

**EMOTIONAL CHANGE IN RESOLVING DEPRESSIVE SELF-CRITICISM DURING
EXPERIENTIAL TREATMENT**

Bryan H. Y. Choi

A THESIS SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

MASTER OF ARTS

GRADUATE PROGRAM IN CLINICAL PSYCHOLOGY

YORK UNIVERSITY,

TORONTO, CANADA

SEPTEMBER 2013

© Bryan Choi, 2013

Abstract

The goal of this study was to empirically demonstrate emotional changes that differentiate successful versus unsuccessful resolution of depressive self-criticism during experiential treatment. Emotion episodes occurring during five sessions across three phases of experiential treatment (early, middle, and late) were sampled for nine highly self-critical depressed clients (five good resolvers of self-criticism and four poor resolvers) from the York II depression project. Emotion episodes were then coded using two emotion process coding measures: the Classification of Affective-Meaning States (CAMS) and the Object-Valence Scale (OVS), and later analyzed employing three analytic procedures: graphical/descriptive; linear mixed modeling; and pattern analysis using THEME. Convergent evidence that EFT emotional change processes generally hold within experiential treatment for self-criticism was found. Compared to poor resolvers, good resolvers expressed: 1) greater decreases in secondary emotions (mainly in rejecting anger) and greater increases in expression of needs and primary adaptive emotions, and 2) more frequent transformations of secondary to primary adaptive emotions, and secondary to primary maladaptive to primary adaptive emotions. Good outcome cases also displayed 3) greater increases in positive emotional self-states and greater decreases in both negative emotional self-states and other-negative emotional states. Future directions of this research are discussed.

Acknowledgments

I would like to express my deepest gratitude to individuals who have helped me in the completion of this thesis. To my supervisor Alberta Pos, I thank you for your unwavering support and guidance. You have given me my wings as a researcher. To my statistical consultants in this project, George Monette, Magnus Magnusson, and Mirka Ondrack, I thank each of you for your time and effort in helping me understand and analyze my data. To my other committee members, Leslie Greenberg, Myriam Mongrain, and Mary Waller, I thank each of you for your participation and interest in my research. To my colleagues, Karen Wong, Dana Male, and Melissa Button, I thank each of you for being there when I needed help. And finally, to the love of my life, Douglas Falcão, I thank you for giving me the strength to keep going each day. Thank you for being in my life.

TABLE OF CONTENTS

Abstract.....	ii
Acknowledgements.....	iii
Table of Contents.....	iv
List of Tables.....	viii
List of Figures.....	ix
INTRODUCTION.....	1
LITERATURE REVIEW.....	4
Depression.....	4
Self-critical Depression: Varied Theoretical Perspectives.....	5
Psychodynamic Perspective.....	5
Cognitive Therapy Perspective.....	7
Emotion-Focused Therapy Perspective.....	8
Self-Critical Depression: A Unified Conceptualization?.....	10
Emotional Processing in Experiential Treatment.....	11
Goal of Study.....	12
Hypothesis 1.....	12
Hypothesis 2.....	12
Hypothesis 3.....	13
Hypothesis 4.....	13
METHOD.....	14
Participants.....	14
Inclusion criteria.....	14

Outcome groups.....	14
Client demographics.....	14
Treatments.....	15
Client-centered therapy.....	15
Emotion-focused therapy.....	15
Pre-treatment and Post-treatment Measures.....	16
Depressive Experiences Questionnaire.....	16
Rosenberg Self-Esteem Scale.....	16
Beck Depression Inventory.....	16
Symptom 90 Checklist-Revised.....	16
Inventory of Interpersonal Problems.....	17
Process Measures.....	17
Working Alliance Inventory.....	17
The Experiencing Scale.....	17
Classification of Affective-Meaning States.....	18
Transformation of CAMS categories to ES types.....	18
Object-Valence Scheme.....	19
Procedure.....	19
Emotion Episode Sampling.....	19
Emotion Process Coding.....	20
Data Analysis.....	20
RESULTS.....	21
Reliability.....	21

Inter-rater Reliability of CAMS and OVS ratings.....	21
Outcome	21
Demographic Differences of Outcome Groups.....	21
Outcome Group Differences on Pre-treatment and Post-treatment Measures.....	22
Impact of Treatment Type on Outcome Groups.....	22
Outcome Group Differences on Emotion Episode Dimensions.....	23
Outcome Group Differences on the Working Alliance and Depth of Emotional Processing.....	23
Analysis 1: Descriptive Analyses	23
Proportional changes in ES and CAMS.....	24
Proportional changes in OVS.....	26
Analysis 2: Mixed Hierarchical Modelling	27
Analysis 3: Temporal Pattern Analysis	28
CAMS patterns.....	30
Emotion scheme patterns.....	31
OVS patterns.....	32
DISCUSSION	33
Emotional Change Processes	34
Emotion-focused emotional change processes and resolving self-criticism.....	34
Client differences.	37
Changes in Views of Self and Others	39
Change in view of self and resolving self-criticism.....	39
Transforming self-negative to self-positive emotional processing.....	39

Therapist Factors.....	41
Limitations and Future Directions.....	41
Conclusions.....	43
REFERENCES.....	44
APPENDICES.....	56
Appendix A: The Classification of Affective-Meaning States.....	56
Appendix B: The Object-Valence Scheme.....	151
Appendix C: Longest THEME Generated Patterns.....	154

List of Tables

1. Outcome Group Differences on Pre-treatment Measures	160
2. Outcome Group Differences on Post-treatment Measures.....	161
3. Outcome Group Differences on Emotion Episode Dimensions.....	162
4. Outcome Group Differences on the Working Alliance and Depth of Emotional Processing.....	163
5. Mean Proportions of CAMS Categories in Emotion Episodes within Phases of Treatment between Outcome Groups.....	164
6. Mean Proportions of ES Categories in Emotion Episodes within Phases of Treatment between Outcome Groups.....	165
7. Mean Proportions of OVS Categories in Emotion Episodes within Phases of Treatment between Outcome Groups.....	166
8. Mean Changes in Proportions of CAMS Categories in Emotion Episodes between Phases of Treatment between Outcome Groups.....	167
9. Mean Changes in Proportions of ES Categories in Emotion Episodes between Phases of Treatment between Outcome Groups.....	168
10. Mean Changes in Proportions of OVS Categories in Emotion Episodes between Phases of Treatment between Outcome Groups.....	169
11. Random Mixed Effects Hierarchical Model Predicting 4-point Ordinal CAMS Ratings.....	170
12. Wald Tests for Model Predictors.....	171
13. Outcome Group Differences on Mean 4-point Ordinal CAMS Ratings across Emotion Episodes of a Session at Early Treatment.....	172
14. Outcome Group Differences on 4-point Ordinal CAMS Ratings across Emotion Episodes in a Session at Middle/Late Treatment.....	173

List of Figures

1. Mean Proportions of CAMS Categories in Emotion Episodes within Phases of Treatment between Outcome Groups.....	174
2. Mean Proportions of ES Categories in Emotion Episodes within Phases of Treatment between Outcome Groups.....	175
3. Mean Proportions of OVS Categories in Emotion Episodes within Phases of Treatment between Outcome Groups.....	176
4. Change in Mean 4-point Ordinal CAMS ratings across Emotion Episodes of a Therapy Session between Phases of Treatment and Outcome Groups.....	177
5. Change in Mean 9-point Ordinal CAMS ratings across Emotion Episodes of a Therapy Session between Phases of Treatment and Outcome Groups.....	178
6. THEME Pattern Detection Algorithm.....	179
7. Distribution of THEME generated CAMS Patterns by Length among Real versus Random Data.....	180
8. Global Deviation of THEME generated CAMS Patterns of Real Data from Random Data.....	181
9. Longest THEME generated CAMS Pattern in Good Outcome Cases: Example 1...	182
10. Longest THEME generated CAMS Pattern in Good Outcome Cases: Example 2...	183
11. Longest THEME generated CAMS Pattern in Good Outcome Cases: Example 3...	184
12. Longest THEME generated CAMS Pattern in Poor Outcome Cases: Example 1....	185
13. Longest THEME generated CAMS Pattern in Poor Outcome Cases: Example 2....	186
14. Longest THEME generated CAMS Pattern in Poor Outcome Cases: Example 3....	187
15. Distribution of THEME generated ES Patterns by Length among Real versus Random Data.....	188
16. Global Deviation of THEME generated ES Patterns of Real Data from Random Data.....	189
17. Longest THEME generated ES Pattern in Good Outcome Cases: Example 1.....	190
18. Longest THEME generated ES Pattern in Good Outcome Cases: Example 2.....	191

19. Longest THEME generated ES Pattern in Good Outcome Cases: Example 3.....	192
20. Longest THEME generated ES Pattern in Poor Outcome Cases: Example 1.....	193
21. Longest THEME generated ES Pattern in Poor Outcome Cases: Example 2.....	194
22. Distribution of THEME generated OVS Patterns by Length among Real versus Random Data.....	195
23. Global Deviation of THEME generated OVS Patterns of Real Data from Random Data.....	196
24. Longest THEME generated OVS Pattern in Good Outcome Cases: Example 1.....	197
25. Longest THEME generated OVS Pattern in Good Outcome Cases: Example 2.....	198
26. Longest THEME generated OVS Pattern in Good Outcome Cases: Example 3.....	199
27. Longest THEME generated OVS Pattern in Poor Outcome Cases: Example 1.....	200
28. Longest THEME generated OVS Pattern in Poor Outcome Cases: Example 2.....	201
29. Longest THEME generated OVS Pattern in Poor Outcome Cases: Example 3.....	202

Emotional Change in Resolving Depressive Self-criticism during Experiential Treatment

Transformation of emotion schemes or schemas has been identified as an important target of treatment across all treatments of depression (Greenberg & Watson, 2006; Teasdale, 1999). Amongst emotion schemes linked to depression, many theories have identified self-criticism as a core affective process involved in the etiology of depression and an important change target during treatment of this disorder (Arieti & Bemporad, 1980; Blatt, 1974; 2004; Beck, 1983; Greenberg, 1992; Greenberg, Rice, & Elliott, 1993). While models of resolution of self-critical processes have been identified (Greenberg & Watson, 2006), we have yet to empirically establish the emotional changes that mark successful resolution of self-criticism in clients suffering from depression. The goal of the present study was just this, to empirically demonstrate emotional change processes that differentiate successful versus unsuccessful resolution of self-criticism in a clinically depressed sample.

In the present study, nine depressed clients who received short-term experiential treatment for depression in the York II depression project (Goldman, Greenberg, & Angus, 2004) were identified as highly self-critical (on the Depressive Experiences Questionnaire; Blatt, D'Afflitti, & Quinlan, 1976) as well as classified as good (five clients) or poor (four clients) outcome cases based on having the highest or lowest residual gain rankings on post-treatment gains in self-esteem compared to other York II clients. All emotion episodes for these nine clients across three phases of treatment were sampled: early (session two), middle (two sessions from the working phase of therapy, between the fourth and fourth last session), and late (the second and third last sessions). Emotion episodes were then rated using two emotion process coding measures: the Classification of Affective-Meaning States (CAMS; Pascual-Leone &

Greenberg, 2005) and the Object-Valence Scheme (OVS; Choi, present study). The CAMS, an empirically validated measure, identifies 10 emotional processing states empirically demonstrated to mark significant resolution of global distress in experiential psychotherapy (Pascual-Leone & Greenberg, 2007). CAMS can also capture distinctions in emotion scheme typology (secondary, primary maladaptive, and primary adaptive). These distinctions are important as transformation in this emotion scheme typology is identified by EFT theory as centrally important in successful treatment. In particular, sequences of emotion episodes that reflect emotional schematic change from either secondary or primary maladaptive emotion to the expression of needs and primary adaptive emotion is presumed essential to client improvement in the treatment of depression (Greenberg, Auszra, & Herrmann, 2007; Greenberg & Safran, 1987; Greenberg & Watson, 2006).

I am arguing here for the premise that EFT theory describes an emotional change process that will generally hold across experiential treatment. As such, in experiential treatment in general (even in therapies where no chair work occurs), emotion episodes of depressed clients who successfully resolve self-criticism should be marked by fewer emotion episodes expressing secondary and primary maladaptive emotions within and across phases of therapy, and more emotion episodes exhibiting expression of needs and primary adaptive categories of emotions within and across phases of therapy. I also hypothesized that sequences of emotion episodes that reflect transformation of secondary and maladaptive emotion to emotional processing expressing needs and primary adaptive emotion will occur more in good outcome versus poor outcome cases.

Emotional schematic change expressing positive shifts in views of self is also identified by EFT theory as central to resolving self-criticism (Greenberg, 1992; Greenberg & Pedersen,

2001; Greenberg & Watson, 2006). To examine this, the Object-Valence Scheme (OVS) was developed for the present study. The OVS was used to rate the client's relational valence to personal objects (self or others) expressed within and across emotion episodes. It was hypothesized that decreases in emotion episodes expressing negative views to the self, and increases in emotion episodes exhibiting positive views to the self as measured by the OVS would mark successful resolution of depressive self-criticism in good outcome cases. Sequences of self-negative emotion episodes leading to self-positive emotion episodes were also hypothesized to occur more frequently in good outcome cases.

In order to examine changes in emotional processing between good and poor outcome cases when power was limited by the study's relatively small sample size, CAMS and OVS coded emotion episodes were examined using three complementary analytic procedures that together could provide convergent validity of the results obtained: 1) descriptive analyses, visual representations, and *t*-tests examined changes in proportions of CAMS and OVS codes in emotion episodes across treatment; 2) mixed effects hierarchical modelling tested predictors of change in CAMS codes within emotion episodes across time, considering both between and within client variables; and lastly 3) a data driven analysis of temporal patterns in THEME statistical software detected sequences of CAMS and OVS codes within emotion episodes across time.

Experiential psychotherapy is an empirically supported treatment for depression (Goldman et al., 2004; Greenberg & Watson, 1998; Watson, Gordon, Stermac, Kalogerakos, & Steckley, 2003). The present study will provide new understanding and further validation of how emotional processes facilitate therapeutic change in self-critical depressed clients undergoing experiential treatment. Results will contribute to developing more refined models of resolving

depressive self-criticism and inform teaching and practice of existing models. It will also aid improved case conceptualization and treatment planning. This in turn will further support the effectiveness of experiential treatment of depression and ultimately reduce the future disease burden related to depression, perhaps worldwide.

Literature Review

Depression

Depression is one of the most common mental disorders in the world. Over 150 million people worldwide suffer from depression at any moment (World Health Organization, 2004) and the risk for anyone to develop depression in their lifetime is estimated at 17% (almost one in five; Blazer, Kessler, McGonagle, & Swartz, 1994). Depression is also most often a lifelong condition because the disorder tends to remit and recur (Andrews, 2000; APA, 2010; Judd, 1997). On average, a depressed individual experiences four major depressive episodes in their lifetime. In addition, depression carries considerable social (26 billion dollars in lost labour annually in the US) and immense treatment costs (51 billion dollars annually in the US; Greenberg et al., 1999). From these statistics, it is easy to see how depression is currently the leading cause of disease burden in high-income countries, and why it is forecast to become the leading cause of disease burden worldwide by 2030 (World Health Organization, 2004). The development and refinement of psychotherapies that support effective treatment and long-term remission of depression remains therefore a crucial task for mental health providers.

Depressive symptomology can be conceptualized on different levels: (1) affective symptoms such as feelings of lowness, worthlessness, or excessive guilt; (2) physiological symptoms such as fatigue or disturbances in weight, appetite, or sleep; (3) cognitive symptoms such as impaired concentration or decision-making; and (4) motivational symptoms like

diminished interest or pleasure in activities, or recurrent suicidal ideation or behaviour (APA, 2000; Greenberg & Watson, 2006). As such, the population of clients suffering from depression form a heterogenic group of individuals presenting with unique combinations of symptoms. While theories of depression are equally numerous and divergent (Street, Sheeran, & Orbell, 1999), some convergence has emerged concerning the etiology of depression. One convergence is a general agreement regarding the important role that self-criticism plays in the vulnerability and maintenance of depression. Psychodynamic, cognitive-behavioural, and emotion-focused therapies have all identified a depressive subtype characterized by self-critical processes.

A large body of research supports the relationship between self-criticism and depression across age groups and cultures (Abela, Sakellaropoulo, & Taxel, 2007; Abu-Kaf & Priel, 2008; Barrelstone & Trull, 1995; Besser & Priel, 2003; 2005; Brewin & Firth-Cozens, 1997; Cox, McWilliams, Enns, & Clara, 2004; Derosa, 2000; Enns, 1999; Irons, Gilbert, Baldwin, Baccus, & Palmer, 2006; Luyten et al.; 2007; McGillivray & McCabe, 2007; Mongrain & Leather, 2006; Öngen, 2006). Self-criticism has also been associated with postpartum depression (Carey, Sheehan, & Whyte, 2003; Vilegen, Luyten, Besser, Casalin, & Kempke, 2010), as well as depression in binge eating disorder (Moerk, 2003) and borderline personality disorder (Southwick, Yehuda, & Giller, 1995). Considering that self-critical depressed clients have also been found to experience reduced gains in group cognitive-behavioural therapy (Enns, Cox, & Pidlubny, 2002) and supportive-expressive therapy (Blatt, 2004), the need for research examining this self-critical depressive subtype more closely is clear.

Self-critical Depression: Varied Theoretical Perspectives

Psychodynamic Perspective. Blatt (1974, 2004) theorizes that one's personality structure is formed from the synergistic dialectical interaction of two fundamental human dimensions

during human development: relatedness and self-definition. The relatedness dimension is defined as the capacity to form mature interpersonal relationships, whereas the self-definition dimension is defined by the capacity to develop personal agency and competence. Blatt asserts that healthy individuals are equally invested in both dimensions and are able to both relate maturely to others and express independent competence and agency. However, Blatt has argued that an individual whose personality development neglects one dimension will be vulnerable to developing mental health concerns. In particular, if the self-definition dimension is over emphasized to the neglect of the relatedness dimension, the individual is thought to be vulnerable to developing a self-critical personality structure. This development of a self-critical character appears to be facilitated by the internalization of harsh punitive criticism one has received from significant others (e.g., a critical parent).

Highly self-critical individuals are viewed as often engaging in the pursuit of unattainable perfectionistic or idealistic goals for the purpose of achieving a sense of self-esteem and self-worth. Disruptions in personal agency (i.e., failure or criticism) are believed to interact with a self-critical personality structure to produce a self-critical subtype of depression. As such, self-critically depressed individuals fear failure and criticism most, and are often plagued with feelings of guilt, self-contempt, worthlessness, helplessness, and hopelessness as a result of being inevitably unable to sustain or meet their excessively high expectations and standards. They may also feel unlovable because of their perceived lack of competence and agency (i.e., “not being good enough” to love). Research has identified self-critical depression as a preponderant subcategory of depressed clients (Blatt, Quinlan, Chevron, McDonald, & Zuroff, 1982; Blatt, Zuroff, Hawley, & Auerbach, 2010; Choi & Pos, 2011; Kagan, 2003; Segal, Shaw, & Vella, 1989; Vanheule, Desmet, & Meganck, 2008).

Blatt (1974; 2004) suggests that self-critical depression is resolved by reorganizing the self-critical personality structure. This process involves helping the client 'correct' their overinvestment in the self-definition dimension with more investment in the relatedness dimension. In psychodynamic therapy, this change is accomplished through a transferential relationship with the therapist within which the client first achieves insight into their self-critical character, gradually forms a more stable and secure sense of self, develops interest in pursuing close interpersonal relationships, and over time finally forms trusting, intimate relationships with others. According to Blatt, the development of more adaptive and positive views and relationships to self and others is the core change process in resolving self-critical depression. Some evidence supports this idea as self-critical depressed clients who form more mature and positively-toned representations of oneself and others have been found to express better treatment outcomes (Blatt et al., 2010).

Cognitive Therapy Perspective. Beck (1983) postulates a somewhat complementary view to Blatt albeit cloaked in language more palatable to non-dynamic audiences. Beck asserts that depression can result from an overly *autonomous* personality structure oriented towards excessive mastery and control seeking. Highly autonomous individuals are characterized as having depressogenic thinking patterns regarding self-worth being contingent on achievement or autonomy, e.g., "If I don't get A's in school, I am worthless" (Clark, Beck, & Alford, 1979). From a stress-diathesis model perspective, only when such autonomous individuals find themselves in situations in which achievement or autonomy is lost or challenged, are their core dysfunctional self-worth schemas assumed to activate and produce autonomous depression. As such, autonomous depression shares with the psychodynamic conceptualization of self-critical depression the assumption that situations of perceived failure or criticism will activate core

dysfunctional mental structures in vulnerable individuals that link achievement-striving and self-worth, resulting in a depressive episode.

In cognitive-behavioural therapy, autonomous depression is thought to be resolved by changing dysfunctional core beliefs regarding self-worth being contingent on achievement and autonomy (Beck, Rush, Shaw, & Emery, 1979). Core schematic change is achieved through a number of cognitive interventions such as the Core Belief Continuum (Padesky, 1994) or the Thought Record (Persons, 1989).

Emotion-Focused Therapy Perspective. Emotion-focused therapy (EFT; Greenberg, 2002; Greenberg & Paivio, 1997; Greenberg, Rice, & Elliott, 1993; Greenberg & Watson, 2006; Greenberg, Watson, Goldman, 1998; Pos & Greenberg, 2007) theory asserts that all human behaviour and meaning-making is the consequence of the operation of emotion schemes (ESs). ESs are dynamic internal cognitive-affective structures that rapidly and automatically synthesize a wide variety of information (i.e., memory, perception, conscious appraisals, motivation, and action) to organize one's moment-to-moment experience of oneself and the world. From an EFT perspective, there are several types of ESs: secondary, primary maladaptive, and primary adaptive. Secondary emotion schemes are emotional responses to underlying primary (first-occurring) emotional experiences. Not helpful or productive, they interfere with accessing adaptive orienting information within primary emotion schemes. In self-critical depression, fear of expressing one's deep shame is an example of a secondary emotion. The fear blocks access to primary maladaptive shame that is the real emotional target that needs to be accessed and transformed. Primary maladaptive emotion schemes are immediate emotional responses that are considered maladaptive because they involve over-learned responses from previous, often traumatic experiences. Perhaps once adaptive reactions of a child coping with a past situation

(e.g., a child feeling shame in the face of a critical parent), primary maladaptive emotions do not support adaptive coping in the present (e.g., feeling shame when one harshly criticizes oneself). In treatment, primary maladaptive emotion schemes are explored and validated for the original historical context within which they were once adaptive. Unmet needs in the past (e.g., need for support or love) are also validated, and painful core maladaptive appraisals of the world and oneself embedded in these reactions (e.g., “I’m unlovable if I’m not pleasing others”) are oriented to and empathized with. Following this, primary maladaptive emotions are transformed by therapists facilitating access of alternative primary adaptive emotion schemes in which clients express core underlying needs and experience appraisals of oneself and others that make adaptive sense in the present. Primary adaptive emotion schemes are emotional responses that make universal sense given the situation and needs in the present. They give individuals access to adaptive behaviours and appraisals. Examples of primary adaptive emotions in self-critical depression might include: compassion for one’s early self who was constantly criticized, soothing oneself when one is feeling deep shame, and assertive anger towards a harsh internal critic. It has been found that increased access of primary adaptive emotions such as hurt, grief, assertive anger, self-soothing, acceptance, and agency predicts good outcome in depressed and emotionally injured clients treated with EFT (Pascual-Leone, 2009; Pascual-Leone & Greenberg, 2007).

From the EFT perspective, self-critical depression emerges through the chronic activation of a strong self-critical self-organization that is accompanied by significant and consistent activation of secondary or primary maladaptive emotion schemes (Greenberg, Rice, & Elliott, 1993; Greenberg & Watson, 2006; Greenberg, Watson, Goldman, 1998). These negative emotion schemes tend to express shame, self-criticism, self-blame, self-disgust, and self-hostility.

Depending on the client's history (e.g., early experiences of parental invalidation or criticism), self-critically depressed individuals may feel either inadequate or unlovable, or both. However, the content of the self-criticism is not as much of a concern to the EFT therapist as the process of self-criticism, which when engaged in is thought to result in subsequent activation of either secondary feelings such as global distress, helplessness, or hopelessness, or deeper core maladaptive feelings of shame and worthlessness. Activation of these emotion schemes is also marked by highly negative cognitions directed towards oneself (e.g., "I'm defective"). It is the chronic activation of these problematic emotion states that is considered the core issue in self-critical depressed clients. For the self-critical client, resolving the depressed state will require accessing core adaptive emotional resources that can combat self-critical processes. These are often adaptive feelings of assertive anger, self-soothing, self-compassion, and self-acceptance. The client may also do 'virtual battle' with important others from whom they learned the self-critical 'habit.' This conceptualization of self-critical depression again converges with psychodynamic and cognitive therapy theory regarding the role that self-critical processes can play in the etiology of depression.

Self-Critical Depression: A Unified Conceptualization?

Psychodynamic, cognitive, and emotion-focused therapy perspectives have all converged on a conceptualization of self-critical depression in which early experiences of criticism or invalidation are viewed as contributing to the formation of core dysfunctional cognitive-affective mental structures that regard self-worth as being contingent on personal achievement. These affective-cognitive structures are activated by situations of perceived failure or criticism to produce self-critical depressive episodes that are marked by negative feelings and cognitions about the self (e.g., feeling inadequate, unlovable, afraid, and hopeless). While psychodynamic,

cognitive-behavioural, and emotion-focused therapy may advocate for different procedures and techniques for treating self-critical depression, all view the transformation of core dysfunctional cognitive-affective mental structures producing self-critical depression as a central target of treatment. As such, all approaches point to the importance of transforming problematic emotion states associated with depressive self-criticism.

Emotional Processing in Experiential Treatment

Emotional processing is identified as a core process of therapeutic change in experiential psychotherapy (Pascual-Leone, 2009; Pascual-Leone & Greenberg, 2007; Pos, Greenberg, & Warwar, 2009). The experiential therapist encourages the client to approach, tolerate, symbolize, and make sense of their internal affective experience to support both adaptive functioning and organismic growth (Greenberg, 2002; Greenberg & Safran, 1987). However, as mentioned above, EFT theory asserts that emotional processing more specifically resolves depression by transforming problematic secondary and maladaptive emotion schemes with clients' increased access of adaptive emotional schematic resources (Greenberg, Rice, & Elliott, 1993; Greenberg & Watson, 2006). As such, emotion is changed by emotion (Greenberg, 2002). This transformation of emotion schemes has most often been modelled as occurring within two active chair interventions: self-critical splits for self-critical processes and empty chair work for unfinished business. Several volumes (Elliott, Goldman, Watson, & Greenberg, 2004; Greenberg & Watson, 2006) are available which describe these interventions and the models of resolution that have been developed based on task analyses of these interventions. Self-critical splits between critical and criticized selves make intuitive sense as an appropriate intervention in treating self-critical depression. However, since many clients 'learn' to be self-critical from critical and invalidating significant others from their past, asserting oneself during unfinished

business interventions with such others can also help resolve self-critical depression. In fact, Greenberg and Pedersen (2001) have found that depressed clients who achieved higher degrees of resolution on either task were less likely to suffer depressive relapse at 18-month follow up. It should be noted that higher degrees of resolution on both tasks are marked with the expression of needs, positive shifts in views of self and others (or in some cases holding a negative other accountable), as well as accessing primary adaptive emotions. To our knowledge, no one has empirically demonstrated these specific emotion shifts independent of active chair interventions, nor examined them within specifically self-critically versus generally depressed individuals.

Goal of Study

The global objective of the current study was to explore emotional change processes in the resolution of self-critical depression during experiential treatment. More specifically, an added goal was to validate emotional change processes assumed active in EFT – the transformation of secondary and primary maladaptive emotions by the increased alternative access of needs and primary adaptive emotions – as core emotional change processes common in experiential therapy in general, and in particular for resolving self-criticism in depressed clients. In relation to the CAMS, it was hypothesized that: **Hypothesis 1:** Good resolvers of self-critical depression would express decreased secondary and primary maladaptive emotional processing and increased expression of needs and primary adaptive emotional processing as measured by the CAMS across experiential treatment compared to poor resolvers. **Hypothesis 2:** Good resolvers of self-critical depression would exhibit greater frequency of emotional processing sequences of 1) secondary to adaptive emotions, or 2) secondary to maladaptive to adaptive emotions, as measured by the CAMS in experiential treatment compared to poor resolvers.

Emotional schematic change expressing positive shifts in views and relationships to self are also identified as core processes in the resolution of self-critical depression (Greenberg, Rice, & Elliott, 1993; Greenberg & Watson, 2006). An additional goal of this study was to test whether emotional processing during successful experiential treatment of self-critical depression would reflect this 'self-shift' change process. Since the CAMS measure does not capture shifts or changes in views and relationships to self, the Object-Valence Scheme (OVS) created for this study identified the client's relational valences towards personal objects (self or others) during emotional processing. In relation to the OVS, it was hypothesized that: **Hypothesis 3:** Good resolvers of self-critical depression would exhibit decreased negative views of self and increased positive views of self within emotional processing as measured by the OVS across experiential treatment compared to poor resolvers. **Hypothesis 4:** Good resolvers of self-critical depression would exhibit greater frequency of sequences exhibiting shifts of self-negative emotional processing to self-positive emotional processing as measured by the OVS in experiential treatment compared to poor resolvers.

While positive shifts or changes in views of others during emotional processing are also identified as core elements in the resolution of self-critical depression (Greenberg, Rice, & Elliott, 1993; Greenberg & Watson, 2006), no hypotheses concerning these change processes were made for the current study. This is because it was thought that good outcome cases could express both positive shifts (e.g., forming more realistic and potentially attached views of a critical other) and negative shifts (e.g., holding a critical other accountable) in their relationships to others. However, changes in other-positive or other-negative emotional processing were tracked and results concerning its relationship to resolution of self-critical depression were reported as relevant.

Method

Participants

The sample included nine clients from the York II depression project (Goldman et al., 2006) who received short-term (16 to 20 sessions) experiential treatment for depression: either emotion-focused therapy (EFT) or client-centered therapy (CCT).

Inclusion criteria. The present study selected clients from the original study who were highly self-critical at the start of treatment, which was defined as scoring at least one standard deviation above the norm on the Depressive Experiences Questionnaire's Self-criticism scale (DEQ-S; Blatt, D'Afflitti, & Quinlan, 1976). All nine clients met criteria for a major depressive disorder based on the Structured Clinical Interview for DSM-IV (SCID-IV; Spitzer, Williams, Gibbons, & First, 1995). Complete information regarding the York II project's inclusion and exclusion criteria can be found in Goldman et al. (2006).

Outcome groups. Clients were identified as good versus poor outcome cases (i.e., good versus poor resolvers of self-criticism) based on having the highest and lowest residual gain rankings on post-treatment gains in self-esteem as measured by the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). Outcome groups could not be determined by post-treatment reductions in DEQ-S scores because this data was not collected. As such, post-treatment self-esteem gain was used as a measure of post-treatment self-critical reduction and resolution as increases in self-esteem are theorized to accompany this process (Fennell, 1998; Pretzer, 2008) and have been used to measure resolution of self-criticism in treatment (e.g., Berlin, 1985).

Client demographics. The good outcome group ($N = 5$) consisted of two males, and three females. The poor outcome group ($N = 4$) consisted of one male and three females. The mean

age of the good outcome group was 35 years ($SD = 9.72$) and the mean age of the poor outcome group was 50 years ($SD = 7.44$).

Treatments

Clients were randomly assigned to receive EFT or CCT in the York II project. Of the nine clients selected for the present study, four clients received EFT (3 good outcome, 1 poor outcome cases) and five clients (2 good outcome, 3 poor outcome cases) had received CCT. Adherence to both treatments was achieved in the original study (see Greenberg and Watson (1998) and Goldman et al. (2006)).

Client-centered therapy (CCT). In CCT, the therapist provides the relational conditions of unconditional positive regard, empathy, and genuineness to facilitate the client's access, exploration, and symbolization of poignant or meaningful parts of their internal affective experience (Rogers, 1951; 1957). This process is theorized to increase the client's capacity to use their internal experience to direct future action and positive growth.

Emotion-focused therapy (EFT). EFT integrates CCT, existential therapy, and gestalt therapy. In EFT (Greenberg, Rice, & Elliott, 1993; Greenberg & Watson, 2006), the therapist provides the client-centered facilitative relationship for the first three sessions. Thereafter, therapists also engage clients in process directive interventions if they exhibit markers of specific problematic emotional processes. These interventions include: (1) two chair work for internal splits or conflicts (including self-critical splits for self-critical processes); (2) empty chair work for unfinished business with significant others; (3) empathic affirmations for vulnerability; (4) self-soothing for distress; (5) systematic evocative unfolding for problematic reaction points; and lastly (6) focusing for unclear felt senses.

Both treatments work on the premise that activating, exploring, and processing emotions lead to positive change in therapy.

Pre-treatment and Post-treatment Measures

Depressive Experiences Questionnaire (DEQ; Blatt et al., 1976). The DEQ is a 66-item, well-known self-report inventory that measures three depressive vulnerable personality dimensions: self-criticism (DEQ-S), dependency (DEQ-D), and efficacy (DEQ-E). Items are scored on a 7-point Likert scale ranging from “strongly disagree” to “strongly agree.” An example DEQ-S item is: “I set my personal goals and standards as high as possible.” The DEQ has shown high internal consistency, substantial test-retest reliability, and the DEQ-S evidences good construct validity (Atger et al., 2003).

Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). The RSES is a 10-item, self-report inventory that measures global self-esteem. Items are scored on a 4-point Likert scale ranging from “strongly disagree” to “strongly agree.” An example item is: “I take a positive attitude toward myself.” The RSES has demonstrated high internal consistency, test-retest reliability, and construct validity (Bagley, Bolitho, & Bertrand, 1997; Rosenberg, 1965).

Beck Depression Inventory (BDI; Beck et al., 1961). The BDI is a 21-item, widely-used self-report inventory that measures the severity of depressive symptomology. Each item has four response alternatives and is scored on a 4-point Likert scale. A sample item is: “A) I do not feel sad; B) I feel sad or unhappy; C) I am unhappy or sad all of the time and I can’t snap out of it; and D) I am so unhappy or sad that I can’t stand it.” The BDI has shown good internal consistency, as well as good discriminant and concurrent validity (Beck, Steer, & Garbin, 1988).

Symptom 90 Checklist-Revised (SCL-90-R; Derogatis, 1983). The SCL-90-R is a widely-used instrument that measures general psychiatric symptomology (e.g., depression,

anxiety, etc.). The present study used only scores on the Global Severity Index (GSI), which measures overall psychological distress. The SCL-90-R has demonstrated high internal consistency coefficients (.79 to .90), test-retest reliability (.80 to .90), and convergent validity (Derogatis, 1993; Groth-Marnat, 2009).

Inventory of Interpersonal Problems (IIP; Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988). The IIP is a 127-item, self-report inventory that measures interpersonal dysfunction in eight domains. The present study used only the global score of interpersonal dysfunction. This global score has shown high test-retest reliability (.82 to .94) and the overall IIP has demonstrated good construct validity (Gurtman, 1996; Horowitz et al., 1988).

Process Measures

Working Alliance Inventory (WAI; Horvath & Greenberg, 1989). The WAI is a 36-item, self-report inventory that measures the strength of the client-therapist working relationship in terms of the client-therapist bond and client-therapist agreement on treatment tasks and goals. Items are rated on a 7-point Likert scale from “never” to “always.” An example item is: “I feel that [client’s therapist] appreciates me.” The present study used scores on the WAI short-form, which has evidenced good internal consistency as a whole and in terms of its individual subscales, as well as adequate convergent validity (Busseri & Tyler, 2003; Stiles et al., 2002; Tracey & Kokotovic, 1989).

The Experiencing Scale (EXP; Klein, Mathieu-Coughlan, Gendlin, & Kiesler, 1986). The EXP scale measures the degree to which clients attend to, symbolize, and use their internal affective experiences for adaptive problem-solving. The scale is comprised of seven levels of experiencing. Levels 1 to 4 describe the progressive movement of orienting from external to internal referents, and levels 5 to 7 demarcate the progressive symbolization and use of internal

affective experiences for adaptive problem-solving. Levels of experiencing are differentiated by grammatical, expressive, and paralinguistic, and content distinctions. Inter-rater reliability coefficients between .76 and .91 have been reported, as well as rating re-rating coefficients of .80. The full manual can be found in Klein et al. (1986).

Classification of Affective-Meaning States (CAMS; Pascual-Leone & Greenberg, 2005).

The CAMS measures the presence of 10 discrete and specific categories of emotion demonstrated as clinically significant emotional processing states occurring within the resolution of global distress in psychotherapy (Pascual-Leone, 2009; Pascual-Leone & Greenberg, 2007). The measure is applicable to coding emotional events where participants are emotionally-involved and aroused. The 10 categories are: (1) global distress (GD), (2) rejecting anger (RA), (3) fear/shame (FS), (4) negative self-evaluation (NSE), (5) need (ND), (6) relief (RE), (7) hurt/grief (HG), (8) assertive anger (AA), (9) self-soothing (SS), and (10) acceptance and agency (ACAG). Categories are differentiated by distinctions in emotional tone, involvement, and meaning-making. The full CAMS manual is found in Appendix A.

Transformation of CAMS categories to ES types. To examine changes in EFT emotion scheme types, each CAMS category code was assigned an ES type (secondary, primary maladaptive, or primary adaptive) based on EFT theory. Secondary emotions included GD and RA; primary maladaptive emotions included FS and NSE; and primary adaptive emotions included RE, HG, AA, SS, and ACAG. The CAMS category of ND was maintained as a separate category in analyses of ES types because it represents a core component in all EFT models of task resolution (Greenberg & Watson, 2006). Subsequent analyses in this study include both individual CAMS codes and collapsed categories of CAMS codes reflecting ES types.

Object-Valence Scheme (OVS). The OVS is a nominal coding scheme that was created by the first author. It resulted from simple grounded thematic analysis of emotion episode narratives and measures the valence of a client's view toward 'personal objects' (self or others) in emotion episodes. Codes were gradually synthesized and refined during process coding until a point of saturation was reached (approximately the 20th therapy session). The OVS manual is found in Appendix B.

The OVS has five codes. (1) The self-positive code (SP) is given when the client expresses a positive view of self through self-evaluation (e.g., "I am capable.") or self-support (e.g., self-compassion or self-acceptance). (2) The self-negative code (SN) is given when the client expresses a negative view of self through self-evaluation (e.g., "I am a failure.") or self-rejection (e.g., self-criticism or self-loathing). (3) The other-negative code (ON) is given when the client expresses a negative view of another through evaluation (e.g., "He's such an idiot.") or rejection (e.g., criticism or anger at the other). (4) The other-positive code (OP) is given when the client expresses a positive view of another through evaluation (e.g., "He is wonderful with me.") or support/approach (e.g., love or protection of the other). (5) Uncodable means no expressed positive or negative view to self or other occurs in the episode.

Procedure

Emotion Episode Sampling. Emotion episodes (EEs; Greenberg & Korman, 1993; Korman, 1998) previously sampled from five sessions across three phases of treatment were obtained from archival data (Pos, 2006). EE's are segments of a psychotherapy session in which the client expresses past or present emotional experiences and are identified by the presence of two components: an antecedent situation and either an emotional response or expressed action

tendency associated with an emotional response. EEs can range from a few lines to several pages of a psychotherapy transcript.

Pos (2006) sampled EEs for each client during five sessions at three different phases of treatment: early (session 2), middle (two working phase sessions considered by the client to be the most productive based on post-session evaluation questionnaires), and late (the second and third last sessions). The working phase was defined as the period between the fourth and the fourth last session. EEs of all clients had previously been coded on the EXP scale, yielding a mean modal or peak experiencing score for each phase of therapy (Pos, 2006).

Emotion Process Coding. Two raters coded all EEs from the five sessions of all nine clients (850 EEs in total) on both the CAMS and OVS. Raters were trained on the CAMS by the measure's developer Dr. Antonio Pascual-Leone during three trainings culminating in 25 total hours of training. The first author trained the second coder on the OVS. All coding was carried out independently (except for the first two sessions coded). Independent ratings were used for reliability analysis. Disagreements in codes were resolved consensually and all ratings used in the analyses were consensually agreed upon. Expert reliability on CAMS codes was provided as needed by Dr. Pascual-Leone. After all sessions were coded, the codes from all 45 sessions were audited a second time by the first author. This allowed improved validity of codes achieved during the coding process to feedback into and possibly correct earlier coded sessions if necessary. Any codes deemed 'suspect' by the first author were brought back to the second coder, reviewed and, if needed, revised consensually. No recode impacted on measures of reliability which were established from original codes.

Data Analysis

Loosely following Campbell and Fiske (1959) who have advocated for convergent validation of results by the use of multitrait-multimethod approaches, the current study employed three complementary analytic procedures: 1) descriptive analyses, visual representations, and *t*-tests examined changes in proportions of CAMS and OVS codes in emotion episodes across treatment; 2) mixed effects hierarchical modelling tested predictors of change in CAMS codes within emotion episodes across time, considering both between and within client variables; and lastly 3) a data driven analysis of temporal patterns in THEME statistical software detected sequences of CAMS and OVS codes within emotion episodes across time. The first author received four hours of training on THEME 6 from the software's creator, Magnus Magnusson. Additional training and consultation was sought when needed.

Results

Inter-rater Reliability of CAMS and OVS ratings

Cohen's (1960) kappa (*k*) is the appropriate measure of rater agreement on the CAMS and OVS ratings as both are nominal scales. Ninety-seven percent of CAMS ratings on EEs were included in the CAMS reliability sample (970 out of 1003 CAMS ratings). Cohen's *k* for CAMS ratings was .80. Ninety-eight percent of OVS ratings on EEs (917 of 934) were included in the OVS reliability analysis. Cohen's *k* for OVS ratings was .81. This is considered excellent inter-rater reliability as *k*-values above .75 are considered excellent agreement beyond chance (Fleiss, 1981).

Demographic Differences of Outcome Groups

The sample was too small to conduct *t*-tests based on outcome differences in demographic information. Gender appeared to be equally distributed between outcome groups as the good outcome group had two male and three female clients, and the poor outcome group had

one male and three female clients. The good outcome group ($M = 35.00$, $SD = 8.72$) however was younger in age compared to the poor outcome group ($M = 50.00$, $SD = 7.44$).

Outcome Group Differences on Pre-treatment and Post-treatment Measures

T-tests tested whether outcome groups differed on pre-treatment and post-treatment measures. Outcome groups did not significantly differ on pre-treatment measures of self-criticism, self-esteem, depression severity, overall psychological distress, or interpersonal dysfunction (see Table 1). These results were consistent with convergent results from bootstrapped *t*-tests (using 1000 randomized samples) and Mann-Whitney tests. At post-treatment, the good outcome group had significantly higher self-esteem and lower interpersonal dysfunction compared to the poor outcome group (see Table 2). Overall psychological distress was also considerably lower in the good outcome group ($p = .05$). These results were consistent with convergent results from bootstrapped *t*-tests (using 1000 randomized samples). Mann-Whitney tests however found the difference in interpersonal dysfunction to approach significance and the difference in overall psychological distress to be significant.

Impact of Treatment Type on Outcome Groups

Chi-square analyses tested whether outcome was related to the type of treatment received (EFT or CCT). Results should be interpreted cautiously given the small sample size as one group had less than five members. In the good outcome group, three clients had received EFT and two clients had received CCT. In the poor outcome group, one client had received EFT and three clients had received CCT. No significant relationship was found between outcome and receiving EFT or CCT, $\chi^2 = 1.103$, $df = 1$, $p = .29$. However, it should be noted that EFT cases had good versus poor outcomes at a rate of 3 to 1, whereas CCT cases had good versus poor outcomes at a rate of 2 to 3.

Outcome Group Differences on Emotion Episode Dimensions

T-tests tested whether outcome groups differed on the following emotion episode dimensions: 1) the mean number of EEs per session, 2) the mean duration of an EE, and 3) the mean proportion of total session time in EEs. Results are reported in Table 3. No significant differences between outcome groups were detected on any EE dimension. The poor outcome group did appear however to have had EEs that endured longer on average compared to the good outcome group, as well as a trend for EEs that occurred over a higher proportion of total session time ($p = .12$). These results were consistent with convergent results from bootstrapped *t*-tests (using 1000 randomized samples) and Mann-Whitney tests.

Outcome Group Differences on the Working Alliance and Depth of Emotional Processing

T-tests also tested whether outcome groups differed on measures of the working alliance (WAI) and the depth of emotional processing (EXP) across phases of therapy (early, middle, and late). Results are reported in Table 4. While there was no difference in early or late measures of the alliance, the good outcome group was found to be significantly higher on the alliance at middle treatment compared to the poor outcome group, and also significantly higher in peak emotional processing at middle and late treatment. However, bootstrapped *t*-tests (using 1000 randomized samples) found the differences in middle WAI and late EXP-P to approach significance. Mann-Whitney tests also found the difference in late EXP-P to approach significance.

Analysis 1: Descriptive Analyses

Mean proportions of EEs within phases of treatment (early, middle, and late) for CAMS ratings are reported in Table 5, for Emotion Scheme Types (ES) in Table 6, and OVS ratings in Table 7. Significant differences between outcome groups are noted where applicable in each

table. These results are also visually displayed in Figures 1 (CAMS), 2 (ES), and 3 (OVS). Mean changes in proportions of CAMS, ES, and OVS categories in EEs across any two phases of treatment (i.e., early and late, early and middle, or middle and late) for each outcome group are also reported in Table 8 (CAMS), Table 9 (ES), and Table 10 (OVS). Differences between outcome groups in EE proportions within phases or EE proportion changes between two phases were considered of clinical interest if the difference was equal to or greater than 5.0%. These differences were tested for significance using *t*-tests. Due to the small sample size, the significance of differences are indicated on tables ($p < .05$, or for trends $p < .15$) only if bootstrapped *t*-tests (using 1000 randomized samples) and/or Mann-Whitney tests indicated convergent results.

Proportional changes in ES and CAMS. There was a trend towards greater decreased proportion of EEs expressing secondary emotion (SE-EEs) in the good outcome group (GOG) than the poor outcome group (POG) between early and late treatment. The proportion of SE-EEs was also significantly lower in the GOG than the POG in the late phase of treatment. As for the individual CAMS categories that constitute SE, there was no significant difference found between outcome groups in changes of proportions of global distress emotion episodes (GD-EEs) from early to late treatment. However, proportions of rejecting anger emotion episodes (RA-EEs) did decrease significantly more in GOG than POG from early to late phases. No significant differences between outcome groups were found in proportions of GD-EEs and RA-EEs at late treatment, however it is evident that GOG clients exhibited lower proportions of GD in all phases compared to POG clients, and lower proportions of RA in the middle and late phase of treatment.

For primary maladaptive emotions (PME), there was no significant difference found between outcome groups in changes of proportions of PME emotion episodes (PME-EEs) between early and middle treatment. No significant difference was also detected between outcome groups in proportions of PME-EEs at late treatment, although GOG clients did evidence lower proportions than POG clients. Focusing on individual CAMS categories that constitute PME, changes in proportions of both fear/shame and negative self-evaluation emotion episodes (FS-EEs or NSE-EEs, respectively) did not differ between outcome groups from early to late treatment. The proportions of FS-EEs and NSE-EEs at late treatment were also not significantly different between outcome groups. However, it is apparent that GOG clients expressed a lower proportion of NSE-EEs than POG clients at late treatment.

Regarding the expression of needs (ND), outcome groups did not differ in changed proportions of need emotion episodes (ND-EEs) between early and late treatment. At late treatment, GOG clients however did exhibit a higher proportion (trend) of ND-EEs than POG clients.

For primary adaptive emotions (PAE), proportions of PAE emotion episodes (PAE-EEs) increased significantly more in the GOG than the POG between early and late treatment. GOG clients had a significantly higher proportion of PAE-EEs at late treatment compared to POG clients. Looking at individual CAMS categories that constitute PAE, the proportion of relief emotion episodes (RE-EEs) increased more (trend) in the GOG than the POG from early to late treatment. More specifically, proportions of RE-EEs increased significantly more in the GOG than the POG between early and middle treatment. GOG clients expressed a significantly higher proportion of RE-EEs than POG clients at middle treatment and substantially higher proportions (trend) at late treatment. No other differences between outcome groups in EE proportion changes

of CAMS categories across treatment were significant. It is clear however that proportions of assertive anger emotion episodes (AA-EEs) increased more in the GOG than the POG between early and middle treatment before decreasing more than the POG between middle and late treatment. The proportion of AA-EEs at middle treatment was considerably higher (trend) in GOG versus POG clients. Moreover, it is evident that proportions of self-soothing emotion episodes (SS-EEs) increased more in the GOG than the POG between middle and late treatment, and proportions of acceptance and agency emotion episodes (ACAG-EEs) increased more in the GOG than the POG between early and late treatment as ACAG-EEs were never expressed by any POG clients at any phase of treatment.

Proportional changes in OVS. In terms of negative self views, there was no significant difference found between outcome groups in changes of proportions of self-negative emotion episodes (SN-EEs) between early and late treatment. However, the GOG decreased proportions of SN-EEs between these two phases more than the POG whose proportions of SN-EEs actually increased. At late treatment, the proportion of SN-EEs was not significantly different between groups, but again the GOG had lower proportions of SN-EEs than the POG. Table 7 indicates that the GOG did not have significantly more SP-EEs in the beginning of treatment than the POG. Table 10 shows that for proportions of self-positive emotion episodes (SP-EEs), there was a trend to increased SP-EEs from early to late in treatment and a significant increase in SP-EEs from the middle to late in treatment in the GOG. The POG actually decreased their proportions of SP-EEs from the middle to late in treatment. No other differences between outcome groups in EE proportion changes of OVS categories across treatment were significant. However, proportions of other-negative emotion episodes (ON-EEs) decreased more in GOG clients than POG clients between early and late treatment and proportions of ON-EEs were lower in the

GOG than the POG at late treatment. Proportions of other-positive emotion episodes (OP-EEs) increased more in the POG than the GOG between middle and late treatment.

Analysis 2: Mixed Hierarchical Modelling

Random mixed effects hierarchical models modeled change in CAMS ratings predicted by outcome (good or poor), phase of treatment, and time EE occurred in session, allowing also for two-way interactions. This model is considered ‘conservative’ (Monette, personal communication, July 4, 2013) as it allowed CAMS ratings to vary both between clients, and within clients (i.e., changes in an individual client’s CAMS ratings across treatment). Two models were tested. In one model, change in CAMS ratings was measured on a 9-point ordinal scale of degree of emotional transformation outlined by Pascual-Leone (2009): (1) global distress (GD), (2) rejecting anger (RA), (3), fear/shame (FS), (4) negative self-evaluation (NSE), (5) need (ND), (6) relief (RE), (7) hurt/grief (HG), (8) assertive anger (AA) and self-soothing (SS), and (9) acceptance and agency (ACAG). In the second model, change in CAMS ratings was measured on a 4-point ordinal scale reflecting EFT emotion scheme typology, or previously described ES codes, including the expression of needs (ND).

Both models were initially run with treatment phase having three levels (early, middle, and late). No violations in normality and heterogeneity of variance were detected in the data. While the overall model for CAMS measured as a 9-point ordinal scale was significant at the .001 level, there was insufficient data to test hypotheses concerning changes in nine levels of CAMS ratings over time. Therefore, further analyses examined CAMS data collapsed into the 4-point ordinal scale reflecting EFT emotion scheme typology, or ES ratings (SE, PME, ND, and PAE). This model was first tested using both three levels (early, middle, and late) and then with phases of treatment collapsed into two levels for treatment phase (early and middle/late). This is

because using one middle/late measure both got similar results and increased power. The model using two treatment phases was pursued and is the analysis reported here. The model was significant at the .001 level. The regression table is presented in Table 11.

No significant interactions were found in the model, however the interaction of the time an EE occurred in session and treatment phase on CAMS ratings showed a trend towards significance. The main effect of outcome also showed a trend towards significance and the main effect of treatment phase was significant. Wald tests subsequently tested whether maintaining all predictors was essential to the overall model. The Wald tests for outcome and treatment phase were significant at the .05 level (see Table 12). The Wald test for time EE occurred in session was approaching significance ($p = .08$). All predictors were therefore maintained in the model.

A visualization of the predicted values generated by the mixed model for 4-point ordinal CAMS ratings between outcome groups is presented in Figure 4. Figure 5 illustrates the same model predicting the 9-point ordinal CAMS ratings for comparison. These plots suggested that outcome groups differed on their average ordinal CAMS rating at different times within a session both in the early and middle/late phases of treatment. Wald tests examined the significance of these differences within sessions between outcome groups (see Table 13 and 14). Compared to the poor outcome group, the good outcome group expressed significantly higher mean 4-point ordinal CAMS ratings on EEs in the middle of a session at both early and middle/late phases of treatment. The difference between outcome groups in mean CAMS ratings for EEs at the beginning of a session also neared significance at both early and middle/late phases of treatment ($p = .08$ and $.06$, respectively). This indicates higher CAMS processing on average not only in the middle of sessions, but also at the onset of sessions for good outcome cases.

Analysis 3: Temporal Pattern Analysis

Patterns of CAMS and OVS ratings within emotion episodes that differentiate outcome groups were also explored using THEME software (Magnusson, 1993; 2000). THEME analysis detects non-obvious or hidden temporal patterns of events in time-coded event data and has been employed in a growing number of research areas, such as research on hormonal changes in humans (Hirschenhauser, Frigerio, Grammer, & Magnusson, 2002), sports performance (Borrie, Jonsson, & Magnusson, 2002), human-animal and human-robot interactions (Kerepesi, Kubinyi, Jonsson, Magnusson, & Miklósi, 2006), and effective team interaction (Stachowski, Kaplan, & Waller, 2009; Zijlstra, Waller, & Phillips, 2012).

THEME detects temporal patterns of events in three stages (Magnusson, 1993; 2000). In the first stage, THEME searches time-coded event data for simple temporal patterns called *T*-patterns, which are two events that occur sequentially more often than expected by chance and whose temporal distance is relatively invariant (see Figure 6). In the second stage, THEME detects more complex hierarchical patterns of relationships among *T*-patterns (see Figure 6). In the final stage, THEME removes or ‘prunes’ patterns that are less complete versions of other patterns. Obtained patterns can be reported per client, per outcome group, and for the entire sample. THEME can also rank obtained patterns based on parameters such as their length (i.e., number of events), frequency of occurrence, complexity, and duration among others.

The current THEME analysis detected within session temporal patterns of CAMS and OVS emotion episode ratings in the entire dataset and per outcome group. CAMS and OVS ratings were analyzed separately to avoid dual codes, which have an exponential number of combinations that would have limited the software’s ability to obtain meaningful patterns. In THEME, I set the alpha level to .005 so that obtained patterns had a 0.5% or less probability of occurring by chance and I set the minimum occurrence of the pattern to seven to allow for a

pattern to occur across an entire outcome group while still potentially occurring in both good and poor outcome cases. Lastly, it should be noted that each CAMS and OVS rating was inputted as two events in THEME, one denoting the beginning of the code, and one denoting the cessation of the code.

CAMS patterns. In the entire sample, 2231 unique within session CAMS patterns were detected, ranging in length from 2 to 13 events (see Figure 7). To test whether these patterns were not due to chance, THEME compared obtained patterns to pattern extracted data obtained from each of two 100 bootstrapped procedures (shuffling and rotation) that randomized the real data. In shuffling, the real data's time signatures for an event series are randomly redistributed within the event series. In rotation, the real data's time signatures for an event series are all shifted a random number of degrees in relation to other event series. In general, more patterns are found in the rotated versus shuffled data because the former maintains much of the initial data structure (Magnusson, 2006). The mean number of CAMS patterns detected in 100 shuffled and rotated versions of the real data for each pattern length is reported in Figure 7. Figure 8 indicates that the number of patterns obtained from the real data significantly deviated from the mean number of patterns obtained from the shuffled and rotated data for all pattern lengths (no global deviation is below 3). Both figures indicate that the CAMS patterns obtained from the real data are not random (Magnusson, personal communication, June 26, 2013).

In the good outcome group, 242 unique within session CAMS patterns occurred with significantly greater frequency in good versus poor outcome clients (at the .05 level), ranging from 2 to 9 events in length. The 10 longest patterns (i.e., patterns of the most events) will be presented here because the probability of any of these patterns occurring by chance even just once was very low ($p < .0005$) and because longer patterns are more likely to suggest meaningful

patterns of CAMS codes. For parsimony of presentation, I organized these 10 patterns into three global pattern themes based on the similarity and sequencing of their events. The most common pattern theme that emerged was marked by expressions of hurt/grief (HG) and need (ND) that lead to assertive anger (AA). See Figure 9 for an example of this. A second pattern theme that emerged was characterized by recurrent expressions of HG and ND (see Figure 10 for an example). The last pattern theme was marked by initial access of global distress (GD) that was followed by recurrent activation of fear/shame (FS) and then an expression of a need (see Figure 11 for an example). The 10 patterns within these and subsequent pattern themes are all found in Appendix C.

In the poor outcome group, 288 unique within session CAMS patterns occurred with significantly greater frequency in poor versus good outcome clients (at the .05 level), ranging from 2 to 8 events in length. The probability for any one of the 10 longest patterns occurring by chance even just once was very low ($p < .001$). These 10 patterns were organized into three global pattern themes. Firstly, the most frequent pattern theme was characterized by expressions of rejecting anger (RA) and GD (see Figure 12 for an example). The second pattern theme contained expressions of rejecting anger and fear/shame but not the expression of ND (see Figure 13 for an example). The final pattern theme was one in which there was recurrent negative self-evaluation activation followed by expressions of either fear/shame or global distress (see Figure 14 for an example).

Emotion scheme patterns. THEME analysis was also performed on the ES data measured as collapsed CAMS categories. In the entire sample, 5538 unique within session ES patterns were detected, ranging in length from 2 to 16 events (see Figure 15). These patterns were also compared to obtained patterns from 100 repetitions of shuffled and rotated versions of

the real data. Figure 16 indicates that ES patterns obtained from the real data are non-random as no global deviation was below 3 for all pattern lengths.

In the good outcome group, 622 unique within session ES patterns occurred with significantly greater frequency in good versus poor outcome clients (at the .05 level), ranging from 2 to 13 events in length. The probability for any one of the 10 longest patterns occurring by chance even just once was very low ($p < .00005$). These 10 patterns were organized into three global pattern themes. The most common pattern theme was characterized by recurrent PAE access (see Figure 17 for an example). Secondly, there was a pattern theme marked by initial access of PAE and ND that leads to PME and back to ND and PAE (see Figure 18 for an example). Finally, the last pattern theme was identified by PAE that leads to SE and then returns to PAE (see Figure 19 for an example).

In the poor outcome group, 447 unique within session ES patterns occurred with significantly greater frequency in poor versus good outcome clients (at the .05 level), ranging from 2 to 12 events in length. The probability for any one of the 10 longest patterns occurring by chance even just once was very low ($p < .00001$). These 10 patterns were organized into two global pattern themes. Firstly, the most common pattern theme was marked by recurrent expressions of SE and PME (see Figure 20 for an example). The second pattern theme was characterized by initial access of SE that leads to ND and back to SE and not primary emotion (see Figure 21 for an example).

OVS patterns. In the entire sample, 4014 unique within session OVS patterns were detected, ranging in length from 2 to 20 events (see Figure 22). These patterns were also compared to obtained patterns from 100 repetitions of shuffled and rotated versions of the real

data. Figure 23 indicates that OVS patterns obtained from the real data are non-random as no global deviation was below 3 for all pattern lengths.

In the good outcome group, 171 unique within session OVS patterns occurred with significantly greater frequency in good versus poor outcome clients (at the .05 level), ranging from 2 to 9 events in. The probability for any one of the 10 longest patterns occurring by chance even just once was very low ($p < .005$). These 10 patterns were organized into three global pattern themes. The most common pattern theme was identified by recurrent expressions of other-negative codes (ON) and self-positive codes (SP; see Figure 24 for an example). Secondly, there was a pattern theme identified by initial access of other-positive codes (OP) leading to expressions of ON to SP before returning to ON (see Figure 25 for an example). Lastly, there was a pattern theme marked by recurrent access of SP (see Figure 26 for an example).

In the poor outcome group, 325 unique within session OVS patterns occurred with significantly greater frequency in poor versus good outcome clients (at the .05 level), ranging from 2 to 14 events in length. The probability for any one of the 10 longest patterns occurring by chance even just once was very low ($p < .00005$). These 10 patterns were organized into three global pattern themes. Firstly, the most common pattern theme was marked by initial access of ON that leads to OP before returning to ON (see Figure 27 for an example). Secondly, there was a pattern theme characterized by recurrent expressions of self-negative codes (SN; see Figure 28 for an example). Finally, the last pattern theme was identified by initial access of ON that leads to SN before returning to ON (see Figure 29 for an example).

Discussion

The present study tested whether emotional change processes assumed to predict client improvement in EFT would predict resolution of self-critical depression across experiential

treatments (client-centered or EFT). Partial support was found that the EFT theory of productive emotion schematic change describes a common emotional change process. This process was observed during good resolution of self-critical processes across experiential therapies other than EFT, and within sessions that did not employ active EFT interventions.

Emotion-focused emotional change processes and resolving self-criticism. The first hypotheses that good outcome clients would express increases in both expression of needs and primary adaptive emotions, and decreases in both secondary and maladaptive emotions during successful resolution of self-criticism during experiential therapy, found partial support in each of the three analyses. This was especially true in relation to decreases in secondary emotions and increases in primary adaptive emotions. The proportional analyses indicated that good outcome clients decreased their proportion of secondary emotion and increased their proportion of primary emotion. Poor resolvers of self-criticism, on the other hand, actually increased their proportion of rejecting anger across therapy. These results are consistent with findings in Herrmann (2012) where less secondary emotional experiences and more primary adaptive emotional experiences during active chair interventions within the working phase of EFT predicted post-treatment reductions in depressive symptoms.

The hierarchical mixed model also showed that good outcome clients reached higher average ratings on the CAMS during their middle and late therapy sessions when compared with poor outcome clients, indicating that the EEs of good outcome clients were being rated at higher (more adaptive) levels of the CAMS coding scheme. This is similar to findings in Pascual-Leone (2009) where ordinal CAMS ratings increased significantly more across time within productive versus less productive in-session segments.

The THEME analysis provided additional support for the second hypothesis that stated that there would be evidence of more frequent sequences of secondary to adaptive emotion, or secondary to maladaptive to adaptive emotion in good resolvers of self-criticism. THEME analysis showed that sequences of emotion episodes for good outcome cases expressed more frequent expressions of core pain (hurt/grief) followed by expressions of needs and assertive anger. This again validates the models of resolution of self-critical tasks as outlined in Greenberg and Watson (2006), and is consistent with the results found in Greenberg and Pedersen (2001).

These results validate not only the importance of accessing adaptive sadness and anger but also validate the EFT admonition to 'follow the pain compass' (Greenberg & Goldman, 2011). It appears that indeed depressed clients who resolve self-criticism do in fact go to the pain before leaving it. These patterns of expressing core pain (hurt/grief) followed by the expression of needs and assertive anger did not occur in the poor outcome clients. Good outcome clients also exhibited THEME sequences within which they moved from secondary emotion expression to maladaptive emotions to subsequent expressions of needs, again supporting the second hypothesis. Poor outcome cases on the other hand exhibited EE patterns with no core pain, no adaptive emotion, nor expressions of need, but instead sequences of emotion episodes that consistently expressed more secondary and maladaptive emotion sequences.

Evidence for decreases in maladaptive emotion across therapy was not found in the proportional analyses nor THEME analyses, as fear/shame or maladaptive emotion did not occur significantly more in either good or poor outcome clients. What appeared to be more important were the differences in EE sequences following expression of maladaptive emotions in good versus poor resolvers of self-criticism. In good outcome clients, expression of maladaptive emotion was often followed by expression of needs and then adaptive emotions such as assertive

anger, whereas in poor outcome clients expression of maladaptive emotion was more frequently followed by EEs expressing core negative self-evaluations and more secondary emotional processing such as rejecting anger and global distress. These results converge with findings in Herrmann (2012) where increased frequency of sequences of primary maladaptive to primary adaptive emotions during active chair interventions within the working phase of EFT predicted good outcome in depressed clients. Moreover, in poor outcome clients of the current study, the expression of needs was actually also often followed with secondary emotion. Therefore expression of needs appeared to not be as frequent or as helpful to the poor outcome cases. Future research might consider the emotional effect of experiencing particular needs.

Relating to the resolution of self-criticism, what THEME results do suggest is that not only accessing assertive adaptive emotions as a general class but experiencing/expressing core pain as a particular category of adaptive emotion is of central importance in helping clients later access experience of needs and assertive adaptive emotions. The importance of expression of needs as well, as EFT theory suggests, is also indicated and does appear to be an extremely important part of adaptive emotional processing sequences in good outcome clients.

Most important, it should be underlined that these results occurred through examining in session emotional processing during EEs from clients not only in EFT therapies, but also in sessions within which there were no active EFT interventions. This gives support to the possibility that emotional change principles suggested by EFT may in fact be common emotional change principles in the resolution of self-critical emotion schemes. If so, research on EFT emotional processing principles may be important processes in all treatments attempting to resolve self-critical depression, not only in experiential therapies.

Client differences. One interesting caveat that should be noted from several of the analyses is that good and poor outcome clients do appear to exhibit some differences at the beginning of therapy that may have affected the entire emotional processing change path across therapy. Lambert (1992) has long asserted that client differences are what make the difference in outcomes. While there were no significant differences in proportion of CAMS categories early in treatment, nor in pre-treatment distress, nor degree of self-positive emotional processing, one might argue that lack of power to detect some differences may have occurred. For example, one can note that early in treatment poor outcome clients expressed greater proportions of global distress compared to their expressed proportions of rejecting anger whereas good resolvers of self-criticism expressed higher early proportions of rejecting anger when compared to their proportions of global distress. As such, for poor outcome clients, more feelings of powerlessness and distress may have been linked to anger suppression (Allan & Gilbert, 2002). One could argue that poor outcome clients in fact, did make therapeutic progress by expressing higher proportions of RA late in treatment after their GD had substantially mitigated at mid-treatment. That is, they were somewhat more differentiated in their emotional processing than at treatment onset. As such, what counts as good process might in fact vary based on clients early-therapy starting points.

Alternatively, poor outcome clients from the onset of therapy may have had less capacity to either regulate their emotions or in fact may have been over-regulating experience of some feelings compared to good outcome clients. That is, poor outcome clients may have been more emotionally phobic at treatment onset (McCullough et al., 2003) and may have found contacting and exploring their experience more challenging from the first moments of therapy. This is partially and potentially confirmed by the fact that poor outcome cases did express lower

alliances in session one of their therapies ($p = .06$), suggesting that they may have been communicating discomfort with the emotional processing task being set for them from the first moments of therapy. This does not negate the importance of the emotional processing principles in successfully resolving self-critical processes mentioned above but does make one wonder about whether different clients may require different doses of experiential treatment. Degree of early global distress could be fruitfully considered a marker of such a client.

Consider as well, that in spite of these early differences between good and poor outcome cases the mixed model graphics indicate that poor outcome cases did exhibit a capacity to increase their emotional processing measured as higher CAMS ratings within sessions and across therapy. What is also apparent however is that the average levels that the poor outcome clients attained by the end of therapy appear quite similar to the levels that good outcome clients were already expressing in the early sessions of therapy. This again begs the question as to whether poor outcome clients could continue to develop their capacity to access core pain and other adaptive emotions given additional treatment or whether experiential treatment will not be suitable to some clients. These are important issues to untangle as it is ethically important for researchers to systematically assign clients to treatments within which they can achieve their goals (Beutler, Clarkin, & Bongar, 2000).

Past research on assertiveness and self-criticism for example (Gay, Hollandsworth, & Galassi, 1975; Ludwig & Lazarus, 1972; Whelton & Greenberg, 2005), are worth considering here, as clients who are more assertive appear to be better positioned to resolve their depressive self-criticism. Good resolvers of self-critical depression in the present study may have been more assertive at the onset of therapy. This is consistent with good outcome clients expressing greater proportions of rejecting anger early in therapy as well as more assertive anger in later sessions.

In contrast, poor outcome clients evidenced less assertion perhaps based on their greater expression of global distress (e.g., feelings of helplessness and entrapment) and negative self-evaluations. Dynamic views of depression in fact have for a long time linked depression with an inability to express anger outwardly and in fact have described depression as anger turned inwards (Robbins & Tanck, 1997). THEME analyses in this study does highlight that accessing assertive anger was a productive endpoint in emotion episode sequences in good outcome clients. Therefore, again it may not be the accessing of adaptive emotion per se that is important in resolving self-criticism but accessing particular adaptive emotions such as anger, but again, only after first experiencing core pain and needs.

Change in view of self and resolving self-criticism. The hypothesis that there would be decreased self-negative, and increased self-positive emotional processing in good outcome clients was supported by proportion change analyses as good resolvers of self-critical depression strongly expressed increased self-positive (SP) emotional processing across experiential treatment in comparison to poor resolvers. Descriptive evidence also supported decreased self-negative (SN) emotional processing across treatment in good versus poor resolvers. Increased emotional processing that positively appraises or relates to the self such as positive self-evaluations, self-soothing, self-compassion, self-acceptance, and self-assertion are all assumed to empower and increase the self's resilience to combat self-critical processes (Greenberg, 2002; Whelton & Greenberg, 2005). These processes have also been shown to mitigate levels of self-criticism (Gilbert & Irons, 2004; Kelly, Zuroff, & Shapira, 2009; Leary et al., 2007; Lee, 2005; Neff et al., 2007).

Transforming self-negative to self-positive emotional processing. Results from THEME temporal pattern analyses failed to support the fourth hypothesis that sequences of SN-SP would

mark good outcome clients. These SN-SP OVS sequences within sessions were not found in the 10 longest OVS patterns of either outcome group. However, it is worth pointing out that within THEME obtained patterns, all good outcome group patterns expressed SP emotional processing (including a pattern theme of recurrent SP), whereas most poor outcome group patterns expressed SN emotional processing (including a pattern theme of recurrent SN). Consistent with EFT theory, access to successive positive self-states in emotional processing is thought to resolve self-critical processes while clients who access successive negative self-states in their emotional processing are thought to stagnate within their depressive self-criticism (Greenberg, 2002). The recurrent accessing of positively-valanced sense of self within emotion episodes for good resolvers of self-criticism also suggests that these clients may have had more self-resilience (Whelton & Greenberg, 2005) or greater capacity to broaden and build on their positive views of self (Fredrickson, 2001). Again it is important to remember that this process occurred in EEs not exclusively within EFT therapies nor in sessions within which chair work occurred. Therefore positive changes in self view were not necessarily contingent on evocative chair-work interventions.

Lastly, the good outcome group evidenced two pattern themes containing emotional sequences of ON leading to SP, whereas the poor outcome group evidenced a pattern theme containing emotional sequences of ON leading to SN. It is possible that the clients who resolve self-criticism find it helpful to view the other as negative in order to access a more self-positive state (e.g., “You were wrong, I was ok”); whereas poor outcome clients who appear to be caught in cycles of negative self-evaluation and rejecting anger may instead be involved in another process such as: “You were never there for me – I wasn’t good enough.” Therefore, future

research will be needed to uncover the role of other negative emotional processes and how they differentially impact views of self.

What about the therapist in all this? While the present research has validated EFT emotion change processes as important in resolving self-critical processes in experiential treatment and that increases in self-positive emotional processing are also important, these results indicate processes that clients should engage in to have good outcome but not how engagement in these processes occurs. Especially because these processes were sometimes observed in good outcome case sessions during which no chair work occurred, it begs the question: “How did the therapist facilitate the client entering these emotional processing states?” This study cannot answer this question; however it is generally known that client depth of experiencing predicts outcome during experiential treatment (Pos, Greenberg, & Warwar, 2009). Good outcome clients in this study did exhibit increased peak emotion episode experiencing in the middle and late in therapy coincident with the other process changes noted in this study. Consider also that it is known that therapist depth of experience also predicts client depth of experience (Adams, 2011). This may point to a core therapist intervention style that must be considered. Connecting emotion schematic shifts with therapist behaviours that precede these shifts will be important in future research.

Limitations and Future Directions

This study had several limitations. First, statistical power was limited by the small sample size (9 clients in total). Analyses that found trends in the data (e.g., the difference between outcome groups on EE proportion change of secondary emotions between early and late treatment) may have been significant in a larger sample. As well, the small sample size

precluded considering client factors that may be important to examine in future studies such as assertiveness. Variance in outcome predicted by these processes could also not be explored.

Secondly this study examined emotional processing in highly self-critically depressed clients. Given that this was an exploratory study of resolving self-criticism it made sense to include those clients who were the most and least successful at resolving a substantial degree of self-critical process. Findings from this study however may not generalize to clients who have more moderate levels of self-criticism. Further validation of EFT emotion change processes will require examination of these processes within larger samples and a more heterogeneous depressed population before these emotional change processes can be considered truly common emotional change processes.

Third, results from THEME temporal pattern analyses reported here are based only on length criteria. Patterns can be examined based on other criteria such as complexity or duration. Future research could rank and analyze obtained patterns by these other parameters to see if findings are convergent.

Fourth, this study did not examine combinations of CAMS and OVS category codes and therefore could not test the relative contributions that these two process measures make in predicting resolution of self-critical depression during experiential treatment. Future research with larger samples might examine the relative emotional processing contributions of these two process measures to predicting outcome. This would further differentiate emotional change processes and potentially test the usefulness of these measures for future research.

Related to this point, distinctions should be made between understanding good therapy process, evaluating measures that best capture client process, and identifying therapist intervention that promote important client processes. I have captured important client process

using the CAMS and OVS, and whether each or both measure will prove useful in future research remains to be considered. These measures must be evaluated not only for their capacity to capture important process but their ease of use. For example, the OVS is much more easily applied than the CAMS.

Lastly, considering that peak experiencing level at middle and late treatment also differentiated good and poor resolvers of self-critical depression, relating sessional EXP ratings to CAMS ratings also represents an important area of future study as higher peak experiencing levels for a session might be associated with higher mean or peak ordinal CAMS ratings for that session as well.

Conclusions

This study was the first to explore and test whether EFT emotional change processes hold as general experiential emotion change processes in the resolution of self-critical depression during experiential treatment by observing them outside of active chair interventions and EFT therapies. Convergent evidence from three analytic procedures suggests that they do. Not only were reductions of secondary emotions and increases in adaptive emotions found to differ between good and poor resolvers of self-criticism, the importance of particular adaptive emotions (hurt/grief and assertive anger) seem indicated. This study also examined changes in self and other views. Increased self-positive emotion in good resolvers of self-criticism and differential self responses to negative views of other were also of interest. These results may continue to refine the effectiveness of both EFT interventions for self-criticism and also experiential treatment of self-critical processes in general.

References

- Abela, J. R., Sakellaropoulo, M., & Taxel, E. (2007). Integrating two subtypes of depression: Psychodynamic theory and its relation to hopelessness depression in early adolescents. *The Journal of Early Adolescence, 27*(3), 363-384.
- Abu-Kaf, S., & Priel, B. (2008). Dependent and self-critical vulnerabilities to depression in two different cultural contexts. *Personality and Individual Differences, 44*(3), 689-700.
- Adams, K. (2011, May). Therapist influence on depressed clients' therapeutic experiencing and outcome. Paper presented at the 27th annual meeting of the Society for the Exploration of Psychotherapy Integration, Washington, DC.
- Allan, S., & Gilbert, P. (2002). Anger and anger expression in relation to perceptions of social rank, entrapment and depression. *Personality and Individual Differences, 32*, 551-565.
- Andrews, G. (2001). Should depression be managed as a chronic disease. *BMJ, 322*(7283), 419-421.
- APA. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: APA.
- APA. (2010). *Relapse prevention for depression*. Washington, DC: APA.
- Arieti, S., & Bemporad, J.R. (1980). The psychological organization of depression. *American Journal of Psychiatry, 137*, 1360-1365.
- Atger, F., Frasson, G., Loas, G., Guibourgé, S., Corcos, M., Perez-Diaz, F., Speranza, M., Venisse, J. L., Lang, F., Stephan, P., Bizouard, P., Flament, M., & Jeammet, P. (2003). Validation study of the Depressive Experience Questionnaire. *Encephale, 29*(5), 445-455.
- Bagley, C., Bolitho, F., & Bertrand, L.D. (1997). Norms and Construct Validity of the Rosenberg

- Self-esteem Scale in Canadian High School Populations: Implications for Counselling. *Canadian Journal of Counselling, 31*, 82-92.
- Bartelstone, J. H., & Trull, T. J. (1995). Personality, life events, and depression. *Journal of Personality Assessment, 64*(2), 279-294.
- Beck, A. T. (1983). Cognitive therapy of depression: New perspectives. In P. J. Clayton & J. E. Barrett (Eds.), *Treatment of depression: Old controversies and new approaches* (pp. 265-290). New York: Raven.
- Beck, A. T., Rush, A., Shaw, B., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.
- Beck, A. T., Steer, R. A., & Garbin, M. G. (1987). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review, 8*, 77-100.
- Beck, A. T., Ward, C. H., Mendelsohn, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4*, 561-571.
- Berlin, S. (1985). Maintaining reduced levels of self-criticism through relapse-prevention treatment. *Social Work Research & Abstracts, 21*(1), 21-33.
- Besser, A., & Priel, B. (2003). A multisource approach to self-critical vulnerability to depression: The moderating role of attachment. *Journal of Personality, 71*(4), 515-555.
- Besser, A., & Priel, B. (2005). Interpersonal relatedness and self-definition in late adulthood depression: Personality predispositions, and protective factors. *Social Behavior and Personality, 33*(4), 351-382.
- Beutler, L. E., Clarkin, J. F., & Bongar, B. (2000). *Guidelines for the systematic treatment of the depressed patient*. London: Oxford University Press.

- Blatt, S. J. (1974). Levels of object representation in anaclitic and introjective depression. *The Psychoanalytic Study of the Child*, 29(10), 107-157.
- Blatt, S. J. (2004). *Experiences of depression: Theoretical, clinical, and research perspectives*. Washington, DC: American Psychological Association.
- Blatt, S. J. (1990). Interpersonal relatedness and self-definition: Two primary configurations and their implications for psychopathology and psychotherapy. In J. L. Singer (Ed.), *Repression and dissociation: Implications for personality theory, psychopathology, and health* (pp. 299–335). Chicago, IL: University of Chicago Press.
- Blatt, S. J., Afflitti, J. P., & Quinlan, D. M. (1976). Experiences of depression in normal young adults. *Journal of Abnormal Psychology*, 85, 383-389.
- Blatt, S. J., Quinlan, D. M., Chevron, E. S., McDonald, C., & Zuroff, D. (1982). Dependency and self-criticism: Psychological dimensions of depression. *Journal of Consulting and Clinical Psychology*, 50(1), 113-124.
- Blatt, S. J., Zuroff, D. C., Hawley, L. L., & Auerbach, J. S. (2010). Relatedness & self-definition: Predictors of sustained therapeutic change. *Psychotherapy Research*, 20(1), 37-54.
- Blazer, D. G., Kessler, R. C., McGonagle, K. A., & Swartz, M. S. (1994). The prevalence and distribution of major depression in a national community sample: The national comorbidity survey. *The American Journal of Psychiatry*, 151(7), 979-986.
- Borrie, A., Jonsson, G. K., & Magnusson, M. S. (2002). Temporal pattern analysis and its applicability in sport: An explanation and exemplar data. *Journal of Sport Science*, 20, 845-852.
- Brewin, C. B., & Firth-Cozens, J. (1997). Dependency and self-criticism as predictors of depression in young doctors. *Journal of Occupational Health Psychology*, 2(3), 242-246.

- Busseri, M. A., & Tyler, J. D. (2003). Interchangeability of the Working Alliance Inventory and Working Alliance Inventory, Short Form. *Psychological Assessment, 15*(2), 193-197.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin, 56*(2), 81-105.
- Carey, T., Sheehan, J., & Whyte, J. (2003). Postnatal depression and antenatal self-criticism. *The Irish Journal of Psychology, 24*, 79-87.
- Choi, B., & Pos, A. E. (2011, April). *An investigation of incidence of depressive subtypes and emotion change in self-critical depression*. Poster presented at the York University Psychology Honours Student Poster Day, Toronto, ON.
- Clark, D. A., Beck, A. T., & Alford, B. A. (1999). *Scientific foundations of cognitive theory and therapy of depression*. New York, NY: John Wiley & Sons.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement, 20*(1), 37-46.
- Cox, B. J., McWilliams, L. A., Enns, M. W., & Clara, I. P. (2004). Broad and specific personality dimensions associated with major depression in a nationally representative sample. *Comprehensive Psychiatry, 45*(4), 246-253.
- Derogatis, L. R. (1983). *SCL-90: Administration, scoring, and procedures manual for the revised version*. Baltimore: Clinical Psychometric Research.
- Derosa, T. (2000). *Personality, help-seeking attitudes, and depression in adolescents*. (Doctoral Dissertation, University of Toronto).
- Elliott, R. K., Watson, J. C., Goldman, R. N., & Greenberg, L. S. (2004). *Learning emotion-focused therapy*. Washington, DC: APA.
- Enns, M. W. (1999). Perfectionism and depression symptom severity in major depressive

- disorder. *Behaviour Research and Therapy*, 37(8), 783-794.
- Enns, M. W., Cox, B. J., & Pidlubny, S. R. (2002). Group cognitive behaviour therapy for residual depression: Effectiveness and predictors of response. *Cognitive Behaviour Therapy*, 31(1), 31-40.
- Fennell, M. (1998). Low Self-Esteem. In N. Tarrier, A. Wells, & G. Haddock (Eds), *Treating complex cases: The cognitive behavioural therapy approach*. London: John Wiley & Sons.
- Fleiss, J. (1981). *Statistical methods for rates and proportions* (2nd ed.). New York: Wiley.
- Fredrickson, B. L (2001). The role of positive emotions in positive psychology. *American Psychologist*, 56(3), 218–226.
- Gay, M. L., Hollandsworth, J. G., & Galassi, J. P. (1975). An assertiveness inventory for adults. *Journal of Conseling Psychology*, 22(4), 340-344.
- Gilbert, P., & Irons, C. (2004). A pilot exploration of the use of compassionate images in a group of self-critical people. *Memory*, 12(4), 507-516.
- Goldman, R. N., Greenberg, L. S., & Angus, L. (2006). The effects of adding emotion-focused interventions to the client-centered relationship conditions in the treatment of depression. *Psychotherapy Research*, 16(5), 536-546.
- Greenberg, L. S. (1992). Task analysis: Identifying components of intrapersonal conflict resolution. In S. Toukmanian & D. Rennie (Eds.), *Psychotherapy process research* (pp. 22-50). Newbury Park, CA: Sage Publications.
- Greenberg, L. S. (2002). *Emotion-focused therapy: Coaching clients to work through their feelings*. Washington, DC: APA.
- Greenberg, L. S., Auszra, L., & Herrmann, I. R. (2007). The relationship among emotional

- productivity, emotional arousal and outcome in experiential therapy of depression. *Psychotherapy Research*, 17(4), 482-493.
- Greenberg, L. S., & Goldman, R. (2011). Case formulation in emotion-focused therapy. In T. D. Eells (Eds.), *Handbook of psychotherapy case formulation* (2nd ed., pp. 379-412), New York: Guilford Press.
- Greenberg, L. S., & Korman, L. M. (1993). Assimilating emotion into psychotherapy integration. *Journal of Psychotherapy Integration*, 3(3), 249-265.
- Greenberg, L. S., & Paivio, S. C. (1997). *Working with emotions in psychotherapy*. New York: Guilford Press.
- Greenberg, L. S., & Pedersen, R. (2001, November). *Relating the degree of resolution of in-session self-criticism and dependence to outcome and follow-up in the treatment of depression*. Paper presented at conference of the North American Chapter of the Society for Psychotherapy Research, Puerto Vallarta, Mexico.
- Greenberg, L. S., Rice, L., & Elliott, R. K. (1993). *Facilitating emotional change: The moment-by-moment process*. New York: Guilford Press.
- Greenberg, L. S., & Safran, J. D. (1987). *Emotion in psychotherapy: Affect, cognition, and the process of change*. New York: Guilford Press.
- Greenberg, L. S., & Watson, J. C. (1998). Experiential therapy of depression: Differential effects of client-centered relationship conditions and process-experiential interventions. *Psychotherapy Research*, 8, 210-224.
- Greenberg, L. S., & Watson, J. C. (2006). *Emotion-focused therapy for depression*. Washington, DC: American Psychological Association.
- Greenberg, P. E., Kessler, R. C., Birnbaum, H. G., Leong, S. A., Lowe, S. W., Berglund, & P.

- A., Corey-Lisle, P. K. (2003). The economic burden of depression in the United States: how did it change between 1990 and 2000? *Journal of Clinical Psychiatry*, 64(12), 1465-1475.
- Groth-Marnat, G. (2009). *Handbook of psychological assessment* (5th ed.). New York: Wiley.
- Gurtman, M. B. (1996). Interpersonal problems and the psychotherapy context: The construct validity of the Inventory of Interpersonal Problems. *Psychological Assessment*, 8, 241-255.
- Herrmann, I. (2012). *Emotion categories and patterns of change in experiential therapy for depression*. (Doctoral Dissertation, Ludwig Maximilian University)
- Hirschenhauser, K., Frigerio, D., Grammer, K., & Magnusson, M.S. (2002). Monthly patterns of testosterone and behavior in prospective fathers. *Hormones and Behavior*, 42, 172-181.
- Horowitz, L. M., Rosenberg, S. E., Baer, B. A., Ureno, G., & Villasenor, V. S. (1988). Inventory of Interpersonal Problems: Psychometric properties and clinical application. *Journal of Consulting and Clinical Psychology*, 56, 885, 892.
- Horvath, A., & Greenberg, L. S. (1989). Development and validation of the Working Alliance Inventory. *Journal of Counseling Psychology*, 36, 223-233.
- Irons, C., Gilbert, P., Baldwin, M. W., Baccus, J. R., & Palmer, M. (2006). Parental recall, attachment relating and self-attacking/self-reassurance: Their relationship with depression. *British Journal of Clinical Psychology*, 45(3), 297-308.
- Judd, L. L. (1997). The clinical course of unipolar major depressive disorders. *Archives of General Psychiatry*, 54, 989-991.
- Kagan, F. (2003). *Differentiating depression: A qualitative analysis of the depression themes within 36 case studies* (Honours Thesis, York University).

- Kelly, A. C., Zuroff, D. C., & Shapira, L. B. (2009). Soothing oneself and resisting self-attacks: The treatment of two intrapersonal deficits in depression vulnerability. *Cognitive Therapy and Research, 33*, 301-313.
- Kerepesi, A., Kubinyi, E., Jonsson, G. K., Magnusson, M. S., & Miklósi, Á. (2006). Behavioral comparison of human-animal (dog) and human-robot (AIBO) interactions. *Behavioural Processes, 73*, 92-99.
- Klein, M., Mattieu, P., Gendlin, E., & Kiesler, D. (1969). *The Experiencing Scale: A research and training manual* (Vol. 1). Madison: University of Wisconsin Extension Bureau of Audiovisual Instruction.
- Korman, L. M. (1998). *Changes in clients' emotion episodes in therapy*. (Doctoral Dissertation, York University)
- Lambert, M. J. (1992). Psychotherapy outcome research: Implications for integrative and eclectic therapists. In M. R. Goldfried, & J. C. Norcross (Eds.), *Handbook of psychotherapy integration* (pp. 94-129). New York, NY: Basic Books Inc.
- Leary, M. R., Tate, E. B., Adams, C. E., Allen, A. B., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology, 92*(5), 887-904.
- Lee, D. A. (2005). *Compassion: Conceptualisations, research and use in psychotherapy*. New York: Routledge.
- Ludwig, L. D., & Lazarus, A. A. (1972). A cognitive and behavioral approach to the treatment of social inhibition. *Psychotherapy: Theory, Research & Practice, 9*(3), 204-206.
- Luyten, P., Sabbe, B., Blatt, S. J., Meganck, S., Jansen, B., De Grave, C., . . . Corveleyn, J.

- (2007). Dependency and self-criticism: Relationship with major depressive disorder, severity of depression, and clinical presentation. *Depression and Anxiety, 24*(8), 586-596.
- Magnusson, M. S. (1993). THEME user's manual. Reykjavik: University of Iceland.
- Magnusson, M. S. (2000). Discovering hidden time patterns in behavior: T-patterns and their detection. *Behavior Research Methods, Instruments, & Computers, 32*, 93-110.
- McCullough L., Kuhn N., Andrews S., Kaplan A., Wolf J. and Lanza Hurley C. (2003). *Treating affect phobia, a manual for short-term dynamic psychotherapy*. New York: Guildford Press.
- McGillivray, J. A., & McCabe, M. P. (2007). Early detection of depression and associated risk factors in adults with mild/moderate intellectual disability. *Research in Developmental Disabilities, 28*(1), 59-70.
- Moerk, K. C. (2003). *Personality in binge eating disorder and depression: Do similarities in personality traits partially account for comorbidity findings?*. (Doctoral Dissertation, State University of New York).
- Mongrain, M., & Leather, F. (2006). Immature dependence and self-criticism predict the recurrence of major depression. *Journal of Clinical Psychology, 62*(6), 705-713.
- Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality, 41*, 139-154.
- Öngen, D. E. (2006). The relationships between self-criticism, submissive behavior and depression among turkish adolescents. *Personality and Individual Differences, 41*(5), 793-800.
- Padesky, C. A. (1994). Schema change processes in cognitive therapy. *Clinical psychology and psychotherapy, 1*(5), 267-278.

- Pascual-Leone, A. (2009). Dynamic emotional processing in experiential therapy: Two steps forward, one step back. *Journal of Consulting and Clinical Psychology, 77*, 113-126.
- Pascual-Leone, A., & Greenberg, L. S. (2005). Classification of Affective-Meaning States. In A. Pascual-Leone's, *Emotional processing in the therapeutic hour: "Why the only way out is through"* (pp. 289-367), Unpublished doctoral thesis. York University, Toronto.
- Pascual-Leone, A., & Greenberg, L. S. (2007). Emotional processing in experiential therapy: Why "the only way out is through". *Journal of Consulting and Clinical Psychology, 75*, 875-887.
- Persons, J. B. (2001). Chapter 5: Using the thought record. In J. B. Person, J. Davidson, & M. A. Tompkins (Eds.), *Essential components of cognitive-behavioral therapy for depression* (pp. 129-159), Washington, DC: APA.
- Pos, A. E. (2006). *Experiential treatment for depression: A test of the experiential theory of change, differential effectiveness, and predictors of maintenance of gains*. (Doctoral Dissertation, York University)
- Pos, A. E., & Greenberg, L. S. (2007). Emotion-focused therapy: The transforming power of affect. *Journal of Contemporary Psychotherapy, 37*, 25-31.
- Pos, A. E., & Greenberg, L. S., & Warwar, S. H. (2009). Testing a model of change in the experiential treatment of depression. *Journal of Consulting and Clinical Psychology, 77*(6), 1055-1066.
- Pretzer, J. L. (2008). On promoting adaptive self-enhancement in psychotherapy. In M. Chang (Ed.), *Self-criticism and self-enhancement: Theory, research and clinical implications* (pp. 201-224). Washington, DC: American Psychological Association.
- Robbins, P. R., & Tanck, R. H. (1997). Anger and depressed affect: Interindividual and

- intraindividual perspectives. *Journal of Psychology: Interdisciplinary and Applied*, 131(5), 489-500.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rogers, C. R. (1951). *Client-centered therapy: Its current practice, implications, and theory*. Oxford, England: Houghton Mifflin.
- Rogers, C. R. (1957). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting Psychology*, 21, 95-103.
- Segal, Z. V., Shaw, B. F., & Vella, D. D. (1989). Life stress and depression: A test of the congruency hypothesis for life event content and depressive subtype. *Canadian Journal of Behavioural Science*, 21(4), 389-400.
- Southwick, S. M., Yehuda, R., & Giller, E. L. (1995). Psychological dimensions of depression in borderline personality disorder. *The American Journal of Psychiatry*, 152(5), 789-791.
- Spitzer, R., Williams, J., Gibbon, M., & First, M. (1995). *Structured Clinical Interview for DSM-IV*. New York, NY: American Psychiatric Press.
- Stachowski, A. A., Kaplan, S. A., & Waller, M. J. (2009). The benefits of flexible team interaction during crises. *Journal of Applied Psychology*, 94(6), 1536-1543.
- Stiles, W. B., Agnew-Davies, R., Barkham, M., Culverwell, A., Goldfried, M. R., Halstead, J., Hardy, G. E., Raue, P. J., Rees, A., & Shapiro, D. A. (2002). Convergent validity of the Agnew Relationship Measure and the Working Alliance Inventory. *Psychological Assessment*, 14(2), 209-220.
- Street, H., Sheeran, P., & Orbell, S. (1999). Conceptualization depression: An integration of 27 theories. *Clinical Psychology Psychotherapy*, 6(3), 175-193

- Teasdale, J. D. (1999). Emotional processing, three modes of mind and the prevention of relapse in depression. *Behaviour Research and Therapy*, *37*, 53-57.
- Tracey, T. J., & Kokotovic, A. M. (1989). Factor structure of the Working Alliance Inventory. *Journal of Consulting and Clinical Psychology*, *37*, 369-375.
- Vanheule, S., Desmet, M., & Meganck, R. (2008). Dependent and self-critical depression: Evidence for subtypes? *Journal of the American Psychoanalytic Association*, *56*(4), 1352-1357.
- Vliegen, N., Luyten, P., Besser, A., Casalin, S., Kempke, S., & Tang, E. (2010). Stability and change in levels of depression and personality: A follow-up study of postpartum depressed mothers that were hospitalized in a mother-infant unit. *Journal of Nervous and Mental Disease*, *198*(1), 45-51.
- Watson, J. C., Gordon, L. B., Stermac, L., Kalogerakos, F., & Steckley, P. (2003). Comparing the effectiveness of process-experiential with cognitive-behavioral psychotherapy in the treatment of depression. *Journal of Consulting and Clinical Psychology*, *71*(4), 773-781.
- Whelton, W. J., & Greenberg, L. S. (2005). Emotion in self-criticism. *Personality and Individual Differences*, *38*, 1583-1595.
- World Health Organization. (2004). *The burden of disease: 2004 update*. Retrieved January 25, 2011, from the World Health Organization website:
http://www.who.int/healthinfo/global_burden_disease/GBD_report_2004update_full.pdf.
- Zijlstra, F. R. H., Waller, M. J., & Phillips, S. I. (2012). Setting the tone: Early interaction patterns in swift-starting teams as predictors of effectiveness. *European Journal of Work and Organizational Psychology*, *21*(5), 749-777.

Appendix A

The Classification of Affective-Meaning States (CAMS)

Classification of Affective-Meaning States

A. Pascual-Leone & L. S. Greenberg

2005 ©

The source of this document can be cited as:

A. Pascual-Leone & L. S. Greenberg, (2005). Classification of Affective-Meaning States.

In A. Pascual-Leone, Emotional processing in the therapeutic hour: Why 'The only way out is through', pp. 289-366. Unpublished doctoral thesis, York University, Toronto.

TABLE OF CONTENTS

Table of Contents.....	ii
List of Figures.....	iv
Criteria.....	2
Minimum Unit for Coding.....	4
1. Global Distress.....	5
Diagnostic definition.....	5
Conceptual definition.....	9
Examples.....	10
Points of discrimination.....	11
General description of content.....	12
Relating Global Distress to the literature.....	15
2. Specific Maladaptive Fear & Shame.....	16
Diagnostic definition.....	16
Conceptual definition.....	19
General description of content.....	20
Points of discrimination.....	20
Relating Fear & Shame to the literature.....	25
3. Generic Rejecting Anger.....	26
Diagnostic definition.....	26
Conceptual definition.....	30
Examples.....	31
Points of discrimination.....	31
General description of content.....	35
Relating Global Distress to the literature.....	35
Introductory note to Negative Evaluation and Existential Need.	37
4. Negative Evaluation Anger.....	37
Diagnostic definition.....	37
Conceptual definition.....	38
Examples.....	40
General description of content.....	41
Relating Negative Evaluation to the literature.....	41

5. Existential Need	43
Diagnostic definition.....	43
Conceptual definition.....	45
Examples.....	46
Points of discrimination.....	46
Relating Existential Need to the literature.....	47
6. Specific Self-Soothing	49
Diagnostic definition.....	49
Conceptual definition.....	51
Examples.....	51
Points of discrimination.....	52
Relating Self-Soothing to the literature.....	53
7. Specific & Adaptive Assertive Anger.....	54
Diagnostic definition.....	54
Conceptual definition.....	56
Examples.....	57
Points of discrimination.....	58
Relating Global Distress to the literature.....	59
8. Specific & Adaptive Grief/Hurt.....	61
Diagnostic definition.....	61
Conceptual definition.....	65
Examples.....	64
Points of discrimination.....	65
Relating Grief/Hurt to the literature.....	67
9. Relief.....	68
Diagnostic definition.....	68
Conceptual definition.....	70
Examples.....	71
Points of discrimination.....	72
Relating Relief to the literature.....	72
10. Acceptance & Agency.....	73
Diagnostic definition.....	73
Conceptual definition.....	75
Examples.....	75
Points of discrimination.....	76
Relating Acceptance & Agency to the literature.....	77

Introductory note to Mixed/Uncodable and End.....	77
11. Mixed/Uncodable	78
Diagnostic definition.....	78
Conceptual definition.....	78
General description of content.....	79
Points of discrimination.....	65
Relating Mixed/Uncodable to the literature.....	79
11. End Code.....	80
Diagnostic definition.....	80
Conceptual definition.....	81
Points of discrimination.....	81
Relating Mixed/Uncodable to the literature.....	82
Appendix: Additional resources for coding and reliability.....	83
Coding criteria at a glance.....	84
Reliability.....	86
Aligning CAMS Ratings for Reliability.....	86
Reliability of the Measure.....	90

LIST OF FIGURES

Figure 1: Coding at a Glance.....	84
Figure 2: An example of aligned ratings	89
Figure 3: Agreement about unitization of observations.....	90
Figure 4: Confusion matrix to examine pure errors....	91

Pascual-Leone & Greenberg, 2005 ©

1

Purpose of the Coding System

The Classification of Affective-Meaning States (CAMS) is a measure that was developed to rate the presence of emotion states relevant to the model of this research project. The measure is applicable to coding emotion events when participants are engaged, emotionally involved, and aroused. Thus, the following coding system assumes that participants are not explicitly avoiding or interrupting arousal or emotional experiencing. Although clients may be naturally ambivalent about engaging, heightening and essentially allowing upsetting emotions, the events used for coding should follow the initial “allowing” of feeling (Greenberg & Paivio, 1997; Greenberg & Safran 1987). The codes themselves are intended to describe emotional experiences that are being “allowed” by the individual¹.

That having been stated, the coding system is designed to track the changing “flow of emotions”: Which emotions are occurring and in what sequence. The measure was created in light of preceding research that has shown some emotional experiences are more productive than others (Greenberg, Rice, & Elliott, 1993; Greenberg & Paivio, 1997; Sicoli & Greenberg, 2005).

¹ For observable criteria that might identify emotionally resistant and interruptive processes see the work of Davenloo (1990) from a short-term dynamic perspective or of Weston & Greenberg (2005) from an experiential perspective.

Criteria

Each emotion state is evaluated on up to five criteria, which address three distinct facets:

Emotional tone

- A. Emotion/ Action tendency

Involvement

- B. Expression (i.e. non-verbal behaviours, emotional arousal...)
- C. Vocal Quality

Meaning

- D. Stance and/or Adaptivity
- E. Specificity

These criteria capture key affective-meaning (i.e. “emotion”) states. In the first criterion, emotion words and action tendencies serve as a rough guide suggesting the type of self-organization that a client is in. Some categories of coding are based on Greenberg’s (2002; Greenberg & Paivio, 1997) categorizations of primary vs. secondary and adaptive vs. maladaptive emotion. Those qualitative distinctions are captured mainly by the two “meaning criteria” listed above in addition to the Vocal Quality Scale (Rice & Kerr, 1986)².

Fosha’s (2000) distinction between core affects and core states is also quantified in this measure through a combination of criteria. The core affects are captured by higher

² Note that although the Experiencing Scale (Klein, Mathieu-Coughlan, & Kiesler, 1986) would be a well suited contribution to these criteria, it was not included so that it could be used later as a dependent variable, providing construct validity to the current measure and model.

Pascual-Leone & Greenberg, 2005 ©

3

ratings on “emotional involvement criteria” including the Emotional Arousal Scale (Warwar & Greenberg, 1999) in particular. Core states, on the other hand, are reflected by the meaning criteria as well as certain types of vocal quality, i.e. the focused voice (Rice & Kerr, 1986).

A richer degree of conceptual differentiation and integration in the clients’ discourse is characteristic of productive meaning states (Wexler, 1974). Two types of criteria in this measure are intended to reflect, at least in part, this richness and level of formulation. “Specificity” is a criterion for some facet of meaning differentiation while “Stance and/or Adaptivity” is a criterion for the degree to which meaning is integrated and/or formulated to a healthy end.

Because the observational rating of a client’s subjective “involvement” is quite limited, involvement is judged in the context of previous arousal and engagement. In this classification system, it is a reasonable assumption that a client’s expressed arousal is carried on internally unless there has been a dramatic change in topic. From this perspective, the involvement criteria are met if emotional expression is observable and/or if clients provide a detailed physical description of their emotional experience. In this way, clients who are reticent about outwardly expressing arousal yet disclose that they are, i.e. “on the brink of tears” (without ever actually tearing), have met the criteria for affective involvement (assuming all other verbal and non-verbal indicators are consistent with the verbal report).

Minimum Unit for Coding

For a rater to make any given code the participant must utter a minimum of two consecutive statements that indicate the same emotion class. This requirement is consistent with what has been used in other ratings of comparable clinical material (i.e. see Sicoli & Greenberg, 2005). There are two theory-driven exceptions to this rule. In the case of coding either a “Need” or a “Negative Evaluation” (see classifications to follow) a single clear statement is sufficient to make the code. The justification for this exception is that, by definition, both these classifications are crystallized statements of meaning.

1. Global DistressDiagnostic definition:*Emotional tone*

A. Presence of at least one of the following:

1) An experience clearly labelled by either client or therapist as any of the

following:

- a) hurt,
- b) pain,
- c) confusion,
- d) hopelessness,
- e) helplessness,
- f) resignation,
- g) unelaborated loneliness,
- h) unelaborated emptiness,
- i) self-pity,
- j) vague self-blame, guilt,
- k) irritability,
- l) undifferentiated complaint/whining...

2) An experience that is described by the client as:

- a) undesired,
- b) aversive, and

Pascual-Leone & Greenberg, 2005 ©

6

c) producing suffering.

(i.e. engaged, high emotional arousal that the client describes simply as feeling bad, awful, turmoil, miserable, etc.)

Involvement

B. Presence of at least one (or both) of the following:

- 1) The experience is of high expressive arousal and is rated to be > 4 on the Emotional Arousal Scale (Warwar & Greenberg, 1999).
 - 2) The client verbally reports his or her arousal, indicating that the emotional tone is activated.
- There is non-verbal behaviour reflecting a state of suffering or collapse, which may include one (or more) of the following:
 - a) tears,
 - b) lowered head,
 - c) slumped body language,
 - d) sighs,
 - e) eyes to floor...

C. Presence of at least one (or both) of the following vocal qualities:

- 1) “Emotional voice quality”, which is disrupted or distorted as a result of overflowing feeling. This is characterized by:
 - Disruption of vocal pattern
(i.e. the voice may break, tremble, rise to a shriek, become very low),

Pascual-Leone & Greenberg, 2005 ©

7

- Uneven pace,
 - Irregular accentuation pattern,
 - Unexpected terminal contours.
- 2) “External voice quality”, which has a premonitored quality, suggesting that the content being expressed is not being newly experienced and symbolized. It is characterized by:
- a “talking at” quality,
 - moderate to high energy, which is fairly full and directed outward,
 - extremely regular accentuation achieved primarily by a rise in pitch,
 - there is an even pace with highly expected terminal contours.

Meaning

D. The client is non-agentic, lacks a sense of direction, and there is no adaptive action tendency associated with the distress state.

- I.e. not clearly knowing what to say or do,
- feeling stuck.

E. The object of distress is one or the following³:

1) Unknown and elusive.

“Unknown Distress”

³ Examples of “Unknown Distress” are found in 076#7, 516#2; “Minimally Explored Distress” in 507#3; “Limited and Avoided Distress” in 512#3.

- I.e. the client is uncertain of what the feeling is or why the feeling exists – i.e. “I’m feeling X and I don’t know what it is about or why I am feeling it”.
- When answering the question, “What is the problem?”, the observer is unable to determine what the suffering is about in concrete or specific terms.
- It is as if the client were making the statement:
 - “I don’t know what it is but it bothers me”.

2) Known but minimally elaborated in terms of its subjective experience.

“Minimally explored Distress”

- There is little elaboration of the client’s experience beyond that it is distressing – i.e. “It feels bad when someone does not understand or care”. (Note that who is not specified).
- Clients do not convey their idiosyncratic experience:
 - They use global terms, like feeling “bad”;
 - They refer to their concern in second or third person, i.e. “one feels bad when people don’t care”;
- It is as if the client were making the statement:
 - “I know what it is but not how I feel about it”.

3) Unaddressed beyond the subjective sense of victimhood.

“Limited & Avoided Distress”

- Any meaning is heavily other/circumstance-oriented.
- The client has a marked lack of agency, (as if being helpless was itself the object of distress, i.e. “I’m so upset that I’m helpless”).
- The client makes excuses, rationalizations, justifications with a quality of defensiveness and whininess.
- The client makes pathetic or desperate pleas.
- The client seems avoidant yet is unable to disengage from the distressing material. Sometimes the client refers to “it” indicating the emotional distress in non-elaborative terms.
- The meaning is as if the client were making the statement:
 - “It just happened to me and I feel like a victim”.

Conceptual definition:

Global distress could alternatively be referred to as “undifferentiated distress”. This category of emotion is best characterized as an emotionally expressive reaction to some deeper underlying concern. Distress is global in the sense of all embracing or undifferentiated, such that the presenting undifferentiated feeling might allude to specific negative emotions but those emotions remain “fused”. If deeper core concerns are not being articulated but clients are aroused and distressed about some (general) aspect of their circumstances the rater must code this category.

Expressions of global distress do not capture any meaningful object of emotion or meaningful action tendency. As a result this experience gives the client no meaningful

Pascual-Leone & Greenberg, 2005 ©

10

sense of direction; i.e. “I’m feeling bad”, as opposed to a more differentiated statement like, “I resent him for what he did and don’t want to overlook it.” Thus, in global distress the object of emotion is usually referred to in generalities and the emotional response is also one of generality, -- i.e. “The way I feel now about all that stuff, it freaks me right out”.

The experience of global distress can be described as being of high expressive arousal and low meaningfulness in regards to some personally sensitive theme. It indicates to the person that something is happening that is undesired, aversive, and is producing pain. The person wants the experience to be over with yet cannot seem to get over it. This affective-meaning state is characterized by feeling as if one is a victim of emotional suffering.

Examples:

Some case examples of statements that typify this category follow. One must be aware, however, that such statements in isolation do not necessarily merit a code but are given support by the meaning-context in which they are expressed.

- “I could cry for a really long time.”(Nt. Cry about “what” is not specified.) (hurt)
- “I feel hopeless, lost, sad, discouraged.” (hopeless, no sense of direction)
- “I wish I could get past it or turn it off.” (no sense of direction, complaint)
- “I feel alone, it’s so hard.” (self-pity, unelaborated loneliness)
- “I’ll never get there. There’s no use.” (hopeless, helpless)
- “It’s so awful and I don’t know what to do.” (pain, confusion)

Pascual-Leone & Greenberg, 2005 ©

11

Points of discrimination:

The observer will notice that what many clients describe as “sadness” will be coded here as global distress. In doing so a distinction is drawn between feeling “tearful and troubled” (sad, in more popular parlance) and feeling tearful over a clearly recognized loss (see “specific adaptive hurt/grief” below). An example of this was when a client said, “I felt sad for no apparent reason. I was teary and just had this sadness that came over me. All of a sudden I feel like I want to cry and I don’t know where it’s coming from. Something’s going on deep inside”. In this example, the client is using “sadness” to describe the subjective experience of an undifferentiated state -- global distress. Thus, sadness may or may not be global distress depending on the quality with which it is expressed. Greenberg’s (2002) emotion-focused approach would describe this type of sadness as secondary sadness, indicating that there is some underlying and more primary emotional concern.

Note that especially in cases of complaint, whining, and the like, global distress tends to be very other/circumstance-oriented, such that there is little elaboration on the client’s experience beyond the fact that it is distressful.

Aroused statements such as, “It’s just too painful” or “It’s so hopeless!” are expressions of emotion in their own right – they are pain or hopelessness, respectively. Nevertheless, these statements suggest some underlying emotion that remains unarticulated, herein that feeling/concern has only been referred to as “it”. The underlying feeling may or may not be within the client’s scope of awareness. Again, if

Pascual-Leone & Greenberg, 2005 ©

12

deeper core concerns are not articulated but clients are aroused and distressed about some (general) aspect of their circumstances the rater must code this category. Thus, raters should consider:

- What does 'it' refer too? What is the client *actually* upset about?
- Has the concern at hand been sufficiently differentiated?
- Is the client grappling with the concern's specific and personal nature?
- Is the object of emotion grounded in relatively concrete terms?

Answering "No" to all or some of these questions is indicative of global distress.

Some clients have developed a way of interrupting or curtailing their emotion when this emotion-state becomes unbearable for them. Upon such an occasion, either the interruption is successful and the client's level of arousal drops dramatically or it is unsuccessful and the person continues to express aroused global distress.

General description of content:

Although the affective-meaning state describes a quality rather than content per se, some types of content seem to be prototypical expressions of this state. The following, which is not an exhaustive list by any means, are descriptions of content that characterize global distress when deliberated with high emotional arousal. Some of these descriptions use examples of client statements as illustrations.

- Statements of a “poor me” quality are characteristic expressions of this state. Such statements are usually made from the position of victim and are made in a tone of complaint and often self-pity.
- Statements that protest the eternity of the injury or suffering. Since universals are almost always overly simplistic, they are also a sign of limited differentiation. Therefore, words like always, never, forever, etc. may serve as indicators of Global Distress. These statements also often have a “poor me” quality. For example:
 - “I have been suffering every day of my life”.
 - “I’ve been saddled with this difficulty my entire life and the pain is really, really intense”.
- Statements that the client makes about perennial doubt or uncertainty.
 - “I don’t know, I don’t know”
 - “I’m so doubtful about whether that is the truth or not.”
 - “I need to know why you did that” (...in a desperate tone of voice. If it were an angry tone of voice this may indicate another affective-meaning state).
- Statements that are hypersomatic. Very detailed descriptions of physiological experiences of affect can sometimes lack any description of personal or idiosyncratic meaning. Although such physical accounts are very detailed they are

usually only specific on a somatic level and are non-specific on a meaning level, making them characteristic of global distress.

- Statements that clients use to describe themselves as out-of-control, insane, or overwhelmed by emotional intensity are all characteristic of global distress. In this type of statement self-pity is often only implicit and emphasis is put on the client's sense of disorganizing and intense arousal.
 - "It makes me crazy to think..."
 - "It absolutely enrages me that you don't even care"
- Taking an argumentative position or a complaining position regarding one's "stuckness" is a strong indicator of undifferentiated emotional distress.
- Statements of character assassination may border on a different state (i.e. Rejecting Anger) but otherwise should be considered expressions of Global Distress. For example:
 - "You are selfish and self-centred!"
- Statements of vengefulness from a position of distance (rather than anger).
 - "Screw you. If you don't have any consideration for my feelings I won't have any consideration for yours".
- Statements indicating avoidance rather than emotional engagement.
 - "I don't want to have to deal with him".
 - "I don't want to imagine him" (Note that these comments do not comment on what the client would like to do, they are simply negations).

Relating Global Distress to the literature:

This sort of affective-meaning state has been referred to as secondary emotion in Emotion Focused Therapy and therapists are encouraged to go underneath this feeling (Greenberg, 2002). Other instances of global distress are labeled as emotional pain by the experiential tradition, in which case therapists are encouraged to validate and differentiate the emerging emotion (Bolger, 1999; Greenberg & Bolger, 2001). Sicoli and Greenberg (2005) talk about verbal and non-verbal markers of hopelessness, some of which are also in these criteria.

In psychodynamic therapies this state is referred to as defensive emotion or anxiety (in the broad sense) and the intervention is to interpret this state as a defense (Greenberger & Mitchell, 1983). Reik (1948) has referred to a particular affective-meaning he observed in his clients as the “masochistic morass”. His use of that term captures many of the same experiential features of the global distress construct (although not the motivations he attributed to it). Some psychodynamic authors have referred to instances of collapse into global distress as a mini-dissociative defence (Fosha, 2003).

It appears that both the psychodynamic and Emotion Focused approaches agree on the apparent lack of depth of Global Distress. From another perspective, the cognitive behavioural tradition refers to this state simply as negative emotion, something to be regulated and bypassed (Greenberger & Padesky, 1995).

Experimental research on the fundamental dimensions of subjective emotion states has identified “Distress” as a common factor that underlies aspects of cognitive, emotional, and motivational domains of experience (Mathews et al., 2002).

2. Specific Maladaptive Fear & Shame

Diagnostic definition:

Emotional tone

A. Presence of at least one (or more) of the following:

- 1) An experience clearly labelled by either client or therapist as any of the following. Note that the client must be “in” the state and suffering by the state – not avoiding it.

Shame-based emotion:

- a) Shame
 - i.e. feeling inadequacy, humiliation, embarrassment...
- b) “Feeling Empty” (elaborated)
 - Other forms of a Shame-Sadness blend,
 - i.e. “I’m withdrawn, miserable about my defectiveness”
- c) Collapsing in the face of self-contempt

- The client makes specific and harsh statements of self-contempt while at the same time collapsing into an obvious state of suffering (i.e. crying, etc.).

Fear-based emotion:

d) Fear

- i.e. feeling threatened, unsafe, defenseless, incompetent...

e) “Feeling Lonely” (elaborated)

- Other forms of a Fear-Sadness blend, i.e. dread.

f) Shame-Anxiety

- i.e. “I’m afraid I will be humiliated”

g) Guilt

- i.e. “It’s all my fault”, “I deserve to be punished”.

- 2) The action tendency is to withdraw in some way (i.e. escaping, hiding, turning sadly inwards...) from something/someone aversive. Generally the client reacts defensively sometimes even passively by “closing down” under the weight of this “dreaded state”.

Involvement

- B. The experience may range widely from minimum to high expressive arousal.
- Non-verbal behaviour which may include one (or more) of the following:

- a) covering face with hands,
- b) lowered head,
- c) closed eyes or diverted/downcast gaze,
- d) fear brow (eyebrows raised and straitened),
- e) fear mouth (open but with lips tense and drawn back tightly),
- f) tears...

C. Presence of at least one (or both) of the following vocal qualities:

- 1) “Emotional voice quality”, which is disrupted or distorted as a result of overflowing feeling. This is characterized by:
 - Disruption of vocal pattern
(i.e. the voice may break, tremble, rise to a shriek, become very low),
 - Uneven pace,
 - Irregular accentuation pattern,
 - Unexpected terminal contours.
- 2) “Focused voice quality”, which is described as turning attention inward with a concentrated use of energy and the quality of groping toward new meaning. This is characterized by:
 - Uneven pace,
 - Ragged, unexpected terminal contours,
 - Stop-and-go, unexpected pattern,
 - Accent is done with loudness or a drawl (rather than a pitch rise).

Meaning

D. The presenting concern is the source of deep and enduring personal pain.

- The emotion is full of suffering but familiar in quality.
- It is clear to the observer that this state moves the client in a destructive/unhealthy direction.
- The core concern is self-referencing, e.g.:
 - “I am defective”,
 - “I am insecure, abandoned”.

E. The object of emotion is clear and specific – i.e. “I feel ashamed/afraid of X”.

Conceptual definition:

This category of emotion is best characterized as the emotional expression of a core underlying concern, which is the source of deep and enduring personal pain.

Although emergence of the emotion may involve a significant other, (as in “feeling shame in the eyes of the other”), this type of emotion is clearly self-oriented (as in “I am the one who is shameful”).

Idiosyncratic meaning is usually quite important for this type of affective-meaning state. It represents an unhealthy and very painful way of viewing and experiencing oneself that is regrettably familiar to the client, like an age-old emotional wound. For this reason this category can be described as being of high arousal and high meaningfulness. The nature of this category is that it represents a highly personalized pathogenic state, which is imbued with emotion and sets the clients on a trajectory of

Pascual-Leone & Greenberg, 2005 ©

20

destructive self-organization. The client is completely taken over by the emotion and experiences it as insuperable. There are action tendencies associated with this state (i.e. withdrawing, escaping, etc.) but the familiarity of this highly aversive state gives the sense that the client has no real expectancy of getting away, as it were.

The expression of specific maladaptive emotion often requires a good deal of meaning exploration. More often than not there is eventually the elaboration of some implicit need and an evaluation of client's relation to that need. For example the client may come to the painful conclusion that, "I am not loved or understood".

General description of content:

Although clients almost never use such statements, the essence of these core concerns are captured in summary phrases such as, "I am shamefully unlovable, worthless, or incompetent" or "I am afraid I will die/be annihilated". In any of these cases the client's own description and expression of the concern must be done in a manner that is relatively concrete, specific and personal. In short, this affective-meaning state should be coded when clients make clear and emotionally expressive statements about their sense of fearfulness and/or shamefulness.

Points of discrimination:

The expression of these feelings is done in a specific and detailed fashion (otherwise they may be better represented as global distress). Often clients will not actually use the word "shame" since it is not usually found in common parlance and is perhaps too penetrating. Nevertheless, harsh, overt self-criticism and self-disparagement

Pascual-Leone & Greenberg, 2005 ©

21

may accompany statements indicating that clients feel shame about their shortcomings. Deeply seated objects of shame are more often than not either in regards to (1) clients' competence in the world or (2) their ability to have relationships. Also, in this affective-meaning state, the object of fear is usually the danger of utter destruction possibly as a result of abandonment, rejection, or personal incompetence.

Fear and shame are by far the predominant families of emotions subsumed under this category although variations of these may blend with sadness. Some clarification on the common experience of feeling "lonely" or "empty" will be helpful here. The maladaptive state of "sad loneliness" is conceptualized as existing in the transition (i.e. a loop) between global distress and specific maladaptive fear. Although loneliness is often discussed as a form of sadness, what make loneliness such a painful feeling are its ramifications, which are always tinged with an element of fear. Ultimately, what makes loneliness maladaptive is the tacit meaning it entails of, "Somehow if I'm alone I won't be OK/secure/able to cope". Inevitably, when loneliness is elaborated there is a colouring of fear that gives the idea of being alone its bite. This is consistent with the observations of several authors who have pointed out that attachment disorders are all primarily fear based (Freud, 1995/1913; Bowlby, 1997/1969; Sartre, 2001).

Similarly, feeling "empty" is understood as somewhere between global distress and maladaptive shame, depending on the degree of meaning elaboration the client is able to create. In either case, raters will have to make a judgment on the level of meaning

Pascual-Leone & Greenberg, 2005 ©

22

differentiations and personalization that the client makes in order to determine the code that is most fitting: global distress vs. specific maladaptive fear and shame.

The differentiation of meaning and the freshness of the experience are two of the most discriminating characteristics between global distress and specific maladaptive distresses (i.e. fear or shame). In contrast to global distress, which seems to state: "I feel awful but I don't know why or what it is about", maladaptive fear or shame state: "I feel awful and I do know exactly why!" Although some instances of global distress may have a familiar quality to clients especially if distress is part of a maladaptive personality/social style (i.e. self-pitying), the familiar maladaptive emotion is always being felt freshly in the moment. It is not just being talked about, it requires a high level of experiencing.

Sadness is sometimes maladaptive and at other times adaptive. The following comments help demarcate the difference between healthy and unhealthy types of sadness. Sadness (in the sense of grief or loss) has been described as having two distinct action tendencies that are sequentially ordered (Bowlby, 1997/1969). Initially, the action tendency in response to a loss is to cry out and essentially to reach out. A prototypic illustration is when a child gets lost in the supermarket and cannot find mother and cries out. Should crying for help prove unsuccessful the second action tendency of sadness is to withdraw and conserve energy for the hard times that evidently lie ahead.

When this second action tendency of "closing down" in sadness becomes an enduring or chronic emotional pattern, it represents a maladaptive version of sadness. The

Pascual-Leone & Greenberg, 2005 ©

23

more it becomes an enduring source of personal and self-referencing pain the more it acquires a sense of shame and becomes “shame-sadness” (i.e. “I have lost because I am defective/inadequate”). Needless to say, a lost child is also frightened and so it makes intuitive sense that fear, shame and sadness in their maladaptive forms are amalgamated together here as specific core maladaptive states.

Some forms of shame-anxiety, guilt, and self-contempt are more particular variants of this maladaptive rubric and identifying them will assist in coding. Shame-anxiety is a hybrid feeling. It alerts individuals to the imminent danger of being shamed (Mindell, 1994). This maladaptive state highlights once again the intimate relationship between fear and shame based emotions. The clearest instances of shame-anxiety can be commonly found in social phobias.

Guilt is maladaptive when it rallies self-blame and self-punishment. The most easily recognizable instance of this is found in “survivor guilt” (Garwood, 1996). Guilt is related to the family of fear-based emotions through the dread of punishment and inescapable culpability. Once again, withdrawal and “closing down” signals the maladaptive action tendency of this category.

The expression of contempt in self-criticism, especially during two-chair work can be understood as reflecting a maladaptive way of coping with unhealthy shame (Mindell, 1994; Whelton, 2000). For this reason, when a client expresses obvious emotional suffering at the same time as making specific statements of self-contempt the suffering (i.e. tearing, etc.) is considered a reflection of maladaptive shame.

Other discrete maladaptive emotions such as anger or disgust clearly exist but are not distinct parts of this model. This affective-meaning criteria does not apply to those discrete emotions because of their radically different action tendencies. Although they may be experienced as unpleasant, anger and disgust are not “dreaded” emotional states, to use the words of Horowitz (1987). Accordingly, their action tendencies are not of withdrawing and “closing down” as is the case in this model component.

During the elaboration of meaning some clients become very emotionally aroused⁴. Alternatively, clients begin to intellectualize and in a literal sense distance themselves from the specific and emotionally evocative details that facilitate maladaptive emotion. This form of loop can be referred to as a distancing. If this happens before the rater is able to confidently code the maladaptive emotion the occurrence should not be rated. Alternatively, if the maladaptive emotion is sufficiently aroused and activated then the occurrence will be rated and distancing will likely mark the end of that code.

Similarly, some clients have developed a way of self-interrupting or curtailing their emotion when this emotion-state becomes unbearable for them. Upon such an occasion the interruption is often not fully successful and clients will revert to the less specific expression of aroused global distress (in an attempt to distance themselves from the painful specifics). This occurrence would signal a change in code from one affective-meaning state to another. Otherwise, the interruption is successful and the client’s level

⁴ In this project it could be helpful to raters to know that soothing by the therapist is usually critical around this point to allow the client to tolerate unpleasant feelings and continue with the task at hand – avoiding either distancing or self-interruption. However, unless it is in the form of explicit and adaptive self-soothing, such soothing should not be coded.

Pascual-Leone & Greenberg, 2005 ©

25

of arousal drops dramatically perhaps accompanied by a change in topic. In that case, the occurrence would not be rated or it would signal the end of the code if there had already been sufficient expression to make one.

Relating Fear & Shame to the literature:

Authors writing on Emotion Focused Therapy have referred to this type of emotion as a primary maladaptive emotion. In that tradition, therapists encourage their clients to “own” these maladaptive feelings as their own, to experience them fully and then attempt to help the client transform these feelings. In other words, this type of state must be actively engaged rather than avoided so that it can eventually be changed by the emergence of another subsequent feeling (Greenberg, 2002).

Psychodynamic theorists have referred to this category of experience using various terms. Horowitz (1987) has referred to this as a class of “dreaded states” that must be regulated, while McCullough et al. (2003) has referred to “pathogenic affect”, which must be “faced” by the client. This affective-meaning structure is also represents the “response from self” in a core conflictual relationship theme (CCRT) described by Luborsky et al. (1994). Thus, the psychodynamic tradition generally treats this type of emotion as something that must be willfully tolerated and believes it will eventually change through insight. Doing that is considered the most central target of Psychodynamic therapies.

Both experiential and psychodynamic approaches understand the maladaptive state as one that the client is embedded in, such that within its framework the client has

Pascual-Leone & Greenberg, 2005 ©

26

great difficulty finding any viable alternative to hopelessness and despair (Safran & Muran, 2000). Cognitive and behavioural approaches to therapy have not found it useful to differentiate these fear and shame states from a more global state of distress; consequently (like global distress) it is referred to generically as “negative emotion”. As with more global distress CBT therapist work toward helping the client regulate these unpleasant feelings (Greenberger & Padesky, 1995)

Ekman and Friesen (1975) described the fear-mouth and fear-brow as well as some of the other expressive criteria for this state.

3. Generic Rejecting-Anger

Diagnostic definition:

Emotional tone

A. Presence of at least one (or more) of the following:

- 1) An experience clearly labelled by either client or therapist as any of the following:
 - a) rage,
 - b) reactive anger/ feeling mad,
 - c) hate,
 - d) resentment,
 - e) frustration,
 - f) angry protest (not wining),

Pascual-Leone & Greenberg, 2005 ©

27

- g) repulsion,
- h) anger-disgust,
- i) angry-tears.

2) The action tendency is an attempt to rid oneself of something/someone noxious. Sometimes clients swear and use name-calling. Generally the client reacts with an angry tone to avoid suffering and to defend/protect the Self. This is embodied by one of two sub-categories⁵:

- a) “Distancing Anger”
 - pushing away and producing distance,
- b) “Destructive Anger”
 - attacking, lashing out and destroying.

Involvement

B. Presence of at least one (or both) of the following:

- 1) The experience is of relatively high expressive arousal and is rated as > 4 on the Emotional Arousal Scale (Warwar & Greenberg, 1999). Arousal does not render the expression as out of control or incoherent.
- 2) The client verbally reports his or her arousal, indicating that the emotional tone is activated.
 - There is non-verbal behaviour reflecting a state of anger and protest, which may include one (or more) of the following:

⁵ “Distancing anger” can be seen in 516#12; “destructive anger” in 076#7.

- a) Shaking a fist, chopping, pointing,
- b) Dismissive gestures - i.e. waving away,
- c) Shaking the head,
- d) Emphatic nodding with statements,
- e) Angry mouth (i.e. pressing lips together - or - firm lower lip with mouth open in a squarish shape as if shouting),
- f) Squinting and angry tears.

C. Presence of at least one (or both) of the following vocal qualities:

- 1) “Emotional voice quality”, which is disrupted or distorted as a result of overflowing feeling. This is characterized by:
 - Disruption of vocal pattern
(i.e. the voice may break, tremble, rise to a shriek, become very low),
 - Uneven pace,
 - Irregular accentuation pattern,
 - Unexpected terminal contours.
 - 2) “External voice quality”, which has a premonitored quality, suggesting that the content being expressed is not being newly experienced and symbolized. It is characterized by:
 - A “talking at” quality,
 - Moderate to high energy, which is fairly full and directed outward,
-

- Extremely regular accentuation achieved primarily by a rise in pitch,
- There is an even pace with highly expected terminal contours.

Meaning

D. The client takes the position of plaintiff rather than victim and does not make specific self-affirmations.

For example, the client:

- Expresses “angry tears” vis-à-vis some concern.
- Acts as a plaintiff voicing an injury/concern.
- The tone is of agentic protest rather than powerless complaint.
- There is no explicitly declared positive self-evaluation.

E. The client stresses the noxiousness of the experience rather than the violation of values and self worth per se.

For example, the client:

- Is angry about some wrongdoing or how offending circumstances were injurious.
- Limits concern to the immediate noxious experience of transgression rather than referring to the violation or injury.
- The experience of violation is not articulated in specific, concrete, and personalized terms but rather is only addressed in generic and broad statements.

Conceptual definition:

This category of affective-meaning state is represented by the expression of anger. The main thrust of this instinctive and reactive anger, however, is in rejecting some offensive object. Often this anger is expressed from an “underdog” position such that the client seems to speak from the position of plaintiff or even victim. The almost instinctive expression of rejecting-anger might be described as one of hedonistic righteousness, where the client reacts defensively to avoid pain. The arguments used in expression of this anger often contrasts the Self’s status against what the offender did wrong or how the offending circumstances were injurious.

This affective-meaning category is described as generic because it relates to a class of angry feelings rather than a specific or specialized one. When clients express this state it usually entails high arousal and moderate meaningfulness (on account of its limited-specificity). It is generally a state of anger that sets the client on a trajectory of productive (albeit limited) self-organization. The meaning carried by this state is conveyed by a sense of self-righteousness against being hurt but is generally limited to the immediate experience of transgression (i.e. “I’m upset because you hurt me”). Thus, it is described as being moderately meaningful and can represent some organization toward recovery from injury although this is a state, which individuals often gets “stuck in”.

It is important to understand that although rejecting anger can be somewhat adaptive for the organism experiencing and expressing it, it is fundamentally aggressive.

Pascual-Leone & Greenberg, 2005 ©

31

Under normal circumstances anger and aggression can provide an important and adaptive service in self-preservation and sometimes even the preservation of attachment ties. In this way, sometimes those needs are defended even before they are concretely experienced. This is the adaptive side of rejecting anger. In other instances, instrumental or operant expressions of rejecting anger become so automatized that the expression becomes consolidated developmentally and form maladaptive personality structures of anger. A chronically reactive angry disposition is a structuralized (and pathologized) rendition of rejecting anger.

Examples:

Some prototypical statements that capture the spirit of this affective-meaning class might be:

- “I hate you for injuring me.” (hate, outrage)
- “F-you!” (reactive anger, rejection)
- “I’m pissed off!” (protest)
- “I’m just angry that it happened.” (protest, frustration)
- “You are sick! Disgusting, pathetic.” (repulsion)
- Character assassination, when the client insults and disparages the other, are usually also examples of Rejecting Anger.

Points of discrimination:

Complaint/protest may be either an expression of rejecting-anger or global distress depending on the context and on the proportion of protest vs. pain/helplessness in

Pascual-Leone & Greenberg, 2005 ©

32

which the complaint is expressed. Neither should hostility be taken as synonymous with rejecting-anger. For example, insults directed at the offending object or person are indicative of rejecting-anger if they serve to punctuate a more articulate statement of rejection. Belligerent swearing, on the other hand, especially with either a tone of whining/complaint or with a tone of unbridled and inarticulate rage suggest that the client is more in a state of global distress, depending on the tone and context. The focused intent to harm another and the tendency to escalate out of hand are both characteristics of “malignant” aggression or rage, which is not the same as Rejecting Anger. Consequentially, aggressive rage might be codable as Global Distress but is likely to be better considered uncodable within the current classification system.

The category of “assertive-anger” is described further on (see code #7, below) but it is useful at this time to highlight the features that discriminate rejecting-anger from assertive-anger. There are at least seven discriminating features:

- 1) Rejecting anger is characterized by hedonistic righteousness. For example, “I’m upset because what you did *hurt me*”, is an expression of rejecting-anger and hedonistic righteousness. As contrasted with, “I’m upset because what you did to me *was wrong* and I deserve to be treated with respect”, which is an expression of assertive-anger and ethical righteousness. This difference is that rejecting-anger stresses the noxiousness of individuals experience rather than the violation of their values, ethics, and self worth per se.

- 2) Rejecting-anger is somewhat healthy and adaptive in that it is defensive against some offending object, as seen in the acts of repulsion or anger-disgust. However, the characteristic action tendency of “general rejection” is not explicitly self-affirming of any declared positive self-evaluation. This is one of the reasons that swearing and name-calling is more prominent in rejecting-anger than in assertive-anger. In this sense, rejecting-anger embodies a moderate level of meaningfulness while assertive-anger embodies higher, more developed meaning of self-affirmation.
- 3) In rejecting-anger an individual characteristically speaks from the position of “underdog” or plaintiff. Thus, the client is less agentic than in assertive anger (albeit not entirely devoid of agency, since no agency would be characteristic of global distress).
- 4) Rejecting-anger principally produces negative statements aimed at creating distance. In contrast, assertive-anger principally yields positive statements in an effort of affirmation (which, of course, will also imply some sort of distancing). The affirmation effort of assertive-anger puts a person in the position of an “advocate and activist” with equal footing against the offending object. This also suggests that assertive-anger embodies a more differentiated level of meaning.

- 5) Rejecting-anger tends to make use of more “you” language given its stance of general rejection. This language, however, relates “you” to “my injury”, unlike the language used in global distress, which is restricted to one or the other. Conversely, assertive-anger tends to make more use of “I” language by way of self-affirmation. “I” statements in assertive anger often give a sense of genuineness.
- 6) Rejecting-anger involves more emotional arousal than assertive-anger, (but less arousal than disorganized rage, which is a form of global distress).
- 7) Rejecting anger is the type of anger that an individual feels he or she needs to “get over” or “get rid of”. Harboring such feelings of anger/resentment/hate/etc. is inherently unpleasant. This is not the case, however, for assertive-anger. An individual who is faced with feelings of anger that are well oriented toward the assertion of personal needs and rights often feels positively about his or her anger. In some sense assertive anger can be followed through to “completion” while rejecting anger tends to be more ongoing.

It is not uncommon for the client who expresses anger to eventually feel suddenly overwhelmed or unable to continue. This is best described as a collapse of the Self. In essence, this happens when clients are organized to fight but their initiative precipitously

Pascual-Leone & Greenberg, 2005 ©

35

turns into a flight response. Thus, the client collapses into fear and hopelessness and regresses toward “global distress”.

General description of content:

Expression of generic rejecting-anger is frequently elicited by being confronted with or imagining making contact with the offensive object – whether that be self-critical statements or some significant other, etc.

Interrogatory, rhetorical questions and accusations may characterize rejecting-anger if the client refers to a specific injury and directs reasonable accusations toward an (imaginary) offending other. Otherwise, raters should consider global distress as an alternative code. For example, “Why did you do X, Y & Z??” in a protesting tone is best represented as global distress; whereas “Did you ever for one minute take into consideration X??” in an accusing tone may very well be rejecting-anger.

Relating Rejecting Anger to the literature:

EFT theorists have referred to this as secondary anger on account of its reactivity regarding some concern that is not fully articulated (Greenberg, 2002). Many psychodynamic theorists, on the other hand, have referred to rejecting anger as a sense of entitlement or narcissistic rage. Whereas in the language of Short Term Dynamic Psychotherapy, which focuses explicitly on affective processes (as does EFT), this has been referred to as “murderous rage” (Davenloo, 1990) (although the use of that particular term may suggest more malignant rage than defensive aggression, to use Fromm’s, 1973, terminology).

In discussing attachment and separation, Bowlby (1997/1996) similarly identified two types of anger, one stemming from hope the other from despair. He referred to the “anger of despair” as desperate and coercive, a feeling state that becomes destructive both toward the self and the other. By definition, rejecting anger is experienced from the position of underdog or plaintiff, and in this sense it is an expression of desperation and an “anger of despair”. However, it is not always self destructive and in other instances Rejecting Anger is best captured by Fromm’s (1973) description of “defensive aggression”, an aggressive response to a general immediate threat.

. The combination of being both generic and somewhat adaptive is possible because Rejecting Anger is an immediate here-and-now response to an ill-defined threat. Of course, this adaptive role refers to normal circumstances and normal psychological/emotional functioning. The expression of rejecting anger as a structuralized facet of personality is described in several cluster B personality disorder. Authors such as Linehan (1993) and Korman, (2005) have discussed this as being part of personality structures of people with Borderline Personality Disorder and dysfunctionally angry individuals in particular. The emotion theory presented by Greenberg has referred to this type of deeply rooted and destructive emotion as primary maladaptive anger (Greenberg & Paivio, 1997; Greenberg, 2002).

Non-verbal expressions of anger and protest such as those described in this criteria were documented by Ekman and Friesen (1975) and have also been observed by Whelton (2000) in a psychotherapeutic setting.

Introductory note on “Negative Evaluation” and “Existential Need”

The following two codes (4 & 5) reflect a well-differentiated level of meaning and clear symbolization, rather than distinct and separate emotion states per se.

Occasionally a client may accomplish this by using a complex metaphor but it will always be highly personalized. Since these two codes are more reflective of how meaning is symbolized than some other codes, these events are often coded in the context of other emotion states. Usually this will occur near the climax of a state, when clients are making sense of and putting words to their experienced arousal.

As a heuristic for coding, if emotional arousal appears prior to a statement of negative evaluation or existential need then the appropriate emotion should be coded first (even if only briefly), followed by the statement. Otherwise if the statement occurs in the middle of some emotion state, then the state should be coded before the statement (and again after the statement if it is appropriate).

4. Negative Evaluation

Diagnostic definition:

Emotional tone

- A. The client clearly makes a statement (or endorses a therapist statement) of negative self-evaluation reflecting at least one of the following prototypes:
 - 1) “I am not lovable (i.e. unwanted, unable to love, defective...)”

Pascual-Leone & Greenberg, 2005 ©

38

- 2) "I am worthless (i.e. useless, incompetent, inadequate...)"
- 3) "I will be destroyed (i.e. fall apart, go crazy, die, be annihilated...)"
- 4) "I will be abandoned and unable to survive on my own"

Involvement

- B. The meaning state is currently activated.
- C. Presence of at least one (or both) of the following vocal qualities:
 - 1) The client has a "focused voice quality", which is described as turning attention inward with a concentrated use of energy and the quality of groping toward new meaning. This is characterized by:
 - Uneven pace,
 - Ragged, unexpected terminal contours,
 - Stop-and-go, unexpected pattern,
 - Accent is done with loudness or a drawl (rather than a pitch rise).
 - 2) "Emotional voice quality", which is disrupted or distorted as a result of overflowing feeling. This is characterized by:
 - Disruption of vocal pattern
(i.e. the voice may break, tremble, rise to a shriek, become very low),
 - Uneven pace,
 - Irregular accentuation pattern,
 - Unexpected terminal contours.

Meaning

D. In a short statement, the negative evaluation crystallizes the meaning behind a client's deep and enduring personal pain.

As a belief, it is:

- 1) Absolute and unqualified,
- 2) Internally attributed,
- 3) Stable in time.

E. The negative evaluation occurs in the context of some congruent emotional arousal (i.e. fear, shame, guilt...).

Conceptual definition:

It is common for the clear articulation of a negative evaluation to emerge as a statement that crystallizes in plain words the essential meaning of a client's emotional experience. Nevertheless, the emphasis of this code is not on the emotion but rather the distillation of meaningfulness. In the clearest examples, negative evaluations are stated as if they were simple "observations" and they reflect some belief about the client or the client's emotional experience.

This is a code that reflects a level of symbolic precision vis-à-vis the Self rather than a change in affective tone, per se. The negative evaluation has also been called a core negative belief and is the kernel of the presenting emotion. A negative evaluation does not denote an emotion per se. However, in using this code the rater should be confident that this is the crystallization of meaning related to the current negative

Pascual-Leone & Greenberg, 2005 ©

40

emotion. In this sense the negative evaluation is often an elaboration of a presenting fear or shame based emotion.

Examples:

Appropriate examples include:

- “If I get angry then I will fall apart”. (Emotion will destroy me)
- “I guess I just can’t handle it”. (I am worthless/I will be destroyed)
- I don’t have what it takes”. (I am worthless, incompetent)
- “I’m broken, defective”. (I am worthless)
- “I must have deserved to be ignored”. (I am not lovable)

The spirit of this last statement has appeared often enough to make it a prototypic embodiment of a negative evaluation.

Points of discrimination:

The articulation or even efforts to articulate and symbolize negative evaluations are usually extremely painful to the client. Given the noxiousness of symbolizing these negative evaluations regarding the Self, it is not uncommon for the client to experience negative emotion perhaps even before the code can be made.⁶

A negative evaluation usually is a statement made in first person (i.e. an “I” statement). In some instances, when the criticisms are very specific, a negative evaluation may also be expressed in second person if there is clear contact with the “self”, as during

⁶ It could be helpful for raters to be aware that soothing is usually very important here in allowing clients to tolerate distress just long enough to spell-out the meaning of their negative emotion. However, unless, it is a specific response to a specific and articulated need, self-soothing would not be coded.

Pascual-Leone & Greenberg, 2005 ©

41

an imaginary dialogue between parts of the self. Relatively benign statements, such as, “I’m too emotional, over reactive, hypersensitive, crying” are ambiguous in the degree to which they express negative judgments and could simply indicate plans or intention, i.e. “I would like to be less reactive.” Thus, coding a negative evaluation should be reserved for relatively harsh self-criticisms.

General description of content:

In case examples a negative evaluation is usually identified when the client makes some statements about specific and central self-criticism. Another scenario in which this code could be used is when the client gives concise autobiographical examples, which crystallizing the ultimate self-related “reason” for their negative emotion (i.e. “I was never very good at getting stuff done and that’s sad”). This code is not appropriate for other-related evaluations (i.e. “He doesn’t love me”).

Relating Negative Evaluation to the literature:

Negative evaluations have been referred to by Cognitive Behavioural Theorists as “core dysfunctional beliefs”, negative thoughts, or negative assumptions about the Self and one’s emotion. That tradition handles negative cognitions by actively engaging them and attempting to modify them through reason (Greenberger & Padesky, 1995). Doing so is considered to be the most central target of Cognitive Behavioural Therapy.

This type of negativity has also been described in psychoanalysis as the “Superego” (Freud, 1961). Similarly, some psychodynamic theorists have referred to this as the “expected response from other” in a core conflictual relationship theme (Luborsky

Pascual-Leone & Greenberg, 2005 ©

42

et al., 1994). In these approaches, therapists encourage the analysand/client to simply acknowledge that they harbor such negative evaluations and expectancies.

The humanist tradition of psychotherapy has also referred to negative evaluations by a number of names. In Client-centred therapy these are the “conditions of worth” that a person has assimilated (Rogers, 1961). In Gestalt therapy (Perls et al., 1951) and approaches influenced by Gestalt (i.e. Process-Experiential Therapy) harsh negative evaluations are referred to as the “self-critic”. In these humanist therapies clients are encouraged to expand their awareness of negative evaluations; an aim which is similar to that of the psychodynamic approach, although the methods differ. More process-directive approaches in the humanist tradition attempt to actually arouse and vivify the client’s experience of the self-critic (Greenberg, Rice, & Elliott, 1993; Greenberg & Paivio, 1997).

Negative evaluations are essentially consciously verbalized appraisals about one’s inability or inadequacy in the arenas of personal agency and/or communion. These two aspects of life are of most central importance to human existence. As such, a negative evaluation is an expression of impotency and/or alienation (Bakan, 1966). The criteria stating that a negative evaluation must be (1) absolute and unqualified, (2) internally attributed, and (3) stable in time, are three features of negative attribution styles that research has found to be characteristic of depression and anxiety (Weiner, 1985; Seligman, Abramson, Semmel, & von Baeyer, 1979).

5. Existential Need

Diagnostic definition:

Emotional tone

- A. The client explicitly makes a statement (or endorses a therapist statement) describing the need they have for healthy functioning – i.e. “I need X”. The statement may reflect a need for any one (or more) of the following:
- 1) recognition/affirmation
 - i.e. admiration, praise, respect, have accomplishments recognized
 - 2) approval/acceptance
 - i.e. to be liked, to be believed in
 - 3) affiliation/affection
 - i.e. love, tenderness, warmth, intimacy, friendship, belonging, cooperate, socialize
 - 4) support
 - i.e. help, protection, emotional support
 - 5) nurturance
 - i.e. ‘mothering’, soothing, validation, sympathy
 - 6) autonomy
 - i.e. independence, freedom, avoid feeling confined or restrained, resist influence or coercion
 - 7) inviolacy

Pascual-Leone & Greenberg, 2005 ©

44

- i.e. to preserve one's self respect, psychological distance, immunity from criticism
- 8) joy, beauty, or playfulness in life
- i.e. specific positive feelings in relation to the experience of life itself
- 9) A metaphorical image or autobiographical example that conveys the client's need for one of the above.

Involvement

- C. The meaning state is currently activated and in the context of some emotional arousal.
- D. The client has a "focused voice quality", which is described as turning attention inward with a concentrated use of energy and the quality of groping toward new meaning. This is characterized by:
- Uneven pace,
 - Ragged, unexpected terminal contours,
 - Stop-and-go, unexpected pattern,
 - Accent is done with loudness or a drawl (rather than a pitch rise).

Meaning

- E. The existential need is something enduringly essential to the client for healthy functioning and development. As a need, it is usually:
- Uncompromisable & straight forward,
 - Internally attributed,

- Stable in time.

F. The need is unmet, has not been sufficiently attained.

- It may be stated using past or present tense but should be a currently felt need.
- It is stated as an observation or discovery about the Self rather than with anger or as a demand on others.
- It emerges as an insight and/or as heralding acts of agency.

Conceptual definition:

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

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

Pascual-Leone & Greenberg, 2005 ©

46

that is the case, raters should be sure that the need is specific and well articulated before they code it as such.

Examples:

Some case examples of client statements regarding needs include:

- “I need to be worth it”. (I need love/value)
- “I have been waiting for the eyes for love.” (I need love, metaphorical image)
- “I need encouragement”. (I need love/support)
- “I want protection, support, ... ” (I need love/parenting relationship)
- “I felt like I was his adopted daughter, It was so nice.”
(I need support/parenting relationship)

As a helpful hint, observers should look for the words:

I need...

I want...

I wish...

I don't need...

I don't want...

...or equivalent.

Points of discrimination:

Phrases that begin with, “I want you to....” or “I need you to....” are usually not statements of an existential need. To satisfy this code the statement must be more grounded in the client's Self. Thus, the statement of a need will more likely begin with

Pascual-Leone & Greenberg, 2005 ©

47

turns of phrase like, “I want or need to feel...”, without reference to any other party on which the demand might be made. Need statements are not demands but rather self-observations, if you will, of what the organism requires to function in a healthy way.

Note that making plans or setting goals is not sufficient to be coded as a “need”. Occasionally, clients will make statements such as, “I want to be able to love myself”. Without a context that serves to buttress it, this is an ambiguous statement with respect to a “need”. In isolation it is unclear if the speaker is making a statement of what is essential and missing from his or her life (i.e. an existential need) or whether the speaker is beginning a list of goals, objectives, or mantras, which would not meet criteria for coding a need (i.e. “I want to be able to love myself, to take better care of myself, I need to work harder, I need to visit my mother more often,...”).

The expression of a need should be coded when it appears as a statement of self-discovery or self-observation. Specific and adaptive assertive-anger also will usually have a clear statement of need that is being affirmed. The distinction between the two codes can be found in the fact that assertive-anger is not only an expression of need but also of the client feeling entitled and deserving of having that need met. Thus, a statement of feeling entitled or deserving of the need may be better coded as Assertive-Anger. Generic demanding may be better coded as Rejecting Anger.

Relating Existential Need to the literature:

By their very nature, humanist psychotherapies highly value a client’s articulation of personal needs. The statement and significance of certain needs has been discussed at

Pascual-Leone & Greenberg, 2005 ©

48

great length in the theory and practice of Emotion Focused Therapy (Greenberg, 2002; Greenberg & Paivio, 1997; Greenberg, Rice & Elliott, 1993). Therapists in that and some other experiential approaches actively encourage and support clients to acknowledge and more importantly experience their needs more fully. Doing this is considered to be main target and catalyst of change in Emotion Focused Therapy.

The “need” is a term that was elaborated by Murray (1938) from a psychoanalytic approach. A need, as referred to by this category of meaning, is what some psychodynamic researchers have called the “wish” in a core conflictual relationship theme (Luborsky et al., 1994). Psychoanalytic and psychodynamic approaches direct their efforts at bringing a client’ s need or wish into consciousness.

Both experiential and the psychodynamic approaches agree that clients suffer from some unmet concern. Work by both Murray (1938), and Prager (1995), formed the basis for the classification of client needs in this coding system. Pedersen (1996) synthesized and elaborated their works for coding in this type of therapeutic context. The need for “joy” and “playfulness” has been contributed by the school of Gestalt therapy as part of an individual’s need for positive experiences vis-à-vis life (Perls et al., 1951). In essence, statements of existential needs are statements that address the overarching concerns of human agency and communion, described by Bakan (1966) as the core dynamic drives in human existence.

Cognitive Behavioural Therapy does not conceptualize the the expression or experience of an existential need as relevant to its approach. In their manual Greenberger

Pascual-Leone & Greenberg, 2005 ©

49

and Padesky (1995) have referred to the formulation of a more “balanced belief”, contrasting it against a presenting core negative belief. In this regard, it is apparent that cognitive and behavioural approaches have a categorically different conception of the healing process. Nonetheless, the nature of an expressed need as internally attributed and stable in time is consistent with cognitive attributional theories of motivation and emotion (Weiner, 1985).

6. Specific Self-Soothing

Diagnostic definition:

Emotional tone

- A. The presence of caring, tenderness, soothing, or nurturing. Perhaps in one (or more) of the following forms:
- 1) In an explicitly reflexive manner,
 - 2) Imagining nurturance/soothing,
 - 3) Attributed nurturing/soothing,
 - 4) Acknowledging existing resources and recalling current examples

Involvement

- B. The meaning state is currently activated. If arousal is present it is sufficiently regulated and is compatible with the process of self-soothing.
- C. Presence of at least one (or both) of the following vocal qualities:

- 1) “Emotional voice quality”, which is disrupted or distorted as a result of overflowing feeling. This is characterized by:
 - Disruption of vocal pattern
(i.e. the voice may break, tremble, rise to a shriek, become very low),
 - Uneven pace,
 - Irregular accentuation pattern,
 - Unexpected terminal contours.

- 2) “Focused voice quality”, which is described as turning attention inward with a concentrated use of energy and the quality of groping toward new meaning. This is characterized by:
 - Uneven pace,
 - Ragged, unexpected terminal contours,
 - Stop-and-go, unexpected pattern,
 - Accent is done with loudness or a drawl (rather than a pitch rise).

Meaning

- D. Attending to the unmet need is done with a positive self-evaluation (which could be either explicit or implicit). It is self-evident that this is adaptive and healthy for the client.

- E. The object being soothed is clearly the Self.

Conceptual definition:

This affective-meaning state is distinctly reflexive in its nature. Intimately tied to the existential need, in this state clients move to an agentic position and begin to meet their own expressed need. This may be done in a variety of ways but will be characterized by caring, tenderness with oneself, and the act of self-nurturing. If the client attributes the role of soothing to another person, place or thing through role-play or some other imaginative exercise, it is ultimately considered to be an act of the client unto him or herself.

Examples:

Clients might do this by:

- Using an explicitly reflexive manner;
 - Soothing or nurturance of “child self” by current “adult self”
 - Positive self-talk: i.e. “I know that I’m going to be alright”.
- Imagining nurturance/soothing;
 - “I can imagine being hugged or going to a safe place”
 - “I can imagine a better situation in the future”
 - “I know God’s love is always out there”.
- Attributed nurturing/soothing;
 - Offering words of soothing or nurturance toward oneself while role-playing the position of some significant other, (i.e. speaking from the other chair as mother, “I do care for you”).

- Imagining the apology/regret of some offending other in a way that is tantamount to imagining the other taking a nurturing stance.
- Acknowledging existing resources and remembering current autobiographical examples,
 - “My existing family/friends care for me and protect me now”
 - “My mother in law gives me what I needed. For example...”
 - “...My sister loves me, my husband brought flowers”.

Points of discrimination:

A need and a positive self-evaluation are events rather than states per se.

However, when there is a confident expression of positive self-evaluation and at the same time an organization toward actively attending to some unmet need, that is the state of self-soothing. Self-soothing should be only coded if there is an explicit effort to grant an explicit need.

Self-soothing can be understood as an implicit expression of self-assertion.

Although a state of self-assertion (elaborated below) is much more combative and anger-based both of these affective-meaning states are built upon a clear sense of some existential need and a positive self-evaluation. Note that if self-soothing represents a healthy way of being in the personal domain, self-assertion (or assertive anger, below) represents a similarly healthy way of being in the interpersonal domain (or when problems are couched interpersonally, as in dialogues).

Pascual-Leone & Greenberg, 2005 ©

53

Relating Self-Soothing to the literature:

Self-soothing is a concept that first emerged out of the literature on attachment (see Bowlby, 1997/1969). Kohut explicitly discusses “Self-soothing” as a specific client behaviour that demonstrates healthy maturation. He describes this as the healthy enactment of “mothering” vis-à-vis oneself in a manner adopted from prior caregivers (Kohut, 1977). Despite the contributions of Self Psychology, this reflexive state has been most highly valued and is perhaps most often referred to in humanist psychotherapies. In an experiential treatment manual Bierman (2003) explicitly refers to “Self-nurturing” as an auto-intervention that should be fostered when clients feel vulnerable.

Although it has not been extensively elaborated as a construct, the gist of this affective-meaning state has been referred to in various ways. The “focusing attitude” in many experiential therapies (Gendlin, 1981; Cornell, 1996) is a less explicitly active state but still has the same intentionality as self-soothing. Similarly, “compassion for the Self” (Nhat Hanh, 1976) reflects a certain disposition or preparedness for self-soothing but does not denote the explicit behavioural engagement that is required in this affective-meaning state. Likewise, Fromm’s (2000/1956) conception of “self-love” also suggests the self-soothing disposition.

In the cognitive and behavioural traditions to therapy, self-soothing has taken on different forms. The cognitive approach refers to collecting “evidence against” a core negative belief (Beck, J., 1995). And depending on its tone, this can be suitably understood as a rationally driven method by which an individual is lead to acknowledge

Pascual-Leone & Greenberg, 2005 ©

54

his or her existing resources. In that approach, more affectively laden forms of self-soothing occur only incidentally as part of skills training and positive self-talk. In a behavioural vein, Dialectical Behavioural Therapy explicitly treats self-soothing as a skills set that is discussed, taught, and deployed as one of the steps toward emotional regulation (Linehan & Schmidt, 1995). In an integrative fashion, Dialectical Behaviour Therapy has provided a practical operationalization of self-soothing for clients in the form of “self caring behaviours” (Korman & Bolger, 2000; Linehan, 1993b).

7. Specific & Adaptive Assertive-Anger

Diagnostic definition:

Emotional tone

- A. The presence of anger in one (or more) of the following:
- 1) Self-affirmation/assertion
 - (i.e. “I am OK”),
 - 2) Entitlement to an already stated existential need
 - (i.e. “I deserved to be protected, cared for”),
 - 3) Affirmation/assertion of ethical standards & rights
 - (i.e. “What you did was wrong”),
 - 4) Boundary setting or separation
 - (i.e. “I won’t allow it to happen anymore”).

Involvement

B. Presence of at least one (or both) of the following:

- 1) The experience is of moderate to high expressive arousal and can be rated as > 3 on the Emotional Arousal Scale (Warwar & Greenberg, 1999). Any arousal is sufficiently regulated and useful to the process of assertion.
 - 2) The client verbally reports his or her arousal, indicating that the emotional tone is activated.
- There is non-verbal behaviour that reflects active assertion in a considered and deliberate manner, which may include one (or more) of the following:
 - a) Head nodding,
 - b) loud voice,
 - c) body leaning forward,
 - d) assertive gestures (i.e. finger pointing, chopping, stop signal...),
 - e) steady gaze directed outward.

C. Presence of at least one (or both) of the following vocal qualities:

- 1) “Emotional voice quality”, which is disrupted or distorted as a result of overflowing feeling. This is characterized by:
 - Disruption of vocal pattern
(i.e. the voice may break, tremble, rise to a shriek, become very low),
 - Uneven pace,
 - Irregular accentuation pattern,

- Unexpected terminal contours.
- 2) “Focused voice quality”, which is described as turning attention inward with a concentrated use of energy and the quality of groping toward new meaning.

This is characterized by:

- Uneven pace,
- Ragged, unexpected terminal contours,
- Stop-and-go, unexpected pattern,
- Accent is done with loudness or a drawl (rather than a pitch rise).

Meaning

- D. The client is agentic and assumes a position of being both entitled and deserving of the need.
- The client takes the role of advocate or activist for him or herself.
 - The client seems to have a sense of equal footing against the offending object.
 - The client takes a reflective stance that allows anger to be active yet sufficiently regulated to be useful for self-assertion.
- E. The object of anger is clear and specific.
- It is clear to the observer what injustice or unfairness was done and by whom.
 - The assertion may be anchored in some specific autobiographical context.

Conceptual definition:

This category of affective-meaning is represented by the expression of anger, which is a clearly an empowered expression of the Self. The main thrust of this anger is

Pascual-Leone & Greenberg, 2005 ©

57

in its self-assertion, whether that be the assertion of personal boundaries or of some stated need. The client is strong, clear, well-grounded, and speaks with a sense of growing confidence. Often this anger is expressed from an “advocate” or “activist” position such that clients seem to speak and confront their objects of anger like opponents of potentially equal force. Ultimately, assertive-anger defends some Positive Evaluation (i.e. “I am lovable”) and to the extent that it does this it is self-affirming. This type of anger is often founded upon a new, positive evaluation of the Self. The positive evaluation, however, is usually tacit until some point where the anger becomes sufficiently activated.

On the other hand, a need is usually explicit in this form of anger (the client is battling for something specific) and it is also often anchored in some specific autobiographical context. One might describe the assertion of need and/or Self as driven by a sense of ethical righteousness. When clients express this type of state it entails moderate to high arousal and high meaningfulness. It represents a healthy state rich in specific, personally relevant meaning and organizes the client on a productive and ultimately positive trajectory.

Examples:

Typical expressions using this anger are:

- “I cannot accept this”. (Ethical righteousness & separation)
- “You are not a valid judge of me”.(Ethical righteousness & separation)
- “I have value!” (Self-assertion)
- “It’s not OK, because I need more”. (Assertion of need)

Pascual-Leone & Greenberg, 2005 ©

58

- “I’m angry I have been mistreated”. (Ethical righteousness)

Some case examples are given below:

- “We are not the same”. (Boundary setting/ Self-assertion)
- “I am finished with you”. (Boundary setting/ Self-assertion)
- “I can love, I am loveable”. (Self-affirmation/need)
- “I have been mistreated and abused”. (Ethical righteousness)
- “I was not put here to be mistreated. I have to be whom I am”.
- “I resent being stepped on when I’m trying to move forward”.
- “How dare you! I feel gritted teeth. Stay away from me and mine”.

(Ethical righteousness/assertion of Self)

Points of discrimination:

Some more aggressive statements, for example, “Give me a break! That’s stupid. You don’t even know me”, are bordering on “rejecting-anger”. However, given the right context this could be a statement representing, ‘you are not a valid judge of me’ – which would be “self-assertion”. The distinction between these two codes is made based on supporting statements and contextual evidence given that no code should ever be made based on a single statement.

In this project it could be useful for raters to note that EFT therapists often attempt to encourage and facilitate the arousal of this affective-meaning state. Similarly, self-validation is also a common part of this emotional process as clients try to accept support from their therapist and try to buttress their own assertion. Albeit healthy, the

Pascual-Leone & Greenberg, 2005 ©

59

effort to assert oneself against some negative evaluation of the self or offending other/circumstance is usually very difficult and sometimes frightening for the client. One critical difference between the development of anger and fear is individual's appraisal of their ability to cope with the negative stimulus. Given that such appraisals are ongoing, it is not uncommon for the client's self-assertion to collapse into negative emotion (either global distress or specific maladaptive fear/shame). This is literally a client's change of trajectory from an organization for "fight" to some organization for "flight". Validation and/or soothing can play a part in the prevention of such collapses.

Relating Assertive Anger to the literature:

This self-affirming category represents "primary adaptive anger" in the language of Emotion Focused Therapy. Therapists using that approach aim at actively engaging and elaborating this healthy type of anger in the hopes of having it propel the client forward into a healthier, more active, and more resolved state of being. Whelton (2000) referred to this affective-meaning state as self-resilience or assertion when discussing client behaviours within a therapeutic context. Gestalt therapists introduced the notion of "assertiveness" and assertiveness training in psychotherapy as a healthy form of anger to be allowed and made use of (Perls, et al., 1951; Perls, 1969).

Comparably, psychodynamic theorists have referred to this type of client activity as a demonstration of "good ego strength" or a "healthy sense of entitlement". This is contrasted with the more usual sense of entitlement, which by default is considered to have a narcissistic and unhealthy quality (Greenberg & Mitchell, 1983). Even so,

Pascual-Leone & Greenberg, 2005 ©

60

psychodynamic and Cognitive Behavioural theorists and therapists tend to have strong reservations about arousing the expression of anger and consequentially have not developed or used refined distinctions among client's experiences of anger.

Assertive-anger is a construct that has not proved relevant at all to Cognitive Behavioural Therapy. This is probably on account of the fact that, whether adaptive or not, the experience of anger is a generally a negative one for clients. Nonetheless, if collecting rational "evidence against" a core negative belief (Beck, J., 1995) is imbued with a sense of deserving and agency then it might meet criteria for assertive-anger.

Assertive Anger is well described by Bowlby's (1997/1996) "anger of hope", which may be found in the context of attachment. The "anger of hope" is an emotion that aims to rectify an undesirable relationship situation. Anger is the impetus to repair close relationships when the other is inaccessible. In both the contexts of attachment as well as personal agency (i.e. survival and competence) Assertive Anger, like the "anger of hope" in relationships, engages the person in adaptive problem solving and the expression of non-hostile anger. Fromm (1973) aptly described this as "benign aggression" – a beneficial expression of anger that promotes well-being.

The notion that individuals literally fight for the assertion of their rights from a position of anger is consistent with rights theory (Ignatieff, 2000). Social actions and assertions of the self by an individual are built upon an emerging positive self-evaluation, which then takes its momentum from the emotional experience of anger. Thus, specific

Pascual-Leone & Greenberg, 2005 ©

61

and adaptive self-assertion is an anger-based experience whether it be personal or socio-political (Ignatieff, 2000).

8. Specific Adaptive Grief/Hurt

Diagnostic definition:

Emotional tone

A. The presence of one (or more) of the following:

- 1) Sadness over a loss
 - i.e. loss of person, of innocence, of a thing one never had, loss of a missed opportunity, etc.
 - i.e. regret, remorse...
- 2) Recognizing one's woundedness,
 - i.e. reporting and reflecting on past emotional/physical damage.
- 3) Specific and idiosyncratically elaborated pain,
- 4) Realistic hopelessness over regaining lost object (but not out of despair).
 - The above emotional tones must be without blaming, self-pity, or resignation.

Involvement

B. Presence of at least one (or both) of the following:

- 1) The experience is of high expressive arousal and is rated as > 4 on the Emotional Arousal Scale (Warwar & Greenberg, 1999). Any arousal is

sufficiently regulated and useful to the process of grief or recognizing one's woundedness.

- 2) The client verbally reports his or her arousal, indicating that the emotional tone is activated.

C. Presence of at least one (or both) of the following vocal qualities:

- 1) "Emotional voice quality", which is disrupted or distorted as a result of overflowing feeling. This is characterized by:
 - Disruption of vocal pattern
(i.e. the voice may break, tremble, rise to a shriek, become very low),
 - Uneven pace,
 - Irregular accentuation pattern,
 - Unexpected terminal contours.
- 2) "Focused voice quality", which is described as turning attention inward with a concentrated use of energy and the quality of groping toward new meaning. This is characterized by:
 - Uneven pace,
 - Ragged, unexpected terminal contours,
 - Stop-and-go, unexpected pattern,
 - Accent is done with loudness or a drawl (rather than a pitch rise).

Meaning

D. The client takes a reflective stance that allows Grief/hurt to be active yet sufficiently regulated to be useful for the healing process. This means the emotion is self-oriented, personalized and integrative. I.e.:

- Hurt: The client takes the position of one who is recognizing and describing the impact of a deep wound. The client acknowledges that wound as a personal loss.
- Grief: The client takes the position of one who is grieving or saying “good-bye” to bad memories, good memories, hopes and dreams, and finally “good-bye” to either the relationship as a whole or to a part of one’s life.

E. The object of grief/hurt is clear and specific:

- It is clear to the observer what object has been lost and/or what is the source of hurt – (i.e. the loss of X relationship, i.e. the hurt from being neglected in the manner of X).
- The grief/hurt may be anchored in some specific autobiographical context – (i.e. “This is what happened...” or “When I was younger, this is what it was like...”).

Conceptual definition:

This category of emotion is imbued with very specific and often profound meaning that acknowledges the genuine sadness of a loss or injury. Reporting past emotional/physical damage while being in an aroused state especially if it is done with a

Pascual-Leone & Greenberg, 2005 ©

64

sense of self observation or reflection, can be a very new and insightful experience.

Although grief is unpleasant and usually entails some form of withdrawal, this type of sadness is described as adaptive because of its well-grounded, underlying tone of realism and acceptance of things as they are. This allows for one to move on. Note that grief is a healthy way of experiencing loss in the personal domain, while hurt similarly represents an adaptive way of experiencing injury in the interpersonal domain (or when problems are couched interpersonally). Both of these feelings are considered to represent the same broader affective-meaning state. Adaptive grief or hurt often flow from some sort of implied positive evaluation of Self, i.e. "I am lovable... but nevertheless, I have lost".

This affective-meaning state will usually involve a discussion of needs although, at this point, the reference to needs will be in the spirit of, "what I missed and will never have again". In other words, this state of grief or hurt will essentially describe a process of mourning or saying "good-bye" to the bad memories, the good memories, the hopes, and dreams and finally to a part of one's life. Alternatively, the state may entail recognizing and describing the impact of a deep emotional wound, which is acknowledged as a personal loss.

When clients express this state it is with moderate to high arousal and with high meaningfulness. Given its adaptiveness this represents a healthy state rich in personally relevant meaning and organizes the client on a productive trajectory of "letting go".

Examples:

Some case examples of specific and adaptive grief/hurt follow:

Pascual-Leone & Greenberg, 2005 ©

65

- “I’ll never know who I could have been”. (Grief)
- “I would have liked to have had a mother who cared for me”. (Grief)
- “You have made life very difficult for me”. (Sadness/regret)
- “My Sister and parents have no intention of coming to visit and that’s sad”.
(Sadness/describe loss)
- “Until I moved out I didn’t realize how uncared for I was. I hadn’t noticed the
abuse I had to endure, until much later when things were better”.
(Recognizing one’s hurt)
- “I’m sorry you are wasting your life, and father’s and sister’s lives, but I will
not let you waste mine”. (Sadness/describe loss)

Note that this last example is bordering on angry self-assertion; therefore this coding might be swayed by the emotional context and depending on the angry vs. sad tone.

Points of discrimination:

The difference between “specific adaptive grief/hurt” vs. “global distress” is shown, for example, in mourning the loss of a loved one vs. the helplessness and vague despair of being without that loved one. Similarly, both blaming the other and self-pity are indicative of global distress rather than grief/hurt. Raters must also be careful to discriminate between the acceptance of hurt/loss vs. resignation, the latter is a rendition of hopelessness and therefore should be categorized as “global distress”.

When a client talks about how much he or she has suffered the observer must make a judgment call: Is the elaboration a broad, sweeping and generalizing complaint?

Pascual-Leone & Greenberg, 2005 ©

66

Is it in a whining tone? (If so, these suggest global distress). -- Or is the client making a specific observation regarding his or her Self? The latter is grief/hurt in the form of “recognizing one’s hurt” and “acknowledging a past wound”. Thus, if a statement about how bad life was is specific and from a position of, “oh, I’m understanding it better now ... the nature of my suffering is clearer now” – that is indicative of grief/hurt.

The degree to which an individual assesses him or herself as “damaged” is also a discriminating criterion for coding grief/hurt. If an individual essentially states, “I’m so badly damaged, I can’t function”, the appraisal is that he or she is broadly and permanently damaged. The grave and enduring nature of this statement suggests it is an expression of fear/shame and given its incisiveness would likely be coded as a negative evaluation. In contrast, if an individual states, “Although I’ve been very badly damaged, I can function”, the appraisal is that he or she had been locally rather than totally damaged, as it were. Acknowledging one’s wounds or losses while appraising them as at least somewhat repairable is indicative of grief/hurt. Describing oneself as unsalvageable or hopeless is not.

The counterpoints of grief and hurt are self-soothing and self-assertion, such that depending on the presenting concern, grief acts as the complement to self-soothing and hurt often serves as the complement to assertive-anger. In this coding system, the two feelings of grief and hurt have been collapsed together into a single category/ In contrast, self-soothing and assertive-anger have been preserved as independent classifications in the coding. The reason for this is that hurt and grief are believed to be experientially

Pascual-Leone & Greenberg, 2005 ©

67

much closer to one another than self-soothing and assertive anger. Even so, the natures of adaptive grief/hurt vs. assertive-anger/self-soothing is such that both sets of emotions entail highly personalized and complementary meaning constructions and as such are healthy trajectories of development.

In rating affective-meaning states the consequence of this is that the two types of affective-meaning categories (grief/hurt vs. self-soothing and assertive-anger) form an experiential couplet and it is not uncommon for clients to pass back and forth between the two, while remaining on a highly meaningful level. This must be taken into consideration, as it will assist raters who are attending to the variation of emotionally aroused segments of video.

Relating Grief/Hurt to the literature:

Theorists in Emotion Focused Therapy have most often referred to this affective-meaning state as “primary adaptive sadness” (Greenberg, 2002; Greenberg & Paivio, 1997). On some other occasions it has also been referred to as a type of “primary hurt” (Greenberg & Bolger, 2001; Bolger, 1999). Emotion Focused Therapists actively engage and facilitate the experience of these special types of sadness. The aim therein is to have clients recognize and symbolize the most poignant source of their hurt or grief so that they can “complete” it, as it were. In this approach to therapy, feeling specific hurt and grief more “fully” allows clients to “let go” and move forward to a healthier, more active, and more resolved state of being. Other experiential therapists, such as Bierman (2003), have developed the expression of grief into a formal treatment intervention. In this

Pascual-Leone & Greenberg, 2005 ©

68

structured task clients are encouraged to literally, “say good-bye”, to the good things and bad things related to some aspect of their lives ‘that will never come again’, and say good bye to any previously anticipated ‘hopes and dreams’ that will never happen.

Taking an experiential-dynamic approach, Fosha (2000) has also referred to certain grief experiences as being part of what she calls the “healing affects”. In her approach, which is a variant of Short-Term Dynamic Psychotherapy, this state is also to be elaborated and fully experienced for positive therapeutic results.

The notion of a healthy and adaptive grief/hurt state is not entirely new. The unique meaning captured by this type of reflexive sadness is akin to the Buddhist notion of, “seeing oneself with the eyes of compassion” (Naht Hanh, 1976). The specificity and reflexivity of this experience is essential and is what sets this type of state apart from the simplistic experience of global distress and catharsis, in the sense of emotional-purging (as described by, i.e. Janov, 1970, 1991, or Stone, 1995).

9. Relief

Diagnostic definition:

Emotional tone

A. The presence of one (or more) of the following:

1) An experience clearly labelled by either client or therapist as any of the following:

a) Feeling better,

Pascual-Leone & Greenberg, 2005 ©

69

- b) Feeling lighter,
- c) Hopeful,
- d) Positive,
- e) A small sense of accomplishment...

2) The client feels a “bodily shift”

- i.e. less tense, can breath more easily, feels less choked up...

Involvement

B. The meaning state is currently activated. If arousal is present it is sufficiently regulated and is compatible with relief.

- There is non-verbal behaviour reflecting a slightly positive state, which may include one (or more) of the following:

- a) Crying “tears of self-recognition”,
- b) Deliberate sighing often with an open mouth or with voice,
- c) Smiling,
- d) Nodding,
- e) Making eye contact..

C. Presence of a “focused voice quality”, which is described as turning attention inward with a concentrated use of energy and the quality of groping toward new meaning. This is characterized by:

- Uneven pace,
- Ragged, unexpected terminal contours,

Pascual-Leone & Greenberg, 2005 ©

70

- Stop-and-go, unexpected pattern,
- Accent is done with loudness or a drawl (rather than a pitch rise).

Meaning

- D. The client has articulated some aspect of personal meaning and now feels oriented toward adaptive self-development. The client's sense of relief is of "finally, being on the right track".
- E. The client is finished working on the issue for the moment. There is no requirement for a high degree of specificity in meaning. The state of relief is a "pause" or "resting place" between the difficult thoughts and feelings involved in a change process.
- Note: The issue is usually not fully resolved and it is not being avoided.

Conceptual definition:

The affective-meaning state of relief is one of the few states in this coding system that denotes "feeling good". As they pause to reflect on the process in which they are immersed clients sometimes feel the ramifications of what they have just expressed or realized on a bodily level. This creates a reduction in tension or a sense of relief. In this sense the client (deliberately or not) takes a moment and acknowledges his or her efforts in the process. The client has made some step in emotional processing and is able to recognize the progress on some level. The experience is a sense of relief, hopefulness, or accomplishment in having produced a shift.

Given that positive experiences tend to have an inherently lower degree of specificity in meaning than negative experiences, sometimes it is difficult to determine precisely what is relieving to a client. Nonetheless, based on the task analytic research, there is some reason to believe that there are at least two levels of “Relief” and it may be helpful for raters to be aware of them. The first level of relief (#1) is related to an expressive event, exemplified by the statement, “I feel better now that I’ve symbolized and captured my distressing experience in words”. The second level of relief (#2) is related to a micro-change event. Relief #2 is exemplified by the statement, “I feel better about the whole situation and although it’s not resolved I’m relieved that it had actually changed a bit”.

Although this is an important affective-meaning state for describing the emotional processing of clients, in some ways it is epiphenomenal to the actual meaning-making, expression, or change it refers to. It is believed that relief may not be explicitly required for emotional processing. However, it may provide a useful function in meaning consolidation, emotional-regulation, and as an opportunity for interpersonal bonding.

Examples:

Some case examples of relief follow:

- “I feel like I can breath again”
- “I feel a bit better, it feels good having said that”
- “I don’t know why I’m crying, it’s good to get that off my chest”
- “It’s like a big burden is lifting off of me”

- “I’m glad to know that I’m finally doing something”

Points of discrimination:

The “Relief” code was developed later in the development of this classification system. Initially, this positive state was not being coded at all and was a source of confusion for raters. By default raters were obliged to note this state as being either “uncodable” or a “mixture” of other available codes. This did not occur with a very high frequency but occurred often enough the relief code was developed from a homogeneous set of states that had hereto been unidentified. Identifying such recurrent states reduces the likelihood of their being confused with other more common affective-meaning states that occur in the session.

The two affective-meaning states that are most similar to relief are self-soothing and the state of acceptance and agency (see code #10). Although self-soothing at times is a suitable code for when an individual feels good, the good feelings must be functionally directed toward meeting some need. That is not the case for relief, which is a “good feeling” with no functional intention. Acceptance and agency (below), otherwise known as resolution, should be coded when content appears to be resolved. Relief should be coded when content is clearly not yet resolved but is still progress. In this way, Relief is a state that refers to “feeling better” in light of any progress that is being made.

Relating Relief to the literature:

As an affective-meaning state relief has not been addressed in much detail by the literature. In part, this is because it is not a “problem state” and as such is not often

Pascual-Leone & Greenberg, 2005 ©

73

targeted by psychotherapy therapists and researchers. Nonetheless, Gendlin (1964, 1981, 1996) has referred extensively to the concept of a “felt shift” as a small moment-by-moment outcome, some of which are positive experiences of relief. He has referred to the “tears of self-recognition” as a form of positive experience that can follow a felt shift. Following in the experiential school, Rennie (1998) has discussed the role of reflection upon an ongoing emotional experience in perpetuating the development of that same experience (also see Greenberg, 2002). Relief as a pause for reflection on one’s progress, which is in turn experienced in a positive way, is captured but the work of these experiential theorists.

Fosha (2001) has also made special note of the role of positive affective experiences and good feelings, such as the feeling of relief, in therapeutic change. Like experiential theorists, she has also given attention to “the experience of the experience”, indicating that although the transforming power of affect may be painful the meta-experience of that transformation may be a positive one (Fosha, 2000).

10. Acceptance & Agency

Diagnostic definition:

Emotional tone

A. The presence of one (or more) or the following:

- 1) Letting go or moving on,
- 2) Feeling, comfort, calm or good,

- 3) A goal to carrying positive feeling forward into the future or to tell someone,
- 4) Recognition of positive as well as negative aspects involved in change,
- 5) Feeling stronger when coping with the original concern,
- 6) Pride-assertiveness.

Involvement

- B. One notes a dissipation of arousal. The experience is of low expressive arousal and can be rated as < 3 on the Emotional Arousal Scale (Warwar & Greenberg, 1999).
- C. “Focused voice quality”, which is described as turning attention inward with a concentrated use of energy and the quality of groping toward new meaning. This is characterized by:
 - Uneven pace,
 - Ragged, unexpected terminal contours,
 - Stop-and-go, unexpected pattern,
 - Accent is done with loudness or a drawl (rather than a pitch rise).

Meaning

- D. The presence of “new meaning”. Defined by any one (or more) of the following:
 - 1) Broadening appreciation of oneself and surrounding circumstances,
 - 2) The consideration of somewhat new, alternative perspectives,
 - 3) Sense of greater clarity,
 - 4) Being the owner of self worth.

E. The presence of a “novel feeling”. Defined by any one (or more) of the following:

- 1) Expression in a clearly integrative and affirmative manner,
- 2) No longer feeling disoriented,
- 3) Having some plan of action.

Conceptual definition:

This is the complete resolution of distress in all its varieties. In other words, there are little or no lingering feelings of global distress, fear, shame, anger, or grief. This affective-meaning state is characterized by high meaningfulness and low arousal. The affective-meaning state of “acceptance and agency” has three salient features. They are the dissipation of arousal, the emergence of a novel feeling and the creation of new meaning (as detailed in the criteria, above).

By definition, a state of acceptance and agency usually has a broad and global focus. Unlike the other adaptive states listed, which are highly specific in their meaning, a resolution state like acceptance and agency is relatively global. Of course, unlike global distress it can be positive and the new general meanings and feelings it engenders are often projected into the future.

Examples:

Clients may describe an experience of Acceptance & Agency by:

- Using positive feelings,
 - “I feel warm and secure.”
 - “I feel at peace with this”.

- Carrying the positive forward,
 - “I liked feeling like that it felt good. Somehow I think I’m going to start feeling it a lot more”.
 - “I’m going to try to work on positive images of you, mother, and try not focus in on your suicide.”
 - “I’m going to tell my wife about this. I don’t know if she will understand but...”
- Taking the positive with the negative:
 - “It does hurt but I feel OK about it. I feel stronger about letting it go. I can get on.”
 - “This part of my life has a bitter-sweet feeling to it.”
- Feeling stronger:
 - “I think I could handle that now”.

Points of discrimination:

Although the client often develops a sense of greater clarity as part of the Acceptance & Agency state, it is often not necessarily an easy affective state to negotiate. Current forgiveness and acceptance may also be signs of Acceptance & Agency. Even so, raters must heed discussion of such topics with a grain of skepticism. One must not assume that when a client refers to “forgiveness” or “acceptance” it necessarily involves letting go, per se. As it happens, clients often have their own understanding of what they

Pascual-Leone & Greenberg, 2005 ©

77

mean when they use these words.

Relating Acceptance & Agency to the literature:

Greenberg, Rice, and Elliott (1993) introduced the notion of a resolution state regarding certain therapy tasks and goals. Work by Pedersen (1996) has verified and elaborated a model of the resolution process regarding “unfinished business”. Although the construct is a universal one, describing this affective-meaning state is an attempt to capture the “finished”, healthy state using criteria taken from systematic observation. In the Buddhist tradition, this affective-meaning state has been described as a mindful and authentic acceptance of the Self and its circumstances (Nhat Hanh, 1976).

Introductory note to “Mixed/Uncodable” and “End”

The following two codes (11 & 12) are distinct from all other codes in that they are not intended to code particular affective-meaning states. These two codes are included in the classification system because of their structural function in coding. If there is a change in the type of affect and meaning a client is experiencing that cannot be adequately represented using the other 10 codes one of these two codes will be used. For that reason these final two codes in the classification system do not follow the same set of criteria as the affective-meaning states (i.e. Emotional tone, Involvement, Meanings...).

11. Mixed/Uncodable

Diagnostic definition:

A. The presence of some change in state that is different from the preceding state but is not accounted for by any other code.

For example, as in any one of the following:

- 1) There is not sufficient information/disclosure in the video to make a code.
- 2) There are no two contiguous statements that could coherently represent the client's experience.
- 3) There are potential codes for the sequence but they cannot be made with any degree of confidence.

B. It is clear some code must be made for the sake of continuity.

C. Note: When this code is used, any potential codes should be listed in parentheses.

- When two codes seem emergent but are not sufficiently strong each in their own right one might code:
 - I.e. "Mixed/Uncodable: (Self-Soothing/Relief)".

Conceptual definition:

When categories cannot be separated with confidence by the rater, the code of "Mixed/Uncodable" must be used. This code will be useful for the purposes of taxonomy and reliability. Obviously, specific codes are more useful than the code "Mixed/Uncodable". However, it is preferable to the omission of phenomena (when the

Pascual-Leone & Greenberg, 2005 ©

79

rater is relatively confident that some code is required) and also much more preferable to any code that would otherwise be made with poor confidence.

General description of content:

The two most frequent scenarios for this code are:

- The client's line of process-development gets interrupted or is cut short before the rater has a clear sense of which category coding may have been most appropriate. Even so, the rater is relatively certain that the event in question does merit a code of some sort.
- A client uses therapist-fed statements for several moments but seems to neither endorse nor reject them, thus blending and obscuring the actual affective-meaning process.

Relating Mixed/Uncodable to the literature:

This category is a standard category in continuous comprehensive coding systems used in ethology (Bakeman & Gottman, 1986; Martin & Bateson, 1986). It is used to prevent raters from being obliged to code phenomena with low confidence in their ratings (for whatever reason) or to prevent forced coding of phenomena that do not fit any of the available categories. If a large number of Mixed/Uncodable codes are made in a data set the phenomena they refer to can be examined for patterns.

Patterns may indicate coding confusions. Alternatively, if there is a coherent cluster of phenomena that have hereto been mixed or uncodable, this could yield the identification of another affective-meaning state not yet included in the existing

Pascual-Leone & Greenberg, 2005 ©

80

classification system. The state of Relief (code #9) described above was identified and described through this method. Since this classification is intended for continuous coding, from the perspective of ratings there cannot be any missing data. However, when data is deemed uncodable will likely acts as missing data from the perspective of most analyses. For these reasons, research of all kinds that makes use of observational methods requires such a code in order for continuous rating to be valid. This type of code is also frequently used to insulate rating systems against inflated error in reliability.

12. End Code

Diagnostic definition:

- A. A dramatic drop in emotional arousal. The experience is of low expressive arousal and can be rated as < 3 on the Emotional Arousal Scale (Warwar & Greenberg, 1999).
- B. A content change in conversation through one of the following:
 - 1) A change of topic, (which is not emotionally evocative).
 - 2) A change to a different, less emotional level of analysis.

Case examples include:

- a) Psycho-educational discussions initiated by the therapist,
- b) Unfocused intellectualization by the client,
- c) Humour diverts and ends a state of arousal,
- d) The therapist begins to end the session.

Pascual-Leone & Greenberg, 2005 ©

81

3) The client remains silent (and not visibly aroused for two whole minutes).

C. Criteria A and B are sustained for a period of at least two minutes.

Conceptual definition:

The classification system of affective meaning states is designed to code emotionally aroused streams of experience. When the client's experience is no longer regarding emotionally involved material the coding system ceases to be appropriate. The end of a segment is delineated with an End Code.

Points of discrimination:

The segment may include some subsequent moments of discussion if they are immediate commentaries on the current emotional experiences. Note that either therapist or the client may initiate shifts in the content or level of discourse that marks the ends of a segment (assuming the other person in the dyad does not resist the change in content). Note that occasionally (but not necessarily) a change of task entails a shift in topic and/or analysis. An example of this is when the therapist initiates an intervention in order to help the client find a focus or to vivify the client's emotion. Thus, a change in task may also indicate the end of a segment assuming arousal is low.

Naturally, a change in topic marks the end of a segment if it is not emotionally linked. Similarly, two minutes of silence is considered to be enough to suggest the end of an emotion segment or at least that there is no longer direct continuity to the state that follows.

Pascual-Leone & Greenberg, 2005 ©

82

Relating End Code to the literature:

This category is a standard category in continuous comprehensive coding systems used in the observation of behaviour (Bakeman & Gottman, 1986; Martin & Bateson, 1986).

Pascual-Leone & Greenberg, 2005 ©

83

Appendix:

Additional resources for coding and reliability

Figure 1:
Coding criteria at a glance

		Global Distress	Fear & Shame	Rejecting Anger
<i>Emotion</i>	A. <i>Emotion/Action</i>	Vague, whining, hopeless, pain, self-pity, irritable, confusion	withdraw/ close down: fear, shame, lonely, empty	distance/ destroy: frustration, hate, disgust
<i>Involvement</i>	B. <i>Arousal</i> C. <i>Voice</i>	high, >4 emotional; focused	emotional; focused	high, >4 emotional; external
<i>Meaning</i>	D. <i>Stance</i> E. <i>Specificity</i>	non-agentic, no direction unknown, avoid, minimal	deep & enduring pain clear & specific	protector stress wrongdoing not Self
		Negative Evaluation		Need
<i>Emotion</i>	A. <i>Emotion/Action</i>	"I am... unlovable/worthless/ ...abandoned/destroyed"		"I need... recognition/support/ approval/affection/autonomy..."
<i>Involvement</i>	B. <i>Arousal</i> C. <i>Voice</i>	emotional; focused		focused
<i>Meaning</i>	D. <i>Stance</i> E. <i>Specificity</i>	absolute, internally attrib., stable		simple, internally attrib., stable need is unmet, observation
		Self-Soothing	Assertive Anger	Hurt/Grief
<i>Emotion</i>	A. <i>Emotion/Action</i>	caring/tenderness/nurturing reflexive, imaginary, attributed	Anger: self/rights -affirmation entitlement, boundary setting	Hurt: recognizing one's hurt Grief: sadness over loss
<i>Involvement</i>	B. <i>Arousal</i> C. <i>Voice</i>	emotional; focused	moderate-high, >3 emotional; focused	high, >4 emotional; focused
<i>Meaning</i>	D. <i>Stance</i> E. <i>Specificity</i>	adaptive & healthy action refers to Self	agentive, entitlement position clear & specific	wound Impact/Say goodbye clear & specific

con't

	Mixed/Uncodable	End Coding
A.	Presence of emotional state <ul style="list-style-type: none"> • not sufficient info for id • no 2 coherent statements • potential codes, w no certainty 	Absence of emotional state <ul style="list-style-type: none"> • drop in arousal, and evocativeness
B.	A code must be made for continuity	<ul style="list-style-type: none"> • change in topic, not evocative OR
C.	List potential codes	<ul style="list-style-type: none"> • change in level of analysis, not evocative

- I.e.
- o Process interrupted,
 - o Blending states.

- I.e.
- o Psycho-educational discussions,
 - o Unfocused intellectualization,
 - o Humour dissipates a state of high arousal,
 - o therapist begins to end the session.

Start: →

Code:	GD								
Note:	Hurt, helpless								

Note: codes will be easiest recorded in a vertical fashion, so that quotations can be given as notes etc.

Reliability

Aligning CAMS Ratings for Reliability

Following is a detailed description of the rules by which independent ratings were aligned for reliability purposes in the absence of inherently fixed anchors. This procedure protocol also identifies the different sources of error or agreement in reliability. Aspects of this alignment process are illustrated in figure 2. The two independent raters are referred to as “A” and “B”. There are four rules in this procedure:

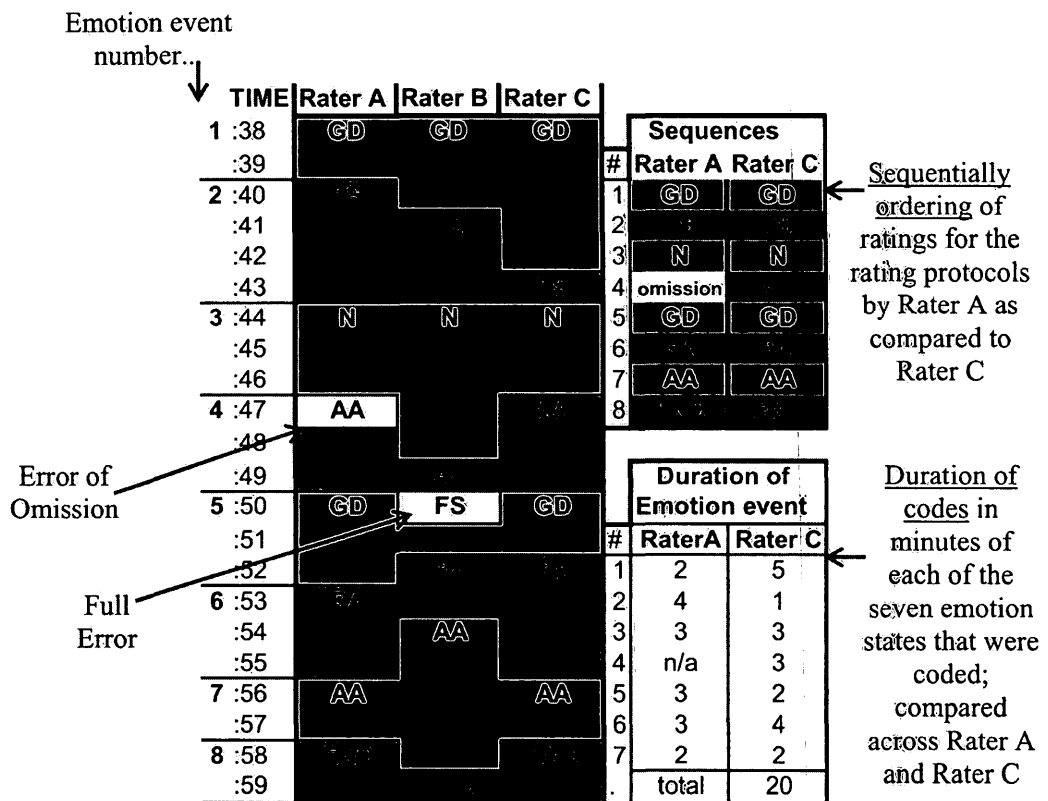
1. Rater A and rater B’s codes are matched according to sequence, which is measured in 30 second intervals.
 - a. A and B are matched in time on the marker code (Global Distress), which they make, confirming the initial event selection for Global Distress.
 - b. If they agree on the subsequently ordered codes then those codes are all counted as agreements.
2. There are three types of errors (see figure 2)
 - a. If a code is missing by rater A in relation to B it is an error of omission.
 - b. If a code is superfluously made by rater A in relation to B it is an error of commission.
 - Note that omissions and commissions are essentially the same error depending on who is the primary rater (i.e. depending on the perspective of A vs. B). For this reason I will simply refer to both of these as error of omission.

- c. If A and B each have a commission/omission error in the same sequential order relative to one another this is considered to be a full (pure) error. A full error is when A and B have coded the same sequentially occurring event in different ways. In other words, the raters disagree on the event in question (rather than it having been overlooked or overcoded, which is omission or commission, respectively). This type of pure error is best examined using a confusion matrix (an example follows, see figure 4).
- Note that if there is agreement subsequent to an error of omission then one of the sequential ratings lacks a “placeholder” and the two ratings are misaligned (even though they may demonstrate some accordance). Thus, any codes that match following an omission must be put into question until the ratings can be re-aligned. The tools used to reinitiate the alignment of codes are the matching time rule and the rationalist analysis of continuity (the next two rules).
3. Aligning rating of A and B is always done within the constraints of a matching time rule. There must be a minimum of one minute overlap between A and B’s codes for one to assume that the two raters are coding the same event. This rule is especially useful following an omission of one rater’s codes relative to the other’s codes, and when the sequential order of coded events is lost. However, this rule is also used as a guiding principle to all code alignment.

4. Moreover, the continuity of codes is also being checked using a rational analysis of continuity. This is possible because some affective-meaning codes are more likely to be confounded than others. Primary examples of this are (i) Negative Evaluation and Fear/Shame, or (ii) Assertive Anger and Rejecting Anger. For example, if rater A were to code a particular event at a particular time as Assertive Anger and rater B were to code a particular event at around the same time as Rejecting Anger, it would be considered a full error for the purposes of reliability. This is because the two raters have made different ratings at the same point in their sequence of codes and it is fair to assume from a rationalist perspective that they were coding the same event. This continuity analysis, like the matching time rule, allows rating alignment to continue despite interruptions (i.e. errors).

Reliability. Finally, reliability between independent rater was measured by agreement in the ratings of A vs. B.

Figure 2: An example of aligned ratings of three hypothetical raters



Two of the three aspects of reliability measurement (sequential reliability and duration reliability) were produced using comparative tables similar to those on the right of this figure.

Reliability of the Measure

Of the total sample of 34 cases used in the doctoral research of Pascual-Leone (2005), 27 cases (79.4%) were randomly selected and independently re-rated in their entirety by a second rater for the purposes of establishing reliability. With respect to the number of actual codes made during data collection 352 out of 395 individual codes (89.1%) were re-rated. Ratings produced by continuous cross-classification must be aligned (see preceding section) and then require different forms of reliability depending on how data are being used. First, the continuous nature of ratings required that independent rater agreement on what constitutes a discrete *change in state* be demonstrated; this is referred to as the *unitization of observations* and reached a percent agreement of 85.9% (see figure 3). Second, the classification of eleven different codes in the measure required that the *sequential ordering* of those classes also be reliable in the ratings; which they were, Cohen's $k = 0.91$ (see figure 4). Third, the continuous nature of ratings required that an agreement be demonstrated between independent raters on the *duration of any given unit* of coding and this was also show to be high, $r = 0.76$. According to Fleiss (1981), levels of agreement above .75 can be considered excellent agreement above chance. Thus, the measure demonstrated high overall reliability.

Figure 3: Agreement about unitization of observations

		Rater B	
		Event	Not
Rater A	Event	265	44
	No	43	

Estimated total events: 308.5;

Agreement: 85.90%

Total Agreements / [(Total Agreements) + (Omissions of A + omissions of B)/2]
 This agreement formula was developed by Dr. F. F. Strayer at the LESC. Note that a Kappa statistic cannot be calculated for unitization because the frequency of events left uncoded by both raters is unknown.

Figure 4: Confusion matrix to examine pure errors

Rater A	Rater B													12	13
	GD	FS	NE	N	RA	AA	SS	HG	A&L	End	Relief	Mix	Omi		
61				1				2						1	8
1	38													1	5
1	3	21												1	4
			32												10
	1			20	2		1								6
			1	1	12										1
1						8							1		4
	1					1	23								6
													24		
											1	2			
1															1
12	8	2	7	7	2	3	2								
sub-total:	77	51	23	41	23	16	12	23	0	25	3	4	44	# of observations:	
Coding base rates by rater:	25%	17%	7%	13%	8%	5%	4%	9%	0%	8%	1%	1%		Total # of codes by Rater B: 303	
														Absolute obs. 352	
														Mutual obs.. 260	

NB: Marginal homogeneity is found by comparing raters' base rates.

<i>Representative Proportion</i>			
Full Study N =	Reliability sample	Proportion	
# Cases	34	27	79.4%
# Codes	395	352	89.1%

Appendix B

The Object-Valence Scheme (OVS)

1. Self-Negative Code (SN)

The subject expresses a negative view of the self in any of the following ways:

- **negative evaluation of the self**
 - e.g., “I’m so worthless”
- **rejection of the negative self**
 - self-criticism
 - self-loathing
 - self-blame
 - self-disgust
- **desire for disconnection with the negative self**
 - e.g. “I need to hide that part of myself, it’s disgraceful”

2. Self-Positive Code (SP)

The subject expresses a positive view of the self in any of the following ways:

- **positive self-evaluation**
 - e.g., “I’m very skilled at what I do, not many people can do what I do”
- **support of the positive self**
 - self-acceptance
 - self-compassion
 - self-soothing

- self-protection
- self-coaching
- self-assertiveness/self-affirmation
- **desire for connection with the positive self**
 - e.g., “I’ve really let myself go over the years, I want to rediscover my real myself now”

3. Other-Negative Code (ON)

The subject expresses a negative view of the other in any of the following ways:

- **negative evaluation of the other**
 - e.g., “He’s such an idiot, I can’t deal with him anymore”
- **rejection of the negative other**
 - criticizing the other
 - blaming the other
 - attacking the other
 - hating/disliking the other
 - anger/resentment/disgust towards the other
- **desire to distance/disconnect from the negative other**
 - e.g., “My boss is so arrogant, I just packed my things and never came back”

4. Other-Positive Code (OP)

The subject expresses a positive view of the other in any of the following ways:

- **positive evaluation of the other**

- e.g. “He’s simply the best, he’s always looking out for me”
- **support of the positive other**
 - accepting the other
 - soothing the other
 - protecting the other
 - asserting on behalf of the other
 - liking the other
 - care/love for the other
- **desire to approach/connect with the positive other**
 - e.g., “I really miss her and the connection we had, I’m going to call her tonight”

5. Uncodable (UNC)

This code is given when criteria is not met for any other code. Two common scenarios for this are:

- **the object is absent or not clear**
 - e.g. “Everything is just falling apart at the seams, it feels so hopeless”
- **the object is present (self or other), but there is no clear positive or negative view of the object**
 - e.g. “The professor gave us a pop quiz today, I was scared because he gave us no indication that it was coming up”

Appendix C

Table C1

Longest THEME generated Patterns of CAMS codes for the Good Outcome Group

Pattern Theme Description	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6
Hurt/grief and need leading to assertive anger	C,B,HG	C,B,ND	C,B,ND	C,B,HG	C,B,HG	C,B,HG
	C,E,HG	C,E,ND	C,E,ND	C,B,ND	C,B,ND	C,B,ND
	C,E,ND	C,B,ND	C,B,ND	C,E,ND	C,E,ND	C,E,ND
	C,B,ND	C,E,ND	C,B,HG	C,B,HG	C,B,HG	C,E,HG
	C,B,HG	C,E,HG	C,E,HG	C,E,HG	C,E,HG	C,B,AA
	C,B,AA	C,B,AA	C,B,AA	C,B,AA	C,B,AA	C,E,AA
	C,E,AA	C,E,AA	C,E,AA	C,E,AA		
Recurrent hurt/grief and need	C,B,HG	C,B,ND				
	C,B,ND	C,B,HG				
	C,E,ND	C,E,HG				
	C,E,HG	C,E,ND				
	C,B,HG	C,B,ND				
	C,B,ND	C,B,HG				
Global distress leading to recurrent fear/shame and a need	C,B,GD	C,B,GD				
	C,B,GD	C,E,GD				
	C,E,GD	C,E,GD				
	C,B,FS	C,B,FS				
	C,E,FS	C,E,FS				
	C,B,ND	C,B,FS				
	C,B,FS	C,B,ND				
	C,E,ND	C,E,FS				
C,E,FS	C,E,ND					

Note. These are the 10 highest ranked CAMS patterns mined by pattern length that occurred with greater frequency in the good versus poor outcome group (binomial test, $p = .05$) organized into themes by observation; “c” = client, “b” = start of CAMS code, “e” = end of CAMS code.

Table C2

Longest THEME generated Patterns of CAMS codes for the Poor Outcome Group

Pattern Theme Description	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5
Rejecting anger and global distress	C,B,RA	C,B,UNC	C,B,RA	C,B,UNC	C,B,GD
	C,E,RA	C,E,UNC	C,E,RA	C,E,UNC	C,B,RA
	C,B,GD	C,B,RA	C,B,GD	C,B,RA	C,E,RA
	C,E,GD	C,E,RA	C,E,GD	C,E,RA	C,B,GD
	C,B,RA	C,B,GD	C,B,RA	C,B,GD	C,E,GD
	C,E,RA	C,E,GD	C,E,RA	C,E,GD	C,B,GD
	C,B,RA	C,B,GD	C,B,RA	C,B,GD	C,E,GD
	C,E,RA	C,E,GD			
Rejecting anger and fear/shame	C,B,RA				
	C,E,RA				
	C,B,RA				
	C,E,RA				
	C,B,RA				
	C,E,RA				
	C,B,FS				
	C,E,FS				
Recurrent negative self-evaluation followed by global distress or fear/shame	C,B,NSE	C,B,NSE	C,B,NSE	C,B,NSE	
	C,B,GD	C,B,GD	C,B,GD	C,E,NSE	
	C,E,NSE	C,E,NSE	C,E,NSE	C,B,FS	
	C,E,GD	C,E,GD	C,E,GD	C,B,NSE	
	C,B,GD	C,B,NSE	C,B,GD	C,E,NSE	
	C,E,GD	C,E,NSE	C,E,GD	C,E,FS	
	C,B,NSE	C,B,GD	C,B,NSE	C,B,NSE	
	C,E,NSE				

Note. These are the 10 highest ranked CAMS patterns mined by pattern length that occurred with greater frequency in the poor versus good outcome group (binomial test, $p = .05$) organized into themes by observation; “c” = client, “b” = start of CAMS code, “e” = end of CAMS code.

Table C3

Longest THEME generated Patterns of ES codes for the Good Outcome Group

Pattern Theme Description	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5
Recurrent primary adaptive emotion	C,B,UNC	C,B,UNC	C,E,UNC	C,B,UNC	C,B,UNC
	C,E,UNC	C,B,UNC	C,E,UNC	C,E,UNC	C,B,UNC
	C,E,UNC	C,E,UNC	C,B,PAE	C,E,UNC	C,E,UNC
	C,B,PAE	C,B,PAE,	C,E,PAE	C,B,PAE	C,B,PAE
	C,E,PAE	C,E,PAE	C,B,PAE	C,E,PAE	C,E,PAE
	C,B,PAE	C,B,PAE	C,E,PAE	C,B,PAE	C,B,PAE
	C,E,PAE	C,E,PAE	C,B,PAE	C,E,PAE	C,E,PAE
	C,B,PAE	C,B,PAE	C,E,PAE	C,B,PAE	C,B,PAE
	C,E,PAE	C,E,PAE	C,B,PAE	C,E,PAE	C,E,PAE
	C,B,PAE	C,B,PAE	C,E,PAE	C,B,PAE	C,B,PAE
	C,E,PAE	C,E,PAE	C,B,PAE	C,E,PAE	C,E,PAE
	C,B,PAE	C,B,PAE	C,E,PAE	C,B,PAE	C,B,PAE
	C,E,PAE	C,E,PAE	C,B,PAE	C,E,PAE	C,E,PAE
	C,B,PAE	C,B,PAE	C,E,PAE	C,B,PAE	C,B,PAE
Adaptive emotion and need leading to maladaptive emotion and back to need and adaptive emotion	C,B,PAE	C,B,PAE	C,B,PAE	C,B,PAE	
	C,B,ND	C,B,ND	C,B,ND	C,B,ND	
	C,E,ND	C,E,ND	C,E,ND	C,E,ND	
	C,E,PAE	C,E,PAE	C,E,PAE	C,E,PAE	
	C,B,PME	C,B,PME	C,B,PME	C,B,PME	
	C,B,ND	C,E,PME	C,E,PME	C,E,PME	
	C,E,ND	C,E,ND	C,E,ND	C,E,ND	
	C,B,PAE	C,B,PAE	C,B,PAE	C,B,PAE	
	C,E,ND	C,B,ND	C,B,ND	C,B,ND	
	C,E,PAE	C,E,ND	C,E,ND	C,E,PAE	
	C,B,PAE	C,B,PAE	C,E,PAE	C,E,ND	
C,E,PAE	C,E,PAE				
Adaptive emotion leading to secondary emotion and back to adaptive emotion	C,B,UNC				
	C,E,UNC				
	C,E,UNC				
	C,B,PAE				
	C,E,PAE				
	C,B,PAE				
	C,E,PAE				
	C,B,SE				
	C,E,SE				
	C,B,PAE				
C,E,PAE					

Note. These are the 10 highest ranked ES patterns mined by pattern length that occurred with greater frequency in the good versus poor outcome group (binomial test, $p = .05$) organized into themes by observation; “c” = client, “b” = start of ES code, “e” = end of ES code.

Table C4

Longest THEME generated Patterns of ES codes for the Poor Outcome Group

Pattern Theme Description	Patterns
Recurrent secondary and primary maladaptive emotion	C,B,SE C,B,SE C,B,SE C,E,SE C,E,SE
	C,E,SE C,E,SE C,E,SE C,B,PME C,B,PME
	C,B,PME C,B,PME C,B,SE C,B,SE C,B,SE
	C,B,SE C,B,SE C,B,PME C,E,SE C,E,SE
	C,E,SE C,E,SE C,E,PME C,E,PME C,E,PME
	C,E,PME C,E,PME C,E,SE C,B,SE C,B,SE
	C,B,SE C,B,SE C,B,SE C,E,SE C,E,SE
	C,E,SE C,E,SE C,E,SE C,B,PME C,B,PME
	C,B,PME C,B,PME C,B,PME C,E,PME C,E,PME
	C,E,PME C,E,PME C,E,PME C,B,PME C,B,PME
	C,B,PME C,B,PME C,B,PME C,E,PME C,E,PME
	C,E,PME C,E,PME C,E,PME
	C,B,SE C,B,SE C,E,SE C,B,SE
	C,E,SE C,E,SE C,B,SE C,E,SE
	C,B,PME C,B,PME C,B,PME C,B,SE
	C,B,SE C,B,SE C,E,PME C,B,PME
	C,E,SE C,E,SE C,E,SE C,E,PME
	C,E,PME C,E,PME C,B,SE C,E,SE
C,B,SE C,B,SE C,E,SE C,B,SE	
C,E,SE C,E,SE C,B,PME C,E,SE	
C,B,PME C,B,PME C,E,PME C,B,PME	
C,E,PME C,E,PME C,B,PME C,E,PME	
C,B,PME C,B,PME C,E,PME C,B,PME	
Secondary emotion leading to need and back to secondary emotion	C,B,SE
	C,E,SE
	C,B,SE
	C,E,SE
	C,B,SE
	C,B,ND
	C,E,ND
	C,E,SE
	C,B,SE
	C,E,SE
C,B,SE	
C,E,SE	

Note. These are the 10 highest ranked ES patterns mined by pattern length that occurred with greater frequency in the poor versus good outcome group (binomial test, $p = .05$) organized into themes by observation; “c” = client, “b” = start of ES code, “e” = end of ES code.

Table C5

Longest THEME generated Patterns of OVS codes for the Good Outcome Group

Pattern Theme Description	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5
Recurrent other-negative and self-positive codes	C,B,ON	C,B,ON	C,B,ON	C,E,SP	C,B,ON
	C,E,ON	C,E,ON	C,E,ON	C,E,ON	C,E,ON
	C,B,ON	C,B,ON	C,B,ON	C,B,ON	C,B,ON
	C,E,ON	C,E,ON	C,E,ON	C,E,ON	C,E,ON
	C,B,ON	C,B,ON	C,B,ON	C,B,ON	C,B,ON
	C,B,SP	C,B,SP	C,B,SP	C,B,SP	C,B,SP
	C,E,ON	C,E,ON	C,E,ON	C,E,ON	C,E,ON
	C,E,SP	C,E,SP	C,E,SP	C,E,SP	C,E,SP
Other-positive leading to other-negative and self-positive and back to other-negative codes	C,E,OP	C,B,OP	C,B,OP	C,B,OP	C,B,OP
	C,E,ON	C,B,ON	C,B,ON	C,B,ON	C,B,ON
	C,B,ON	C,E,ON	C,E,ON	C,E,ON	C,E,ON
	C,B,SP	C,B,ON	C,B,ON	C,B,ON	C,B,ON
	C,E,SP	C,B,SP	C,B,SP	C,B,SP	C,B,SP
	C,E,ON	C,E,SP	C,E,ON	C,E,SP	C,E,SP
	C,B,ON	C,E,ON	C,B,ON	C,E,ON	C,E,ON
	C,E,ON	C,B,ON			
Recurrent self-positive codes	C,B,SP				
	C,E,SP				
	C,B,SP				
	C,E,SP				
	C,E,SP				
	C,E,SP				

Note. These are the 10 highest ranked OVS patterns mined by pattern length that occurred with greater frequency in the good versus poor outcome group (binomial test, $p = .05$) organized into themes by observation; “c” = client, “b” = start of OVS code, “e” = end of OVS code.

Table C6

Longest THEME generated Patterns of OVS codes for the Poor Outcome Group

Pattern Theme Description	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5
Other-negative leading to other-positive and back to other-negative codes	C,B,UNC	C,E,UNC	C,B,UNC	C,B,UNC	C,E,UNC
	C,E,UNC	C,B,ON	C,E,UNC	C,E,UNC	C,B,ON
	C,B,ON	C,E,ON	C,B,ON	C,B,ON	C,E,ON
	C,E,ON	C,B,OP	C,E,ON	C,E,ON	C,B,OP
	C,B,OP	C,E,OP	C,B,OP	C,B,OP	C,E,OP
	C,E,OP	C,B,ON	C,E,OP	C,E,OP	C,B,ON
	C,B,ON	C,E,ON	C,B,ON	C,B,ON	C,E,ON
	C,E,ON	C,B,ON	C,E,ON	C,E,ON	C,B,ON
	C,B,ON	C,E,ON	C,B,ON	C,B,ON	C,E,ON
	C,E,ON	C,B,ON	C,E,ON	C,E,ON	C,B,UNC
	C,B,ON	C,E,ON	C,B,UNC	C,B,UNC	C,E,UNC
	C,E,ON	C,B,UNC	C,E,UNC		
	C,B,UNC	C,E,UNC			
	C,E,UNC				
Recurrent self-negative codes	C,B,SN	C,B,SN	C,E,SN	C,B,SN	
	C,E,SN	C,E,SN	C,B,SN	C,E,SN	
	C,B,SN	C,B,SN	C,E,SN	C,B,UNC	
	C,E,SN	C,E,SN	C,B,UNC	C,E,UNC	
	C,B,UNC	C,B,UNC	C,E,UNC	C,B,SN	
	C,E,UNC	C,E,UNC	C,B,SN	C,E,SN	
	C,B,SN	C,B,SN	C,E,SN	C,B,SN	
	C,E,SN	C,E,SN	C,B,SN	C,E,SN	
	C,B,SN	C,B,SN	C,E,SN	C,B,SN	
	C,E,SN	C,E,SN	C,B,SN	C,E,SN	
	C,B,SN	C,B,SN	C,E,SN		
C,E,SN					
Other-negative leading to self-negative and back to other-negative codes	C,B,ON				
	C,E,ON				
	C,B,UNC				
	C,E,UNC				
	C,B,SN				
	C,E,SN				
	C,B,ON				
	C,E,ON				
C,B,UNC					
C,E,UNC					

Note. These are the 10 highest ranked OVS patterns mined by pattern length that occurred with greater frequency in the poor versus good outcome group (binomial test, $p = .05$) organized into themes by observation; “c” = client, “b” = start of OVS code, “e” = end of OVS code.

Table 1

Outcome Group Differences on Pre-treatment Measures

Pre-treatment Measure	<u>Good Outcome</u>		<u>Poor Outcome</u>		<i>df</i>	<i>t</i>	<i>p</i>
	<i>M</i>	<i>SE</i>	<i>M</i>	<i>SE</i>			
DEQ	1.75	.53	1.36	.33	6.668	-1.318	.23 ns
BDI	32.00	2.92	33.25	4.73	5.153	.225	.82 ns
SCL-90-R	1.33	.25	1.65	.34	5.916	.767	.47 ns
RSES	20.00	2.95	19.75	3.71	6.154	1.086	.32 ns
IIP	1.26	.24	1.66	.28	6.439	-.699	.51 ns

Note. DEQ = Depressive Experiences Questionnaire (Self-criticism scale); BDI = Beck Depression Inventory; SCL-90-R = Symptom 90 Checklist-Revised (Global Severity Index); RSES = Rosenberg Self-Esteem Scale; IIP = Inventory of Interpersonal Problems (global score of interpersonal dysfunction). $N = 5$ for the good outcome group; $N = 4$ for the poor outcome group. While no violations in normality or homogeneity of variance were detected, results should be interpreted with caution due to the small sample size. *T*-tests that correct for potential unequal variances (Welch-Satterthwaite method) are reported. For all *t*-tests, * = $p < .05$, ** = $p < .01$. No significant differences were found on any pre-treatment measure. These results were consistent with convergent results from bootstrapped *t*-tests (using 1000 randomized samples) and Mann-Whitney tests.

Table 2

Outcome Group Differences on Post-treatment Measures

Post-treatment Measure	<u>Good Outcome</u>		<u>Poor Outcome</u>		<i>df</i>	<i>t</i>	<i>p</i>
	<i>M</i>	<i>SE</i>	<i>M</i>	<i>SE</i>			
BDI	4.60	4.22	18.00	13.11	3.499	1.964	.13 ns
SCL-90-R	.25	.30	1.20	.65	4.059	2.725	.05 ns
RSES	35.60	3.58	21.25	6.65	4.373	-3.888	.015*
IIP	.57	.56	1.74	.65	6.075	2.830	.030*

Note. BDI = Beck Depression Inventory; SCL-90-R = Symptom 90 Checklist-Revised (Global Severity Index); RSES = Rosenberg Self-Esteem Scale; IIP = Inventory of Interpersonal Problems (global score of interpersonal dysfunction). *N* = 5 for the good outcome group; *N* = 4 for the poor outcome group. While no violations in normality or homogeneity of variance were detected, results should be interpreted with caution due to the small sample size. *T*-tests that correct for potential unequal variances (Welch-Satterthwaite method) are reported. For all *t*-tests, * = $p < .05$, ** = $p < .01$. The good outcome was significantly higher on the RSES and significantly lower on the IIP. The SCL-90-R difference also approached significance. These results were consistent with convergent results from bootstrapped *t*-tests (using 1000 randomized samples). Mann-Whitney tests however found the IIP difference to approach significance and the SCL-90-R difference to be significant.

Table 3

Outcome Group Differences on Emotion Episode Dimensions

EE Dimension	<u>Good Outcome</u>		<u>Poor Outcome</u>		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SE</i>	<i>M</i>	<i>SE</i>			
EE-MEAN	19.08	3.3	18.65	2.0	-.113	6.341	.91 ns
EE-DUR	125.80	28.0	134.85	7.9	.312	4.620	.77 ns
EE-PROP	.59	.05	.71	.05	1.814	6.427	.12 ns

Note. EE-MEAN = mean number of emotion episodes per session; EE-DUR = mean duration of an emotion episode (measured in seconds); EE-PROP = mean proportion of total session time in emotion episodes. Kolmogorov-Smirnov test detected abnormality in EE-MEAN data of the good outcome group. No violations in homogeneity of variance were detected, but results should be interpreted with caution due to the small sample size. *T*-tests that correct for potential unequal variances (Welch-Satterthwaite method) are reported. For all *t*-tests, * = $p < .05$, ** = $p < .01$. No significant differences were found. The EE-PROP difference approached significance. These results were consistent with convergent results from bootstrapped *t*-tests (using 1000 randomized samples) and Mann-Whitney tests. Across good outcome clients ($N = 5$), total EEs were 71 in early treatment, 222 in middle treatment, and 185 in late treatment. Across poor outcome clients ($N = 4$), total EEs were 82 in early treatment, 143 in middle treatment, and 148 in late treatment.

Table 4

Outcome Group Differences on the Working Alliance and Depth of Emotional Processing

Treatment Phase	<u>Good Outcome</u>		<u>Poor Outcome</u>		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SE</i>	<i>M</i>	<i>SE</i>			
Early Therapy:							
WAI	6.18	.38	4.77	.49	-2.268	6.075	.06 ns
EXP-M	2.62	.13	2.49	.14	-.699	6.590	.51 ns
EXP-P	3.15	.10	2.99	.08	-1.229	6.932	.26 ns
Middle Therapy:							
WAI	6.64	.13	5.88	.25	-2.734	4.569	.045*
EXP-M	2.96	.06	2.80	.11	-1.277	5.097	.26 ns
EXP-P	3.55	.05	3.21	.08	-3.742	5.210	.012*
Late Therapy:							
WAI	6.80	.15	5.77	.48	-2.038	3.592	.12 ns
EXP-M	3.12	.20	2.64	.20	-1.699	6.856	.13 ns
EXP-P	3.61	.11	3.20	.10	-2.663	6.995	.032*

Note. WAI = Working Alliance Inventory; EXP-M = modal EE experiencing level as measured by EXP; EXP-P = peak EE experiencing level as measured by EXP. For WAI, Early Therapy = session 1; Middle Therapy = two sessions that immediately preceded the two most productive working phase sessions rated by clients; Late Therapy = third and fourth last sessions. For EXP-M and EXP-P, Early Therapy = session 2; Middle Therapy = two most productive working phase sessions rated by clients; Late Therapy = second and third last sessions. *N* = 5 for the good outcome group; *N* = 4 for the poor outcome group. While no violations in normality or homogeneity of variance were detected, results should be interpreted with caution due to the small sample size. *T*-tests that correct for potential unequal variances (Welch-Satterthwaite method) are reported. For all *t*-tests, * = $p < .05$, ** = $p < .01$. The good outcome group was significantly higher on middle treatment WAI and EXP-P, and late treatment EXP-P. Bootstrapped *t*-tests (using 1000 randomized samples) found the differences in middle WAI and late EXP-P to approach significance. Mann-Whitney tests found the difference in late EXP-P to approach significance.

Table 5

Mean Proportions of CAMS Categories in Emotion Episodes within Phases of Treatment between Outcome Groups

ES Category	<u>Early Treatment</u>			<u>Middle Treatment</u>			<u>Late Treatment</u>		
	<i>GO</i>	<i>PO</i>	<i>p</i>	<i>GO</i>	<i>PO</i>	<i>p</i>	<i>GO</i>	<i>PO</i>	<i>p</i>
GD	.191	.270	.414 ns	.073	.148	.075* ^t	.075	.161	.324 ns
RA	.236	.125	.250 ns	.095	.108		.102	.218	.048 ns
FS	.126	.127		.195	.218		.119	.166	
NSE	.032	.117	.460 ns	.024	.099	.249 ns	.016	.091	.188 ns
ND	.132	.067	.484 ns	.138	.118		.140	.118	.092* ^t
RE	.000	.009		.092	.017	.003***	.132	.018	.106* ^t
HG	.047	.019		.107	.046	.259 ns	.050	.031	
AA	.010	.009		.080	.016	.108* ^t	.044	.016	
SS	.010	.000		.008	.022		.051	.012	
ACAG	.000	.000		.000	.000		.047	.000	
UNC	.218	.257		.188	.209		.224	.187	

Note. GD = global distress; RA = rejecting anger; FS = fear/shame; NSE = negative self-evaluation; ND = need; RE = relief; HG = hurt/grief; AA = assertive anger; SS = self-soothing; ACAG = acceptance and agency; UNC = uncodable; GO = good outcome group (N = 5); PO = poor outcome group (N = 4). Proportion differences between groups equal to or greater than 5.0% were tested using Welch-Satterthwaite-corrected *t*-tests. Due to the small sample size, results are indicated as significant (* = $p < .05$; ** = $p < .01$; *** = $p < .005$) or trends (*^t = $p < .15$) only if bootstrapped *t*-tests (using 1000 randomized samples) and/or Mann-Whitney tests indicated the same result. Across good outcome clients, total EEs were 71 in early treatment, 222 in middle treatment, and 185 in late treatment. Across poor outcome clients, total EEs were 82 in early treatment, 143 in middle treatment, and 148 in late treatment.

Table 6

Mean Proportions of ES Categories in Emotion Episodes within Phases of Treatment between Outcome Groups

ES Category	<u>Early Treatment</u>			<u>Middle Treatment</u>			<u>Late Treatment</u>		
	<i>GO</i>	<i>PO</i>	<i>p</i>	<i>GO</i>	<i>PO</i>	<i>p</i>	<i>GO</i>	<i>PO</i>	<i>p</i>
SE	.427	.395		.168	.257	.264 ns	.177	.379	.047*
PME	.158	.245	.477 ns	.219	.317	.466 ns	.136	.257	.240 ns
ND	.132	.067	.484 ns	.138	.118		.140	.085	.092* ^t
PAE	.066	.037		.287	.100	.060* ^t	.324	.092	.014*
UNC	.218	.257		.188	.209		.224	.187	

Note. SE = secondary emotion; PME = primary maladaptive emotion; ND = need; PAE = primary adaptive emotion; UNC = uncodable; GO = good outcome group (N = 5); PO = poor outcome group (N = 4). Proportion differences between groups equal to or greater than 5.0% were tested using Welch-Satterthwaite-corrected *t*-tests. Due to the small sample size, results are indicated as significant (* = $p < .05$; ** = $p < .01$; *** = $p < .005$) or trends (*^t = $p < .15$) only if bootstrapped *t*-tests (using 1000 randomized samples) and/or Mann-Whitney tests indicated the same result. Across good outcome clients, total EEs were 71 in early treatment, 222 in middle treatment, and 185 in late treatment. Across poor outcome clients, total EEs were 82 in early treatment, 143 in middle treatment, and 148 in late treatment.

Table 7

Mean Proportions of OVS Categories in Emotion Episodes within Phases of Treatment between Outcome Groups

OVS Category	<u>Early Treatment</u>			<u>Middle Treatment</u>			<u>Late Treatment</u>		
	<i>GO</i>	<i>PO</i>	<i>p</i>	<i>GO</i>	<i>PO</i>	<i>p</i>	<i>GO</i>	<i>PO</i>	<i>p</i>
ON	.445	.325	.451 ns	.407	.300	.318 ns	.320	.388	.419 ns
OP	.098	.068		.117	.046	.152 ns	.099	.088	
SN	.105	.190	.543 ns	.107	.240	.214 ns	.067	.229	.167 ns
SP	.037	.037		.088	.081		.213	.048	.029*
UNC	.315	.379	.499 ns	.281	.334	.506 ns	.301	.248	.579 ns

Note. ON = other-negative; OP = other-positive; SN = self-negative; self-positive; UNC = uncodable; GO = good outcome group (N = 5); PO = poor outcome group (N = 4). Proportion differences between groups equal to or greater than 5.0% were tested using Welch-Satterthwaite-corrected *t*-tests. Due to the small sample size, results are indicated as significant (* = $p < .05$; ** = $p < .01$; *** = $p < .005$) or trends (*^t = $p < .15$) only if bootstrapped *t*-tests (using 1000 randomized samples) and/or Mann-Whitney tests indicated the same result. Across good outcome clients, total EEs were 71 in early treatment, 222 in middle treatment, and 185 in late treatment. Across poor outcome clients, total EEs were 82 in early treatment, 143 in middle treatment, and 148 in late treatment.

Table 8

Mean Changes in Proportions of CAMS Categories in Emotion Episodes between Phases of Treatment between Outcome Groups

CAMS Category	Change from Early to Late Treatment			Change from Early to Middle Treatment			Change from Middle to Late Treatment		
	GO	PO	<i>p</i>	GO	PO	<i>p</i>	GO	PO	<i>p</i>
GD	-.116	-.109		-.118	-.122		-.118	-.122	
RA	-.134	+.093	.036*	-.141	-.017	.102* ^t	-.141	-.017	.100* ^t
FS	-.006	+.038		+.070	+.091		+.070	+.091	
NSE	-.016	-.026		-.008	-.019		-.008	-.019	
ND	+.007	+.018		+.006	+.051		+.006	+.051	
RE	+.132	+.009	.088* ^t	+.092	+.007	.002***	+.092	+.007	
HG	+.003	+.013		+.060	+.027		+.060	+.027	
AA	+.035	+.022		+.071	+.007	.095 ns	+.071	+.007	.272 ns
SS	+.041	+.012		-.002	+.022		-.002	+.022	.165 ns
ACAG	+.047	.000		.000	.000		.000	.000	
UNC	+.006	-.070	.598 ns	-.030	-.048		-.030	-.048	.507 ns

Note. GD = global distress; RA = rejecting anger; FS = fear/shame; NSE = negative self-evaluation; ND = need; RE = relief; HG = hurt/grief; AA = assertive anger; SS = self-soothing; ACAG = acceptance and agency; UNC = uncodable; GO = good outcome group (N = 5); PO = poor outcome group (N = 4). Proportion change differences between groups equal to or greater than 5.0% were tested using Welch-Satterthwaite-corrected *t*-tests. Due to the small sample size, results are indicated as significant (* = $p < .05$; ** = $p < .01$; *** = $p < .005$) or trends (*^t = $p < .15$) only if bootstrapped *t*-tests (using 1000 randomized samples) and/or Mann-Whitney tests indicated the same result. Across good outcome clients, total EEs were 71 in early treatment, 222 in middle treatment, and 185 in late treatment. Across poor outcome clients, total EEs were 82 in early treatment, 143 in middle treatment, and 148 in late treatment.

Table 9

Mean Changes in Proportions of ES Categories in Emotion Episodes between Phases of Treatment between Outcome Groups

ES Category	<u>Change from Early to Late Treatment</u>			<u>Change from Early to Middle Treatment</u>			<u>Change from Middle to Late Treatment</u>		
	<i>GO</i>	<i>PO</i>	<i>p</i>	<i>GO</i>	<i>PO</i>	<i>p</i>	<i>GO</i>	<i>PO</i>	<i>p</i>
SE	-0.250	-0.016	.081* ^t	-0.258	-0.138	.250 ns	+0.009	+0.122	.006**
PME	-0.022	+0.012		+0.061	+0.073		-0.083	-0.061	
ND	+0.007	+0.018		+0.006	+0.051		+0.002	-0.033	
PAE	+0.258	+0.055	.035*	+0.221	+0.063	.183 ns	+0.037	-0.008	
UNC	+0.006	-0.070	.598 ns	-0.030	-0.048		+0.036	-0.021	.507 ns

Note. SE = secondary emotion; PME = primary maladaptive emotion; ND = need; PAE = primary adaptive emotion; UNC = uncodable; GO = good outcome group (N = 5); PO = poor outcome group (N = 4). Proportion change differences between groups equal to or greater than 5.0% were tested using Welch-Satterthwaite-corrected *t*-tests. Due to the small sample size, results are indicated as significant (* = $p < .05$; ** = $p < .01$; *** = $p < .005$) or trends (*^t = $p < .15$) only if bootstrapped *t*-tests (using 1000 randomized samples) and/or Mann-Whitney tests indicated the same result. Across good outcome clients, total EEs were 71 in early treatment, 222 in middle treatment, and 185 in late treatment. Across poor outcome clients, total EEs were 82 in early treatment, 143 in middle treatment, and 148 in late treatment.

Table 10

Mean Changes in Proportions of OVS Categories in Emotion Episodes between Phases of Treatment between Outcome Groups

OVS Category	<u>Change from Early to Late Treatment</u>			<u>Change from Early to Middle Treatment</u>			<u>Change from Middle to Late Treatment</u>		
	<i>GO</i>	<i>PO</i>	<i>p</i>	<i>GO</i>	<i>PO</i>	<i>p</i>	<i>GO</i>	<i>PO</i>	<i>p</i>
ON	-.125	+.063	.247 ns	-.039	-.025		-.086	+.088	.183 ns
OP	+.001	+.020		+.019	-.023		-.018	+.043	.120 ns
SN	-.037	+.039	.271 ns	+.003	+.051		-.040	-.012	
SP	+.176	+.010	.062* ^t	+.051	+.043		+.125	-.033	.035*
UNC	-.014	-.132	.365 ns	-.034	-.046		+.019	-.086	.438 ns

Note. ON = other-negative; OP = other-positive; SN = self-negative; self-positive; UNC = uncodable; GO = good outcome group (N = 5); PO = poor outcome group (N = 4). Proportion change differences between groups equal to or greater than 5.0% were tested using Welch-Satterthwaite-corrected *t*-tests. Due to the small sample size, results are indicated as significant (* = $p < .05$; ** = $p < .01$; *** = $p < .005$) or trends (*^t = $p < .15$) only if bootstrapped *t*-tests (using 1000 randomized samples) and/or Mann-Whitney tests indicated the same result. Across good outcome clients, total EEs were 71 in early treatment, 222 in middle treatment, and 185 in late treatment. Across poor outcome clients, total EEs were 82 in early treatment, 143 in middle treatment, and 148 in late treatment.

Table 11

Random Mixed Effects Hierarchical Model Predicting 4-point Ordinal CAMS Ratings

Predictors	<i>Value</i>	<i>SE</i>	<i>df</i>	<i>t</i>	<i>p</i>
Main Effects					
Time in Session	-.152	.44	594	-.343	.73 ns
Outcome	-.521	.30	7	-1.757	.12 ns
Treatment Phase	.705	.27	34	2.630	.01*
Interaction Effects					
Time in Session * Outcome	.241	.48	594	.506	.61 ns
Time in Session * Treatment Phase	.812	.49	594	1.662	.10 ns
Outcome * Treatment Phase	.012	.29	34	-.040	.97 ns

Note. Time in Session = time EE occurred in a therapy session; Outcome = good or poor; Treatment Phase = early or middle/late. No violations in normality or homogeneity of variance were detected in the data. * = $p < .05$, ** $p < .01$. Overall model was significant ($p < .001$). The interaction of time in session and treatment phase showed a trend towards significance. The main effect of outcome showed a trend towards significance and the main effect of treatment phase was significant.

Table 12

Wald Tests for Model Predictors

	<i>Numerator df</i>	<i>Denominator df</i>	<i>F</i>	<i>p</i>
Time in Session	3	594	2.257	.08 ns
Outcome	3	7	5.963	.02*
Treatment Phase	3	34	3.745	.03*

Note. Time in Session = time EE occurred in a therapy session; Outcome = good or poor; Treatment Phase = early or middle/late. * = $p < .05$, ** $p < .01$. The Wald tests for outcome and treatment phase were significant. The Wald test for time in session showed a trend towards significance.

Table 13

Outcome Group Differences on Mean 4-point Ordinal CAMS Ratings across Emotion Episodes of a Session at Early Treatment

Time in Session	<i>Estimate</i>	<i>SE</i>	<i>df</i>	<i>t</i>	<i>p</i>
Start of Session	.762	.37	7	2.049	.08 ns
Middle of Session	.641	.24	7	2.702	.03*
End of Session	.521	.30	7	1.757	.12 ns

Note. Time in Session = time EE occurred in a therapy session. * = $p < .05$, ** $p < .01$. EEs at the middle of a session were significant. EEs at the start of a session showed a trend towards significance.

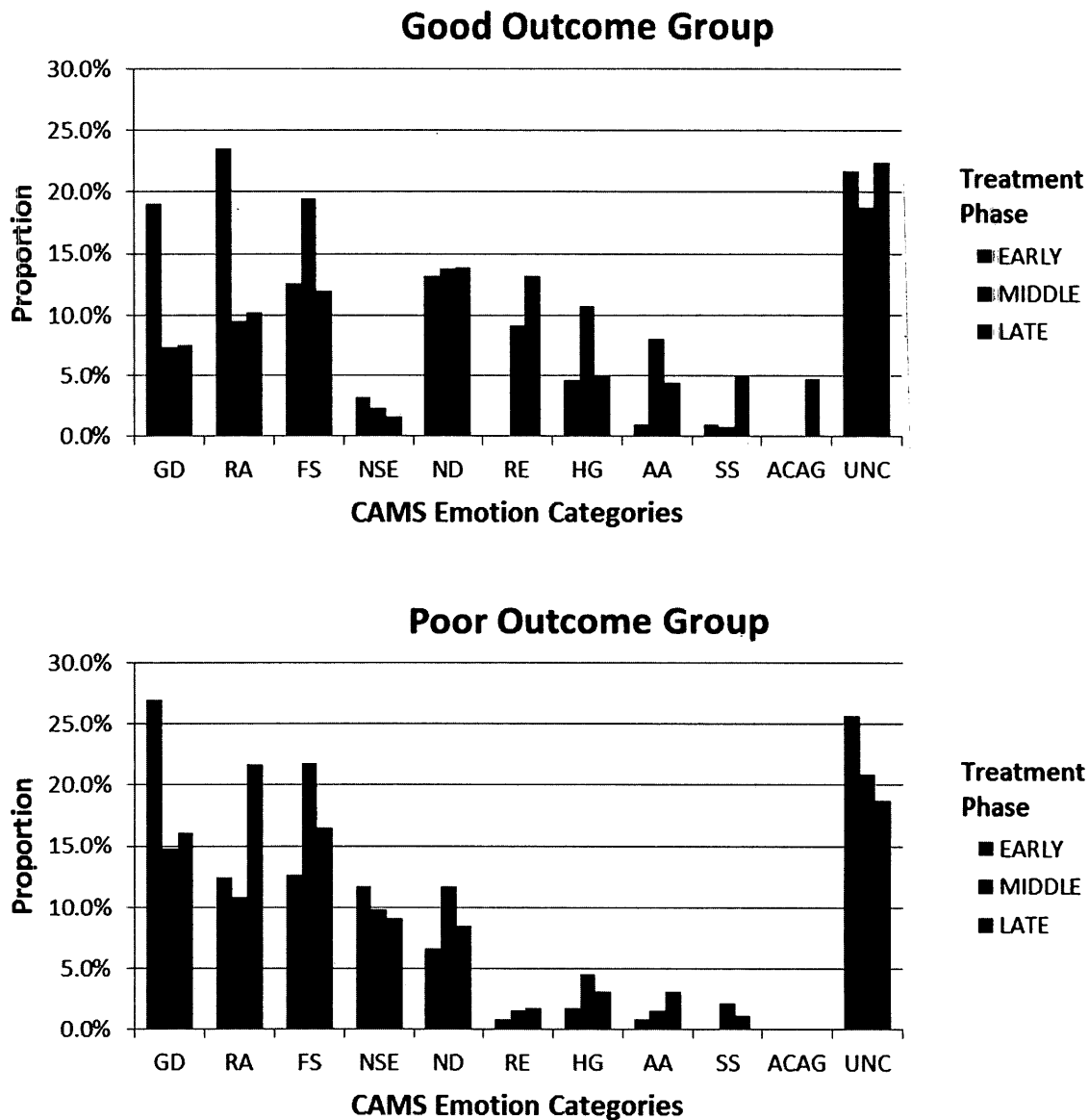
Table 14

Outcome Group Differences on 4-point Ordinal CAMS Ratings across Emotion Episodes in a Session at Middle/Late Treatment

Time in Session	<i>Estimate</i>	<i>SE</i>	<i>df</i>	<i>t</i>	<i>p</i>
Start of Session	.774	.35	7	2.217	.06 ns
Middle of Session	.653	.19	7	3.388	.01*
End of Session	.533	.26	7	2.071	.08 ns

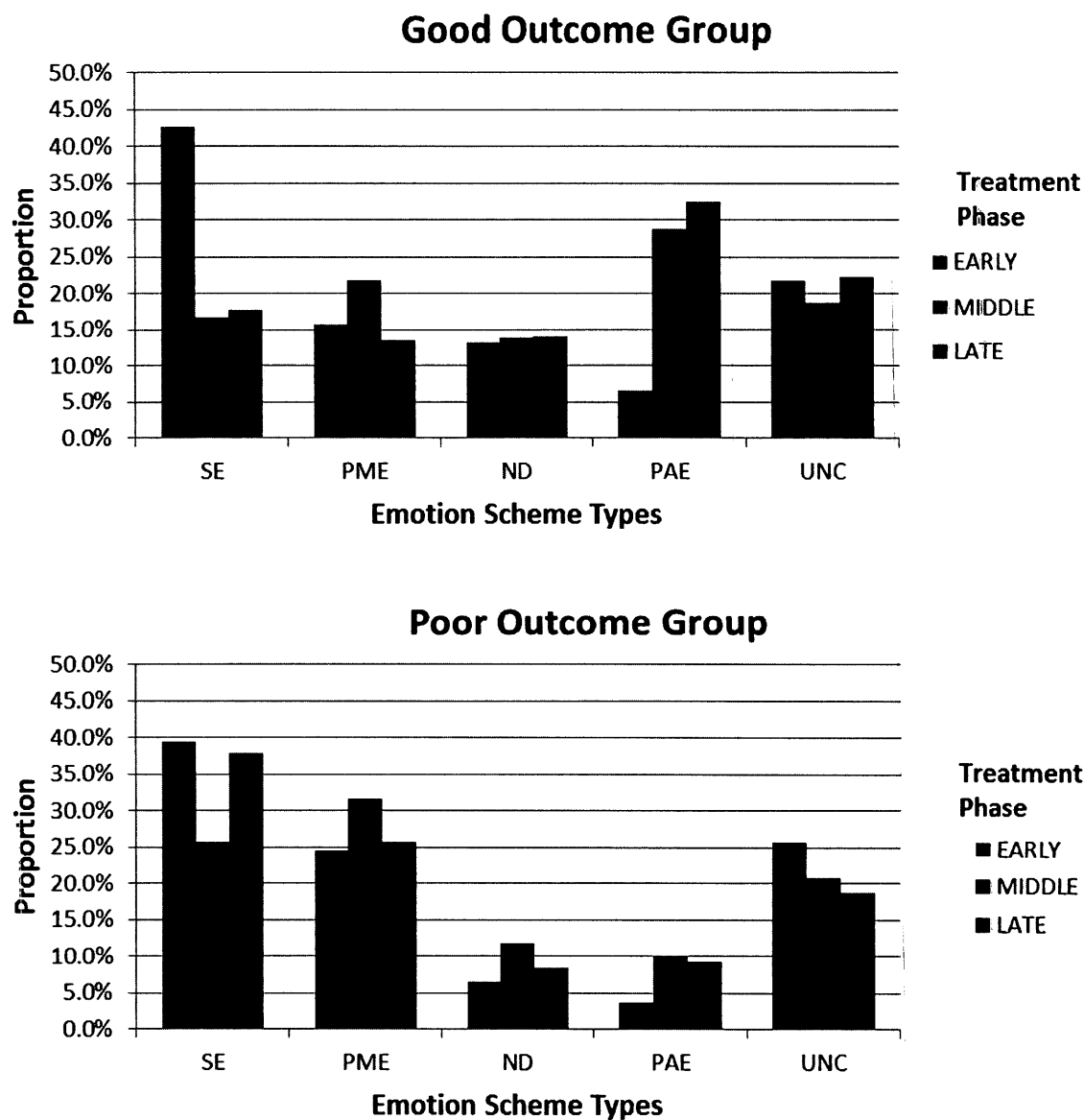
Note. Time in Session = time EE occurred in a therapy session. * = $p < .05$, ** $p < .01$. EEs at the middle of a session were significant. EEs at the start of a session showed a trend towards significance.

Figure 1. Bars represent the mean proportions of emotion episodes with specific CAMS category ratings at early, middle, and late treatment for each outcome group.



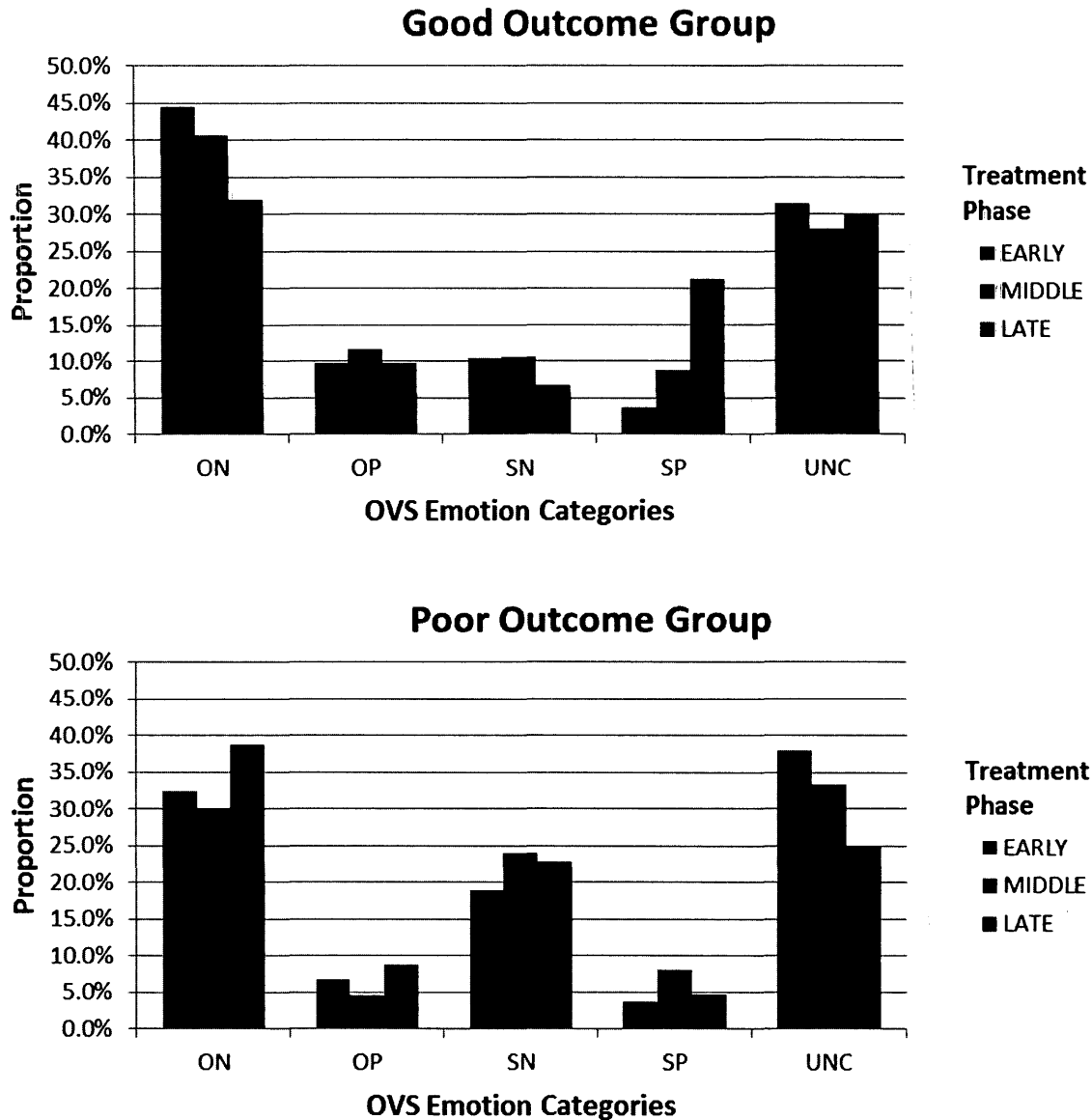
Note. GD = global distress; RA = rejecting anger; FS = fear/shame; NSE = negative self-evaluation; ND = need; RE = relief; HG = hurt/grief; AA = assertive anger; SS = self-soothing; ACAG = acceptance and agency; UNC = uncodable. Early Treatment Phase = session 2; Middle Treatment Phase = two most productive working phase sessions rated by each client; Late Treatment Phase = second and third last sessions. Across good outcome clients, total EEs were 71 in early treatment, 222 in middle treatment, and 185 in late treatment. Across poor outcome clients, total EEs were 82 in early treatment, 143 in middle treatment, and 148 in late treatment.

Figure 2. Bars represent the mean proportions of emotion episodes with specific ES category ratings at early, middle, and late treatment for each outcome group.



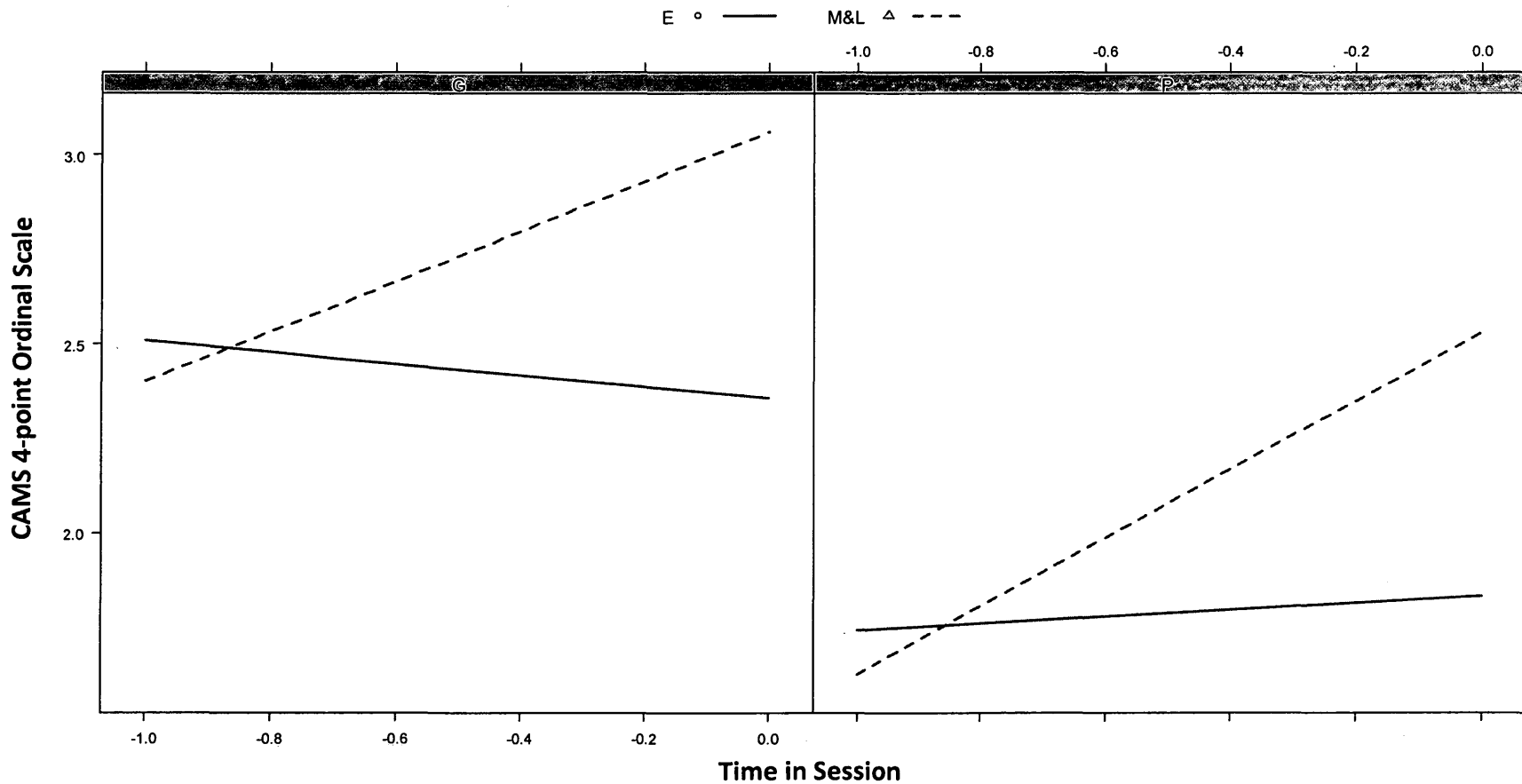
Note. SE = secondary emotion; PME = primary maladaptive emotion; ND = need; PAE = primary adaptive emotion; UNC = uncodable. Early Treatment Phase = session 2; Middle Treatment Phase = two most productive working phase sessions rated by each client; Late Treatment Phase = second and third last sessions. Across good outcome clients, total EEs were 71 in early treatment, 222 in middle treatment, and 185 in late treatment. Across poor outcome clients, total EEs were 82 in early treatment, 143 in middle treatment, and 148 in late treatment.

Figure 3. Bars represent the mean proportions of emotion episodes with specific OVS category ratings at early, middle, and late treatment for each outcome group.



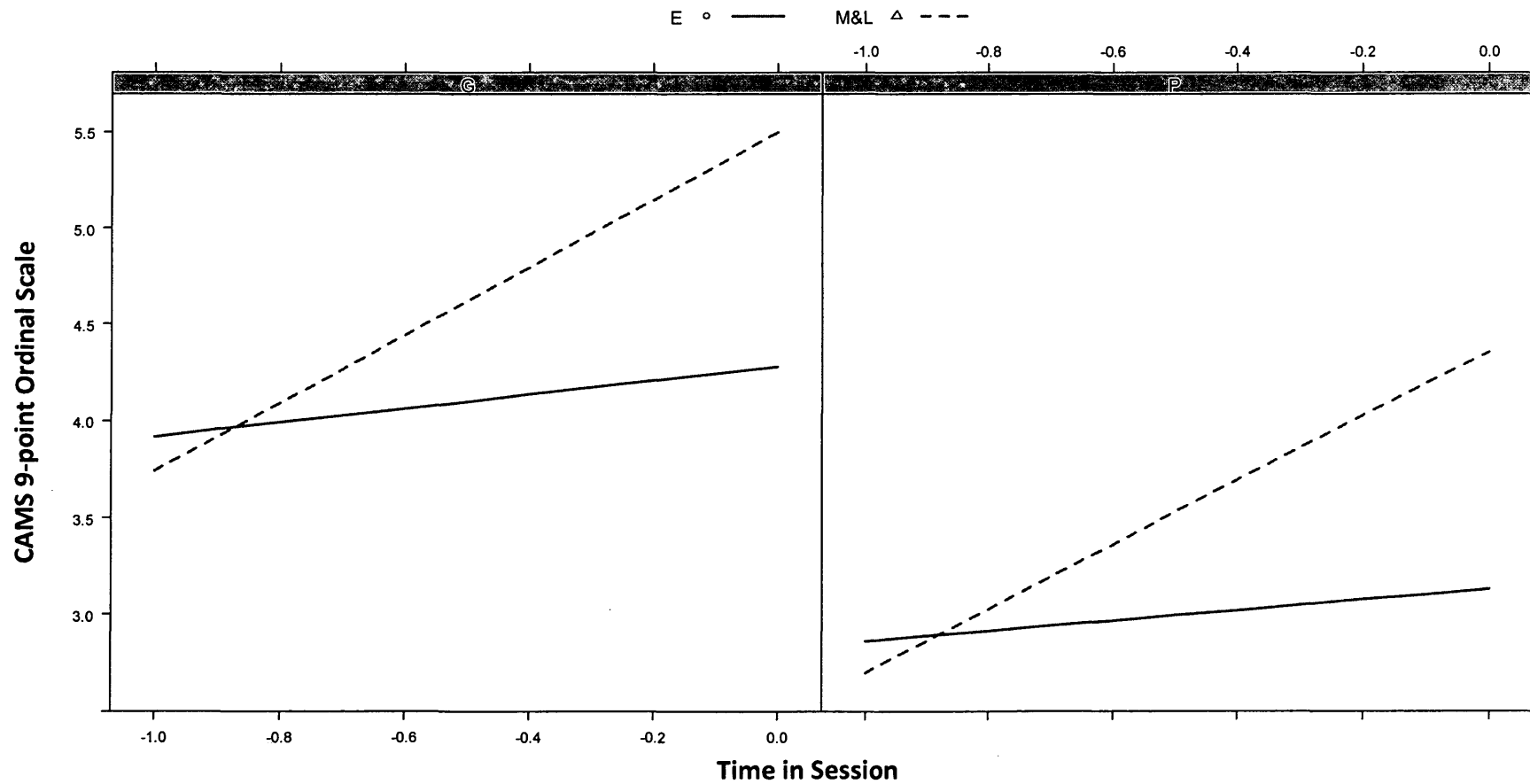
Note. ON = other-negative; OP = other-positive; SN = self-negative; self-positive; UNC = uncodable. Early Treatment Phase = session 2; Middle Treatment Phase = two most productive working phase sessions rated by each client; Late Treatment Phase = second and third last sessions. Across good outcome clients, total EEs were 71 in early treatment, 222 in middle treatment, and 185 in late treatment. Across poor outcome clients, total EEs were 82 in early treatment, 143 in middle treatment, and 148 in late treatment.

Figure 4. Plots indicate predicted change in mean 4-point ordinal CAMS ratings across emotion episodes of a therapy session at early (blue lines) and middle/late treatment phases (dotted purple lines) for the good versus poor outcome groups.



Note. E = early treatment phase; M&L = middle/late treatment phase; G = good outcome group (N = 5); P = poor outcome group (N = 4); Time in Session = time EE occurred in a therapy session.

Figure 5. Plots indicate predicted change in mean 9-point ordinal CAMS ratings across emotion episodes in a therapy session at early (blue lines) and middle/late treatment phases (dotted purple lines) for the good versus poor outcome groups.



Note. E = early treatment phase; M&L = middle/late treatment phase; G = good outcome group (N = 5); P = poor outcome group (N = 4); Time in Session = time EE occurred in a therapy session.

Figure 6. This figure illustrates the temporal pattern detection algorithm used in THEME. The upper line represents a time-coded series of events (i.e., a, b, c, d, k, and w) in an observation period $[1, N_T]$. The lower line represents the detection of two T -patterns in the observation period (ab and cd), each with two occurrences. In each T -pattern, the two events occur sequentially more often than expected by chance and their temporal distance is relatively invariant. In addition, the lower line indicates the detection of a more complex hierarchical pattern that combines the two observed T -patterns ((ab)(cd)), with two occurrences. Figure adapted from Magnusson (2000).

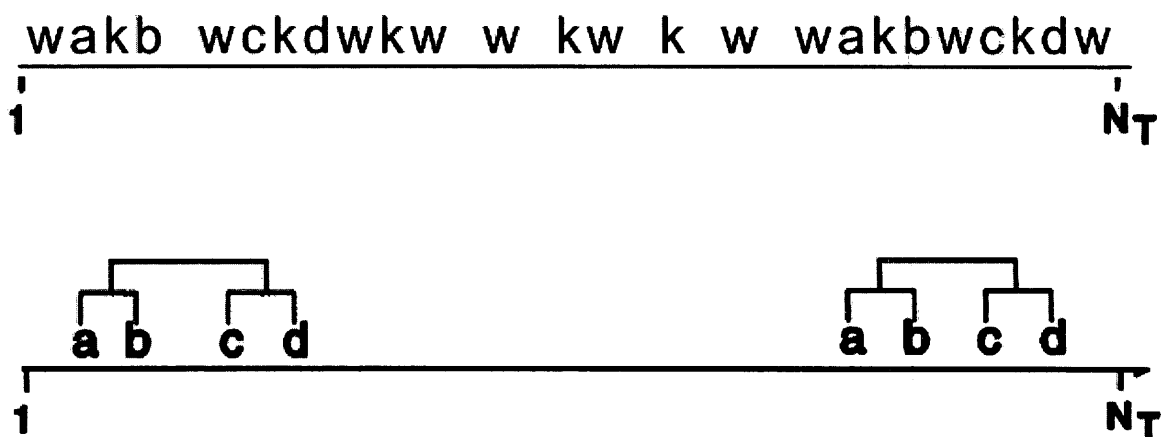


Figure 7. Bars represent the number of obtained CAMS patterns from the real data (green), 100 shuffled versions of the real data (blue), and 100 rotated versions of the real data (red), for each pattern length.

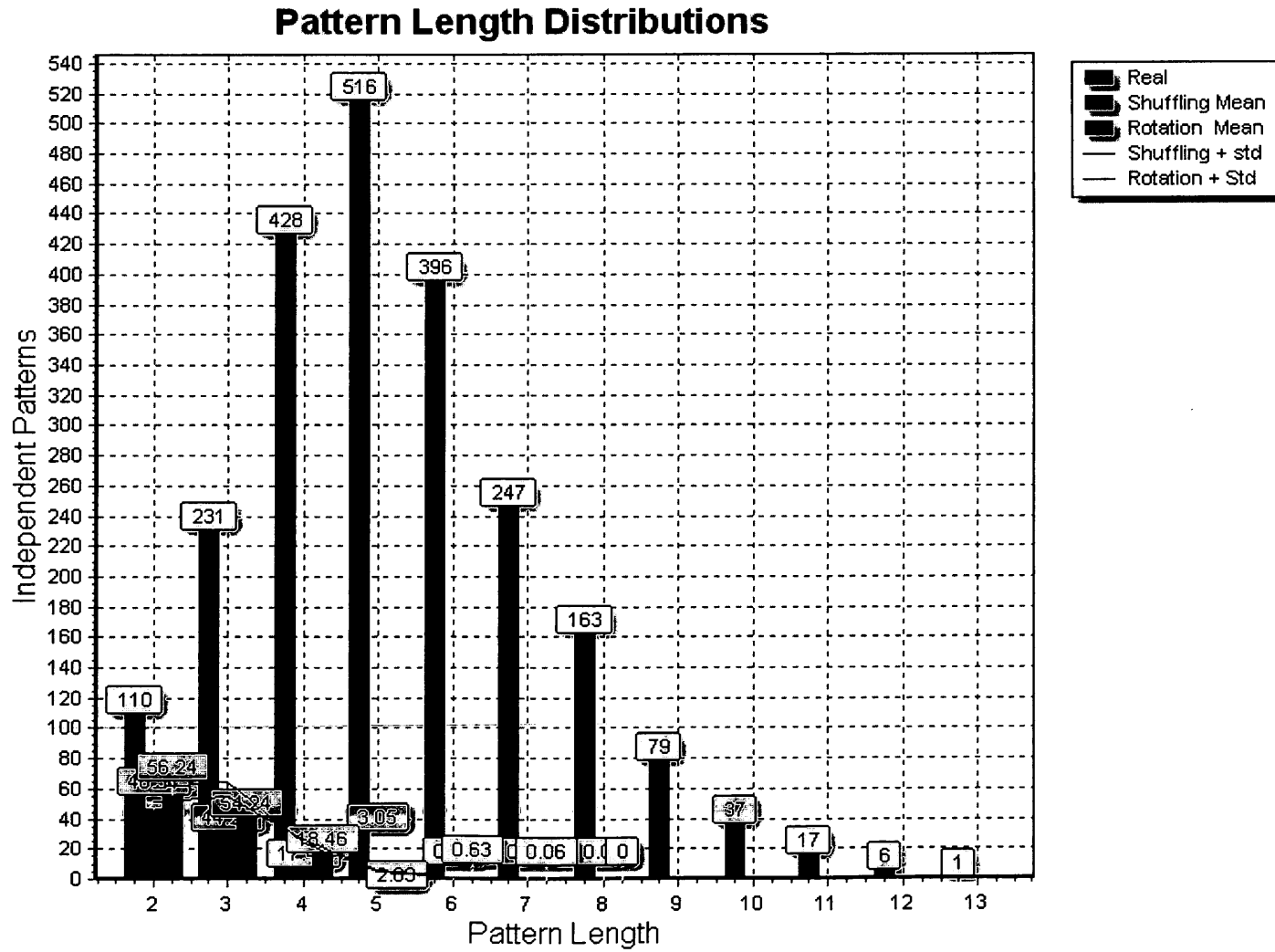


Figure 8. The number of CAMS patterns obtained from the real data significantly deviates from the mean number of patterns obtained from both types of random data (shuffled and rotated) for all pattern lengths as no global deviation is below 3 and the random data failed to detect any pattern with nine events or more. The CAMS patterns obtained from the real data are not random (Magnusson, personal communication, June 26, 2013).

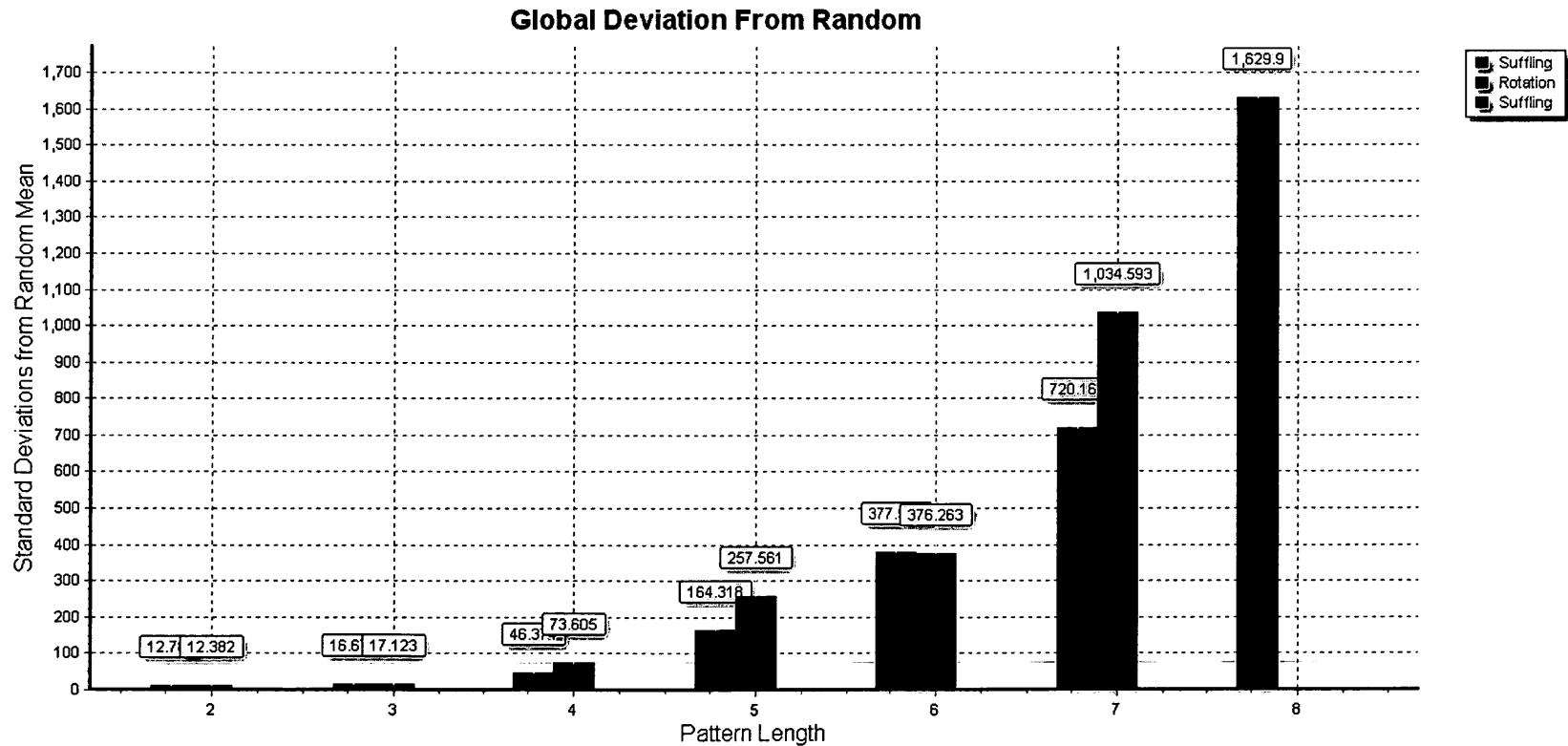
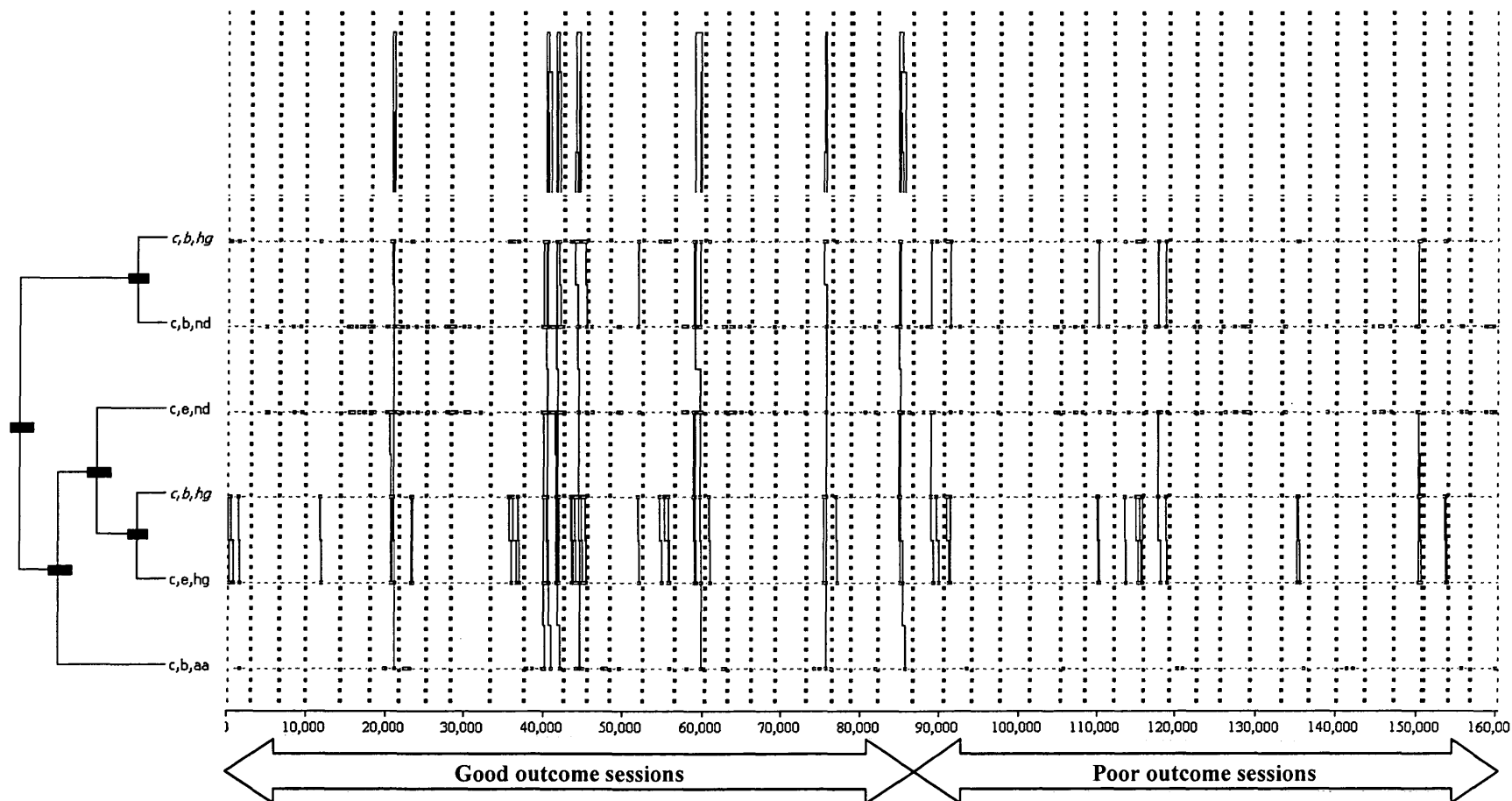
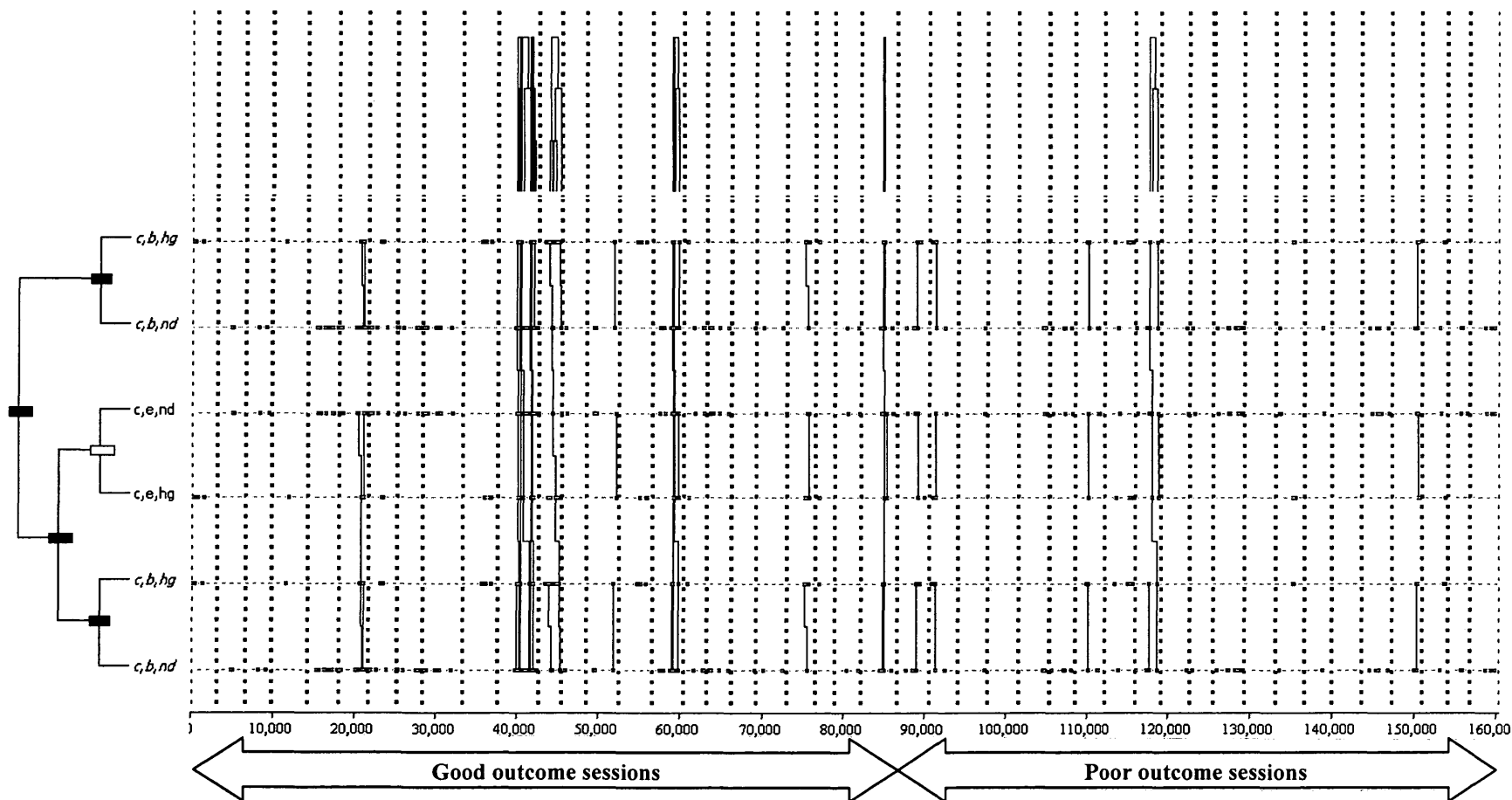


Figure 9. This pattern occurred with significantly greater frequency in the good outcome group. It is marked by expressions of hurt/grief (HG) and need (ND) that lead to assertive anger (AA).



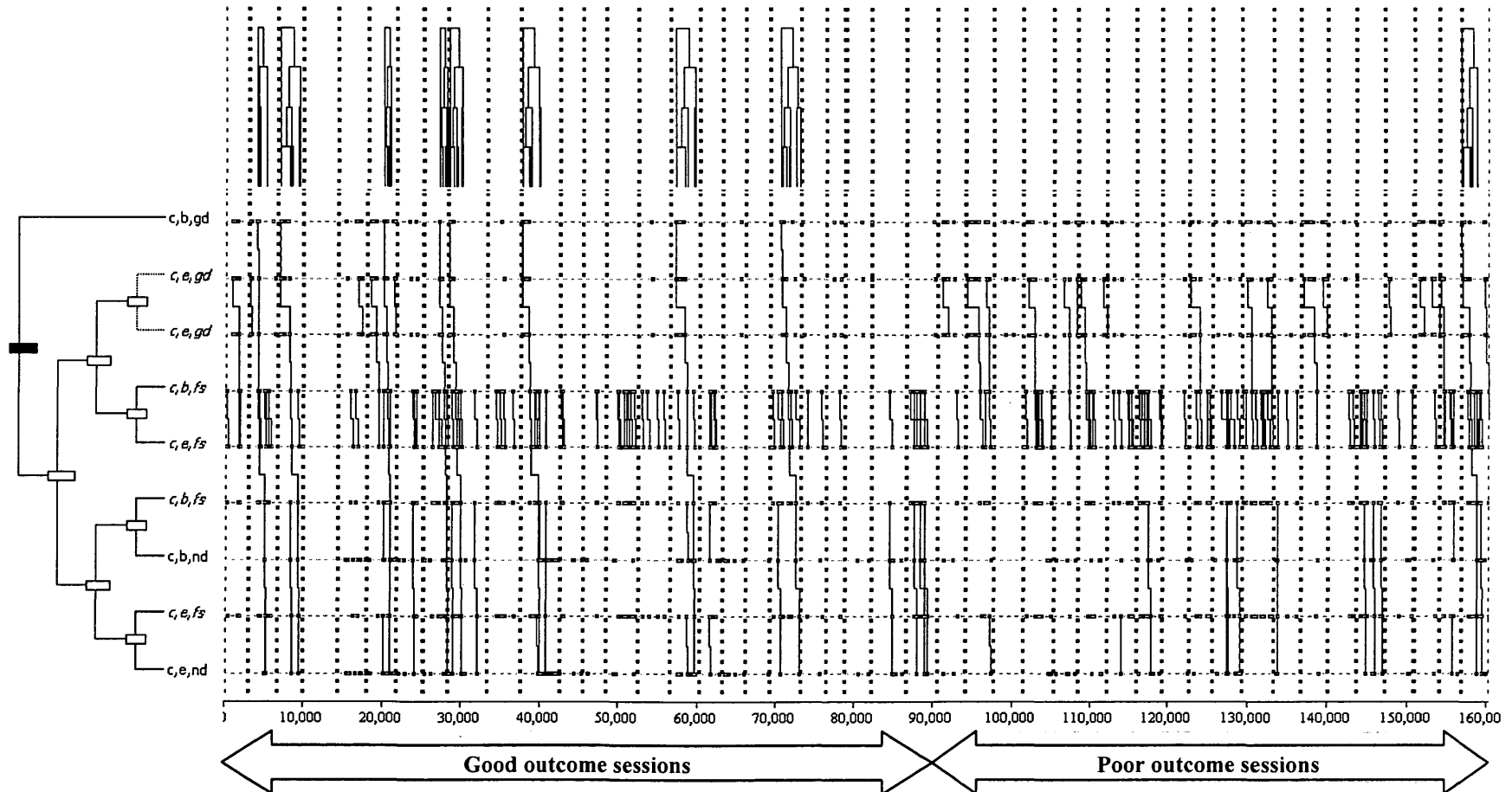
Note. "c" = client; "b" = beginning of code; "e" = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients' individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 10. This pattern occurred with significantly greater frequency in the good outcome group. It is marked by recurrent expressions of hurt/grief (HG) and need (ND).



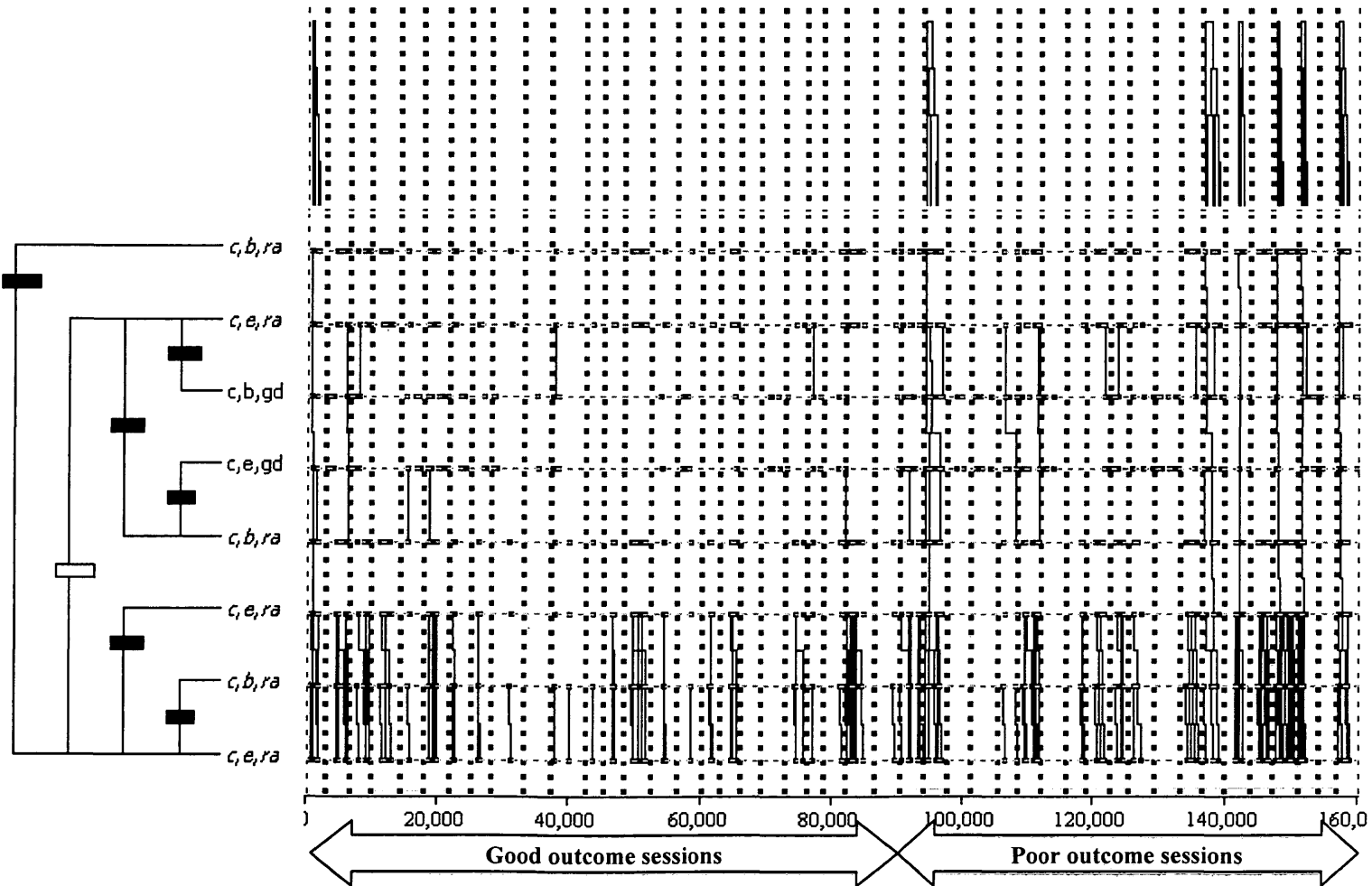
Note. "c" = client; "b" = beginning of code; "e" = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients' individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 11. This pattern occurred with significantly greater frequency in the good outcome group. It is marked by initial access of global distress (GD) that was followed by recurrent activation of fear/shame (FS) and then an expression of a need (ND).



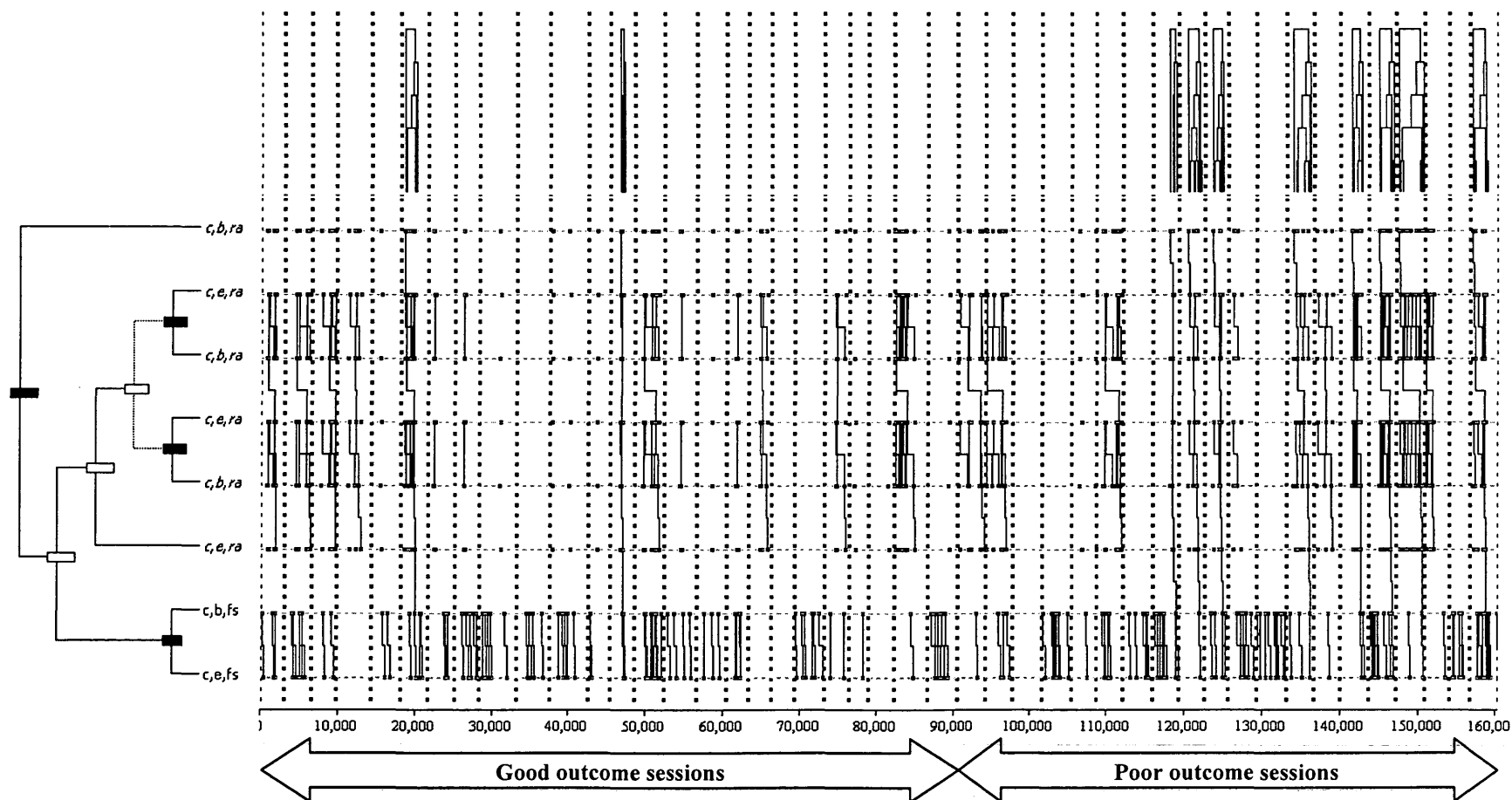
Note. “c” = client; “b” = beginning of code; “e” = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients’ individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 12. This pattern occurred with significantly greater frequency in the poor outcome group. It is marked by expressions of rejecting anger (RA) and global distress (GD).



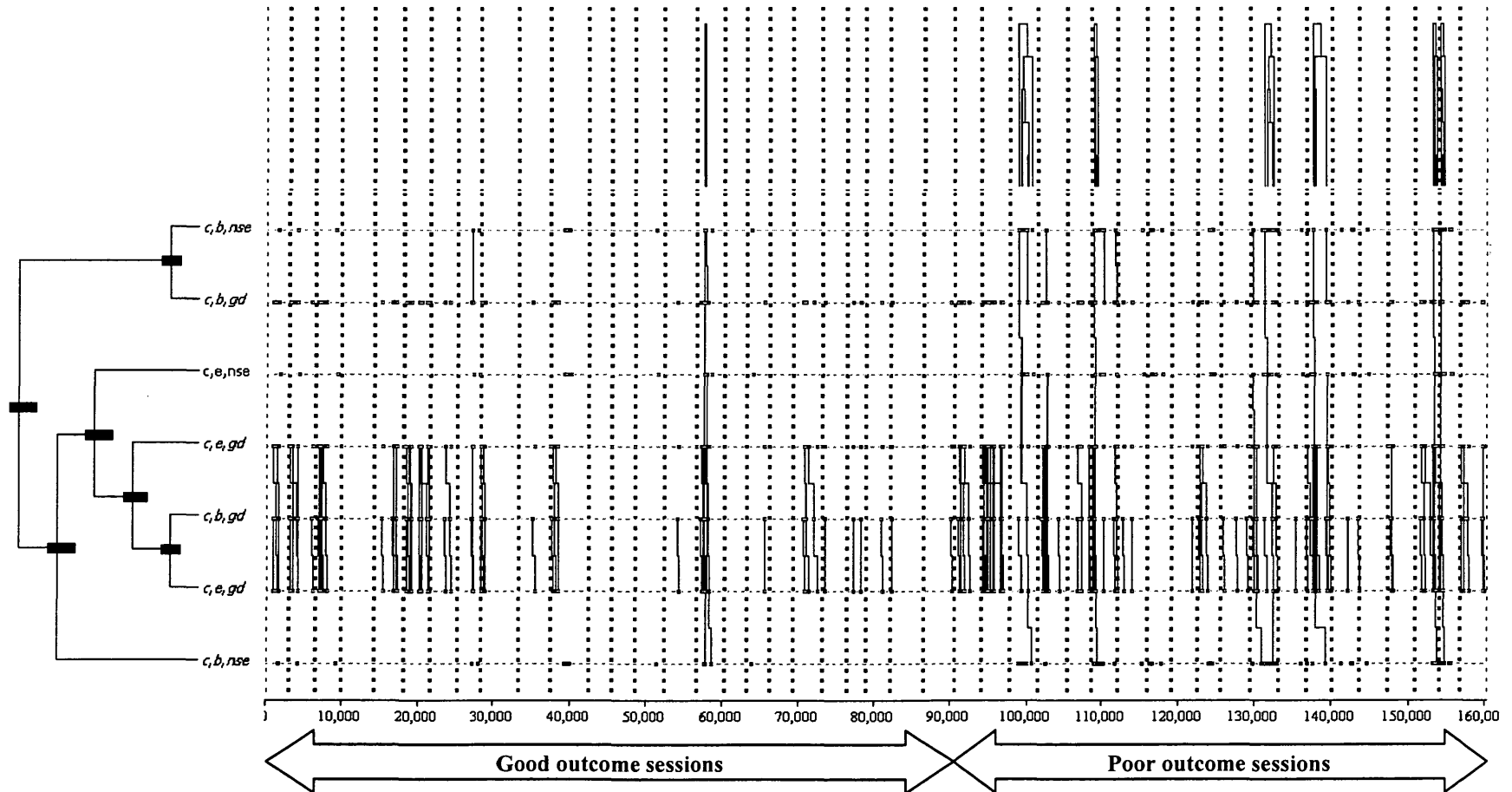
Note. "c" = client; "b" = beginning of code; "e" = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients' individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 13. This pattern occurred with significantly greater frequency in the poor outcome group. It is marked by expression of rejecting anger (RA) and fear/shame (FS).



Note. "c" = client; "b" = beginning of code; "e" = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients' individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 14. This pattern occurred with significantly greater frequency in the poor outcome group. It is marked by recurrent negative self-evaluation followed by expressions of global distress (GD).



Note. "c" = client; "b" = beginning of code; "e" = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients' individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 15. Bars represent the number of obtained ES patterns from the real data (green), 100 shuffled versions of the real data (blue), and 100 rotated versions of the real data (red), for each pattern length.

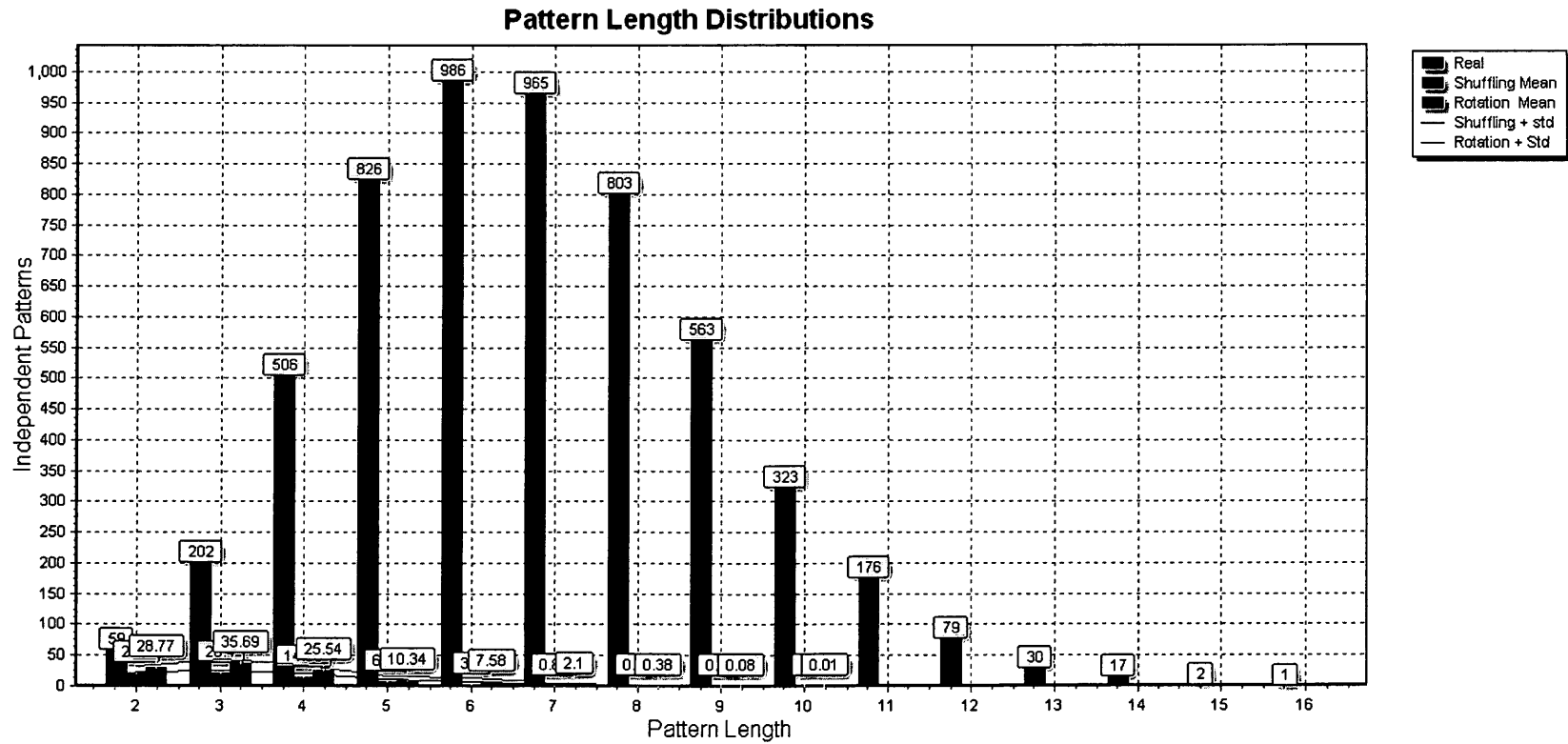


Figure 16. The number of ES patterns obtained from the real data significantly deviates from the mean number of patterns obtained from both types of random data (shuffled and rotated) for all pattern lengths as no global deviation is below 3 and the random data failed to detect any pattern with 11 events or more. The ES patterns obtained from the real data are not random (Magnusson, personal communication, June 26, 2013).

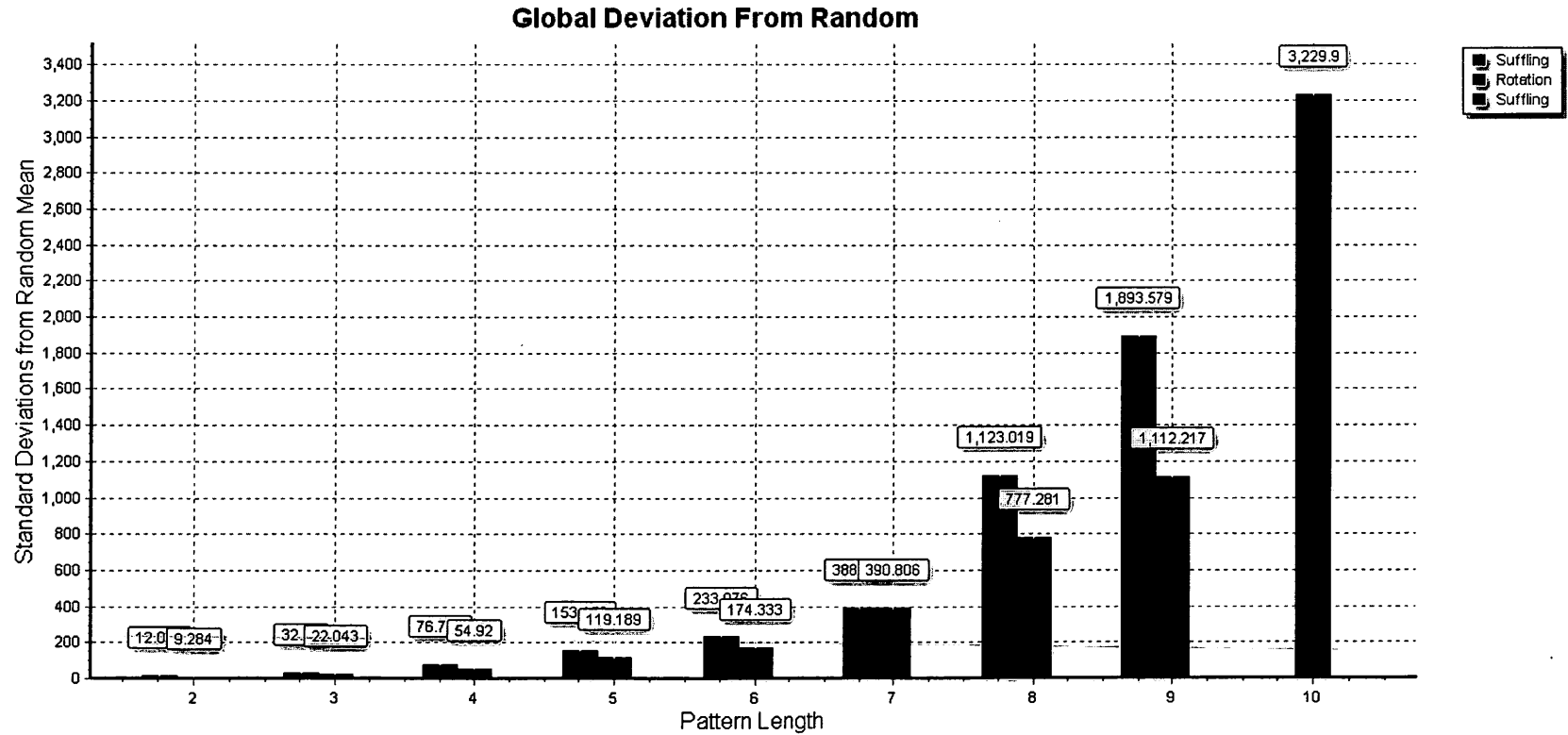
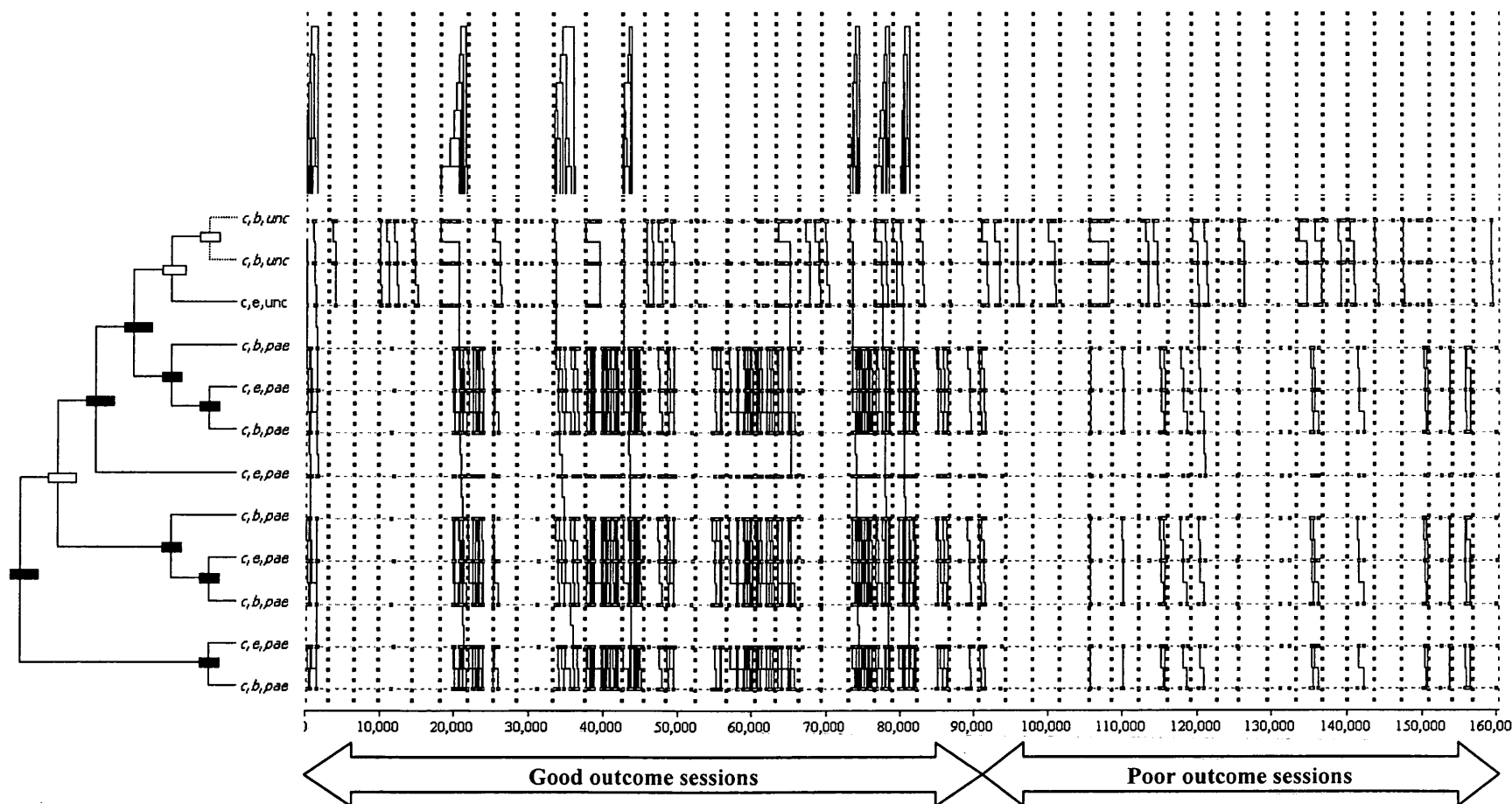
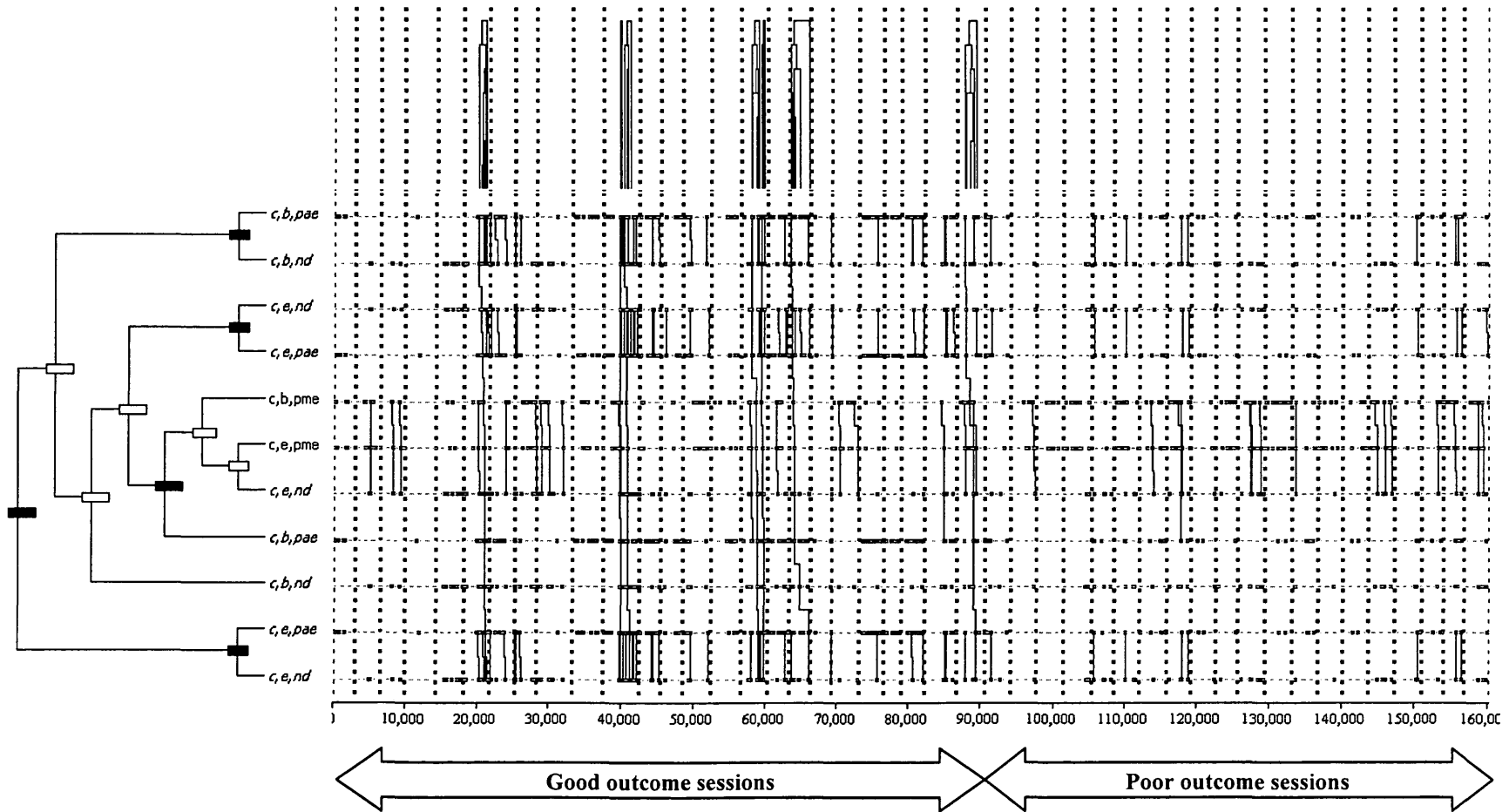


Figure 17. This pattern occurred with significantly greater frequency in the good outcome group. It is marked by recurrent primary adaptive emotion (PAE) access.



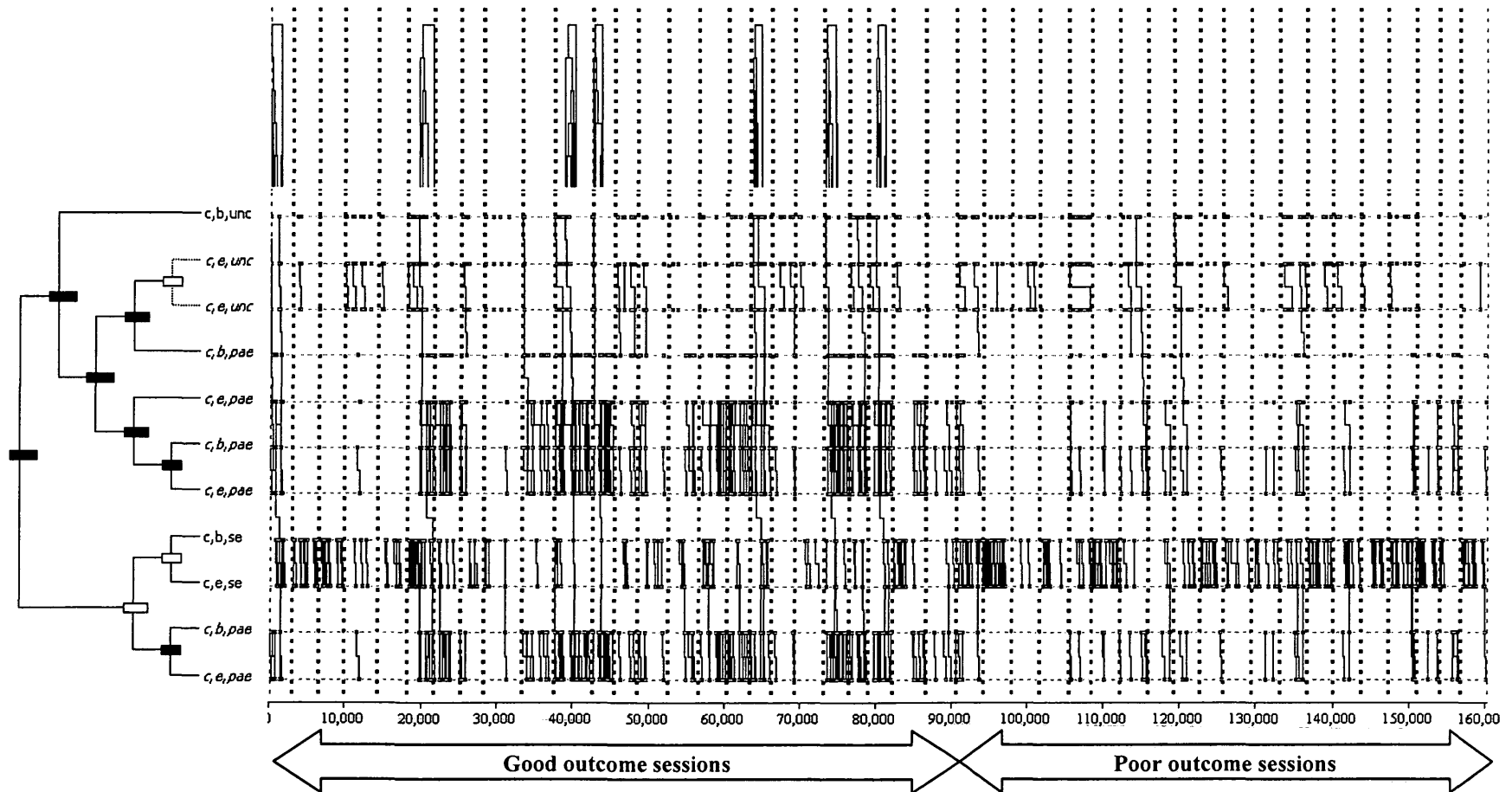
Note. "c" = client; "b" = beginning of code; "e" = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients' individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 18. This pattern occurred with significantly greater frequency in the good outcome group. It is marked by initial access of primary adaptive emotion (PAE) and need (ND) that leads to primary adaptive emotion (PME) and back to ND and PAE.



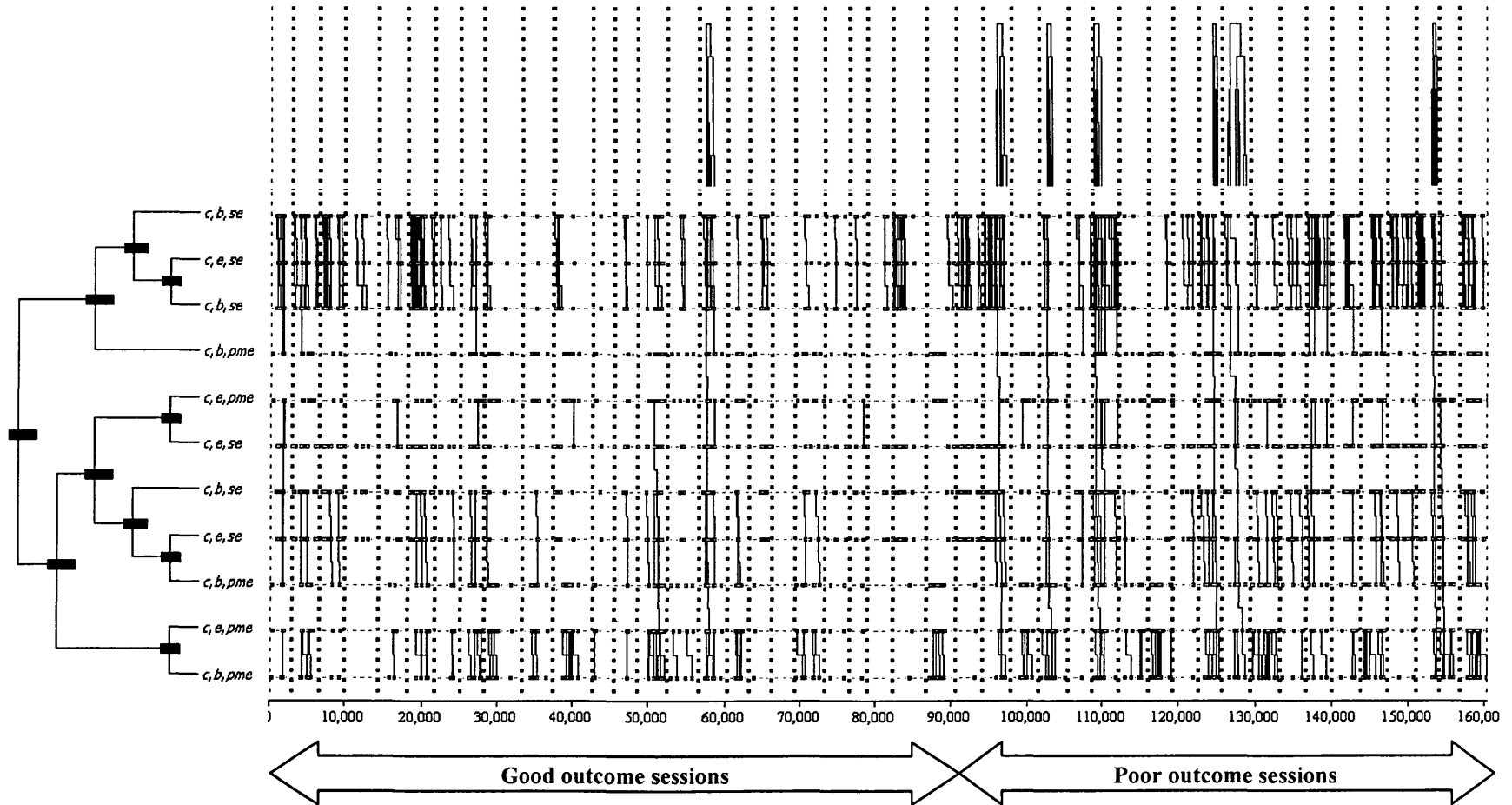
Note. "c" = client; "b" = beginning of code; "e" = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients' individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 19. This pattern occurred with significantly greater frequency in the good outcome group. It is marked by primary adaptive emotion (PAE) that leads to secondary emotion (SE) and back to PAE.



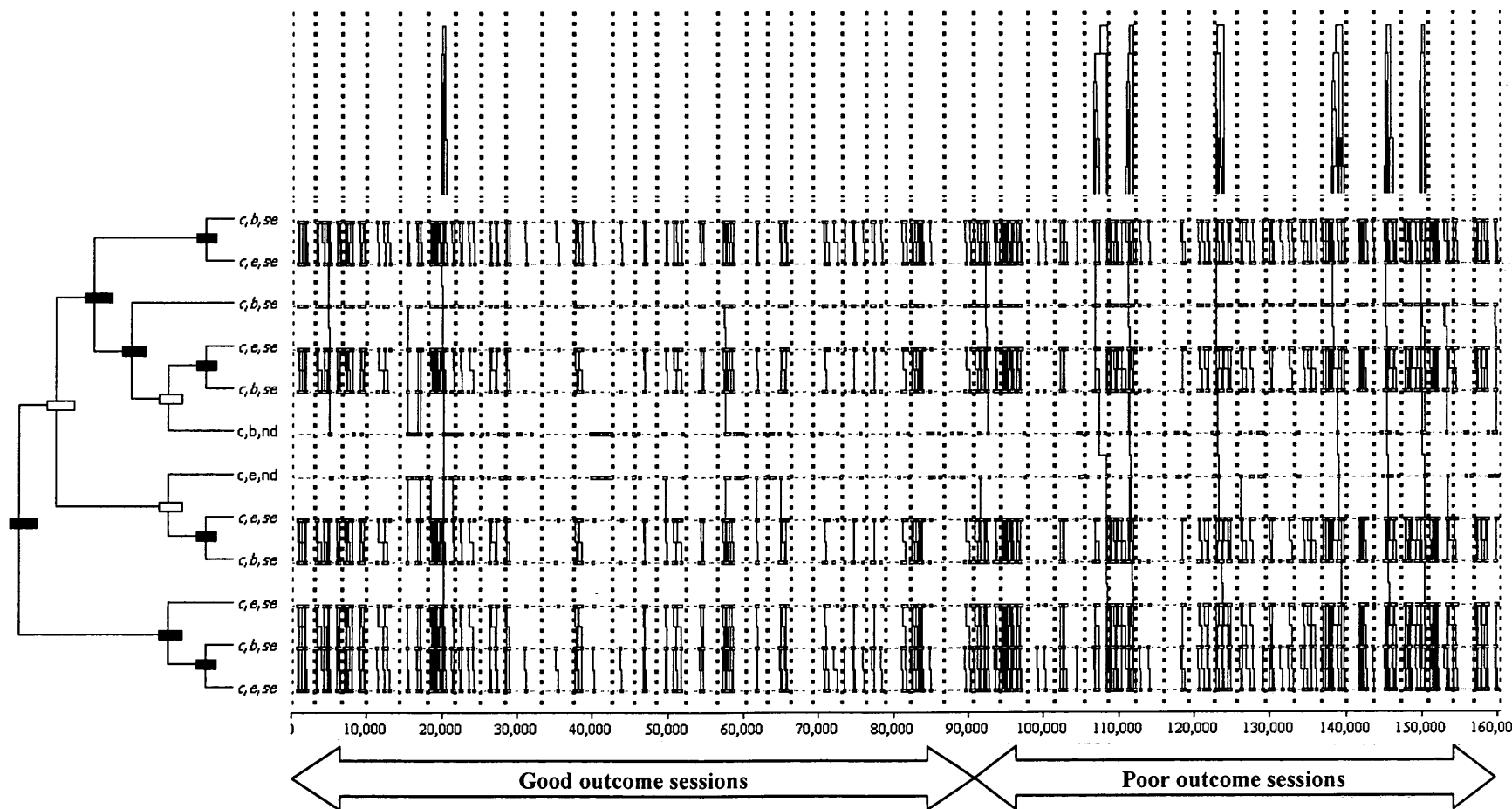
Note. “c” = client; “b” = beginning of code; “e” = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients’ individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 20. This pattern occurred with significantly greater frequency in the poor outcome group. It is marked by recurrent expressions of secondary emotion (SE) and primary maladaptive emotion (PME).



Note. "c" = client; "b" = beginning of code; "e" = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients' individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 21. This pattern occurred with significantly greater frequency in the poor outcome group. It is marked by initial access of secondary emotion (SE) that leads to need (ND) and back to SE.



Note. "c" = client; "b" = beginning of code; "e" = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients' individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 22. Bars represent the number of obtained OVS patterns from the real data (green), 100 shuffled versions of the real data (blue), and 100 rotated versions of the real data (red), for each pattern length.

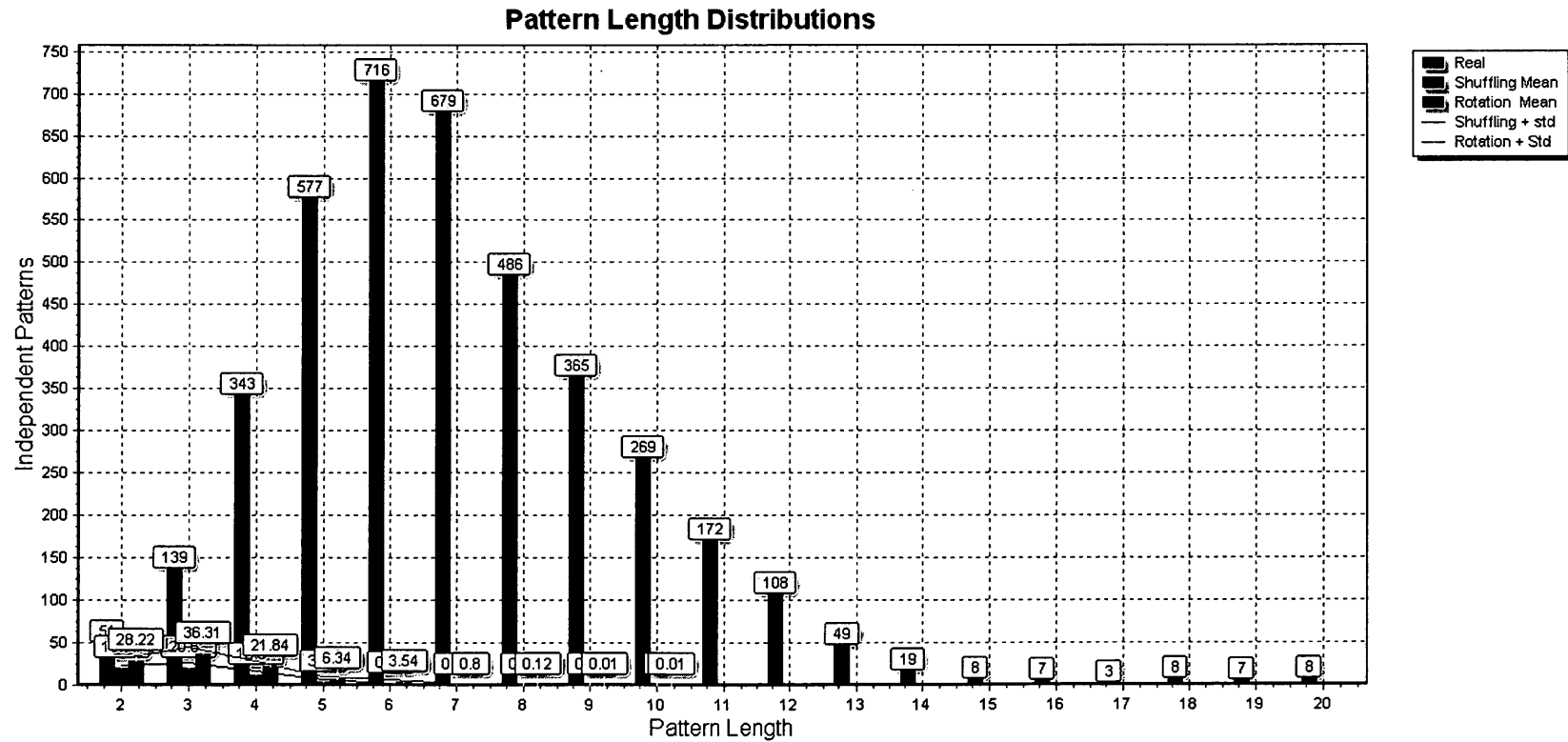


Figure 23. The number of OVS patterns obtained from the real data significantly deviates from the mean number of patterns obtained from both types of random data (shuffled and rotated) for all pattern lengths as no global deviation is below 3 and the random data failed to detect any pattern with 11 events or more. The OVS patterns obtained from the real data are not random (Magnusson, personal communication, June 26, 2013).

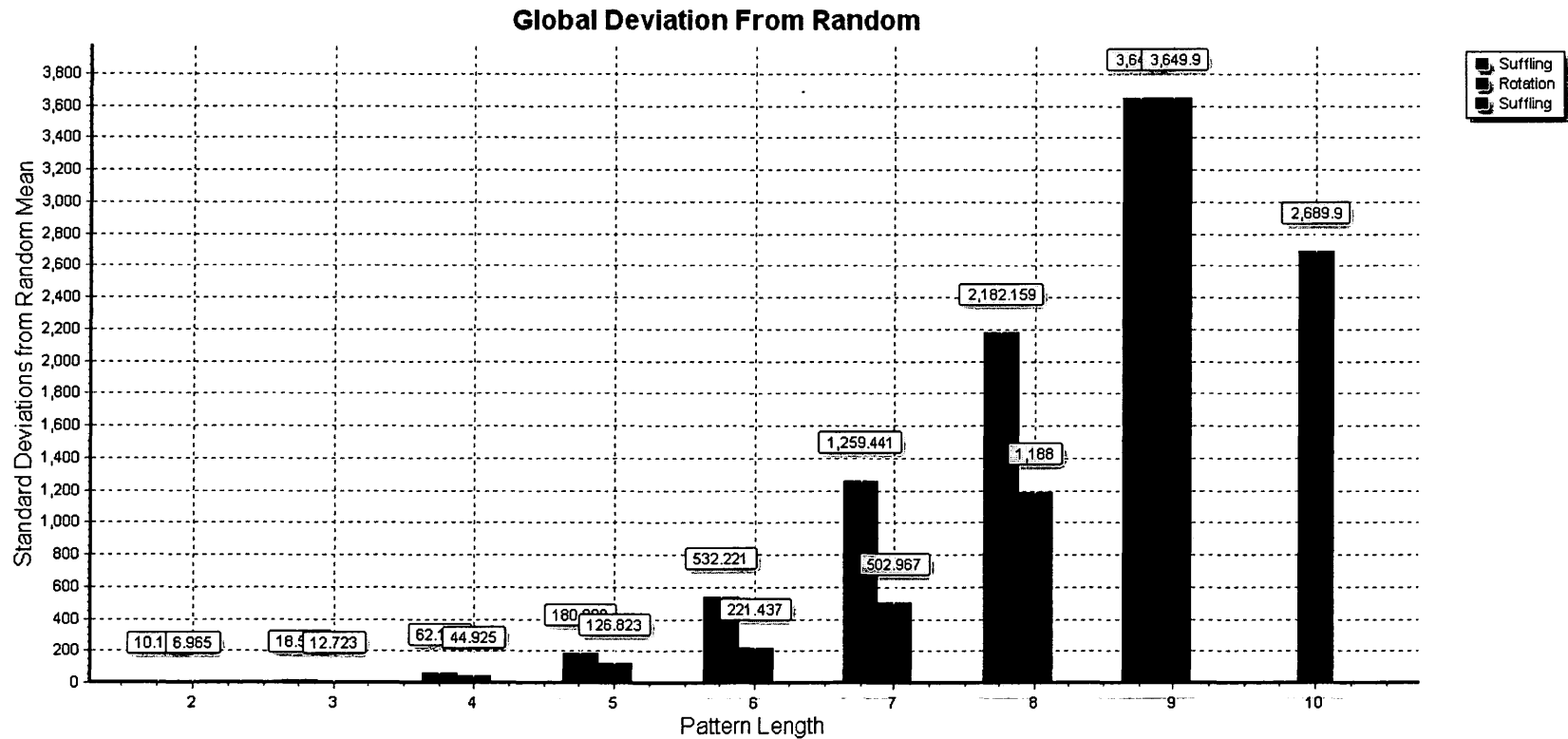
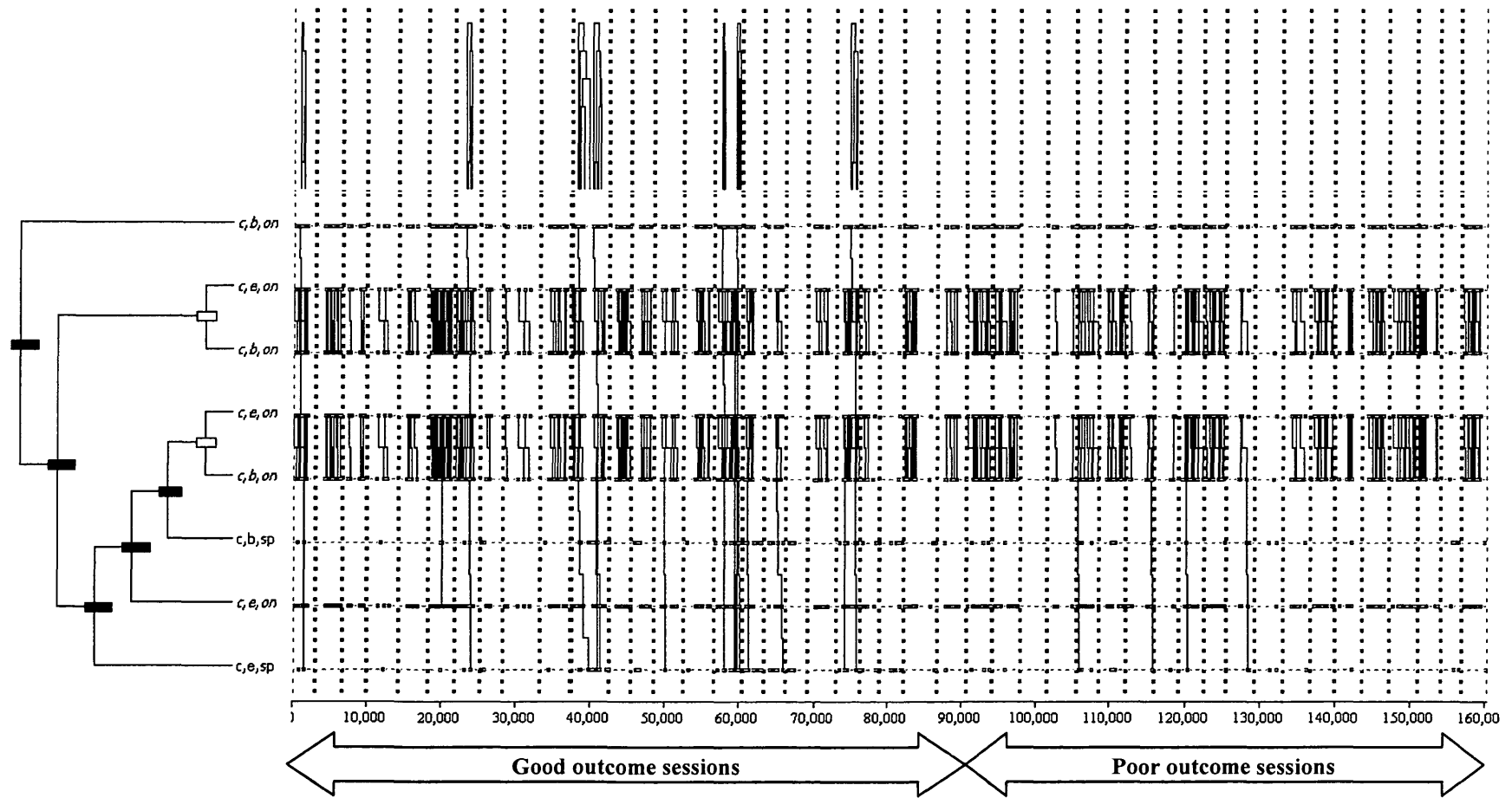
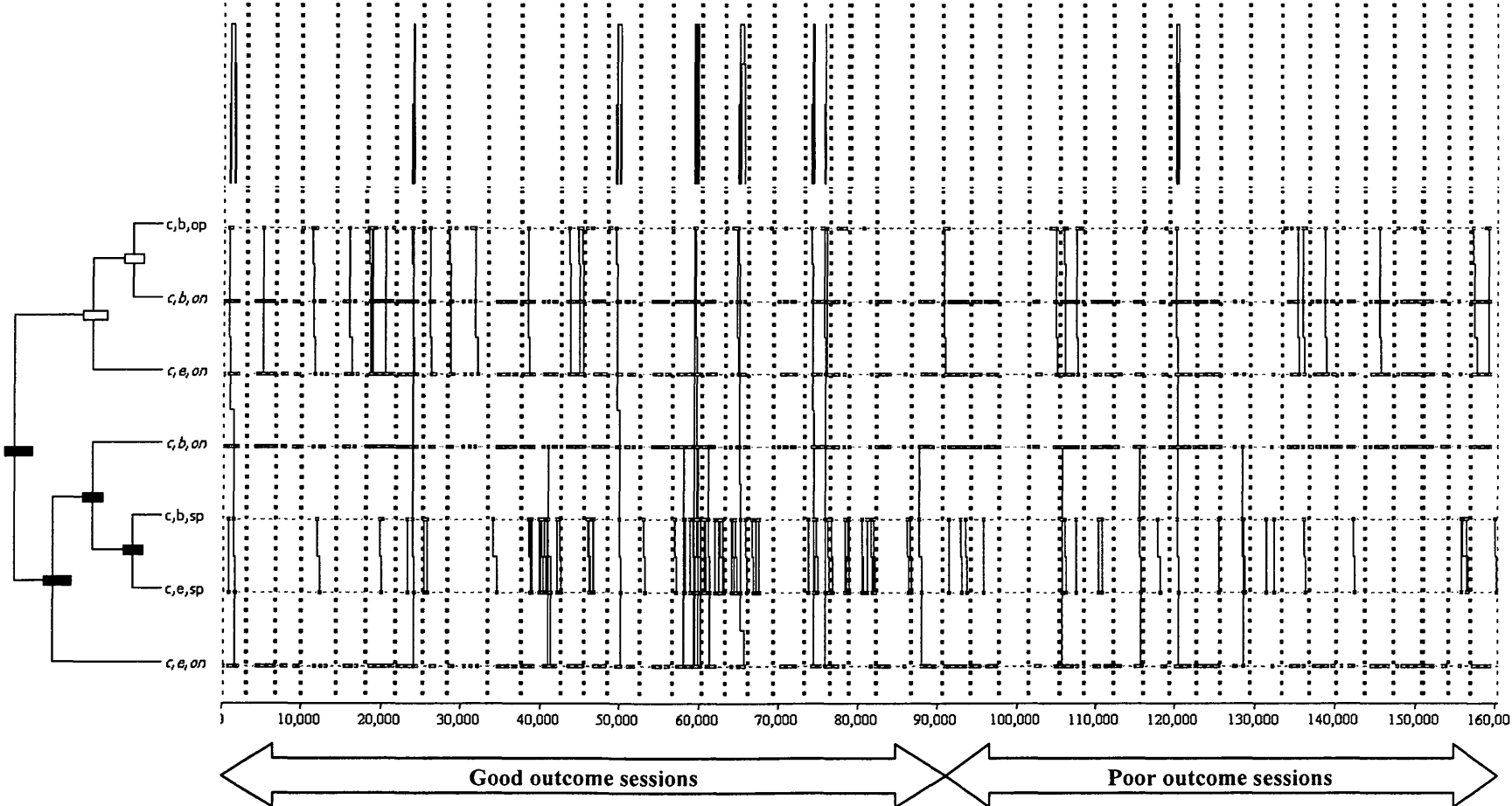


Figure 24. This pattern occurred with significantly greater frequency in the good outcome group. It is marked by recurrent expressions of other-negative (ON) and self-positive codes (SP).



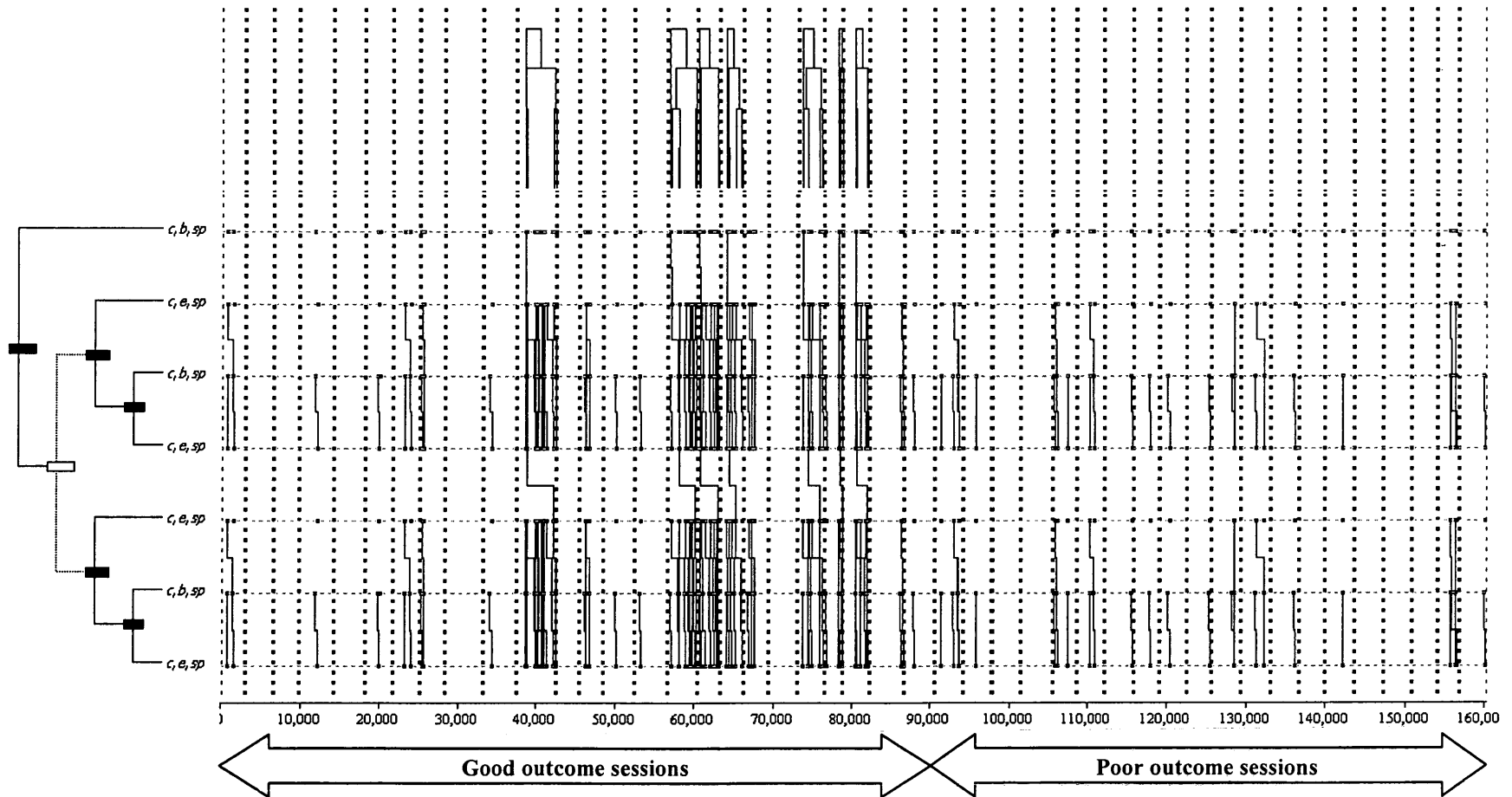
Note. "c" = client; "b" = beginning of code; "e" = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients' individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 25. This pattern occurred with significantly greater frequency in the good outcome group. It is marked by initial access of other-positive codes (OP) that leads to expressions of other-negative (ON) and self-positive codes (SP) and back to ON.



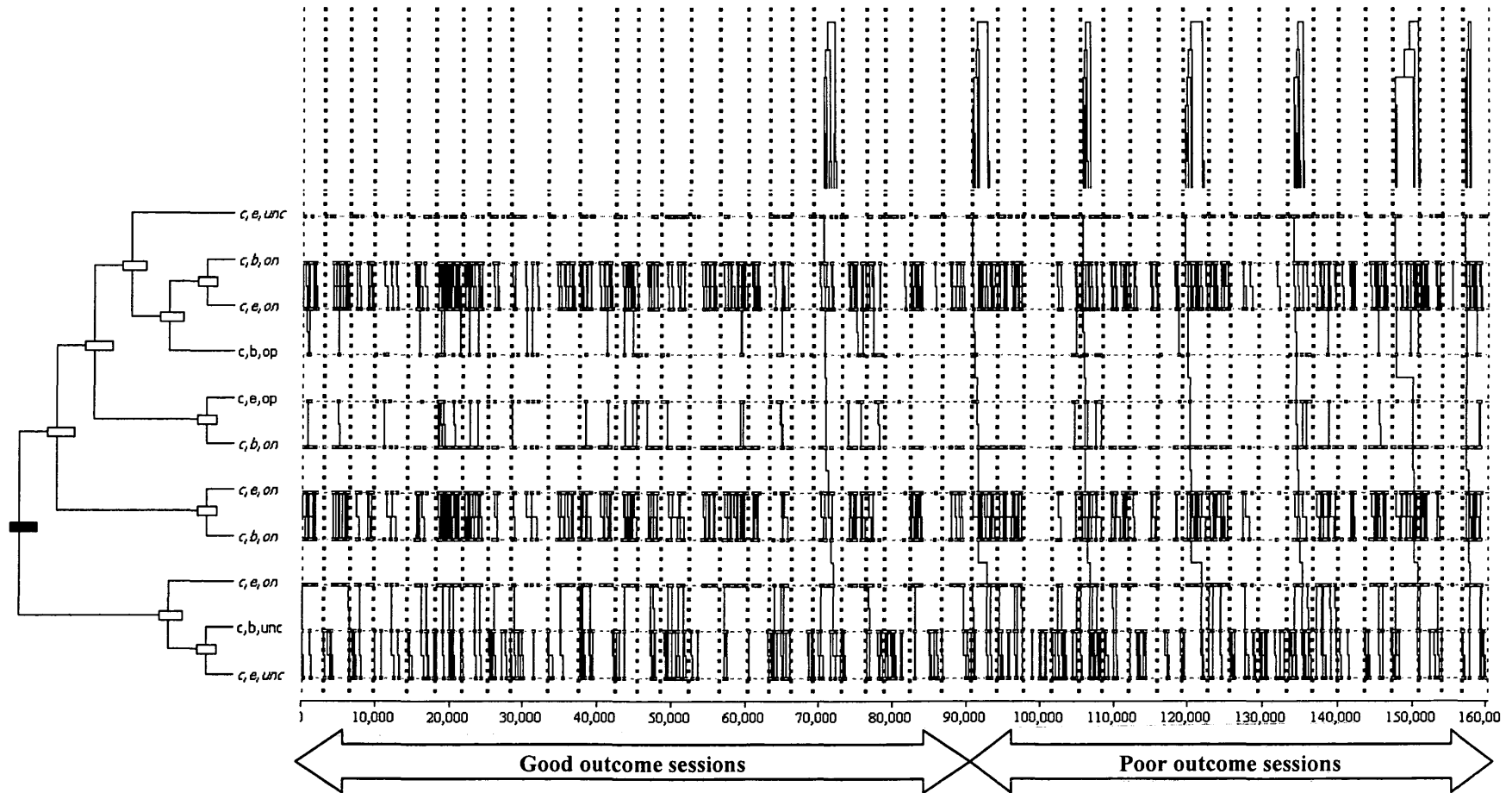
Note. “c” = client; “b” = beginning of code; “e” = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients’ individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 26. This pattern occurred with significantly greater frequency in the good outcome group. It is marked by recurrent access of self-positive codes (SP).



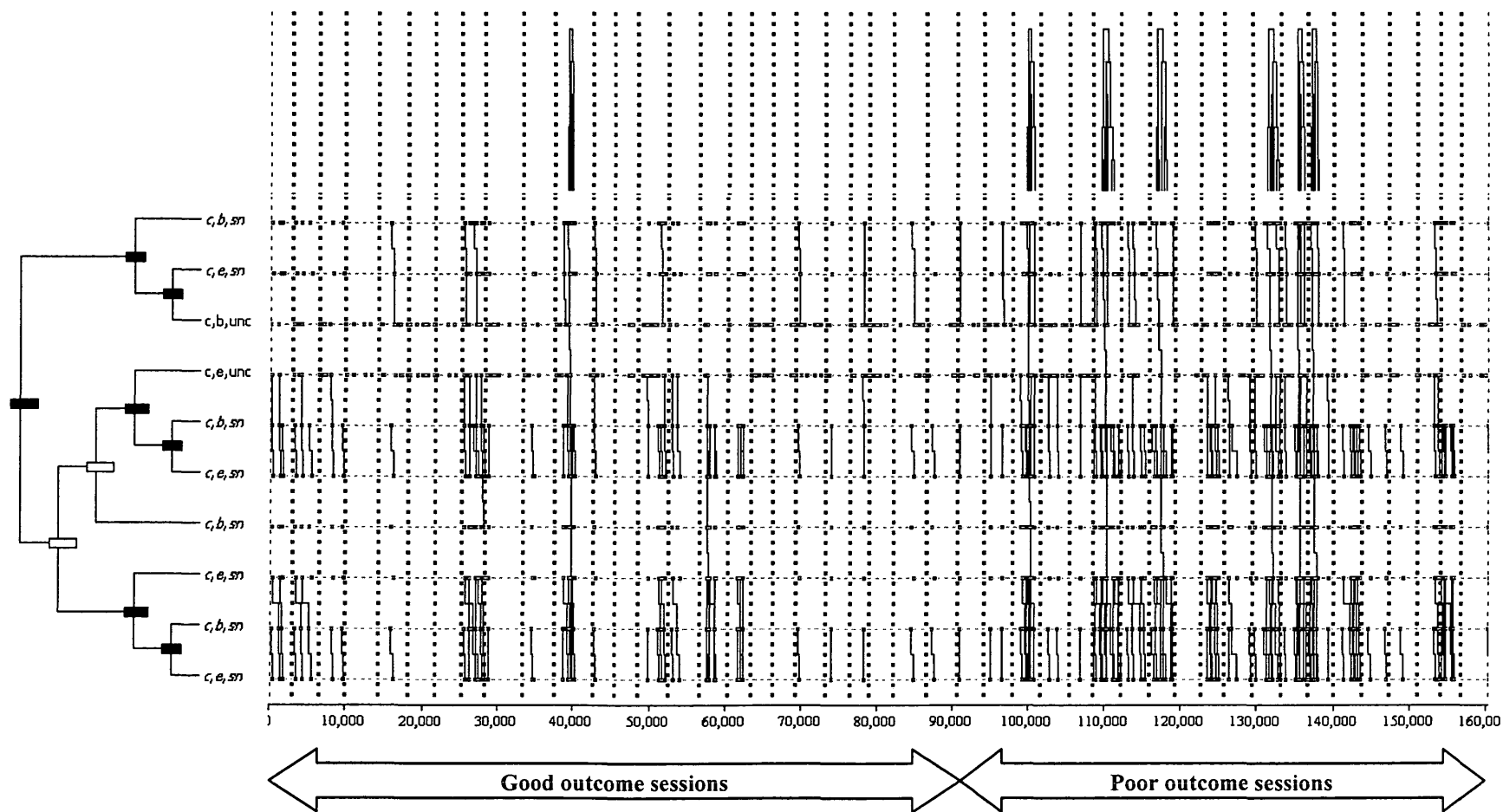
Note. "c" = client; "b" = beginning of code; "e" = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients' individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 27. This pattern occurred with significantly greater frequency in the poor outcome group. It is marked by initial access of other-negative codes (ON) that leads to other-positive codes (OP) and back to ON.



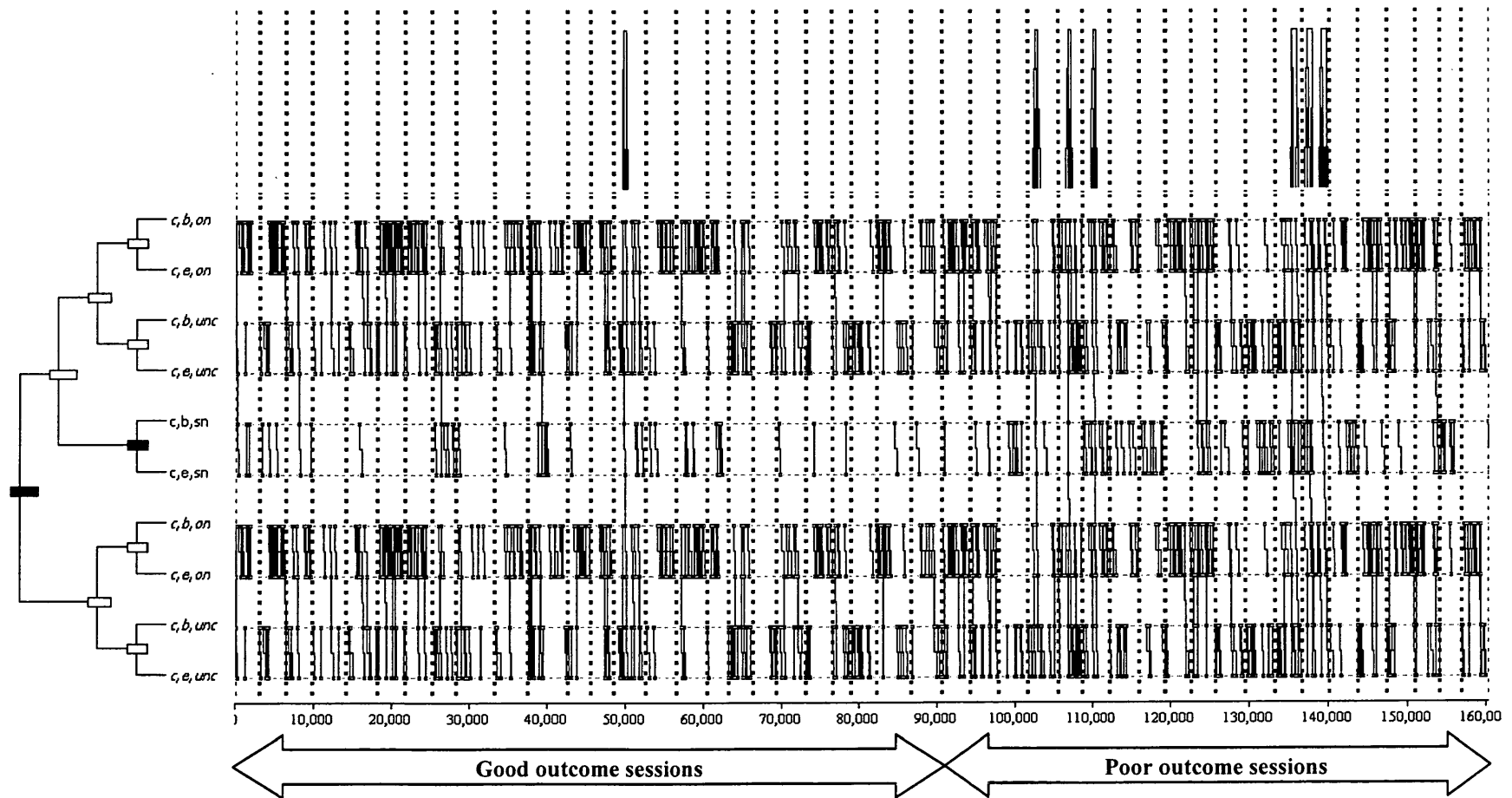
Note. “c” = client; “b” = beginning of code; “e” = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients’ individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 28. This pattern occurred with significantly greater frequency in the poor outcome group. It is marked by recurrent expressions of self-negative codes (SN).



Note. "c" = client; "b" = beginning of code; "e" = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients' individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.

Figure 29. This pattern occurred with significantly greater frequency in the poor outcome group. It is marked by initial access of other-negative codes (ON) that leads to self-negative codes (SN) and back to ON.



Note. "c" = client; "b" = beginning of code; "e" = end of code. Green boxes connecting event labels indicate patterns that occur on their own in the dataset, whereas white boxes indicate patterns that occur exclusively within the total pattern. Columns represent clients' individual sessions with good outcome clients occupying the first 25 columns, and poor outcome clients occupying the last 20 columns. Black dots represent the occurrence of a single event and vertical lines connecting black dots indicate significant temporal relations between events. Vertical lines along the top row indicate sessions in which the total pattern occurs in its entirety.