise advanced by Gendlin (1996), in the service of sorting through or piecing
together the experience. The present-moment felt sense becomes symbolized in language, and may be somewhat disjointed or involve extensive pausing, as well as the “trying on” of various words, symbols, or metaphors in the service of accurately representing the experience.

**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.

**Reflective storytelling.** The Reflective Storytelling marker is defined as a coherent analysis of, or 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, and while internal experiences may be elaborated within this marker, there is limited evidence of present-centered exploration. 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).

**NEPCS change markers.** The NEPCS Change markers subgroup refers to client story types featuring the greatest degree of productive narrative-emotion integration, including more flexible, coherent, and emotionally-differentiated narratives. The Change markers category captures novel action tendencies, or emergent meaning-making, and therefore reflects actual adaptive change—whether concrete behavioral examples, or new conceptual understandings. The markers in this category overlap in significant ways with White and Epston’s (1990)
“Unique Outcome” story, and with markers from the “Innovative Moments Coding System” (IMCS; Gonçalves et al., 2009; Gonçalves, Ribeiro, Mendes, Matos, & Santos, 2011).

**Unexpected outcome storytelling.** Unexpected Outcome Storytelling refers to descriptions of new, adaptive behavior, emotional responses, or thought patterns, which are 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 reflective or interpretive analysis of a specific event, subjective experience, and/or cognitive/behavioural pattern, which is accompanied by a sense of discovery connected to new self-understanding. Whereas Unexpected Outcome Storytelling pertains to novel, adaptive responses to a concrete event, Discovery Storytelling captures innovative meaning-making or the re-conceptualization of old beliefs about the self and/or the world.

**No client marker.** The No Client Marker (NCM) code is assigned during one-minute segments of therapy when the therapist has more than 66% of the air time, or speaks for over 40 seconds of the 60-second clip.

**Procedure**

**Session selection.** For each of the 12 clients comprising the current sample, two early, two middle, and two late phase videotaped therapy sessions were selected for application of the NEPCS 2.0. The third and fourth session were selected to comprise the early phase sessions, under the assumption that the first couple of sessions predominantly focus on cultivating a therapeutic alliance and discussing the presenting problem. Additionally, the IC and EE interventions were consistently introduced in Session 4, and as such, the NEPCS was applied to
one session for each client in which the quintessential therapeutic interventions of EFTT would occur with certainty. The middle sessions selected were Session 10 and 11 (however, due to technical difficulties, one client's Session 10 was uncodable and, as such, Session 12 was used as a substitute). The sessions selected to comprise the late phase of therapy were the two sessions prior to the final session (final sessions ranged from Session 15 to 20), as the last session focused on therapy termination.

**Application of the NEPCS 2.0.** The NEPCS 2.0 was applied to two early, two middle, and two late phase videotaped therapy sessions of each of the 12 clients using Noldus The Observer XT software for behavioural coding. This software allows coders to play video and capture the linguistic and paralinguistic cues associated with each NEPCS marker.

The following coding procedure was employed: (1) Therapy sessions were divided into one-minute time segments. This unit of time was found to be small enough to limit the occurrence of multiple NEPCS markers within a given video clip, yet large enough to meaningfully capture narrative-emotion processes using the NEPCS, (2) Coders watched the entire one-minute segment, and proceeded to assign the modal NEPCS marker (i.e., the client storytelling marker that occurred for the most time over the course of the observational segment). In the event of co-occurring markers within a given segment, the marker of greatest salience is coded. Salience may be determined by duration of time spent in a particular marker (i.e., the client spends more of the minute in one storytelling mode over another), or by an important shift in narrative-emotion process (i.e., the client has been in one storytelling mode over several minutes of the session, but shifts into a different mode during the current segment). In the event that the majority of the session is an NCM code, but there is another NEPCS client marker present for a minimum of
one-third of the observational segment, the NEPCS marker which captures the client process is coded.

**Inter-rater agreement.** In the current project, open consensual validation was used for 80% of the sample (57 therapy sessions), during which the coding team viewed the videotaped sessions together, one minute at a time, and each of three raters privately selected a code. Before moving on to the next time bin, the codes were then reviewed and compared, and in the event of a disagreement, discussion ensued 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 20% of the sample (15 sessions) was coded independently by two raters, and the codes were then compared in order to determine inter-rater agreement. Following this determination, the raters compared their codes and once again discussed any disagreements until consensus was achieved and the final code agreed upon, or it was decided that the arbiter should be consulted.

The primary author coded all 72 sessions; one additional rater (Master’s level psychology student) coded the 15 sessions used to determine inter-rater reliability, and another rater (Doctoral level psychology student) joined the previous raters in coding the remaining 57 sessions.

The 15 sessions selected for reliability coding were drawn, at random, from 5 of the 12 clients in the sample, and included 5 early, 6 middle, and 4 late stage sessions; 6 sessions were from recovered clients, and 9 were from unchanged clients. Throughout these coding sessions, 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 the "salience" of the
competing NEPCS codes was unclear. 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, as calculated based on approximately one-fifth of the sample (15 sessions) coded by two raters, was found to be $\kappa = 0.85$, which is considered very good agreement (Hill & Lambert, 2004). Kappa values for the 15 individual sessions ranged from 0.72 – 0.96.

**Statistical Analyses**

Statistical analyses were conducted using two forms of dependent variables. In order to evaluate the proportions of individual NEPCS markers or NEPCS marker subgroups, a count variable of the total number of occurrences of each individual NEPCS marker or marker subgroup was created. These count variables were observed to be negatively binomially distributed. The second form of dependent variable, NEPCS marker shifting, was a categorical, binary response variable.

Analysis of both the count variables and shifting variable were first assessed using multilevel generalized linear models. For the individual NEPCS marker count variable, the data was reduced to 11 observations per session for each client-therapist dyad, one for every NEPCS marker (at each stage of therapy), resulting in 792 observations. All analyses were performed assuming a negative binomial distribution of errors. For the NEPCS marker subgroup count variable, the data was reduced to 4 observations, one for each marker subgroup type (e.g., Problem markers, Transition markers, Change markers, and No Client Marker), per minute, per
session, per stage, per client-therapist dyad, resulting in 288 observations. All analyses were performed assuming a negative binomial distribution of errors. The shifting variable was not collapsed and retained all 4053 observations drawn from each minute per therapy session, per stage, per client-therapist dyad. All analyses were performed assuming a binomial distribution of errors using logistic regression.

The bottom up hierarchical structure of the data is different for each of the dependent variable types. For the individual NEPCS marker count variable, each observation is nested within session, within stage of therapy, and within client-therapist dyad, and also cross-nested in NEPCS marker subgroup. However, estimates of the unexplained variance for session and stage of therapy were both zero, and removed from the two models, resulting in a simple crossed random effects model with observations nested within client-therapist dyad and NEPCS marker subgroup. For the shifting variable, the observations (by minute) are nested within session, nested within stage of therapy, and nested within therapist-client dyad.

All statistical models employed the use of three primary factor variables of interest (i.e., outcome status, stage of therapy, and NEPCS marker or NEPCS marker subgroup), as well as at least one covariate control variable (i.e., a time variable). For each, the full factorial expansion of outcome status, by stage of therapy, by either NEPCS marker or NEPCS marker subgroup, was included in the model. For the model of shifting behaviour, these three primary variables were also time lagged to the minute prior in order to examine the antecedents of shifting. Time lagging resulted in the loss of the first minute of data from each session, reducing the sample size to 3960. The way in which length of therapy session and time was accounted for in each type of model differed by structure of the dependent variable.
Time was controlled for in each model in the following ways. For both count models (i.e., individual NEPCS marker and NEPCS marker subgroup), differences in session length were addressed in the same way. The total length of each client-specific therapy session was used as an offset to transform the expected occurrences or counts (i.e., 10 examples of Same Old Storytelling in a 58-minute therapy session) into estimated rates (i.e., proportions), and also to account for differences in counts that might arise due to the differing lengths of each therapy 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 (i.e., individual NEPCS marker or NEPCS marker subgroup) can be divided by the offset to give an estimate of rate (i.e., proportion) per session, rather than the count.

For the shifting variable, with time being treated continuously, an offset was not used. Instead, time (in minutes) appeared in the model. Participant specific differences in narrative use (i.e., client storytelling patterns) was also controlled for by including two additional time variables: 1) the mean individual NEPCS marker duration per session, per client-therapist dyad, and 2) the duration of each individual NEPCS marker length (centered on the mean) per minute, per session, per client-therapist dyad. These variables then comprised the time variable. These two variables were observed to have a quadratic relation to shifting, and also to have higher order quadratic interactions both overall and by outcome. Using likelihood ratio tests between step-wise comparable models, model fit based upon Akaike’s and Bayesian Information Criteria (AIC, BIC), and other diagnostics, the functional form for the time variables was best fit. The final model possessed interactions for all possible first and second order quadratic interactions for the time variables and their interactions by outcome. The addition of a large number of variables was
not of concern given the ratio of the degrees of freedom for the model, 54, to that of the sample size, 3960.

With the introduction of both between-participant (i.e., the mean individual NEPCS marker duration) and within-participant fixed effects (i.e., the duration of each individual NEPCS marker length), the higher order variance terms were reduced to near zero and non-significant in all models. This indicated that the between- and within-subject dependencies of the observations at the client-therapist dyad level (Level 2) were accounted for at the fixed effects or covariate level of the model. Once the time covariates were added to the model, the remaining variance was independent of the client, 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.

To further explain, the majority of the fixed effect variables in the model describe differences between clients (e.g., outcome status, stage of therapy, mean NEPCS marker duration, etc.). Furthermore, the fixed effect variables included at Level 1 are, with the exception of client-therapist dyad, the same variables assessed at Level 2 or higher. Thus, the estimated variance for the random intercepts is zero after accounting for outcome status, stage of therapy, NEPCS marker or NEPCS marker subgroup, the participant-specific mean duration of storytelling (time variable), 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 multilevel models (involving the count variables), the random intercepts were retained in the model, as they help to model over-dispersion even if the variance is small. However, for the logistic regression model (involving the shifting variables), both the random effects and the standard logistic regression produced identical estimates of the fixed effects, standard errors, and \( p \)-values. Thus, the multilevel analysis was dropped in favour of the standard logistic regression, as it represented a more correct, parsimonious model, and resulted in an increase in model fit. 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. The Holm sequential correction, proposed in 1979, is similar to the Bonferroni correction, and protects against the inflation of the alpha level when a large number of statistical tests are performed. The Holm's sequential version is more likely to detect real effects, if they do exist, while keeping the Type I error rate under control. It involves performing each statistical test in order to determine its \( p \)-value, and then ordering the tests from the one with the smallest \( p \)-value to the one with the largest \( p \)-value. Next, the test with the lowest \( p \)-value is tested first with a Bonferroni correction involving all tests, and then the test with the second lowest \( p \)-value is tested with a Bonferroni correction involving one less test, and so forth for all remaining tests (Abdi, 2010).

**Results**

The present study examined whether outcome status (recovered vs. unchanged) and stage of therapy (early vs. middle vs. late) was associated with the proportions of individual NEPCS
markers (e.g., Same Old Storytelling), marker subgroups (e.g., Problem markers), and NEPCS shifting in two early, two middle, and two late stage therapy sessions for a sample of 12 clients who received EFTT for complex trauma. To obtain descriptive statistics, NEPCS marker proportions were averaged across all clients in each outcome group separately, for all of the therapy sessions at a particular stage of therapy. For example, the mean proportion of the Same Old Storytelling marker for recovered clients in the early stage of therapy was created by averaging the proportion of Same Old Storytelling for all 6 recovered clients in Sessions 3 and 4, as these sessions uniformly represent the early stage of therapy across the current sample. The proportions across each stage of therapy (early, middle, and late) were then averaged to create a mean overall proportion per outcome group, and the proportions across outcome groups at each stage of therapy were averaged to create a mean proportion per stage.

Descriptive Proportions of NEPCS Markers

Across all therapy dyads ($N = 12$) and all sessions of psychotherapy ($N = 72$), a total of 4053 NEPCS markers were coded. Of the 4053 markers, 1310 (32.32%) were coded in early stage therapy, 1412 (34.83%) were coded in the middle stage therapy, and 1331 (32.83%) were coded in late stage therapy. In the recovered group, 2071 NEPCS markers were coded (51.09%), and in the unchanged group, 1982 NEPCS markers were coded (48.9%). Raw frequencies and mean proportions for each NEPCS marker are summarized by subgroup in Appendix B, Tables B1 (NEPCS Problem markers), B2 (NEPCS Transition markers) and B3 (NEPCS Change markers and No Client Marker). The descriptive information presented below highlights the proportions that were observed for each NEPCS marker by outcome group. It does not indicate statistically significant differences.
**Same old storytelling.** A total of 247 Same Old Storytelling markers occurred in the current EFTT sample overall (6% of all markers coded). Same Old Storytelling occurred more frequently among unchanged clients ($n = 153$, 8% of all markers coded in that outcome group) when compared to recovered clients ($n = 94$, 5% of all markers coded in that outcome group). This result was observed at the early (unchanged: $n = 60$, 9%; recovered: $n = 46$, 7%), middle (unchanged: $n = 54$, 8%; recovered: $n = 33$, 4%), and late (unchanged: $n = 39$, 6%; recovered: $n = 15$, 2%) stages of therapy.

**Empty storytelling.** There were a total of 272 Empty Storytelling markers coded overall (7% of all markers coded). Unchanged clients displayed more Empty Storytelling ($n = 166$, 8%) when compared to recovered clients ($n = 106$, 5%). This difference was most notable in the early (unchanged: $n = 61$, 9%; recovered: $n = 33$, 5%) and middle (unchanged: $n = 71$, 11%; recovered: $n = 43$, 6%) stages of therapy.

**Unstoried emotion.** The Unstoried Emotion marker occurred 122 times within the current sample (3% of all markers coded), and in particular, unchanged clients displayed more ($n = 83$, 4%) than recovered clients ($n = 39$, 2%). This difference was observed across the early, (unchanged: $n = 28$, 4%; recovered: $n = 15$, 2%), the middle (unchanged: $n = 24$, 4%; recovered: $n = 11$, 1%), and the late stages of therapy (unchanged: $n = 31$, 5%; recovered: $n = 13$, 2%).

**Superficial storytelling.** The Superficial Storytelling marker was the most frequently occurring NECPS marker in the current sample ($N = 1809$, 45% of all markers coded). The Superficial Storytelling marker occurred more frequently for unchanged clients ($n = 1076$, 54%) when compared to recovered clients ($n = 733$, 35%) across all stages of therapy, including early (unchanged: $n = 347$, 54%; recovered: $n = 250$, 38%), middle (unchanged: $n = 374$, 55%; recovered: $n = 255$, 35%), and late (unchanged: $n = 355$, 54%; recovered: $n = 228$, 34%).
**Competing plotlines storytelling.** The fourth-most frequently occurring marker in the current sample was Competing Plotlines Storytelling ($N = 345$, 9% of all markers coded). Over the course of therapy, Competing Plotlines were articulated more frequently by recovered clients ($n = 214$, 10%) when compared to unchanged clients ($n = 131$, 7%). This pattern was observed across the early (recovered: $n = 80$, 12%; unchanged: $n = 26$, 4%) and middle (recovered: $n = 87$, 12%; unchanged: $n = 41$, 6%) stages of therapy; however, by the late stage, the pattern was reversed (unchanged: $n = 64$, 10%; recovered: $n = 47$, 7%).

**Inchoate storytelling.** Inchoate Storytelling was coded 127 times in the current sample (3% of all the markers coded). Recovered clients displayed more Inchoate Storytelling markers overall ($n = 107$, 5%) than unchanged clients ($n = 20$, 1%). This pattern was consistent across early (recovered: $n = 41$, 6%; unchanged: $n = 7$, 1%), middle (recovered: $n = 42$, 6%; unchanged: $n = 9$, 1%), and late (recovered: $n = 24$, 4%; unchanged: $n = 4$, 1%) stages of therapy.

**Experiential storytelling.** Experiential Storytelling occurred with the least frequency in the sample ($N = 27$, 1% of all markers coded). Recovered clients articulated the vast majority of Experiential markers in the sample ($n = 23$, 1%) in comparison to unchanged clients ($n = 4$, 0.002%). The highest proportion of Experiential Storytelling markers occurred in the early ($n = 13$, 2%) and middle ($n = 9$, 1%) stages of therapy for recovered clients.

**Reflective storytelling.** There were a total of 375 Reflective Storytelling markers coded in the current sample (9% of all markers coded), making it the third-most frequently occurring storytelling type. Reflective Storytelling occurred more frequently among recovered clients ($n = 232$, 11%) when compared to unchanged clients ($n = 143$, 7%). This difference occurred at the middle (recovered: $n = 88$, 12%; unchanged: $n = 42$, 6%) and late (recovered: $n = 73$, 11%; unchanged: $n = 44$, 7%) stages of therapy.
**Unexpected outcome storytelling.** The Unexpected Outcome Storytelling marker occurred 93 times in the current sample (2% of all markers coded). In the middle stage of therapy, there were more identified in the recovered group \((n = 17, 2\%)\) when compared to the unchanged group \((n = 6, 1\%)\), and this pattern was sustained to the late stage (recovered: \(n = 53, 8\%\); unchanged: \(n = 12, 2\%)\). In the early stage of therapy, unchanged clients \((n = 4, 1\%)\) engaged in more Unique Outcome Storytelling than recovered clients \((n = 1, 0.001\%)\).

**Discovery storytelling.** Across the entire sample, the Discovery Storytelling marker was coded 97 times overall (2% of all markers coded). The recovered clients demonstrated many more over all stages of therapy \((n = 89, 4\%)\) when compared to unchanged clients \((n = 8, 0.004\%)\). The differences in proportion of Discovery Storytelling was most striking at the middle (recovered: \(n = 35, 5\%\); unchanged: \(n = 0, 0\%)\) and late (recovered: \(n = 47, 7\%\); unchanged: \(n = 6, 1\%)\) stages of therapy.

**No client marker.** Finally, the NCM code was the second most frequently occurring marker overall \((N = 539, 13\%\) of all markers coded). More specifically, recovered client-therapist dyads evidenced more NCMs across therapy \((n = 363, 18\%)\) in comparison to unchanged client-therapist dyads \((n = 176, 9\%)\). In fact, the recovered group showed higher proportions of NCMs across early (recovered: \(n = 106, 16\%\); unchanged: \(n = 53, 8\%)\), middle (recovered: \(n = 117, 16\%\); unchanged: \(n = 54, 8\%)\), and late (recovered: \(n = 140, 21\%\); unchanged: \(n = 69, 10\%)\) stages of therapy.
Research Hypothesis 1: Recovered EFTT clients would demonstrate a higher proportion of Change markers in the middle and late stages of therapy, and a higher proportion of Transition markers in the early and middle stages of therapy when compared to unchanged EFTT clients. Conversely, unchanged EFTT clients would demonstrate a higher proportion of Problem markers across all stages of therapy.

To determine whether there were significant differences in the overall proportions of NEPCS Problem markers (Same Old Storytelling, Empty Storytelling, Unstoried Emotion, and Superficial Storytelling), NEPCS Transition markers (Competing Plotlines Storytelling, Inchoate Storytelling, Experiential Storytelling, and Reflective Storytelling), and NEPCS Change markers (Unexpected Outcome Storytelling and Discovery Storytelling) between recovered and unchanged clients in the early, middle, and late stages of therapy, a negative binomial multilevel model was employed. When comparing all NEPCS marker subgroups, findings from this analysis demonstrated an overall difference across outcome group and stage of therapy, Wald \( \chi^2(12) = 96.52, p < .0001 \). This \( p \)-value is Holm Sequentially adjusted for multiple comparisons, as are all \( p \)-values reported. All results were in the hypothesized directions.

At the NEPCS marker subgroup by stage of therapy level, significant differences were evidenced between recovered and unchanged clients for NEPCS Problem markers (Same Old Storytelling, Empty Storytelling, Unstoried Emotion, and Superficial Storytelling) at early (51.8% vs. 78.6%), Wald \( \chi^2(1) = 9.96, p = .013 \), middle (47.0% vs. 79.4%), Wald \( \chi^2(1) = 16.02, p = .0008 \), and late stages of therapy (42.4% vs. 71.5%), Wald \( \chi^2(1) = 13.66, p = .002 \).
Figure 1. Proportions of NEPCS Problem markers over stage of therapy.

For the NEPCS Transition markers (Competing Plotlines Storytelling, Inchoate Storytelling, Experiential Storytelling, and Reflective Storytelling), recovered and unchanged clients differed significantly in the early (30.7% vs. 13.2%), and middle (30.5% vs. 13.8%) stages of therapy, Wald $\chi^2(1) = 13.05, p = .003$ and Wald $\chi^2(1) = 12.87, p = .003$, respectively. There was no statistically significant difference in the late stage of therapy, (21.4% vs. 18.2%), Wald $\chi^2(1) = 0.51, p = .477$. 
Figure 2. Proportions of NEPCS Transition markers over stage of therapy.

For the NEPCS Change markers (Unexpected Outcome Storytelling and Discovery Storytelling), recovered and unchanged clients were significantly different in the middle (5.9% vs. 1.4%), Wald $\chi^2(1) = 6.67, p = .049$, and late stage of therapy (11.4% vs. 3.2%), Wald $\chi^2(1) = 8.84, p = .021$. There was no significant difference in the early stage (1.5% vs. 0.8%).
Figure 3. Proportions of NEPCS Change markers over stage of therapy.

For the NCM category, recovered and unchanged dyads did not differ early in therapy (15% vs. 9.2%), or in the middle stage (15.2% vs. 8.3%), but were statistically different in proportions by the late stage of therapy (20.2% vs. 9.6%), Wald $\chi^2(1) = 7.17, p = .045$. 
Research Hypothesis 2: Recovered EFTT clients would demonstrate a higher proportion of Competing Plotlines Storytelling in the middle stage of therapy when compared to unchanged EFTT clients, and a higher proportion of Inchoate Storytelling, Reflective Storytelling, Unexpected Outcome Storytelling, and Discovery Storytelling in the middle and late stages of therapy. Conversely, unchanged EFTT clients would demonstrate a higher proportion of Superficial Storytelling and Unstoried Emotion across all stages of therapy when compared to recovered EFTT clients.

The results of the negative binomial multilevel model indicated that the Wald $\chi^2$ test was significant for the direct comparison of all individual NEPCS markers simultaneously, which suggests that the proportions of at least one NEPCS marker differed by outcome status, Wald $\chi^2(11) = 92.75, p < .0001$. The $p$-value is Holm Sequentially adjusted for multiple comparisons, as are all $p$-values reported.

Many of the hypothesized relationships were supported. Specifically, there were significant differences in the proportions of Superficial Storytelling, Inchoate Storytelling,
Discovery Storytelling, and No Client Marker by outcome group. For the Superficial Storytelling marker, unchanged clients articulated 55.1% overall, whereas the proportion for recovered clients was 35.3% overall, Wald $\chi^2(1) = 24.32, p < .0001$. For the Inchoate Storytelling marker, recovered clients evidenced this code 5.2% of the time, while the proportion for unchanged clients was 0.96%, Wald $\chi^2(1) = 21.12, p < .0001$. In terms of Discovery Storytelling, recovered clients articulated this marker 3.21% of the time, while the proportion for unchanged clients was 0.68% overall, Wald $\chi^2(1) = 11.07, p = .007$. Finally, a comparison of the proportion of No Client Marker between recovered and unchanged clients overall showed that this marker occurred in the therapy of recovered clients 16.8% of the time, whereas it occurred 9% of the time for unchanged clients, Wald $\chi^2(1) = 14.02, p = .0016$.

The results of the analysis also suggested that the proportions of individual NEPCS markers are differed between outcome group and stage of therapy. The following significant results for each NEPCS marker have been clustered together within their respective marker subgroups (i.e., Problem, Transition, and Change markers).

**NEPCS problem markers.** There was an overall statistically significant difference between outcome group and stage of therapy when examining the NEPCS Problem markers as a whole, Wald $\chi^2(12) = 33.90, p = .0007$. This p value is Holm Sequentially adjusted for multiple comparisons, as are all p-values reported. At the individual NEPCS marker level, there were two comparisons across outcome group and stage of therapy that approached and achieved statistical significance, and the results were in the hypothesized direction. At both middle and late stages of therapy, the recovered and unchanged clients differed in their proportional use of Superficial Storytelling. Specifically, at the middle stage of therapy the difference was significant, Wald $\chi^2(1) = 10.03, p = .019$, with proportions of 35.0% and 56.8% respectively.
for the recovered and unchanged clients. At the late stage of therapy, this difference remained significant, Wald $\chi^2(1) = 8.92, p = .031$, with proportions of 33.8% and 54.5% respectively for the recovered and unchanged clients.

Figure 5. Proportions of Superficial Storytelling over stage of therapy.

**NEPCS transition markers.** There was an overall significant difference by outcome group and stage of therapy, Wald $\chi^2(12) = 43.68, p < .0001$, when comparing all of the NEPCS Transition markers simultaneously. This p value is Holm Sequentially adjusted for multiple comparisons, as are all p-values reported. At the individual NEPCS marker level, there were two comparisons across outcome group and stage of therapy that approached or achieved statistical significance, and these were in the hypothesized direction. Specifically, in the early stage of therapy, the difference in the proportional use of the Competing Plotlines Storytelling marker between recovered and unchanged clients approached statistical significance, $\chi^2(1) = 7.71, p < .06$, with proportions of 13% and 5% respectively for recovered and unchanged clients.
The difference in proportional use of Inchoate Storytelling for recovered and unchanged clients at the middle stage of therapy was statistically significant, Wald $\chi^2(1) = 10.82, p < .01$, with proportions of 6.3% and 0.7% respectively. All other pairwise comparisons did not approach or reach statistical significance within this NEPCS marker subgroup.

![Graph showing proportions of Inchoate Storytelling over stage of therapy.]

Figure 6. Proportions of Inchoate Storytelling over stage of therapy.

**NEPCS change markers.** When comparing all of the Change markers together, there was an overall difference between outcome group and stage of therapy, Wald $\chi^2(6) = 18.64, p = .005$. This $p$ value is Holm Sequentially adjusted for multiple comparisons, as are all $p$-values reported. At the individual NEPCS marker level, there was one comparison across outcome group and stage of therapy that reached statistical significance, and it was in the hypothesized direction. Specifically, a difference in the proportional use of Discovery Storytelling at the middle stage of therapy was observed, Wald $\chi^2(6) = 8.08, p = .027$, with proportions of 3.6% and 0% respectively for the recovered and unchanged clients.
Figure 7. Proportions of Discovery Storytelling over stage of therapy.

Research Hypothesis 3a: Recovered EFTT client would demonstrate a higher proportion of NEPCS shifting – movement between one NEPCS marker and a different NEPCS marker per minute of therapy – across all stages of therapy when compared to unchanged EFTT clients.

A logistic regression was used to determine whether there were differences in the proportions of NEPCS marker shifts between recovered and unchanged clients in the early, middle, and late stages of therapy. NEPCS marker shifts were defined as movement from one type of NEPCS marker to a different type, irrespective of marker subgroup classification, across each minute of therapy. For example, Same Old Storytelling to Superficial Storytelling is considered a NEPCS marker shift, even though the shift occurs within the NEPCS Problem marker subgroup.

Results of this analysis supported the initial hypothesis, and revealed a significant difference between recovered and unchanged clients in terms of the overall proportion of shifting
between NEPCS markers (61.1% vs. 52.4%, respectively), Wald $\chi^2(1) = 36.80, p < .0001$.

Analysis of the proportion of time that clients from both outcome groups remained within a single NEPCS marker on average (i.e., when clients are currently in the same NEPCS marker as they were in the previous minute of therapy; for example Unstoried Emotion to Unstoried Emotion), was used as a proxy for narrative flexibility. With proportions of 48% for unchanged clients and 40% for recovered clients, the difference between the outcome groups was significant, Wald $\chi^2(1) = 5.51, p = .0189$. This result indicates that more shifting, or narrative flexibility, is associated with recovered outcome status.

Further analyses revealed significant differences across outcome group for the proportion of NEPCS marker shifts by stage of therapy. Recovered vs. unchanged clients differed in the early (59.4% vs. 50.6%), and middle (62.1% vs. 50.7%) stages of therapy, Wald $\chi^2(1) = 11.92, p = .002$ and Wald $\chi^2(1) = 22.06, p < .0001$, respectively. Recovered and unchanged clients differed only marginally in the late stage of therapy (61.6% vs. 55.7%, respectively), Wald $\chi^2(1) = 5.57, p = .054$.

![Figure 8. Proportions of NEPCS marker shifting over stage of therapy.](image-url)
Research Hypothesis 3b: Unchanged EFTT clients would demonstrate a higher proportion of unproductive shifting across therapy than recovered EFTT clients, and recovered EFTT would demonstrate a higher proportion of productive shifting across therapy when compared to unchanged EFTT clients.

A logistic regression analysis was used to determine whether there were differences between recovered and unchanged clients in the proportion of unproductive shifting (operationally defined as shifting from one NEPCS Problem marker to another, a Transition marker to a Problem marker, a Change marker to a Problem marker, or an NCM to a Problem marker across each minute of therapy) and productive shifting (operationally defined as shifting from an NEPCS Problem marker to a Transition marker, a Transition marker to another Transition marker, a Transition marker to a Change marker, one Change marker to another Change marker, or an NCM to a Transition marker or a Change marker). In essence, unproductive shifting is identified as occurring whenever a client moves into a Problem marker, and productive shifting occurs when they move away from a Problem marker, or move back and forth between productive NEPCS makers (i.e., those belonging to the Transition or Change marker subgroups). In addition to unproductive and productive shifting, shifting to a NCM was also explored in a separate category as an index of therapist activity.

The results of these analyses revealed that, when compared to recovered clients, unchanged individuals were significantly more likely to experience unproductive shifts than their recovered counterparts (32.5% vs. 25.3%, respectively), Wald $\chi^2(1) = 8.51, p = .007$. This result indicates a higher relative propensity of sustained unproductive storytelling for unchanged clients when compared to recovered clients. Furthermore, recovered clients evidenced a significantly higher proportion of productive shifts when compared to unchanged clients (24.9%
vs. 13.3%, respectively), Wald $\chi^2(1) = 40.14, p < .0001$. This result indicates a higher relative propensity of sustained productive storytelling for recovered clients when compared to unchanged clients. Finally, recovered clients were also significantly more likely to shift to No Client Marker than unchanged clients (9.7% vs. 6.2%, respectively), suggesting that therapist contributions (i.e., moments during a session when therapists are doing more of the talking, such as when engaging in psychoeducation, reflection, interpretation, etc.) to the sessions occurred at a higher frequency for clients who improved in symptomatology by therapy termination, Wald $\chi^2(1) = 11.93, p = .0017$.

![Bar chart showing proportions of NEPCS shifting type]

Figure 9. Total proportions of Productive, Unproductive, and No Client Marker shifting.

As can be noted in the graph above, recovered clients spent almost equal amounts of time engaging in productive and unproductive NEPCS shifting, whereas unchanged clients show a strong propensity towards unproductive shifting. Contextualizing these results with those from the more general shifting analysis, it appears as though narrative flexibility, or shifting between both productive and unproductive narrative-emotion processes, is associated with therapeutic recovery, whereas lower levels of narrative flexibility in general, and higher levels of
unproductive shifting more specifically, characterizes the therapy trajectory of unchanged clients in the EFTT sample.

Summary of Results

The current study sought to examine the following research hypotheses: 1) Recovered EFTT clients would demonstrate a higher proportion of Change markers in the middle and late stages of therapy when compared to unchanged EFTT clients, and a higher proportion of Transition markers in the early and middle stages. Conversely, unchanged EFTT clients would demonstrate a higher proportion of Problem markers across all stages of therapy when compared to recovered EFTT clients, 2) Recovered EFTT clients would demonstrate a higher proportion of Competing Plotlines Storytelling in the middle stage of therapy when compared to unchanged EFTT clients, and a higher proportion of Inchoate Storytelling, Reflective Storytelling, Unexpected Outcome Storytelling, and Discovery Storytelling in the middle and late stages of therapy. Conversely, unchanged EFTT clients would demonstrate a higher proportion of Superficial Storytelling and Unstoried Emotion across all stages of therapy when compared to recovered EFTT clients, and 3 a) Recovered EFTT clients would demonstrate a higher proportion of NEPCS shifting (i.e., movement between any one NEPCS marker and a different type of NEPCS marker per minute of therapy) when compared to unchanged EFTT clients, and 3 b) Unchanged EFTT clients would demonstrate a higher proportion of unproductive shifting (i.e., movement to a Problem marker), and recovered EFTT clients would demonstrate a higher proportion of productive shifting (i.e., movement away from, or outside of, a Problem marker) across therapy.

Results of negative binomial multilevel modelling and logistic regression analyses revealed that, as predicted, unchanged clients demonstrated significantly higher proportions of
Problem markers at all stages of therapy. At the level of individual NEPCS Problem markers, Superficial Storytelling occurred in significantly higher proportions for unchanged clients at the middle and late stages of therapy when compared to recovered clients. Supporting a hypothesis of the current study, recovered clients evidenced significantly higher proportions of Transition markers at the early and middle stages of therapy when compared to unchanged clients. Recovered clients also demonstrated significantly higher proportions of Inchoate Storytelling (a Transition marker) at the middle stage of therapy than unchanged clients. In terms of Change markers, recovered clients showed significantly higher proportions in the middle and late stages of therapy than their unchanged counterparts, which was also in line with expectations. At the level of individual NEPCS Change markers, Discovery Storytelling occurred in significantly higher proportions for recovered clients at the middle stage of therapy when compared to unchanged clients.

Finally, NEPCS shifting (i.e., movement from one NEPCS marker to another kind of NEPCS marker) occurred at a significantly increased frequency in the recovered outcome group. Although recovered clients demonstrated significantly higher proportions of productive NEPCS shifting (i.e., shifting away from, or outside of, a Problem marker), unchanged clients evidenced significantly higher proportions of unproductive NEPCS shifting (i.e., shifting to a Problem marker).

**Discussion**

The current study was an extension of the pilot investigation completed by Carpenter and colleagues (2016), which applied the NEPCS to 4 clients (two recovered, two unchanged) from an EFTT sample. Eight clients were added to the pilot study sample (4 recovered, 4 unchanged).
in order to increase the power of the analyses to detect significant results and improve the
generalizability of the findings.

An important goal of this study was to examine the relationship between the proportions
of NEPCS markers and marker subgroups (NEPCS Problem, Transition, and Change markers)
and outcome status (recovered vs. unchanged) across stages of therapy (early, middle, and late).
Another goal of this study was to explore the association between NEPCS shifting more
generally, and type of shifting (productive vs. unproductive) more specifically, and outcome
status across stages of therapy.

In the sections to follow, significant research findings related to the three research
questions will be highlighted and discussed within the context of trauma literature, EFTT, and
psychotherapy process research. The implications of these findings for clinical practice will be
explored, the limitations of the current study will be addressed, and the directions for future
research will be discussed.

**Application of the NEPCS 2.0 to an Extended Complex Trauma EFTT Sample**

In order to extend the findings of a pilot study conducted by Carpenter and colleagues,
the NEPCS 2.0 was systematically applied to a larger EFTT complex trauma sample of
participants ($N = 12$). In line with the results obtained from the pilot study, all NEPCS markers
were evident at each stage of therapy (early, middle, and late) and across outcome groups
(recovered and unchanged clients).

Additionally, all of the mean proportions for each NEPCS marker were in the expected
directions. For example, all markers belonging to the NEPCS Problem marker subgroup (Same
Old Storytelling, Empty Storytelling, Unstoried Emotion, and Superficial Storytelling) occurred
significantly more frequently in the therapies of unchanged clients, whereas all markers
belonging to the NEPCS Change marker subgroup (Unexpected Outcome Storytelling and Discovery Storytelling) occurred more commonly in the recovered outcome group. Finally, all markers belonging to the NEPCS Transition marker subgroup (Competing Plotlines Storytelling, Inchoate Storytelling, Experiential Storytelling, and Reflective Storytelling) were coded more frequently for recovered clients, which lends empirical support to the theoretical foundations of this marker subgroup (for a complete summary of these results, please refer to Appendix B).

These findings suggest that NEPCS markers occur and can be reliably detected in EFTT. From its inception, the NEPCS has been described as a pan-theoretical and trans-diagnostic tool that is intended to capture the narrative-emotion processes common across psychological treatment modalities and diagnostic classifications, and their varying symptom profiles. To date, the NEPCS has been applied to CCT, EFT, CT, CBT for clients suffering from depression, GAD, and complex trauma.

**NEPCS markers (overall marker subgroups and individual markers) by Therapeutic Outcome and Stage of Therapy**

**NEPCS problem markers overall.** A negative binomial multilevel model was used to determine whether recovered clients and unchanged clients demonstrated significantly different overall proportions of NEPCS Problem markers. To review, NEPCS markers that belong to the NEPCS Problem marker subgroup are characterized by maladaptive narrative states in which emotions are under- or overregulated, and meaningful exploration or elaboration of narrative material is minimal or absent (i.e., Same Old Storytelling, Empty Storytelling, Unstoried Emotion, and Superficial Storytelling).

From a theoretical perspective, Problem markers are presumed to maintain the clients’ presenting problem(s). Results from the current analysis revealed significant differences in the
overall proportions of NEPCS Problem markers between recovered versus unchanged clients across all stages of therapy. As predicted, unchanged clients had higher proportions in the early (78.6% vs. 51.8%), middle (79.4% vs. 47%), and late (71.5% vs. 42.4%) phase of EFTT treatment. In fact, unchanged clients articulated 29.4% more Problem markers across therapy than did recovered clients. Interestingly, recovered clients demonstrated a gradual decline in Problem markers across therapy, as might be expected, whereas unchanged clients articulated roughly the same proportion of Problem markers in the middle stage of therapy as they did in the early stage, and only began to show a decline in the late stage.

Furthermore, although recovered clients spent approximately half of their time in Problem markers at the outset of therapy, unchanged clients spent the vast majority of their time in Problem markers throughout the course of their treatment. It can therefore be seen that clients who continue to struggle with trauma symptomatology at treatment termination demonstrate more Problem markers throughout therapy, indicative of maladaptive states of narrative-emotion integration.

These findings are consistent with Carpenter and colleagues’ (2016) pilot study, in which a significant difference in the proportion of NEPCS Problem markers was observed between outcome groups, in favour of unchanged clients, and the resulting effect size was large. NEPCS analyses using other client populations have also demonstrated similar results. More specifically, clients who did not recover from depression at therapy termination had significantly higher proportions of Problem markers in the middle stage of therapy (Boritz et al., 2014), and in a sample of GAD clients receiving MI-CBT, unchanged clients demonstrated higher proportion of Problem markers overall, spending 19.7% more time in unproductive narrative-emotion states than their recovered counterparts (Macaulay, 2014). Although the Problem marker subgroup has
been associated with unchanged outcome status across numerous NEPCS projects, in the current EFTT sample, Problem markers were seen in higher proportions for unchanged clients across all stages of therapy, perhaps owing to the increased sample size (at least twofold) when compared to all other NEPCS investigations. This result also lends further empirical support to Angus and Greenberg’s (2011) categorization of NEPCS Problem marker processes as unproductive in therapy.

Individual NEPCS problem markers. A negative binomial multilevel model was used to explore whether recovered vs. unchanged EFTT clients differed significantly in proportions of individual NEPCS Problem markers by stage of therapy. The results discussed below represent the statistically significant and noteworthy non-significant findings that emerged, and their implications for trauma therapy more generally, and EFTT more specifically.

Superficial storytelling. As previously outlined, Superficial Storytelling belongs to the NEPCS Problem marker subgroup, and is coded when a client’s narrative discourse about events, thoughts, feelings, and/or behaviours associated with the self or others is presented in a generalized, vague, or intellectualized manner. In this mode of narration, a reflective examination or analysis of causal mechanisms or connections between events, thoughts, feelings, and/or behaviours is cursory or absent, and any reference to the internal (i.e., emotional) experience of the client occurs from a distanced or impersonal perspective. The surface-level reflective processing that occurs in Superficial Storytelling seems to preclude deeper emotional engagement with, and exploration of, the narrated material and therefore stunts the growth and integration of narrative and emotion processes. A notable finding that emerged from the current analysis was a significant difference in the proportion of Superficial Storytelling between recovered and unchanged clients by stage of therapy. Unchanged EFTT clients demonstrated
higher proportions of Superficial Storytelling in the middle (56.8% vs. 35%) and late (54.5% vs. 33.8%) stages when compared to clients who recovered at EFTT termination.

Superficial Storytelling is akin to Abstract Storytelling as outlined in the original version of the NEPCS (NEPCS 1.0; Boritz, Bryntwick, Angus, Constantino, & Greenberg, 2012). In previous research, Boritz and colleagues (2014) found a high proportion of Abstract Storytelling in both the recovered and unchanged group overall (43.6% and 55%, respectively), although further analysis revealed a significantly higher proportion of Abstract Storytelling in the middle stage of therapy for the unchanged group. Boritz (2012) hypothesized that Abstract 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 rigorous 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. Furthermore, because over-general ABM is a hallmark of depressive pathology (Hermans, Vandromme, Debeer, Raes, & Demyttenaere, 2008; Boritz et al., 2008), it can be expected that unchanged clients in this sample evidence a higher proportion of this mode of narrative-emotion processing.

The results of Macaulay’s 2014 study also indicated a trend for the increased proportion of Superficial Storytelling in clients who were unchanged at termination of MI-CBT therapy for GAD. Evidence from the literature on GAD suggests that chronic worriers may engage over-general memory processing as a means of escaping the discomfiting imagery and emotions associated with their negative experiences (Burke & Mathews, 1992). As such, Macaulay (2014) conceptualized Superficial Storytelling as one operationalization of the narrative-emotion process that underlies the worry associated with GAD.
In a similar vein, the results of a study by Mundorf and Paivio (2011) suggest that clients who have a diminished ability to meaningfully explore and elaborate on, in written form, the emotions and consequences associated with their traumatic experiences have reduced levels of symptom resolution post-therapy. Accordingly, emotional avoidance and over-general memory are strongly associated with Major Depressive Disorder (Boritz et al., 2008), GAD (Roemer et al., 2005) and trauma-related pathology (Paivio & Pascual-Leone, 2010). Although 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 strategy is only advantageous in the short-term.

In terms of complex trauma, chronic avoidance means trauma clients may not be able to readily derive important information and meaning from their damaging experiences that might otherwise improve their functioning, and the inhibition of powerful feelings often leads to immune suppression and negative health outcomes more generally (Pennebaker & Campbell, 2000), and in the context of EFTT, can forestall the resolution of lingering distress in relation to the perpetrator(s) of abuse. Furthermore, if survivors of trauma persist in using avoidance as a method of coping with difficult emotions, the “digesting” of painful experience is arrested and the symptomatology associated with trauma endures (Foa, Huppert & Cahill, 2006). In fact, Gestalt therapists consider emotional avoidance to be the “cornerstone of pathology” (Perls, Hefferline & Goodman, 1951).

As previously discussed, parental responsiveness to children’s personal stories, feelings, and needs during the developmental period lays the foundation for healthy emotion regulation capacities, as the child learns to accurately label and appropriately express affective experience in their personal stories, termed “emotion coaching” (Gottman, 1997). In an empathically
responsive environment that provides a sense of safety and support, children are able to share their most painful stories and experience a full range of emotions, learn to modulate their feelings to suit a particular context, and can more effectively self-soothe and adaptively problem-solve in the face of unpleasant experience. In environments characterized by abuse or neglect, however, children are not safe to disclose their most painful stories or express difficult emotions, and in the absence of appropriate emotion coaching, often learn to stifle emotional awareness and painful personal stories (Paivio and Pascual-Leone, 2010). Psychotherapy, then, provides a rich opportunity for the therapist to serve the interpersonally corrective function of emotion coach, and help traumatized clients to safely disclose their most painful stories in order to access, explore, and articulate their full inventory of emotional experience.

The results of the current study suggest that, in line with predictions, clients who remain unchanged at therapy termination (i.e., still experiencing significant levels of trauma-related symptoms) maintain a level of emotional avoidance, in the context of Empty and Superficial storytelling, over the middle and late phase of therapy that is significantly more pronounced than in their recovered counterparts. Interestingly, recovered clients did not differ significantly from unchanged clients with respect to their proportion of Superficial Storytelling in the early phase of therapy, perhaps suggesting that, while unchanged clients show high levels of emotional avoidance throughout treatment, recovered clients become less emotionally guarded, and more willing and able to access and disclose their most painful specific autobiographical memories (Boritz et al., 2008; 2011), for new emotional meaning making as time goes on, in line with the theory of EFTT, as proposed by Paivio and Pascual-Leone (2010). Because Superficial Storytelling seemed to predominant the middle and late stage of therapy for unchanged clients, it may be important for therapists who work with traumatized clients to listen closely for an
overrepresentation of this mode of processing in the early phase of therapy, and pay particular attention to helping clients move away from this emotionally-avoidant state, and into a more promising treatment trajectory. More constructive modes of narrative-emotion processing relevant to populations experiencing trauma-related pathology will be discussed below.

**Unstoried emotion.** Although not associated with significant statistical results in the present analyses, the Unstoried Emotion marker warrants further discussion, as dysregulated emotion is often associated with trauma. This narrative-emotion marker is coded when undifferentiated, over- or under-regulated emotional states are disconnected from, or are unelaborated within, a narrative context. In the case of trauma, Unstoried Emotion may take the form of dissociative emotion, such as “silence and pausing in which clients appear to face obstructions in their process of self-exploration, [as they attempt to] disengage by avoiding emotion and/or withdrawing from it” (Boritz, 2012). In the current analysis, unchanged clients evidenced higher proportions across all stages of therapy when compared to recovered clients, although these differences were not statistically significant.

Interestingly, in Carpenter and colleagues (2016) pilot project, a significant difference did emerge in the proportion of Unstoried Emotion between recovered and unchanged clients. More specifically, an eta squared analysis revealed that 35% percent of the variance in proportion of Unstoried Emotion was attributable to therapeutic outcome status (i.e., recovered or unchanged), whereby unchanged clients expressed significantly more Unstoried Emotion than recovered clients.

The difference between the two samples may have occurred because one of the unchanged clients in Carpenter and colleagues’ pilot analysis evidenced a very high proportion
of Unstoried Emotion, and due to the small sample size \((N = 4)\), the difference in proportions between unchanged and recovered clients may have been overinflated.

Nonetheless, Unstoried Emotion is thought to represent a form of emotional dysregulation that may occur with greater frequency in trauma samples when compared to individuals suffering from depression or GAD. In particular, 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). The descriptive findings of the present study suggest that the proportions of Unstoried Emotion in both recovered and unchanged clients remained consistent across stages of therapy, perhaps suggesting that in the current sample, the therapeutic treatment did not decrease the occurrence of this maladaptive emotion regulation strategy, but rather promoted other, more productive strategies that enabled some clients (i.e., those who recovered from trauma symptomatology) to access, explore, differentiate, and transform the emotional experiences/outcomes of traumatic events.

In their analysis of the written narratives of clients receiving EFTT, Mundorf and Paivio (2011) found that clients with a greater capacity to express trauma-related feelings and meanings in written trauma narratives at the onset of therapy had greater trauma resolution post-therapy. Similarly, the recovered clients in the present study expressed a lower proportion of Unstoried Emotion at the outset of therapy, and continued to decrease in the expression of this marker over the course of therapy. Perhaps recovered clients are better able to access and verbally express their emotionally-charged trauma material, and thus reap greater therapy benefits.

**NEPCS transition markers overall.** A negative binomial multilevel model was employed to determine whether recovered clients and unchanged clients demonstrated significantly different overall proportions of NEPCS Transition markers. To review, the NEPCS
Transition marker subgroup is comprised of NEPCS markers (i.e., Competing Plotlines Storytelling, Inchoate Storytelling, Experiential Storytelling, and Reflective Storytelling) that represent processes that move the client away from the presenting problem(s), and towards adaptive therapeutic change through de-stabilization of maladaptive self-narratives, regulation of emotional experience, and increased reflective analysis of narrative content.

The NEPCS Transition marker subgroup represents a further elaboration of the classification system that differentiates between narrative-emotion processes that demonstrate adaptive changes in thinking, feeling, or being, and re-conceptualized views of the self, others, and the world (i.e., NEPCS Change markers), from those processes that reveal forms of therapeutic engagement that may facilitate or catalyze the process of recovery from psychological pathology. As such, Transition markers are considered to be productive narrative-emotion states, although they do not suggest that bona fide change has occurred or will necessarily occur. In the current analysis, recovered clients were found to have significantly higher proportions of Transition markers in the early (30.7% vs. 13.2%) and middle (30.5% vs. 13.8%) stage of therapy, which partially supported the initial prediction. This result suggests that clients who were classified as recovered by the end of therapy began to engage in productive narrative-emotion processing soon after the initiation of treatment.

The productivity associated with the Transition marker subgroup may occur because the NEPCS markers that comprise this subgroup are indices of increased emotional awareness, enhanced accessing and articulation of experience (as can be seen in Experiential Storytelling and Inchoate Storytelling), and heightened de-stabilization of dominant, problem-saturated narratives (as can be seen in Competing Plotlines Storytelling, during which an incongruent, and often more adaptive perspective becomes simultaneously activated and strengthened, leading to
increased differentiation of emotional experience and self-related meanings). In Reflective Storytelling, a focus on the causal mechanisms underlying cognitive, emotional, or behavioural patterns also serves to further differentiate and vivify the monological, maladaptive self-narratives with which clients enter therapy. In these ways, the Transition marker subgroup captures processes that pave the way for the emergence of Change markers later in therapy, as new information and more adaptive perceptions become available to the client and transform their lived experience in profound ways that leave them feeling and behaving differently in the world, and having a re-conceptualized sense of self.

In line with the results of the current study, Macaulay (2014) found a significant interaction between outcome group and stage of therapy, whereby recovered GAD clients receiving MI-CBT showed higher proportions of Transition markers in the early stage of therapy when compared to the middle and late stage. In the present study, Transition markers continued to be articulated at significantly higher frequencies by recovered clients in the working phase of treatment. Together, these results may suggest that recovered clients enter therapy with an increased capacity to productively integrate narrative and emotion processes when compared to unchanged clients, and this individual difference may be associated with a more linear trajectory towards therapeutic change and recovery from trauma. As brief, time-limited psychotherapy increasingly becomes the gold standard for treatment, the articulation of Transition markers by clients early in therapy is of utmost importance, as this is associated with productive change down the line in treatment. If these facilitative processes are not set in motion early on in therapy, clients may find themselves in the termination phase of treatment before any productive gains have been made. Perhaps then, for some clients, time-limited therapies prematurely halt their more circuitous trajectory of change, and therefore they would be likely to benefit from
extended treatment protocols. Interestingly, the proportions of Transition markers for unchanged clients increase in the late stage of therapy, and a significant difference between the outcome groups is no longer present. It is as though the unchanged outcome group has now "caught up" to the recovered clients, and it can be speculated that had therapy continued, some of these clients may have benefitted to a greater degree from the treatment.

The statistically significant results of the current analysis also suggest that Transition markers can be discriminated from Change markers, and that the theoretical link between Transition markers and good psychotherapeutic outcomes has empirical validation. Although Transition markers seem to represent productive narrative-emotion processes, they may be experienced as highly uncomfortable modes of processing for many more emotionally-phobic clients, particularly those who have endured complex trauma. Many of the NEPCS markers belonging to the Transition marker subgroup require a client to access and remain in contact with painful emotional states, and are therefore likely to be threatening to many clients, particularly in the early stage of treatment when the therapeutic alliance is not firmly established.

Macaulay (2104) suggested that pre-treatment measures of traits like openness to experience and tolerance of uncertainty may differentiate recovered from unchanged clients with respect to their differing levels of Transition markers, particularly in the early phase. If these differences were borne out in research investigations, it might be fruitful to incorporate an adjunct treatment along with EFTT, similar in concept to including sessions of MI prior to the initiation of CBT interventions for GAD clients. Perhaps sessions aimed at increasing a client's capacity for mindfulness and supporting the development of emotion regulation skills would be helpful additions to trauma-focused treatments when clients are alexithymic or emotionally avoidant.
**Individual NEPCS transition markers.** A negative binomial multilevel model was used to explore whether recovered vs. unchanged EFTT clients differed in proportions of individual NEPCS Transition markers by stage of therapy. The results to follow represent the statistically significant and noteworthy non-significant findings that emerged, and their implications for trauma therapy more generally, and EFTT more specifically.

**Competing plotlines storytelling.** Competing Plotlines Storytelling falls within the NEPCS Transition marker subgroup, and involves the emergence of an alternative thought, feeling, belief, or behaviour that is in opposition to a previous self-experience and results in feelings of tension and incongruence. According to Hager (1992), feelings of ambivalence and confusion ("client chaotic states"), can facilitate productive therapeutic processes, as the discomfort associated with incongruence encourages the synthesis and integration of disparate parts of the self into an expanded self-experience and "new directions for living." Similarly, Competing Plotlines Storytelling is conceptualized as a productive narrative-emotion process that promotes disentanglement from a dominant, overly-rigid, and problematic self-narrative through increased emotional differentiation and experiential "dialogue" between two opposing parts of the self (Bryntwick, 2008).

In the current analysis, a trend approaching significance (p < .06) emerged wherein recovered clients exhibited a higher proportion of Competing Plotlines Storytelling in the early phase of therapy when compared to unchanged clients. Interestingly, in Carpenter and colleagues’ (2016) pilot study, recovered clients demonstrated a significantly higher proportion of Competing Plotlines Storytelling in the early and middle phases of therapy, whereas the unchanged clients articulated significantly more in the late phase of therapy. For that study, Carpenter et al., (2016) suggested that the recovered outcome group appeared to have more
awareness of, and readiness to address their ambivalent or incongruent self-experiences, at the outset of therapy. Recovered clients appeared to process and work through their ambivalence in the context of Competing Plotlines Storytelling during the middle phase of therapy.

Carpenter et al., (2016) theorized that the precipitous decline in Competing Plotlines Storytelling, and parallel increase in narrative-emotion markers belonging to the NEPCS Change marker subgroup in the late stage of therapy, was indicative of the resolution of ambivalence related to confronting and holding perpetrators of trauma accountable, enacting real world change and the creation of coherent new views of self, others, and the world (i.e., Unexpected Outcome Storytelling and Discovery Storytelling). In contrast, the unchanged outcome group evidenced a significantly higher proportion of Competing Plotlines Storytelling in the late stage of therapy, suggesting that perhaps the therapy was terminated just as these clients were beginning to access and explore their ambivalent self-experiences.

Macaulay's (2014) analysis of GAD clients receiving MI-CBT revealed that all clients, irrespective of outcome status, articulated significantly more Competing Plotlines Storytelling in the early stage of therapy when compared to the late stage, and that recovered clients had significantly higher overall proportions than their unchanged counterparts. Interestingly, unchanged clients in this sample evidenced a higher proportion of Competing Plotlines Storytelling than in previous studies, and Macaulay postulated that this finding suggests that not all ambivalence is created equal - that some forms of client ambivalence and incongruence may be facilitative of productive therapeutic processes, while others may not.

In fact, Ribeiro and colleagues (2014) conceptualized client ambivalence as a dynamic process in which opposing internal voices representing novel experiences begin to undermine the stability of an individual's dominant, problematic self-narrative or Same Old Story (Angus,
Gonçalves, Boritz & Mendes, in press; Angus & Paivio in press). In response to this assault on an individual's sense of self-coherence, the emergent healthy, assertive voices may be diminished or trivialized as part of a protective function that works to ensure the continuity of self-understanding, even when it is maladaptive, Same Old Storytelling.

Ribeiro et al. (2014) referred to this process as a return-to-the-problem marker (RPM), and report that, while good outcome clients decreased in their probability of RPMs across therapy, poor outcome clients did not. Interestingly, this finding is consistent with the drop in Competing Plotline Storytelling evidenced in recovered clients in Boritz et al.'s (2014, 2016) investigations of NEPCS subtypes in EFT for Depression.

Furthermore, Brinegar et al. (2006) asserted that conflict between opposing internal voices can result in a dialogue that resists change by maintaining the status-quo, or one in which both perspectives are meaningfully and respectfully integrated in the service of mutual and collaborative action.

Perhaps, then, of particular importance for the N-EP model and the NEPCS is how a therapist responds to client ambivalence as communicated through Competing Plotlines Storytelling. Encouraging the full elaboration of an emergent internal experience that challenges the problematic self-narrative may enable clients to bring the conflicting parts of the self into a more productive dialogue. As tempting as it might be to help a client resolve the tension associated with their ambivalent feelings quickly, therapists must be careful to avoid prematurely aborting this iterative process, as when "therapists…become overly directive, interpretive, and so-called rescuing...[t]he client is usually not rescued, however, but robbed of what might have been a piece of growth" (Hager, 1992).
**Inchoate storytelling.** Inchoate Storytelling belongs to the NEPCS Transition marker subgroup, and is defined as a focusing of attention on the bodily felt-sense, and the symbolization of one’s present-moment internal experience in language. Inchoate Storytelling captures the process through which the imposition of narrative structure allows an individual to more fully comprehend and appropriately respond to a nebulous inner experience.

The results of the present analysis revealed that recovered clients articulated a significantly higher proportion of Inchoate Storytelling overall, as well as in the middle stage of therapy when compared to unchanged clients (6.3% vs. 0.7%, respectively). In the Carpenter et al. study (2016), a small effect size was found for Inchoate Storytelling. More specifically, 2% of the variance in the proportion of Inchoate Storytelling was related to therapeutic outcome, and recovered clients articulated more Inchoate Stories over the course of therapy (2.92% vs. 2.08%).

Macaulay’s 2014 sample of GAD clients evidenced an overall low proportion of Inchoate Storytelling (0.7%), although this finding was in keeping with the subset of clients who received CT for depression from Boritz and colleagues’ (2014) study. Interestingly, the clients in this study who received CCT and EFT for depression had higher proportions of Inchoate Storytelling (6.8% and 4.4%, respectively), which seems to suggest that clients of therapeutic paradigms in which the emphasis on present-moment experiential engagement is explicit in the treatment model (Pos, Greenberg & Warwar, 2009), such as CCT and EFT, demonstrate higher proportions of Inchoate Storytelling.

From a theoretical perspective, Inchoate Storytelling appears to capture a process fundamental to productive trauma resolution. Specifically, memories associated with traumatic experiences are often vague, overgeneral, and incoherent (van der Kolk, 2003), and the resulting narrative accounts are often disjointed and incomplete, alluding to a sense of internal confusion.
In fact, researchers have used narrative quality as an index of trauma resolution (e.g., Pennebaker, 1997), reporting that increased narrative coherence, namely a sense of continuity and meaning, is associated with favourable outcomes.

The psychological disturbances associated with traumatic memories are believed to result from the way in which this material is encoded, chiefly through the nonverbal, experiential right-brain. The emotions, bodily sensations, and images associated with these memories are not processed verbally, leaving the experiences unintegrated in the larger life narrative comprised of other events and their related themes and meanings (van der Kolk, et al., 1996). In fact, several neuroimaging studies have demonstrated that, during the recollection of traumatic experiences, sensory processing increases while verbal processing decreases (e.g., Lanius, Williamson, Densmore, Boksman, Neufeld, Gati & Menon, 2004). EFTT is said to help clients access and symbolize in language the nonverbal content of traumatic memories. The concept of 

experiencing, or capacity to connect with and examine subjective internal experience, is seen as an important “emotional competence skill” (Paivio & Pascual-Leone, 2010, p. 83) and central to the model of change in EFTT. More specifically, the ability to label and describe internal reactions in words is said to create a working distance from affective experience that promotes self-regulation and meaning-making capacities. Furthermore, in helping clients become aware of internal experience, such as emotions, values, needs, and desires, they become more proficient at responding to others and the world in ways conducive to adaptive functioning, such as using their own view(s) of reality to guide decision-making and behaviour. According to most experiential therapies, the question of why individuals experience what they experience is not central, but rather what individuals feel and how they feel it, in the service of enhancing knowledge and control over internal processes (Pascual-Leone & Greenberg, 2006). As such,
these therapies, including EFTT, seek to “increase clients’ awareness of what they are experiencing in the moment as well as a meta-awareness of the experiential process itself and how they influence it” (Paivio & Pascual-Leone, 2010).

As previously discussed, Inchoate Storytelling bares a strong resemblance to Gendlin’s (1996) concept of the bodily felt sense, akin to a gut feeling, and his focusing exercise, which requires locating and centering in on an internal state of being, and ascribing meaning to it through words, metaphors, and/or descriptions of images. Inchoate Storytelling captures the dual processes of contacting inner experience, and struggling or grasping for the appropriate symbolization in language. In this way, Inchoate Storytelling should play a pivotal role in all experiential therapies, including EFTT, and would seem of particular value to helping traumatized clients access, explore, and represent in narrative form, emotional experiences that were previously denied, avoided, or repressed.

Inchoate Storytelling is the lived story of trauma, the “feeling of what happens” (Damasio, 1999), or how the client experiences themselves in the present-moment in relation to their traumatic experience(s). It is not surprising, then, that in the current study, Inchoate Storytelling occurred at a significantly higher proportion in the working phase (i.e., middle stage) of therapy for recovered clients. This result suggests that recovered clients were able to shift away from the avoidance of internal experience (as seen in Superficial Storytelling), and increasingly into the lived experience of trauma in the form of Inchoate Storytelling. It is from this new vantage point that the associated meanings can be explored and consolidated, which may pave the way for the emergence of Discovery Storytelling.

*Experiential storytelling.* Although not associated with significant statistical results in the present analyses, the Experiential Storytelling marker also warrants further discussion.
Experiential Storytelling is part of the NEPCS Transition marker subgroup, and was added during the NEPCS 2.0 revision process. Experiential Storytelling is coded when a client experientially re-enters an autobiographical memory by describing, with vividness and richness, the event and its associated thoughts, emotions, and/or sensory details. Despite having the lowest occurrence of any NEPCS marker in the current analysis, the Experiential Storytelling marker demonstrated an interesting descriptive pattern. Recovered clients articulated almost six times as many Experiential Stories in total when compared to unchanged clients, and additionally, the marker was almost exclusively coded in the early and middle stage of therapy for recovered clients.

Although not a statistically significant finding, this may suggest that, in productive trauma-focused therapy, Experiential Storytelling occurs early on in treatment as clients contact long suppressed, highly-vivid memories of traumatic events, in the safety of the therapeutic relationship. As such, Experiential Storytelling would seem highly important for successful trauma-focused therapy, particularly early on, and may have been more represented within the current EFTT sample had additional sessions of therapy been coded. In fact, telling the story of trauma is an important aspect of all specialized treatment approaches. Prolonged Exposure (PE), for example, is designed to support clients in processing trauma-related disturbances in daily functioning, such as intrusive memories, and strong physiological or emotional responses to reminders of the experience(s). Because many traumatized individuals make conscious or unconscious attempts to ward off unpleasant memories or to avoid distressing reminders of the trauma, a focal aspect of PE is a technique termed Imaginal Exposure, which involves the client revisiting the traumatic memory in imagination during the therapy session, and recounting the event(s) aloud (Foa et al., 2006). In EFTT, the first phase of treatment involves the client
"telling the story of what happened...[and] learning that they can tolerate the painful memories...[while] receiving comfort and support from the therapist..." (Paivio & Pascual-Leone, 2010, p. 82).

In the present analysis, no significant findings emerged for Same Old Storytelling, Empty Storytelling, or Reflective Storytelling, although descriptive findings were in the expected directions. Unchanged clients evidenced higher proportions of Same Old Storytelling and Empty Storytelling, whereas recovered clients demonstrated higher proportions of Reflective Storytelling compared to unchanged clients.

**NEPCS change markers overall.** A negative binomial multilevel model was employed to determine whether recovered clients and unchanged clients demonstrated significantly different overall proportions of NEPCS Change markers. To review, markers belonging to the NEPCS Change marker subgroup demonstrate productive integration of emotions within an adaptive narrative framework of self-experience. When in a Change marker, clients are recounting concrete examples of cognitive or behavioural change and the associated emotions, or they are engaging in a process of novel meaning-making (i.e., Unexpected Outcome Storytelling and Discovery Storytelling).

In the current study, a significant outcome group by stage of therapy interaction emerged. As predicted, recovered clients demonstrated significantly more NEPCS Change markers in the late phase of therapy (11.4% vs. 3.2%), but additionally, recovered clients evidenced a higher proportion of Change markers in the middle stage (5.9% vs. 1.4%). Differences between the proportion of Change markers by outcome group and stage of therapy were also observed in previous research conducted using the NEPCS. Specifically, clients who recovered from GAD symptoms after MI-CBT treatment articulated a significantly higher proportion of Change
markers in the late stage of therapy than their unchanged counterparts (Macaulay, 2014), and Boritz and colleagues (2014) found higher proportions of Change markers in both the middle and late stages of therapy for recovered clients when compared to unchanged clients. The pilot study involving a subset of the current EFTT sample revealed a large effect size for the difference in the proportions of Change markers by outcome group (in favour of recovered clients), but no statistically significant difference emerged, likely due to the small sample size (Carpenter et al., 2016).

Contextualizing the finding that recovered clients demonstrated increased proportions of Transition markers in the early and middle phase of treatment, with the finding that recovered clients also showed increased proportions of Change markers in the middle and late stages of therapy, lends further support to the NE-P model of successful EFT therapy, proposed by Angus and Greenberg (2011), which posits that "[t]herapy...is a process of clients coming to know and understand their own lived stories and articulating them as told stories - and in so doing, changing their stories" (Angus & Greenberg, 2011, pp. 25).

**Individual NEPCS change markers.** A negative binomial multilevel model was used to explore whether recovered vs. unchanged EFTT clients differed in proportions of individual NEPCS Change markers by stage of therapy. The results to follow represent the statistically significant and noteworthy non-significant findings that emerged, and their implications for trauma therapy more generally, and EFTT more specifically.

**Discovery storytelling.** Discovery Storytelling is part of the NEPCS Change marker subgroup, and catalogues the emergence of new meaning-making as clients describe a reconceptualization of the self, others, significant events, or intra- and interpersonal themes and behavioural patterns. Results from the current analysis revealed that recovered clients articulated
significantly more Discovery Stories across therapy when compared to unchanged clients (3.21% vs. 0.68%, respectively).

Furthermore, an outcome by stage interaction emerged that indicates that the recovered clients evidenced significantly higher proportions of Discovery Storytelling in the middle stage of therapy when compared to their unchanged counterparts (3.6% vs. 0%, respectively).

Previous research projects that used the NEPCS across several client populations also demonstrated significant differences in the proportional use of Discovery Storytelling between recovered and unchanged clients. Boritz and colleagues (2014) found that clients who were recovered from depression at therapy termination articulated significantly more Discovery Stories across therapy, and Macaulay (2014) observed a significant outcome group by stage of therapy interaction, wherein clients who were deemed recovered from GAD post-therapy expressed more Discovery Stories in the late stage of therapy than unchanged clients.

Most surprisingly, the unchanged clients in Macaulay’s sample did not articulate any Discovery Stories throughout the therapy, whereas the proportions steadily increased for recovered clients as therapy progressed, culminating in 13.3% in the late stage. In Carpenter and colleagues (2016) pilot analysis of a subset of clients from the current EFTT sample, results revealed a medium effect size for Discovery Storytelling, namely that 6% of the variance in the proportion of Discovery Storytelling was related to therapeutic outcome. When compared to unchanged clients, those who were recovered at therapy termination were found to articulate 14 times more Discovery Stories in the late phase, a statistically significant difference.

As discussed previously, Mendes and colleagues (2010) applied the Innovative Moments Coding System (IMCS) to a sample of clients receiving EFT for depression, and found that Reconceptualization IMs, or client reports of the differences between their past and present sense
of self, and descriptions of the process that resulted in this transformation, occurred with significantly higher frequency in good outcome cases. The Reconceptualization IM shares many common features of Discovery Storytelling, most notably the emergence of new understandings of the self. Mendes and colleagues argued that Reconceptualization IMs may serve an important role in successful EFT for depression, because they allow for integration of the problematic self-narrative (of the past) into a new self-narrative, and "position the client as an author of his or her own experience."

In Angus and Greenberg's (2011) four-phase model of narrative and emotion integration in EFT, self-identity reconstruction is the culmination of the psychotherapeutic change process. The authors argued that emergent bodily felt experiences become integrated into existing views of the self, others, and the world, and through this process of integration, new personal meanings develop. Moreover, Angus and Greenberg underscored the important role that the therapist has in directing attention towards the client's emergent reorganization of the self-identity, and encouraging further reflection on new emotional experiences in the world that help to engender productive change. Self-identity reconstruction provides a causal explanation for new ways of thinking, feeling, and being, and allows for a re-conceptualized sense of self to be understood and accepted as part of the broader life story (Angus & Greenberg, 2011; Angus & Paivio, in press; Angus et al., in press).

The importance of a re-conceptualization of the problem-saturated story has been advanced by Gonçalves and collaborators (2009). In particular, the authors discuss re-conceptualization as a meta-level viewpoint on the process of change itself, whereby clients are able to simultaneously access their rigid, problem-saturated narratives while reflecting on the feelings and meanings associated with emergent experiences in the therapy office, and the world,
more broadly. This dual perspective functions to help clients generate new self-narratives, and to see their own active contributions to the authoring process. Gonçalves and colleagues further wrote,

Reconceptualization allows a narrative to have structure (e.g., coherence, organization, and complexity) by the way it organizes the other emergent [expressions of change]. In our view, reconceptualization is crucial for the change process. In the construction of a new narrative it acts like a gravitational field that attracts and gives meaning to action, reflection, and protest [stories]…which act as internal validations that change is taking place. (p.13)

Evidence of the importance of re-conceptualization to recovery from the effects of trauma was seen in a study that examined the adjustment of high school students to the recent suicide of a classmate (Margola et al., 2010). The authors found that, in general, the trajectory of processing showed that students moved from a highly factual account of the traumatic experience in the days following the event, to a more emotionally nuanced and integrated perspective that focused on the meaning and implications of the event. Significant differences were noted, however, in the coping styles of various groups of students. Those individuals who showed a more negative or highly distressed trajectory demonstrated higher levels of emotional inhibition, whereas recovered individuals evidenced a greater ability to understand and explain the event, and to integrate the experience into their worldview, an indication of enhanced meaning-making.

The process of re-conceptualization is of vital importance to recovery from trauma. It is often through the psychotherapeutic exploration of traumatic memories, and their related emotions and meanings, that survivors are able to develop coherent and well-integrated narratives regarding the novel ways that these experiences now fit into their life story and worldview. Interestingly, in the current study, recovered EFTT clients had a statistically
higher proportion of Discovery Storytelling in the middle or "working" phase of therapy than did unchanged clients, and although recovered clients articulated more Discovery Stories in the late stage of therapy than in the middle stage, this difference (when compared to unchanged clients) was not statistically significant.

In comparing the proportions of Discovery Storytelling for recovered clients across stages of therapy, it can be seen that there is a notable increase between the early and middle stages, wherein recovered clients articulated five times more Discovery Stories in the middle stage when compared to the early stage (35 vs. 7, respectively). This is a much more dramatic increase than the one observed between the middle and late stages of therapy for recovered clients (35 vs. 47, respectively). This finding may suggest that highly productive change processes, such as a re-conceptualized views of the self, others, and the world in relation to traumatic experiences (e.g., Discovery Storytelling), are emerging earlier in the course of therapy than anticipated for clients who are on a trajectory towards recovery at treatment termination. This may be important information for therapists, as they need to be attuned to these narrative-emotion indicators, and work towards highlighting, elaborating, and differentiating these processes when they occur, such that productive change is consolidated and reinforced.

This result suggests that the seeds of change may be planted early in therapy, and that by the middle stage, demonstrable change has taken root and is coming to life for many clients on a trajectory towards recovery from trauma. In her 2014 study, Macaulay suggested that higher proportions of Discovery Stories across therapy may predict maintenance of therapeutic gains at post-treatment follow-up. This possibility remains a fruitful avenue for future exploration using the NEPCS 2.0.
**Unexpected outcome storytelling.** Although not associated with significant statistical results in the present analyses, the Unexpected Outcome Storytelling marker bears some discussion. Unexpected Outcome Storytelling belongs to the NEPCS Change marker subgroup, and occurs when a client concretely describes new and adaptive ways of being in the world, including positive changes in behaviours, emotional responses, or patterns of thinking that diverge significantly from previous ways of functioning. The client's narrative account of these changes is also accompanied by expressions of excitement, contentment, pride, relief, surprise, or protest, and client's often underscore or highlight their own contributions to the process as the primary agents of change.

Although no statistically significant differences emerged in the proportions of Unexpected Outcome Storytelling between recovered and unchanged clients in the present analysis, the descriptive changes that occurred for both outcome groups were in the expected directions. For example, recovered clients evidenced a notable increase in the number of Unexpected Outcome Stories between the early and middle stage of therapy (a 17-fold increase), and demonstrated 3 times more Unexpected Outcome Stories in the late stage when compared to the middle stage of therapy. This result suggests that recovered clients began experiencing adaptive change in the middle stage of therapy, although this trend increased by the late stage. Unchanged clients also evidenced a steady increase in their proportions of Unexpected Outcome Storytelling across therapy, articulating two times more in the late stage than in the middle stage.

The lack of statistical difference between the outcome groups is unique to the present NEPCS investigation. In 2014, Bortiz and colleagues found that Unexpected Outcome Storytelling was significantly associated with recovery from depression at treatment termination,
and Macaulay (2014) revealed that clients who recovered from GAD following MI-CBT also articulated significantly more Unexpected Outcome Stories overall. Carpenter and colleagues pilot analysis (2016) using a subset of the current EFTT sample demonstrated a medium effect size for Unexpected Outcome Storytelling (11% of the variance in proportion of Unexpected Outcome Storytelling was attributable to outcome status); however, no statistically significant difference emerged between recovered and unchanged clients overall.

While it is possible that a larger EFTT sample than the one used in the current study may have yielded statistically significant results, the non-significant result may also speak to the emphasis of treatment approach across different client populations. In treating depression and GAD, a goal of recovery is adaptive and concrete changes in functioning at the cognitive, emotional, and behavioural level. Therapists often aim to see their depressed clients become more physically and socially active, and to overcome maladaptive thought processes that beget hopelessness and pessimism. For clients experiencing GAD, many treatments are designed to promote cognitive and behavioural shifts that prevent chronic worries from orchestrating all aspects of one's life. For example, CBT for GAD generally involves cognitive restructuring, relaxation training, behavioral experiments for testing worries and feared outcomes, and worry prevention (Fisher, 2006). All of these interventions underscore the importance of making changes to thought processes, emotional experiences, and behavioural patterns.

By contrast, in treatments designed to ameliorate the symptoms associated with complex trauma, such as EFTT, the overarching goal of therapy is often different. Although adaptive changes in everyday ways of thinking, feeling, and behaving are desirable to both clients and therapists alike, the thrust of trauma-focused treatment typically involves the integration of painful emotions with trauma-related memories and experiences, in an effort to thoroughly
process and make meaning out of what happened. This difference in treatment emphasis between trauma-focused therapies and those designed for depression and GAD may help to explain why statistical differences in the proportions of Unexpected Outcome Storytelling across outcome group emerged in other NEPCS investigations, but not in the current study.

**No client markers overall.** A negative binomial multilevel model was employed to determine whether recovered clients and unchanged clients demonstrated significantly different overall proportions of No Client Marker. To review, No Client Markers (NCMs) are coded when the therapist has more “airtime” than the client in a given 60-second segment of a therapy session. A NCM was deemed to have occurred if therapist talk occurred for more than 40 seconds of the 60-second clip. During these segments, the therapist was often providing psychoeducation, a rationale for a technique or intervention, an empathic reflection or conjecture, or was engaged in “chit-chat” with the client (e.g., discussing the scheduling of sessions, the weather, etc.).

A significant outcome group by stage of therapy interaction emerged for the NCM subgroup as well. Although recovered and unchanged clients did not differ significantly in their proportions of NCMs at the early and middle stages of therapy, recovered clients did evidence a significantly higher proportion in the late stage of therapy (20.2% vs. 9.6%). Both outcome groups demonstrated relatively consistent proportions of NCM over the course of therapy.

In Boritz and colleagues’ (2014) study, the proportions of NCMs were found to be statistically associated with therapeutic modality. In particular, clients receiving CBT for depression had significantly higher proportions of NCMs overall (38.5%) than those receiving CCT (7.3%) and EFT (12.8%); however, proportions of NCMs were not associated with therapeutic outcome in this sample. In Macaulay’s (2014) study, unchanged clients were
observed to have a rather consistent pattern of NCM proportions across therapeutic stage (30-33%), whereas recovered clients demonstrated higher proportions of NCMs at the middle (25.7%) and late (20%) stage of therapy, when compared to early treatment sessions (13.7%). This result was not statistically significant, although the pattern of increased NCM codes for recovered clients as therapy progressed mirrors the results of the current study. In the EFTT pilot project conducted by Carpenter and colleagues (2016), a medium effect size was found for NCMs, whereby 9% of the variance in the proportion of NCMs was attributable to therapeutic outcome. In this analysis, recovered clients had a slightly higher frequency of NCMs (18.48%) than did the unchanged clients (13.83%) across therapy.

The higher proportion of NCM codes in the late phase of treatment for recovered clients is an interesting finding for the current study. It may suggest that therapists of good outcome clients spend more time highlighting “change talk” during the final phase of treatment than therapists of their unchanged counterparts, through the use of empathic reflection or conjecture. One of the fundamental tasks for an EFTT therapist is to “verbally symbolize the meaning of emotional experience” (Paivio & Pascual-Leone, 2010), and although this is important early on in treatment in order to establish a secure therapeutic alliance and to promote increased access, exploration, and differentiation of emotionally painful experiences, it is also crucial to the consolidation of re-conceptualized understandings of the self, others, and the world.

Although NCMs can be coded during moments of psychoeducation or non-therapeutic chit-chat, it is likely that the EFTT therapists of recovered clients were using reflection and conjecture to strengthen change-related talk. This result may underscore the importance of active and appropriately-timed intervention on the part of the therapist in the service of reinforcing and/or deepening emotional engagement with productive therapeutic material. It will
be interesting to see whether future research using the NEPCS will demonstrate a similar result. Perhaps the relationship between NCMs and therapeutic outcome will be modality-specific. For example, in Macaulay’s (2014) GAD sample, NCMs occurred at a higher frequency amongst unchanged clients. It is likely that not all therapist intervention is created equal, and a qualitative analysis (i.e., task analysis) aimed at determining the most and least productive forms of therapist intervention with respect to narrative-emotion processing may be a fruitful area of future inquiry.

**Frequency of NEPCS Marker Shifting, Type of Shifting (productive vs. unproductive), and Therapeutic Outcome**

In order to determine whether a higher proportion of shifting between NEPCS markers (irrespective of subgroup classification) was related to therapeutic outcome, a logistic regression analysis was performed. The results revealed that recovered clients demonstrated significantly higher proportions of shifting than unchanged clients (61% vs. 52.4%, respectively), and this pattern was observed across early (59.4% vs. 50.6%) and middle (62.1% vs. 50.7%) stages of therapy. In the late stage of therapy, recovered clients also evidenced a higher proportion of shifting that approached statistical significance (61.6% vs. 55.7%). In order to differentiate the concept of NEPCS shifting further, an analysis was conducted to determine whether recovered and unchanged clients differed with respect to productive and unproductive shifting.

Productive shifting was defined as movement away from NEPCS Problem markers, or within and between NEPCS Transition markers and NEPCS Change markers. Unproductive shifting was defined as movement towards Problem markers. Movement to NCMs was also included in the analysis as a separate category. The results demonstrated that unchanged clients
engage in a significantly higher proportion of unproductive shifting when compared to recovered clients (32.5% vs. 25.3%, respectively), as was anticipated. Moreover, recovered clients were found to engage in a significantly higher proportion of productive shifting when compared to unchanged clients (24.9% vs. 13.3%, respectively), a result that was also in the hypothesized direction. Finally, recovered clients were seen to shift to NCM codes at a significantly higher proportion than unchanged clients (9.7% vs. 6.2%, respectively).

These results echo the findings of Boritz and colleagues (2016), in which clients who were recovered from depression at therapy termination evidenced significantly higher proportions of NECPS marker shifting in the middle stage of therapy when compared to unchanged clients. Boritz also noted that movement between NEPCS Problem markers and NEPCS Change markers (and vice versa) was related to better therapeutic outcome, arguing that markers within both subgroups were important for a productive therapy process, and that the ability to flexibly move between subgroups was predictive of recovery. At the NEPCS marker level, Boritz argued that this necessitates movement back and forth, both within and between, NEPCS Problem marker and NEPCS Change marker subgroups.

The current project extended Boritz and colleagues’ (2016) findings by including the recent addition of NEPCS Transition markers into the analysis of marker subgroup shifting, as well as including shifts to the NCM category. The result that shifting, in general, is associated with recovery from trauma suggests that narrative flexibility (i.e., proportion of shifting, in general) is an important metric of change; however, the quality of the shifts (i.e., productive vs. unproductive shifting) was also related to good therapeutic outcomes in the current complex trauma sample. Recovered clients demonstrated significantly higher proportions of productive shifting and significantly lower proportions of unproductive shifting. Indeed, recovered clients
spent more time in Transition and Change markers on average than unchanged clients, and less
time in Problem markers. As such, therapists would be wise to encourage clients to shift away
from Problem markers where possible, and to remain in Transition and Change markers for
longer periods of time, by encouraging the elaboration and differentiation of these narrative-
emotion states.

The following segment of therapy elucidates how a client-therapist dyad can become
entrenched in an unproductive therapeutic process when a therapist is unsuccessful in shifting a
client out of the NEPCS Problem marker subgroup. In this example, the client discusses the
importance of being positive around his grandchildren, and later criticizes television shows for
their lack of realism. The therapist makes an attempt to shift the client to a more productive
mode of narrative-emotion processing, but the client resists. The therapist abandons this effort
and the client remains in a Superficial Storytelling mode:

**Transcript Excerpt 1: Client 418, Session 18.**

C: Negativity can affect people down the road
T: you know that all too well

C: *(Superficial Storytelling begins)* I learned the bad habits
T: So you can be negative? Is that what you’re saying?

C: No
T: It’s very easy to be negative, or?

C: It’s easy to be negative, but I work at being positive
T: How do you do that?
C: Well, I, I – I try hard not to make negative statements to the grandkids or whatever…kind of like I’ll think about it and then, you know, I’ll think it’s not appropriate or whatever, so –

T: So you stop yourself from saying certain things

C: right

T: [Your grandkids] are important, so they don’t deserve those negative things

C: right. And you know, life is different today than it was in my day. For them and for me. Like I mentioned before, I wouldn’t want them to go through what I went through. It leaves too many bad tastes.

T: So it’s important to remember what happened to you – is that right?

C: Yeah, but uh, it helps me to be more positive

T: So being sad helps you to be more positive

C: Yeah, because I know what it felt like for me, and I try to encourage otherwise with them.

T: Does that make sense to you, feeling sad makes you more positive?

C: For them, toward [the grandkids] yeah, because I know what it’s like to be that way. It’s not a pleasant, healthy state.

T: So that really goes together in your mind – clearly. The fact that you can remember and feel sad and feel that loneliness helps you be a better grandfather

C: I would hope so. Yeah.

T: Well how are you doing?

C: I think I’m doing okay. <smiles>
T: I can see right there. What happened? <therapist gestures towards chest> What went through you?

C: Like uh, they come over, and I play with them, and I mean they’re tiring – they’re good. But it’s tiring because they take a lot of energy.

T: {therapist attempts to shift the client to Inchoate Storytelling} But how do you feel inside when you are thinking about those kids?

C: Well I think it’s great.

T: You’re lighting up. You’re beaming is actually it. You can really see {shift to Unstoried Emotion} <clients begins to look down at a piece of paper in his lap> how much you value those grandkids

C: <client continues to avert his gaze from the therapist by looking down at the folded piece of paper, and then puts it into his shirt pocket> {shift back to Superficial Storytelling} Yeah. So, the main items I thought about over the last couple of weeks I jotted down, so… <scratches nose>

T: So you feel sad when you remember the neglectful parts of your past

C: yeah, like the TV show the other day that goes back to the 50s. I didn’t watch it, I just saw what it was and I just turned off, I turned it off to something else because it’s just – it’s not realistic. Not realistic.

T: Too sugar-coated

C: yeah, I guess you could say that.

T: It’s fake nostalgia

C: yeah, so it’s – like the Harriet Nelson series, the Nelsons. Everyone was goody-goody, and nobody rubbed anyone the wrong way. It’s idealism but it’s not very practical.
T: It’s not what happens in life

In the above segment, the therapist made an effort to shift the client's focus to his internal experience, although this appeared to overwhelm the client and he withdrew into Unstoried Emotion briefly, before resuming his Superficial Storytelling, underscoring that this kind of emotion process is likely a mechanism of emotional avoidance. The therapist did not address the client's shift in processing, nor did he attempt to re-engage the client in a more exploratory, present-centered process. Perhaps then, in moments when clients resist a therapist’s lead in deepening their emotional experience, the therapist should be more explicit in addressing the issue, such as through metacommunication about the client’s narrative-emotion process, and a discussion about the importance of contacting internal experiences in order to facilitate therapeutic change.

By contrast, the two transcript examples below illustrate ways in which productive narrative-emotion processing can be cultivated and/or sustained by a therapist's interventions. In the first segment, the client’s Same Old Story (an NEPCS Problem marker) is differentiated through the therapeutic dialogue. The result is a shift to Competing Plotlines Storytelling (an NEPCS Transition marker). In this segment, the client is describing the emotional impact of feeling criticized by her significant other:

**Transcript Excerpt 2: Client 410, Session 3.**

C: It felt like someone who should care about you is putting you down. That’s sort of…

T: yeah, that must be so crushing, right?

C: It is. And then I think, well, are you overreacting or not? I mean, um…I went to bed and I was crying, but not a lot – I stopped myself. I thought, ‘If you do that you won’t be able to function tomorrow, so calm down and go to sleep’. And that’s what I did.
T: {therapist hinting at Competing Plotlines Storytelling} The logic part of you kicking in. But the emotional part, what was that saying, what was that feeling?

C: Oh, I just wanted to sit there and ball my eyes out…so…

T: Because it’s so sad. It’s sad to feel like you are not being heard or understood by this man, who –

C: {Same Old Storytelling begins} and it’s like “here we go again” is what it feels like.

T: yeah, like bringing up all those feelings from way back when, kind of like ‘oh, they’re still here with me’, that feeling like, ‘I’m nothing and I’m not good’, and just feeling crushed

C: that’s the – that’s the word. Like, you, you feel, like I said, like somebody who should care about you is just…you know, just doesn’t, doesn’t give a hoot, um <5 second pause> {shift to Competing Plotlines Storytelling} but I don’t, I keep trying to ask myself if I’m reacting too strongly…

T: …so part of you, when you start to, I mean it sounds like you feel crushed and you feel hurt, but then you start to sort of doubt that and be like, ‘okay, am I overreacting’

C: Yes.

T: ‘Should I maybe just not make a big deal out of it?’ But something in your gut, something in your emotions is, is telling that it’s, it’s important…it sounds like

C: Yes. Yes…

T: …so is that something, is that something that you would maybe like to work on, getting that sense for yourself maybe? When that –

C: A little more, yeah.

T: so when the doubting part starts to come in
C: yeah, because I don’t know. Like I don’t know when, that’s why I say I don’t know when I’m reacting too strongly

T: um-hm. But you know something that you feel inside you, right, that you feel it, right, when you say you tense up and you feel the upsetness, and like what happened to you when you were a little girl, like ‘I am nothing, I am no good, I’m not good enough’

C: oh yeah, I definitely felt that then. Like now, now, I’ll feel like that and then I’ll think, ‘No, that’s not the way it is’, and I know it’s just an incident, like I…but I still feel like that and feel awful for a while and it’s kind of like a – struggle’s too strong a word, but I have to, sort of, pull myself out of it.

T: um-hm, because even though you know, like logically, that was back then, it still – it sounds like the emotional experience of it is something that you-

C: that is still there.

T: yeah, that you still carry with you.

In the example above, the therapist articulated an implied Competing Plotlines Story early in the segment, sensing that the client was struggling with two parts of her experience – logic versus emotion. The therapist then reflected this tension to the client, completing her empathic reflection on the part of the client’s experience that warranted further exploration – the emotional impact of the comments made by her significant other. As such, the therapist prompted the client to contact her primary emotional experience of the event before analyzing her response from a rational perspective.

The therapist’s focus on emotional, rather than the thematic content, is also noteworthy. In previous analyses, it has been demonstrated that attention paid to the subjective internal experience of a client, as opposed to the external details of an event, is more facilitative of
productive therapeutic processing (e.g., Pos et al., 2009). In focusing on internal experience, the client is more likely to access primary adaptive emotions that lead to deeper levels of processing and meaning-making. By contrast, if emphasis is placed on external details, clients tend to remain “stuck” in secondary emotional processes, such as blame and/or self-reproach. In the above example, the therapist directed the client to elaborate on the emotional experience of the event, eliciting a Same Old Story as the client drew a parallel between the feelings associated with the current interpersonal exchange, and similar feelings from her past. As soon as the client contacted the pain associated with her Same Old Story, and moved into a rational evaluation of the situation (a shift back to Competing Plotlines Storytelling), the therapist supported the further elaboration of the client’s internal conflict between the two opposing parts of her experience.

In some cases, Competing Plotlines Storytelling results from the differentiation of Same Old Storytelling. Same Old Storytelling condenses the nuances associated with lived experience, such as competing thoughts, reactions, or drives of the client, into one overly rigid and maladaptive plotline, whereas Competing Plotlines Storytelling differentiates lived experience by holding opposing or contradictory perspectives in mind, allowing each one to inform the other. The end result is often a more emotionally sophisticated and cohesive tapestry of experience.

The final example illustrates a sustained episode of productive narrative-emotion processing over several minutes of therapy. In this segment, the client remains within the NEPCS Transition marker subgroup, but shifts back and forth between several different NEPCS markers with the therapist's support. In this segment, the client is exploring the feelings and meanings associated with her pattern of prioritizing her own needs above the needs of others.
Transcript Excerpt 3: Client 308, Session 10.

T: {therapist introducing Same Old Storytelling} So there’s almost this sense of ‘I don’t know how to love another person’

C: Oh I don’t know. I don’t know at all. I don’t have a clue, it doesn’t come. I mean even if I try to do some things, I mean I’m getting kind of close to it with my oldest son because he lives close and I keep trying to do things for him <client breathes rapidly>

T: Breathe, yeah, what’s happening there

C: It’s all got to do with that, it’s all got to do with not knowing how to love anybody

T: So this is right to the core of it, so some really really deep stuff is coming up – but it’s good that you’re letting this come up. You are doing a really good job. Yeah, just let it be there and feel it, I know it’s hard.

C: I feel so terrible but I know that if it was one of them or me, I would take care of myself instead of them

T: ah

C: that just feels so horrible –

T: yeah, so how could I possibly not care about them more than myself in a sense

In the above excerpt, the therapist guided the client to differentiate her Same Old Story. When painful emotions began to emerge, the therapist gently supported the client in allowing them to surface. The therapist additionally coached the client in emotion regulation, instructing her to breathe while experiencing her feelings. The therapist then directed the client to stay in contact with her emergent internal experience, and applauded the client’s efforts around accessing her deep-rooted emotional pain. The session continued:
C: {Same Old Storytelling begins} I just don’t have that piece that other people seem to have

T: ah, so there’s this sense of, ‘I don’t have it’, so I’m kind of, what, flawed in that sense? I’m missing something?

C: I’m missing a piece, yeah

T: ‘I don’t know how to do this’

C: I don’t know how to do this

T: and ‘this’ is? What, ‘I don’t know how love’…’I don’t know how to be –’

C: I don’t know how to…love is a good word, because I think that if I loved then I would have the other piece. I think that if I loved I would be able to do that

T: So say more about that. What’s the other piece? ‘If I loved I would be able to do what’?

C: [client closing her eyes and speaking slowly, attention turned inward to her internal experience] {shift to Inchoate Storytelling} I would be able to give of myself – I would be able to make the choice to let go of something that I think I need for someone else.

That I wouldn’t…<extended pause>…be in survivor mode. Yeah, I’m in survivor mode.

T: yeah, you are. You’ve been in that mode all of your life

C: <bursting in to tears>

T: yeah, and that is –

C: I don’t like that at all

T: yeah, that’s a really hard one

C: Oh god <crying>
T: tell me, describe the feelings that are there. We want to have them so that they’re not stuck in there.

C: I feel like throwing up

T: ah, like throwing up, yeah so –

C: I don’t want it

T: um-hm. ‘I don’t want this’. Just take some deep breaths, yeah. Oh, so this stuff’s hard to feel, this is real –

C: it’s deep and it’s dark

T: ah, deep and dark. So this is scary stuff. ‘I don’t know what to do with this’, like –

C: this is why I need to get out, will I get out?

T: yeah, ‘will I get out’

C: and what’s it like out?

T: all of these unknowns

C: is it safe out?

T: ‘Can I be safe?’

C: oh my god, but I see that the other side is white…and the survivor mode is dark.

T: hm. So it’s keeping you from the white, yes? Wow. This is exhausting, yeah.

C: this is

T: it is yeah

C: I feel light-headed now

T: you know, just take some breaths to settle yourself

In the preceding segment, the client initially engaged in Same Old Storytelling as she accessed her familiar script of being unable to love others. The therapist then asked the client to elaborate
on her sense of missing the “piece” that would allow her to love others, and the client subsequently began to engage in Inchoate Storytelling, turning inward towards an emergent internal experience and struggling to make sense of it. Throughout the client's Inchoate Storytelling process, the therapist used empathic conjecture to facilitate the exploration and differentiation of the client’s nebulous emotional experience. Additionally, she provided the client with a rationale for remaining engaged in this difficult process, stating that the client's emotions required expression lest they remain “stuck”. Furthermore, the therapist continued to remind the client to take deep breaths to support her emotional regulation. The session continued:

C: [shift to Reflective Storytelling] so am I really in survivor mode? I just said that, but you know what, it’s like when I’m talking, I’m not talking about what I know, I’m talking about something my brain doesn’t know yet – do you know what I mean by that? There’s two ways for me to talk. I can talk about what I’ve agreed with, and I can talk about what I don’t know yet. And when I’m here, I’m talking about what I don’t know yet. And then I get a chance to know it or not. And right now, it’s like, do you really want to know this? So the thinking part is coming in now, and it’s saying, ‘you just said you were in survivor mode: do you accept that, or do you want to let that go?’ You see it’s like I have a choice T: so then…I don’t know, I guess I’m more concerned with what your heart thinks about this whole issue, you know, because when you expressed that, ‘I’m in survivor mode’ and it caused some great pain for you, um, so is that, is that resonating with you somehow? That that was a stuck piece or is your head coming in saying, ‘No, that’s wrong”? I’m not quite sure…
C: <hand on chest> My head comes in…and wants to…wants to organize it or do something with the information. Um, my head has got so much control over what I agree to feel

T: so it controls sometimes what you feel, yeah

C: yeah

T: in a good way or a not so good way?

C: {shift back to Inchoate Storytelling} <3 second pause> in a survivor way. Um…in a…okay, okay…so my head’s giving me another choice here…maybe I don’t…maybe I don’t need to manage and control this. Oh man, it’s saying…maybe I just don’t need to put it into a black or white case and say that this is either good or bad. Maybe I can just live with this for a little while and see where it goes

T: Tell me what this is

C: this is…accepting the fact that I’ve been in survivor mode my whole life, because I really didn’t know that, even though, well my feelings didn’t really know that. My head has known it all along. My head has stopped my feelings from knowing that.

T: okay, yeah

C: {shift to Competing Plotlines Storytelling} And so now my head is saying that maybe we don’t have to do this. Maybe you can make a change – if I can just, maybe, let it go that maybe I’ve been in survivor mode, and maybe I don’t have to take it as a big gulp of medicine, that I just have to let it sit with me for a while. And maybe I’m going to find out it’s not so bad.

T: um-hm. That’s quite a process you just contacted there. So as you say that, what do you feel now as you’re saying this?
C: I feel good. A positive feeling
T: describe it
C: very light-headed, um. A positive, uh – loose. Um…
T: where do you feel loose?
C: my whole body. My shoulders mainly, feel loose. I feel accepting…of me <crying>
T: Accepting of you
C: that makes me feel sad
T: uh, yeah, what’s the sad part of that? ‘I haven’t accepted me’?
C: it’s sad…it’s sad that…it’s sad that it takes so long…
T: sad that it takes so long…?
C: to get to the point where you can accept yourself

Once the client sufficiently captured her emergent internal experience in language, she entered a Reflective Storytelling mode, and attempted to analyze and understand her own Inchoate Storytelling process. She additionally began to question whether she could trust the information that emerged in the process. The client then moved back into Inchoate Storytelling as she attempted to sort through her feelings regarding “survivor mode”.

Finally, the client shifted to Competing Plotlines Storytelling, expressing uncertainty around how best to respond to the knowledge that she has lived her life in survivor mode. She also expressed two competing emotional responses, reporting that she felt a sense of positivity as a result of being divested of the tension associated with her long-repressed feelings, and sadness over the amount of time she has taken to arrive at a place of self-acceptance. The therapist’s ability to provide the client with words of encouragement and emotion regulation coaching, as well as her use of empathic conjecture, enabled the client to sustain a lengthy episode of
productive narrative-emotion processing as she shifted back and forth within the NEPCS Transition marker subgroup.

**Limitations**

Although a primary aim of the current study was to address the limitation of small sample size in previous NEPCS investigations, the sample size in this project (N = 12 clients) is relatively small, and may precluded the detection of further significant findings, particularly for NEPCS markers that tend to occur with less frequency across therapy sessions, but may be very important indicators of both productive and unproductive narrative-emotion processing (e.g., Unstoried Emotion, Experiential Storytelling, Inchoate Storytelling, etc.) that exert a powerful influence on the client’s experience in session. Conversely, some of the significant findings that did emerge may have been unduly influenced by one or a few clients, as opposed to being reflective of the sample as a whole.

Furthermore, the NEPCS 2.0 was only 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), and therefore, important information regarding the narrative-emotion processes associated with complex trauma may have been lost due to the limited number of sessions sampled. It is also difficult to determine the representativeness of the sessions chosen at each stage, particularly since, in some cases, the late stages sessions occurred in close proximity to the middle stage sessions (e.g., for Client 10, the middle sessions coded were 10 and 11, and the late sessions coded were 13 and 14) and may therefore be qualitatively different from late stage sessions that occurred at a much later point in time (e.g., sessions 18 and 19). In order to fully explicate the narrative-emotion processes associated with complex trauma in an EFTT sample, the NEPCS 2.0 should be applied to all therapy sessions.
The current study additionally did not examine the relationships between EFTT condition (i.e., imaginal confrontation (IC) and empathic exploration (EE) and NEPCS markers, marker subgroups, and shifting. In future research, it will be important to determine if the therapeutic interventions associated with the IC and EE conditions have a differential impact on the proportions of NEPCS markers, marker subgroups, and/or NEPCS shifting patterns in relation to therapeutic outcome and stage of therapy.

Another important limitation of the current study was the sole use of the NEPCS to investigate narrative-emotion change processes in an EFTT sample. Future NEPCS studies should seek to apply other process measures that evaluate narrative and/or emotion processing in psychotherapy sessions, in conjunction with the NEPCS, in order to differentiate recovered and unchanged clients in an EFTT sample. For example, the Experiencing Scale could be used to evaluate the degree to which a client is experientially engaged in session and focusing on the exploration of internal experience, the Client Emotional Arousal Scale – III (CEAS – III; Warwar & Greenberg, 1999) could be used to assess a client’s quality and intensity of emotionality in session based on bodily and vocal cues, and the Innovative Moments Coding System (IMCS) could be used to evaluate a client’s narrative challenges to their problem-saturated story (i.e., Same Old Storytelling). Along these lines, a multi-method analysis was recently undertaken in which narrative-emotion process shifts (as identified by the NEPCS), immediacy events (Hill, 2004), and observable features of the working alliance, were used to better understand a client’s corrective experience in Brief Dynamic Therapy (Friedlander, Angus, Wright, Gunther, Austin, Kangos, Barbaro, Macaulay, Carpenter, & Khattra, in press).

Finally, although some noteworthy statistical relationships emerged in the present study that were in line with theoretical assumptions about how various NECPS markers and marker
subgroups influence therapeutic outcomes, causal relationships have not been established. Future use of a mediation model (i.e., a statistical model that seeks to identify and explain the mechanism that underlies an observed relationship between an independent variable and a dependent variable through the inclusion of a third hypothetical variable, or mediator) or a granger causality analysis (i.e., a statistical test used to determine the utility of one series of events in forecasting another series of later events) may help to illuminate causal relationships between various modes of narrative-emotion processing and therapeutic outcomes in traumatized clients receiving EFTT, as well as in other client populations receiving various treatments.

**Future Directions**

The primary goal of this study was to identify and elucidate the narrative-emotion processes associated with the treatment of complex trauma by applying the NEPCS 2.0 to an extended EFTT sample. NEPCS markers and marker subgroups were richly represented within this client population and therapeutic modality, further indicating the utility of the NEPCS as a pan-theoretical, trans-diagnostic research tool for the identification of clinically significant narrative-emotion processes.

The results from the current study, together with outcomes from previous studies using the NEPCS, point to several general and more specific future directions for the NEPCS, both from a clinical practice and psychotherapy research perspective. In terms of using the NEPCS to inform clinical work, an ultimate goal of the Angus Narrative-Emotion Marker Lab is to develop a framework for process-guided interventions, including a manual to assist therapists in facilitating narrative-emotion processing across various psychotherapeutic modalities. Many of these interventions have been outlined in previous publications (Angus, 2012; Angus & Greenberg, 2011), and some will be discussed in the sections to follow. As a research tool, the
NEPCS may continue to be used to elucidate the narrative-emotion process markers common to all therapeutic paradigms, and those specific to certain client populations (e.g., depression, GAD, complex trauma, etc.) or treatment modalities (e.g., EFTT, CCT, MI-CBT, etc.)

**NEPCS as a clinical practice tool.** Several individual NEPCS markers were found to be associated with therapeutic outcome (and often, stage of therapy) in the current EFTT complex trauma sample. Specifically, Superficial Storytelling was related to unchanged status at treatment termination, and Inchoate and Discovery Storytelling were related to recovered status. The NCM category was also associated with more positive outcomes in the present sample.

With respect to Superficial Storytelling, the current study represents the fourth NEPCS investigation to find a relationship between increased proportions of this mode of narrative-emotion processing, and poor therapeutic outcome. As such, it seems likely that Superficial Storytelling serves an experiential avoidance function across all client populations and therapeutic modalities, and its relationship to poor treatment outcomes suggests that therapists need to be particularly attuned to its presence, and more importantly, its pervasiveness for some clients, and make active attempts to shift clients out of this form of narrative-emotion processing.

With respect to trauma specifically, Superficial Storytelling may predominate until the client develops a sense of trust in the therapist, and/or feels more comfortable within the psychotherapeutic milieu. In clinical practice, bringing a client’s attention to nonverbal indicators of internal experience, through metacommunication by the therapist, may be an important starting point for transitioning clients to more emotionally evocative forms of processing (i.e., NEPCS Transition markers).

A relationship between Inchoate Storytelling and positive therapeutic outcome was also an important finding of the present study. Interestingly, Inchoate Storytelling was associated
with recovery from depression (Boritz et al., 2014), but not with recovery from GAD (Macaulay, 2014). This difference may be due to factors associated with the client population, or with the therapeutic modalities that were applied. Because the development of depression, trauma symptoms, and GAD is related to the avoidance of internal, present-moment experience, the result may be related to differences in the “key ingredients” of the specific treatment approaches used in each sample. In the depression sample, two-thirds of the clients received CCT or EFT, and the current complex trauma sample received EFTT. All of these therapies explicitly use present-centered experiential information provided by the client to guide the therapeutic process.

In the GAD sample, the clients received MI-CBT, which focuses less on the internal experience of the client within the session, and more on cognitive and behavioural principles of change. When encouraging Inchoate Storytelling in order to promote productive change in clients suffering from complex trauma, it is important for therapists to bear in mind that this mode of storytelling involves accessing an internal felt-sense that is murky and amorphous, and requires sustained exposure to, and attention towards, emotions that are often very painful or uncomfortable. Accordingly, from a clinical practice perspective, it may be helpful for therapists who are treating clients suffering from complex trauma to provide some coaching in emotion regulation, both prior to and during episodes of Inchoate Storytelling, in order to support these clients effectively during difficult moments in session.

Discovery Storytelling was also associated with recovery from trauma in the current study, a finding that has been consistently demonstrated across all NEPCS investigations to date. In the case of a complex trauma population, Discovery Storytelling may be theoretically linked in important ways to Inchoate Storytelling. For example, it may be that through iterative Inchoate Storytelling sequences, clients are able to reflect on newly emerging, present-centered
information, and use this knowledge to reorganize their self-experiences. Once a client moves into the mode of Discovery Storytelling, it would seem fruitful for therapists to make attempts at sustaining this type of productive processing. For example, asking the client to reflect on previous beliefs and patterns of behaviour, and to reconcile those views of self with newly emerging self-understandings, may be important for the development of a more integrated and cohesive self-narrative that will endure beyond treatment termination.

In a related vein, shifting between various NEPCS markers and marker subgroups was associated with good outcomes, and specifically, productive shifting (i.e., shifting away from NEPCS Problem markers) was more characteristic of recovered clients. Future research endeavours may wish to elucidate the way(s) in which therapists can promote NEPCS marker and marker subgroup shifts, away from unproductive processes and towards productive ones. Additionally, it will be important to understand how therapists can sustain and reinforce productive processing. It is possible that some NEPCS markers and marker subgroups are meaningfully associated with one another, comprising a change pathway that therapists can use to facilitate enhanced processing. Such a research project may spur the development of an NEPCS process-guided intervention manual that therapists can use in their work with clients, irrespective of the client’s presenting problem or their own therapeutic orientation.

Further to this discussion, the Experiencing Scale provides a framework for evaluating the depth of client experiencing in psychotherapy, and as such, can be used to measure client change processes in EFT treatments (Pos, Greenberg, Goldman & Korman, 2003), including EFTT, as well as other therapeutic approaches. There is significant overlap between the NEPCS markers, which capture important client processes like depth of experiential engagement with narrated material, and degree of expressed emotion, and various levels of the Experiencing Scale.
For example, Empty Storytelling (an NEPCS Problem marker), which is characterized by an impersonal narrative account devoid of an internal referent and low emotional expression, is similar to Level 1 of the Experiencing Scale.

Furthermore, Inchoate Storytelling (an NEPCS Transition marker), which involves a heightened exploration of an emergent emotional experience, is consistent with a Level 5 on the Experiencing Scale (i.e., client is focused on exploring his/her internal experience).

Finally, Discovery Storytelling (an NEPCS Change marker) corresponds to a Level 6 or 7 on the Experiencing Scale, as clients demonstrate novel meaning-making through the articulation of a new understanding(s) of the self. The overlap that exists between the NEPCS and the Experiencing Scale suggests that the constructs of client experiencing and emotional arousal are embedded within NEPCS marker indicators. Although the Experiencing Scale has significant utility for evaluating the depth of client experiencing in therapy sessions, Safran, Greenberg & Rice (1988) argued that key dimensions identified by the measure are too broad to provide clinicians with specific information regarding when and how to effectively implement therapeutic interventions, on a moment-to-moment basis. Additionally, the Experiencing Scale provides only minimal criteria addressing the quality/degree of narrative coherence and expressed emotional arousal in therapy sessions. NEPCS markers, on the other hand, outline key indicators of narrative coherence, expressed emotional arousal, depth of self-reflection and meaning-making, and paralinguistic cues of internal processes, and may therefore address some important gaps in the Experiencing Scale, in the service of enhanced therapist training in EFT and other treatment approaches.

Once NEPCS process-guided interventions have been fully explicated through future research endeavours, the utility of such interventions as a means of promoting productive
narrative-emotion processing may be evaluated through horse-race comparisons of therapists trained in the NEPCS approach and those administering another kind of psychotherapeutic intervention (e.g., supportive counselling). This type of research design will help to determine whether productive shifts in narrative-emotion processing occur as a result of NEPCS-specific training.

**NEPCS as a research tool.** In future research projects, the NEPCS should be applied to an EFTT sample in which recovered and unchanged clients are balanced between IC and EE conditions. This will help to elucidate whether condition-specific NEPCS marker, marker subgroup, and shifting patterns are present. Furthermore, the effects of client and therapist variables assessed as part of Paivio and colleagues' (2010) EFTT research study on NEPCS marker and marker subgroup proportions, as well as shifting patterns, may be another interesting avenue for future research. Client variables could include household income, education level, marital status, abuse focus (i.e., emotional, physical, sexual, or neglect), self-esteem, level of anxiety, and symptoms of depression, and therapist variables could include ratings of adherence to EFTT treatment protocol and competence.

More broadly, it may be interesting to evaluate whether differences in the proportions of NEPCS marker and marker subgroups, or differences in the amount and/or type (productive vs. unproductive) of NEPCS shifting seen in session one of psychotherapy, are associated with therapeutic outcome status. Interestingly, Pos, Warwar, and Greenberg (2009) found that the client-rated therapeutic alliance after session one in a sample of depressed clients predicted outcome status at treatment termination. This may indicate that other client factors measured early on in treatment, such as baseline narrative-emotion processing capacity, will also be associated with outcome status. If this were the case, it would help to inform an NEPCS
process-guided intervention manual by directing therapists to attend to certain narrative-emotion processes considered “red flags”, or early indicators of problematic or unproductive processing. For example, a preponderance of Superficial Storytelling in session one may be related to poor treatment outcomes, and interventions focused around shifting clients out of this type of processing as early as session one could be outlined. It might then be interesting to explore, through path analysis, whether targeted NEPCS shifting interventions initiated by therapists are related to outcome status.

Finally, as previously mentioned, an exciting area of future research may involve applying multiple psychotherapy process measures, to be used in conjunction with the NEPCS, in order to better understand important mediators of narrative-emotion processing that occur in a therapy session. One such psychotherapy process measure that may elucidate the mechanisms of narrative-emotion process shifts is the Structural Analysis of Social Behaviour (Benjamin, 2010). Application of the SASB system to therapy sessions previously coded using the NEPCS, may help to determine what types of interpersonal dynamics between therapist and client are related to increased levels of productive NEPCS shifting.

**Conclusion**

The findings of the present study contribute to the ongoing development of the NEPCS as a reliable, valid tool for psychotherapy process research and clinical practice. Specifically, it extended the validity of the newly refined NEPCS 2.0 by applying the coding system to an extended sample of clients receiving EFTT for complex trauma. In particular, results from the current study provided further empirical validation of the Superficial Storytelling, Reflective Storytelling, and Experiential Storytelling markers, and of the NEPCS Transition markers subgroup as distinct from the Change markers subgroup.
This study made a further contribution towards elucidating the narrative-emotion processes associated with recovery from complex trauma. Specifically, Superficial Storytelling emerged as more common in the therapies of unchanged clients, while Inchoate and Discovery Storytelling occurred more frequently in the sessions of recovered clients. These patterns seem to suggest that emotional avoidance is common to clients who continue to experience significant trauma symptomatology at treatment termination, whereas clients who are able to access, symbolize in language, and reflect meaningfully on emergent internal experience are more likely to recover from trauma-related pathology in EFTT. Furthermore, NEPCS Problem markers seem to be related to poor therapeutic outcomes in EFTT for complex trauma, whereas NEPCS Transition and Change markers are associated with productive change. Finally, the quantity and quality of NEPCS marker and maker subgroup shifting as related to therapeutic outcome - namely, narrative flexibility, or the quantity of NEPCS shifting - was associated with recovery in the EFTT sample, as was productive NEPCS shifting (i.e., away from NEPCS Problem markers).

Although the sample size of the current study was relatively small, the number of sessions coded was double the number used in any previous NEPCS project. As such, the generalizability of the findings is likely improved, although further research applications of the NEPCS 2.0 continue to be warranted, including expanding the current sample of EFTT clients to include equal numbers from the IC and EE conditions.
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Appendix A

Narrative-Emotion Process Coding System Manual
(NEPCS)

Version 2.0  FV

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### PROBLEM MARKERS:

<table>
<thead>
<tr>
<th>Same Old Story</th>
<th>Indicators</th>
<th>Examples</th>
</tr>
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<tbody>
<tr>
<td>Client’s story involves over-general descriptions of interpersonal, behavioural, or thought patterns or emotional states, accompanied by a sense of stuckness.</td>
<td>Linguistic indicators: always, never, no matter what, here we go again</td>
<td>C:…getting all the negative message like never getting any encouragement...it’s almost like [my husband’s]…point of view is the only right one...and everybody has to follow it, like there’s nothing outside of that…it’s just like whichever way I turn, you know no matter what…it’s never the right thing and he just doesn’t want to be around me. ***</td>
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<tr>
<td>Low personal agency</td>
<td>Client may express helplessness, powerlessness, hopelessness, or resignation. Client may view problematic patterns as maintained by forces outside of the self.</td>
<td></td>
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<tr>
<td>Generic autobiographical memory (ABM), or combination specific/generic ABM</td>
<td>Generic ABM – Personal recollections that represent a blend of many similar events repeated over a long period of time. This includes memory descriptions of non-specific events that lack discrete connection to a particular moment in time (in contrast with a single-event memory that is specific and focused on a particular incident). Generic ABMs blend unique events into an amalgam or schematic representation that is meant to capture key commonalities that link the events together.</td>
<td>C: Well all I can really say is that I remember the statement that she made at the time, but I guess at the time I didn’t really, you know, didn’t really click in, or pay much attention to it, other than that she made the statement that I guess she was number one, and everything else took second place. T: And, somewhere along the way I guess you’ve come to realize, that’s who she is. C: Yeah. She was never concerned about me. She was concerned about herself. T: Like there’s no two-way in this relationship, it feels like it’s all about her. C: It’s all the one way, yup. Behave, be good, don’t give me any trouble or cause me any misery, or cause me any discomfort. T: She’s still like that C: Oh, yeah. Mhm. Yup. ***</td>
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<tr>
<td>Combined Specific/Generic ABM – Represents a narrative sequence in which a specific incident or life event is contextualized within an overall life theme or pattern of life events. In this category, the specific event is used as a best exemplar of an important life theme and as such the meanings attached to the single event are generalized to other contexts and time periods in the person’s life.</td>
<td>Emotion is global, non-specific (secondary emotion) An emotional response to another emotion (e.g. one emotion interrupts another emotion). Does not fit the person’s appraisal of the situation.</td>
<td>C: Yeah, cause like I said before I’m like, “why can’t I cope?” Like, why can’t, why do I need this [medication]? [Crying] T: So I mean, in terms of breaking it down, it sounds like a part of you wonders if this position isn’t right for you in the long run... ***</td>
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</table>
C: I think for me, it’s work. But even if I was to change my job to somewhere else, I think there would be other stresses, you know what I mean? [Heavy sigh]. And then where will I be? You know? Like, what if I can’t cope with that either?

A focus on event details.
- Attention is focused almost exclusively on external events (e.g., “what happened”).
- This may include factual autobiographical memories about the self (i.e., an account based on factual information).

Lack of self focus in the recounting of the narrative event.
- The client tells a story, describes other people or events in which s/he is not involved, or presents a generalized or detached account of ideas.
- Refers in passing to him/herself but his/her references do not establish his/her involvement. First person pronouns only define the client as object, spectator, or incidental participant. The client treats him/herself as an object or instrument or in so remote a way that the story could be about someone else.

The significance (meaning) of story is unclear to the listener.
- Significance of the disclosure of story at that moment in therapy unclear, and/or meaning of story to client is unclear. The content is such that the speaker is identified with it in some way but the association is not made clear.

External voice
- The external voice has a pre-monitored quality (e.g., “talking at” quality) that may indicate a more rehearsed conceptual style of processing and a lack of spontaneity and may suggest that content is not freshly experienced.
- The client’s manner of expression is remote, matter of fact, or offhand as in superficial social chit-chat, or has a mechanical quality.
**Unstoried Emotion**

Client verbally or non-verbally expresses undifferentiated emotional states that are unacknowledged, disconnected or not integrated within the narrative (i.e., emotional response is not referred to or elaborated in the plot).

Dysregulated emotion (i.e., extremely intense emotional arousal apparent in both the voice and the body of the client).
- Usual speech patterns are extremely disrupted by emotional overflow, as indicated by changes in accentuation patterns, unevenness of pace, changes in pitch, and volume or force of voice.
- Emotional expression is completely spontaneous and unrestricted.
- Emotional arousal appears to be an uncontrollable and disruptive negative experience in which the client feels like s/he are falling apart.

Emotional Overflow – not dysregulated, but powerful and relatively unexplored or disconnected from narrative

Dissociative emotion
- Silence and pausing; clients appear to face obstructions in their process of self-exploration, by attempting to disengage by avoiding and/or withdrawing from emotion.
- Therapy discourse markers associated with occurrence of silent disengaged moments included discussion of difficult emotion, pauses followed by a response that indicated that client had stopped processing to the same depth as before the pause, pauses followed by jokes, or summarizing, dismissing, or distracting responses.

No discernable cause of affect
- Inability to identify a specific cause or starting point that explains the onset of the emotional response.
- Client demonstrates little or no understanding of what the emotional state means to him/her.
- No relational or situational context identified.

Somatic complaints
- Client identifies points of tension in the body.
- Client describes pain or other bodily discomfort.

T: So it’s hard to keep the lid completely shut and it keeps peeking out.
C: yeah I find it’s...affected my...stomach...you know how you get that tightness and you always feel like...sort of slightly nauseous all the time...like everything you eat kind of sits there...

***

T: What’s bad about that? It’s like he’s judging me, or...?
C: Um, I think he sees, um, I don’t know. It feels like all the times that I did well, it’s...[tears up]. Sorry [smiles], sorry, [reaches for Kleenex]. Um...[smiles, crying, covers her face].
T: What’s happening right now?
C: [silent, crying]. It’s like, now he sees the real me.
T: I see. Now he sees the real me.
C: [client looks down at thought record, writing].
T: And those tears are tears of? I mean I think they’re important, they’re telling you something...
C: [continues staring down at clipboard, fidgeting with pen, silent :10 seconds].
T: I feel...sad? Or mad?. Or...
C: [crying again]. Sorry, I’m really sorry

***

C:...and I just feel like my mind is going a million miles an hour, with...same old kind of stuff.
T: Ok, well, so...in particular, what sort of stuff?
C: [starts to cry, shaking her head. :20 silence]. Um , uh, it’s all kind of one big ball.
T: Ok.
C: I just, um, I don’t know. [more silence, crying]. It’s just, I’m just, it’s just a never ending...I don’t know, it’s just kind of a big ball.
Physical Indicators
- Change in body posture (e.g. rigid), eye contact (e.g. diminished), vocal tone (e.g. quivering or raised voice), gestures (e.g. placing hand on chest), bodily movements (e.g. hand wringing, restless legs).

Superficial Story
Client’s emotional state and narrative expression are presented in a generalized, vague or incoherent manner. The client may talk about his or her own feelings or self-relevant ideas in a coherent manner, but with little or no evidence of exploration or discovery.

Lack of clarity and/or depth in reflection or examination of client’s or other’s thoughts, feelings, and behaviours.

Client provides sweeping, vague statements with lack of detail or analysis.

The content is a self-description that is superficial, abstract, generalized, or intellectualized. Little reference is made to the speaker’s feelings or internal perspective. The segment may include the ideas, attitudes, opinions or moral judgments, complaints, wishes, preferences, aspirations, or capacities of the speaker from an external or peripheral perspective.

Narrative incoherence
- Story holds together loosely or is scattered. The client may talk his or her own feelings or self-relevant ideas, but in a skipping or jumping manner.
- Multiple trains of thought, stories or talking points within rapid succession that remain incomplete.
- Connection between ideas may be unclear to therapist.

Emotion is depersonalized.
- High or low emotional arousal; however, if the client is emotionally aroused, it is evident from his/her manner, not from his/her words
- Treats feelings abstractly, impersonally, as objects.
- Uses third person pronouns (e.g., “one feels…”).
- Appears to be removed and distant from emotional impact of narrative.

Lack of self-focus

C: And then, the moment...sometimes with certain things I just can’t help myself. Without having to think of myself, it’s always great when this happens, it’s always down to the point. I can’t think of any examples. But when it happens, all of a sudden they are just like, wow. Because of all of a sudden they just get it back.

***

C: Most of the time I do pretty good but, uh, when it comes to my mum or um um people that well, uh, again I uh my babysitter’s sister, the so-called friend, they well, uh, we’re not as close as we used to be but she said some things that are kind of frustrating to me back a few years ago and I didn’t really say anything about it, so.

T: So she said…?

C: Yeah it was uh, something pretty cold, and I didn’t say anything about it, I laughed it off, but uh you know, it was kinda hurtful and I kind of um withdrew from our relationship sort of you know just, we never really had a deep relationship anyway.
- May include biographical information about others, or
descriptions or explanations.
- (imagination/fantasy/projection) of others’ thoughts,
feelings, or behaviours.
- If focused on other, little discussion of self-related
thoughts, feelings and behaviours.

Hypothetical scenarios, conjecture.

Unclear referents (e.g., “it” “that” “this”).

---

**TRANSITION MARKERS:**

**Reflective Story**
Client’s narrative includes a coherent analysis of or
reflection on an ABM, or on a behavioural, cognitive,
emotional, or interpersonal pattern. Often explanatory in
nature, the client may provide a “why” or “how” for the
emergence of significant events, emotional responses or patterns,
or may discuss why something matters. The client appears
engaged in this process, but with limited evidence of salient
present-moment tension, stuckness, searching, exploration, or discovery.

May be an introduction and setting the scene for further
analysis or exploration.

Emotional arousal can range from no/low arousal to
moderate – high arousal.

Focus on self
- Narrative is told from a personal perspective and
includes the details of the clients feelings, reactions,
motives, goals and assumptions

Client provides description of feelings as they occur in a
range of situations, or relate reactions to self-image.

Abstract terms or jargon are expanded and elaborated with
some internal detail.

Reporting internal experience not arising from present
centered exploration.

The client appears to be speaking with some perspective on a
therapeutically relevant or personally meaningful topic or
event. The overall tone is one of reflection. For example, the
narrative content may sound like a Same Old Story, a
Competing Plotline, or a Discovery Story, but the client
shows now evidence of feeling stuck/hopeless, tension, and

---

*C: With my boyfriend it’s like we’re equal. Completely equal.
And with a few of my friends I feel equal, so I can be myself
with them because we’re equal.*

*T: Right, so you feel like you can be yourself in relationships
where you’re not inferior, or something.*

*C: Right, and I feel inferior when I’m with them, then I feel
inferior in my work, and then I feel inferior in my life, you
know what I mean? So, I think if I start to change the
relationship I have with people it will change the relationship
I have with my work, the relationship I have with myself.*

*T: It sounds like that’s a really important connection to make,
because you just said I feel inferior in my life if I don’t sort of
stand up for myself.*

*C: Yeah, because you’re always constantly interacting with
people, so… I guess my interaction with my friends has had a
lot of impact on how…how I feel about myself, you know
what I mean?***

*C: It’s just, it’s shaped who I am.*

*T: How so? Can you say more about that?*

*C: I guess like the whole people pleasing thing. ‘Cause I
guess, I had to really watch my back with her, all the time.
And like, this was my home. It was supposed to be where I felt
safe.*

*T: Right. You sort of learned, ‘ok I can’t really trust people.’”*

*C: And she was my parent. Or a parent figure. And I just feel*
pride/excitement, respectively; instead, the client appears to be describing feelings/patterns with emotional distance as well as engaged self-awareness.

like, you know, I’ve always had to watch my back, I was always—and I think, this is what is now this constant, like, trying to work out every eventuality, because she was so manipulative that I had to feel like I was one step ahead of her.

<table>
<thead>
<tr>
<th>Competing Plotlines</th>
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<tbody>
<tr>
<td>Client expresses or implies competing or opposing emotional responses, lines of thinking or behaviour or action tendencies in relation to a specific event or narrative context, accompanied by confusion, curiosity, uncertainty, self-doubt, protest, anger or frustration (i.e., the client expresses feeling conflicted over the competition). Tension and incongruence is at the core of these two opposing emotional responses, ideas or behaviours.</td>
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<th>Inchoate Story</th>
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<tbody>
<tr>
<td>Client appears to focus attention inward in order to sort through, piece together, or make sense of</td>
</tr>
</tbody>
</table>

| Linguistic indicators (e.g., on the one hand, on the other hand; one part of me). |
| Moderate expressed emotional arousal. |
| - Arousal is moderate in voice and body. Ordinary speech patterns may be moderately disrupted by emotional overflow as represented by changes in accentuation patterns, unevenness of pace, changes in pitch. Although there is some freedom from control and restraints, arousal may still be somewhat restricted. |

| Breach of client’s beliefs and assumptions about the world and/or the self, leading to a shattered sense of identity, purpose, and/or values. |
| - This may be reflected in questions such as, “How do I make sense of this?” “Why has this happened to me?” “Why am I behaving? Why do I feel this way?” “Why do I feel two different ways?” |

| Both of the competing emotional responses or ideas do not need to be explicitly expressed by the client. One may be implied but recognized as “competing” in the broader context of the client’s previously-expressed tendencies, same-old-story, therapy goals, etc. (e.g., client can express wishes, state confusion about actions or feelings without articulating a direct desire for change). |

| C: ...it’s like, I have three healthy children, a house, we’re not wealthy by any means but we’re okay, um and I sort of go “oh”...why am I not...happier? I don’t know. |
| T: ...sounds almost like you’re saying, “what’s the matter with me? What’s wrong with me?” |
| C: yes... “what more do I need?” um, “am I grateful?” It’s funny because you start to feel that you should be grateful but you, you really can’t feel grateful. Isn’t that awful? That’s horrible. It’s an awful feeling... |

| *** |

| C: And I think there’s also a fear, um, that because I’m an energizer bunny, that if I slow down a little, like...I won’t be as, um accomplished, you know, or people are going to notice, like “gosh, [name] is being lazy” |
| T: Yeah, so if I’m not on top of everything and doing everything then I’m going to be a “lazy slob” |
| C: Yeah. (laughter). Yes. And I don’t want people to think that, obviously. |

| Narrative lacks clear beginning, middle, and end. |
| - Client is unable to clearly articulate the story; the telling |

| C:...and then for the rest of my life having no sense of self, or at least one that was really discombobulated in a way. |
an experience and search or struggle for the appropriate symbolization in language. of the story is disjointed. Both client and therapist may find it difficult to follow the story.

- Situational/relational context is only partially elaborated
- Client expresses confusion or uncertainty about the causes, factors, and/or details of the narrated event.
- Client describes a disjointed, unclear or hard to understand narrative.

Client may use metaphor to symbolize an experience.

Client engages in a present-centered exploration of patterns of feelings, behaviour, actions, reactions, etc., but appears to struggle to articulate something new.

Disjointed description of subjective experience (internal state) of protagonists and antagonists.

- Pausing and/or disrupted speech as client attempts to articulate internal experience.
  - Client struggles to symbolize novel or complex experience felt in that moment.

Client is silent because of an emotional experience or due to the process of moving into contact with an emotion.

**Experiential Story**

A client narrative of what happened and how it felt; an experiential re-entry into an generic or specific autobiographical memory with reference to the associated internal experience (thoughts, sensations, emotional responses).

An emotional differentiation of what happened.

- The therapist may facilitate re-entry into the landscape of action and emotion.
- Moderate to high emotional arousal.
- Client will discuss his/her emotions, but may also report what they saw, heard, smelled, etc. (i.e., sensory exploration).
- Client’s gestures, posture, or gaze may indicate review or re-enactment of the actions associated with the event.

Similar to Robert Elliott’s “memory reprocessing”

T: So it feels like he took your sense of self away.

C: Yeah, yeah [silence]. And I’m left…[silence]…because we moved, things seemed to be ok on the outside. But inside, there was…[pause, closes eyes, scrunches up face] a, like a [silence] black hole or a void, or a…not a ticking time bomb [makes fist like a bomb], but there was something that wasn’t there. [Silence]. Or actually there’s something that was there [uses other hand to clasp fist], that loathing, or just because…and then…and then, it just sort of, every time I became more sexually aware, it built up, and built up over the years…
just went out and walked and walked and walked, even where it wasn’t safe and where it was dark, and it was like I was in a fog, and it was raining and raining, a thunderstorm and at night, and I got wound up, and I just had to walk it off, and it’s like I couldn’t. I was getting soaked wet but I didn’t care.

unexpected outcome

Client narratives involving descriptions of “new” behaviours, emotional responses, and/or thought patterns, accompanied by expressions of surprise, excitement, contentment, pride, protest, and/or relief.

Linguistic indicators: new, different, comparisons between past and present.

Specific ABMs detailing the expression of new, adaptive actions, reactions, and/or emotions in the context of previously troubling events/scenarios.

Client identifies his/her own active role in the event.

Primary emotion is present within the story (i.e., an individual’s very first automatic emotional response to a situation)

- Indications of primary emotion are that emotion has to be (a) experienced in the present, (b) in a mindfully aware manner, meaning that (c) the emotion has to be owned by the client who experiences him/herself as an agent rather than as a victim of the feeling and (d) the emotion is not overwhelming; (e) the emotional process has to be fluid rather than blocked; and (f) the emotion has to be on a therapeutically relevant theme

C: ...it was just really surprising and amazing like to see that you know, and to notice that...I just...took a completely different approach to uh answering the question and representing like what’s important to me...I was very pleased with myself.

***

C: It was like—my stomach was so bad that I was bent over, and I thought ‘I’m obviously anxious for some reason,’ but, as I was saying, instead of just sitting there wallowing in it I was like ‘ok, what can I do?’

T: Right, is that a change for you, in terms of—

C: Yes, ‘cause generally that is my comfort go-to place is to just sit and wallow in it, so to be able to sit and do the relaxation and kick [the anxiety] to the curb, it was a big change. I just keeping thinking about what you said, like you can’t be anxious and relaxed at the same time. So I keep trying to relax myself, and do the muscle stuff, and--

T: Right, right. So what was that like, then?

C: Good, it felt really good. After, I felt like a different person, especially because my muscles were so tight that actually doing it helped relieve a lot of the stress, like unwinding them. I mean my anxiety was probably at like 90%, and then after I relaxed myself it was maybe like 20, 30.

Discovery story

Client narratives in which a new account is constructed as a Moderate Emotional Arousal

A general overview of an event or a description of a specific

C: I think that that...humiliation was the currency that my parents dealt in...when they where disciplining myself and
client describes his or her subjective experience, accompanied by a sense of discovery emerging from exploration resulting in a reconceptualization, reorganization or new understanding of the self.

incident or event (past, present, or future; actual or imagined)

An experiential description of how one feels or felt during the specified event.

A reflexive or interpretive analysis of current, past, or future events and/or subjective experiences, in which the client:
- Examines own behaviour in situations/relationships
- Plans future behaviour alternatives
- Examines own thinking in situations
- Explores own emotions in situations
- Discusses patterns in own behaviour and/or that of others
- Is self-questioning

A reconceptualization of the Same Old Story

A more generalized description of changed patterns (behavior, thought, emotion, interpersonal) or understandings, including some analysis or reflection on how the change occurred (i.e., indicating that the client has perspective on own change process).

my sisters... and I felt - I feel - very sad about that.

T: mm-hm... when you talk about it now...
C: Yeah because I feel like they criticized and nagged and were negative to the point where I chose no longer to be honest with them... and because we had such a limited discourse they really didn't know who the heck I was

***

C: Just being able to unravel that ball of wool is huge. Because now, if I’m feeling anxious, I start to unravel why. And for me that’s huge. Because then I have a reason. Do you know what I mean? Because then it’s not like ‘oh it’s anxiety and I can’t control it,’ it’s like ‘oh well I’m anxious because I’m going to this appointment and I don’t want to see my ex-employers who I just sued.’ Do you know what I mean? [...] And it’s giving it acceptance as well, like ‘you don’t like any of those situations, you’re having a bad day, and that’s OK. You’re not mad, it’s anxiety but the situation is stress-provoking because [x, y, z reasons], and then being able to change it as well.

No Client Marker: NCM
Segments in which there are no client markers are present (e.g., where therapist is talking, “chit-chat”, scheduling).
### Appendix B

Table B1.

**NEPCS Problem markers: raw frequencies and mean proportions by stage, outcome, and overall**

<table>
<thead>
<tr>
<th>Outcome and Stage</th>
<th>Total Minutes</th>
<th>Same Old Storytelling f</th>
<th>%</th>
<th>Empty Storytelling f</th>
<th>%</th>
<th>Unstoried Emotion f</th>
<th>%</th>
<th>Superficial Storytelling f</th>
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<td></td>
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### Table B2.

**NEPCS Transition markers: raw frequencies and mean proportions by stage, outcome, and overall**

<table>
<thead>
<tr>
<th>Outcome and Stage</th>
<th>Total Minutes</th>
<th>Competing Plotlines Storytelling</th>
<th>Inchoate Storytelling</th>
<th>Experiential Storytelling</th>
<th>Reflective Storytelling</th>
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<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
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<tr>
<td>Recovered</td>
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<tr>
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<tr>
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Table B3.

**NEPCS Change markers and No Client Marker: raw frequencies and mean proportions by stage, outcome, and overall**

<table>
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<tr>
<th>Outcome and Stage</th>
<th>Total Minutes</th>
<th>Unexpected Outcome Storytelling</th>
<th>Discovery Storytelling</th>
<th>No Client Marker</th>
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<td></td>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
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