Changes in Clients' Emotion Episodes in Therapy

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A thesis submitted to the Faculty of Graduate Studies
in partial fulfillment of the requirements
for the degree of

Doctor of Philosophy

Graduate Programme in Psychology
York University
North York, Ontario

March 1998

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ABSTRACT

A major aim of emotionally-focused therapies is the therapeutic restructuring of clients' dysfunctional emotion-generating schemes. Emotionally-focused interventions are used to access and restructure clients' dysfunctional emotion schemes, and are thought to result in changes in clients' emotional experiences. This study used the Emotion Episode (EE) method, developed in earlier work by the author, to measure whether or not therapeutic outcome was associated with changes in the configurations of clients' reported emotional episodes from early to late in emotionally-focused therapies for depression. The EE method was used to identify and demarcate EE segments in therapy transcripts, and to identify the situation, emotion, action tendency, appraisal, and concern associated with these segments.

Clients ($N = 24$) undergoing an average of 18 emotionally-focused therapy sessions pertaining to the treatment of mild to moderate depressions, were split into those having better or poorer outcomes based on a grand outcome ranking derived from their residual gain scores on the Beck Depression Inventory, the Rosenberg Self-Esteem Scale, the Inventory of Interpersonal Problems, and the Global Severity Index of the Symptom Checklist 90.

All EEs occurring in the transcripts of the first three and the last three sessions of the clients' therapies were identified. The emotion or action tendency in each EE was categorized according to one of the higher-order emotion categories indexed in a

modified version an empirically-generated list of basic emotion categories (based on work by Shaver and his colleagues).

For each client, a single difference value (*D*) was calculated to represent the overall difference in the relative frequency of occurrence of all emotions from early to late in therapy. It was found that *D*-values of the better outcome group were significantly higher than those of the poorer outcome group. This finding suggested a greater degree of change in the reported emotions of the better outcome group over therapy. In addition, clinical ratings of the clients' therapeutic improvement, based on a reading of their EE protocols from early to late in therapy, were significantly correlated with the clients' *D*-values, thus indicating an association with positive clinical change. Taken together, these findings suggest that when successful, emotionally-focused therapies targeting clients' emotional experiences are associated with positive therapeutic changes in clients' reported emotional experiences. Implications for future research are discussed.

ACKNOWLEDGMENTS

I am deeply indebted to Leslie Greenberg for training me as a therapist and researcher. The education he provided has been of the very highest quality. I would also like to thank Les for quietly mentoring me as a person, and for showing me such a good time in graduate school.

I wish to express my appreciation to my committee members, Shaké Toukmanian and David Rennie. David took an interest in my personal and professional development throughout graduate school, and went the extra mile in helping me to complete this project. I would also like to thank Shaké for her caring and thoughtfulness.

Liz Bolger provided invaluable suggestions in the preparation of this manuscript. I am grateful also to Rhonda Goldman, Freda Kalegakoros, Alberta Pos, Mira Starkman, and Bill Whelton for their work as raters on this study. Freda and Mira also made substantial theoretical contributions in early work on the Emotion Episode method. I wish to thank Georges Monettes for his most generous and inspired statistical contributions to this work. Thanks also to Mike Friendly, who obliged my need for quick and dirty statistical fixes.

I am fortunate to have the following wonderful friends, who provided love, support, and patience: Rhonda Goldman, Ann Wainwright, Shelley McMain, Liz Herlich, Ken Scopick, Enoch Grey, Yedida Zalik, Liz Bolger, Ross Thomson, Robin Gagnon, and Marcie Fuchs. I was also lucky to have some very fine friends at York, among them Steve

Biggs, Cynthia Chataway, Sharon Day, Karen Hardtke, Heidi Levitt, Myriam Mongrain, Serine Warwar, and Bill Whelton. I would also like to thank Patrick Smith of the Centre for Addictions and Mental Health for his patience and encouragement.

I would like to thank my family, Irving, Rebecca, and Sherry Korman, for their love and support. My parents' resolute confidence in me, especially, sustained me through this project.

I dedicate this project to the late Jack (Atito) Rains, alive in me, in the here and now.

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CHAPTER I: INTRODUCTION

Emotions are important because they inform us about how we appraise ourselves and our worlds (Frijda, 1986; Lazarus, 1991). Emotions also tell us that an important need or concern may be threatened or advanced in a situation (Frijda, 1986), and theyare involved in establishing goal priorities (Oatley & Jenkins, 1992). A current view sees emotion as the felt action tendency associated with the appraisal of a situation in relation to a need or concern (Frijda, 1986; Lazarus, 1993). The appraisal involves an evaluation of harm or benefit to the individual, and results in a corresponding physical and psychological preparedness to regulate the individual's relationship with its environment. For example, an appraisal of threat in relation to the need for safety may result in a mobilization of the individual in readiness to flee.

Appraisals, action tendencies and concerns have appeared repeatedly as prominent concepts in a number of emotion theories of early philosophers (e.g., Aristotle, c. 320 B.C./1961; Hobbes, 1651/1962; Spinoza, 1677/1989) and the adaptive nature of changes in action readiness was emphasized in evolutionary and physiological theories of emotion in the late stages of the nineteenth century (Darwin, 1872/1965; James, 1884/1984). The concepts of appraisal, action tendencies, and concerns are also central features in the modern conceptualization of emotion- generating schemes, the neural memory-based structures considered central in generating the majority of human emotional experience after infancy (Damasio, 1994). Emotion-generating schemes have been defined as

organizations integrating emotional memory, expressive motor processing, and conceptual thought (Leventhal, 1979).

Clinically, "emotion schemes" have been conceptualized as structures that automatically and implicitly integrate cognitive, affective, and sensory information, and generate an embodied, emotional felt sense of self-in-the-world (Greenberg et al., 1993; Greenberg & Paivio, 1997). Greenberg et al. have emphasized that emotion schemes are not only informational networks, but are also blueprints for action. Because they are involved in automatically generating an emotional felt sense, emotionally-focused therapies target emotion schemes for intervention. Incorporating concepts from schematic theories of memory (e.g., Bartlett, 1932), emotionally-focused evocative interventions involve "priming" sufficient constituents or "nodes" of emotion scheme networks in order to activate, access, and restructure dysfunctional emotion-generating schemes in therapy. Aspects of such schemes that are attended to and targeted for change include clients' action tendencies, appraisals of self and world, and underlying needs and concerns. The intent of emotionally focused interventions is to modify the schematic structures generating clients' emotional experiences. Recently, emotionally focused treatments have been shown to result in the reduction of depressive symptoms in a study of clinically depressed clients (Greenberg & Watson, in press). Emotionally focused therapies posit that the therapeutic changes observed among the clients in that sample are due to changes in clients' emotion schemes.

The Emotion Episode (EE) method (Korman, 1991; Greenberg & Korman, 1993) is an attempt to measure and operationalize emotion schemes, a key construct in emotionally-focused therapies (e.g., Greenberg et al., 1993). The EE method is used to identify and demarcate segments in psychotherapy in which clients report emotional episodes. In addition, the method is used to identify the following components associated with the emotional event: emotions and/or action tendencies, appraisals of self and/or situation, and concerns. In contrast with questionnaire measures that ask clients how they think they feel, the EE method may be a more representative gauge of clients' emotion schemes because the method is used to derive schematic features from accounts of episodes in which emotion has actually occurred. That is, rather than gauging true/false or likert-scaled responses to pre-set questions, the EE method is used to distill meaning from the texts of clients' reports of their emotional experience.

The first goal of this dissertation is to use the EE method to measure changes in emotion across treatment in depressed clients. It is expected that changes in clients' EEs will be associated with therapeutic improvement. Specifically, it is hypothesized that changes in depressed clients' emotional configurations from early to late in therapy will discriminate between clients exhibiting better and poorer treatment outcomes. That is, it is expected that clients who improve more on standardized outcome indices from pre- to post-treatment will also demonstrate more proportional changes in the types of emotions they report experiencing from early to late in therapy. It is also hypothesized that the

changes in the components (i.e., the emotions and/or action tendencies, appraisals, and concerns) derived from better outcome group clients' EEs will be rated by clinical judges to be more indicative of therapeutic improvement than changes in the protocols of clients with poorer outcomes. These investigations will also serve as an empirical test of a central tenet of emotionally-focused therapies; that successful emotionally-focused treatments are associated with changes in clients' emotional experiences (e.g., Greenberg & Paivio, 1997).

A second goal of this study is to explore if the EE method provides a meaningful means of representing and tracking changes in clients' emotion schemes from early to late in therapy, and to explore and describe the nature of these changes in a number of clinical examples. This will be accomplished by following a number of individual clients' EEs from early to late sessions, and comparing the appraisals and concerns associated with these early and late EEs. If emotionally-focused therapies do result in changes in clients' emotion schemes (e.g., Greenberg et al., 1993), then these changes should be associated with meaningful changes in clients' appraisals of self and world, and their underlying concerns, from early to late in treatment. That is, it is expected that the appraisals and concerns associated with the EEs of better outcome clients will demonstrate meaningful change over treatment, while the appraisals and concerns of poorer outcome clients will remain more static.

A final set of objectives in this study is methodological: The first goal is to

explore further the reliability of the EE method. Initial tests of the reliability and validity of the EE method have been reported elsewhere (Greenberg & Korman, 1993; Korman, 1991). An additional purpose is to develop a means of representing the distribution of clients' emotional experiences over a given time period and the changes in these configurations from early to late in therapy. The aim is to provide a graphic representation that will illuminate the process of emotional change in psychotherapy.

CHAPTER II: LITERATURE REVIEW

Philosophical Precursors of Current Emotion Theory

The roots of current emotion theory, with its emphases on appraisal and action tendencies, can be seen in earlier work by Aristotle (c. 320 B.C./1961), Hobbes (1851/1962), and Spinoza (1677/1989). A predominant view of emotion held by philosophers in ancient Greece was that the passions were wild and enslaving, and needed to be overcome by reason (Omdahl, 1995). An ideal society fostered reason, so that its members could be liberated from their passions. However, rather than condemning tragedies and epics as Plato did (Plato, *c.* 370/1941) for their tendency to unleash the passions, Aristotle saw the arts as providing a safe, cathartic release of excess emotions that was necessary to maintain social order.

Aristotle (*c.*320 B.C./1954) actually tried to increase the effectiveness of tragedies and epics by outlining specific qualities that needed to be conveyed to, and apprehended by, audiences in order to evoke in them particular affective responses. For example, Aristotle's recipe for evoking pity involved introducing a moderately virtuous character, who due to his own error, loses a close attachment figure. According to Omdahl, Aristotle's Poetics (*c.*320 B.C./1961) was one of the earliest writings to articulate the relationship between the interpretation of particular events and ensuing emotional states. Aristotle also integrated features of actional impulses into his otherwise cognitive view of emotion. For example, Aristotle defined anger as "a belief that we, or our friends, have

been unfairly slighted, which causes in us both painful feelings and a desire or impulse for revenge (Aristotle, 1941, p. 1380). Thus, Aristotle's understanding of emotion included properties that could today be considered akin to affect, action tendency, and appraisal.

Hobbes' (1651/1962) view of emotion also integrated characteristics related to cognition and behavioural directional tendencies. According to Hobbes, all voluntary motion, including emotion, was rooted in the imagination. Hobbes first defined basic categories of affect as well as more specific emotional states. An example of the former was Hobbes definition of "appetite," as movement toward. An example of one of Hobbes' definitions of a more specific emotion was "courage" as "fear with the hope of avoiding through resistance." Hobbes' definitions of affective states, totalling more than 50, typically involved sequences of attitudes, hopes and other affects associated with directional action tendencies.

Part of Spinoza's (1677/1989) contribution to current emotion theory involved the role of idiosyncratic interpretation or appraisal in the generation of emotional experience. According to Spinoza, two individuals could react with two different emotions to an identical situation. Spinoza argued that it was how the individual *processed* the experience that dictated the type of ensuing experience, not the inherent quality of a situation *per se*. Spinoza's examples also introduced attributions and/or judgments about goal conduciveness, certainty and causality as qualities determining emotional reactions ,

dimensions that have emerged subsequently in studies of appraisal theories of emotion (e.g. Scherer, 1984).

Thus, a number of key concepts in current emotion theories were articulated by philosophers. These concepts include the importance of interpretation or appraisal in the generation of emotions, and the notion of directional actional tendencies associated with emotion. Beyond philosophy, early evolutionary and physiological theories of emotion highlighted the importance of the physiological changes associated with emotional experience. Darwin (1872/1965) emphasized the adaptive role of the physiological changes associated with emotion, while James (1884/1984) argued that emotion was the felt experience of these bodily changes.

Early Evolutionary and Physiological Theories of Emotion

In the latter part of the 19th century, Darwin (1872/1965), produced a series of drawings of and discussions about facial expressions and body postures associated with particular emotional states. In keeping with his overall thesis, Darwin emphasized the survival value of the action orientations expressed in faces and gestures associated with the various emotions.

About a decade after *The expression of the emotions in man and animals* (Darwin, 1872/1965), William James followed with a more comprehensive theory of emotion. James (1884/1984) contended that bodily changes directly followed the perception of the evoking situation, and that emotion constituted the experience of these bodily changes.

That is, the conscious experience of emotion resulted from one's perceptions of autonomic changes evoked by an event. James' theory challenged existing notions that subjective emotional states occurred first, and then led to facial and other bodily experiences of emotion. The theory of James was congruent with Darwin's evolutionary view (1872/1965), since the physical changes necessary for survival in Darwin's scheme were elevated to a primary role, while subjective states were seen as secondary or almost epiphenomenal (Omdahl, 1995).

James's theory is subject to a number of criticisms. Because of their relevance to current theories of emotion discussed later in this chapter, two of these criticisms are outlined below: First, if, as James (1884/1984) argued, the perception of particular patterns of autonomic arousal is what one experiences as particular emotions, a logical extrapolation is that unique observable patterns of arousal should correspond to particular emotions. Unfortunately, little empirical evidence has been found to support the latter hypothesis. Moreover, patterns of autonomic arousal associated with emotional states can be evoked by such acts as exercise or drug-taking without concomitant emotional experience (Cannon, 1927). In addition, Schacter and Singer (1962) argued that cognitive interpretation can mediate between physiological arousal and emotional experience. Critiquing James' theory, Cannon (1929) argued instead that when confronted with a particular stimulus, the thalamus relayed input simultaneously to both the cortex and the autonomic nervous system. In this view, emotion would be a function of both awareness

of bodily changes and of cognitive processes. In light of recent neuropsychological evidence (c.f., Ledoux, 1992, 1993), Cannon's theory now appears more plausible than that of James, although the amygdala is now considered as the relay junction and early processing centre for emotion the brain.

A second limitation of James's (1884/1984) theory is that it never addressed fully the mechanism by which the perception of an event was translated to bodily changes. That is, James's theory essentially ignored the mental evaluations of situations associated with emotional experiences. According to James, the body is excited in a highly preorganized fashion by mechanisms that are inflexible, innate, and ultimately, unexplained. Though this conception may do some justice to the emotions of infants, it does little to capture the complexity of adult human emotions (Damasio, 1994). The perceptual "black box" of James's theory left his work incomplete and later in some disfavour. Evidence from more recent neuropsychological studies suggest a role for the amygdala in the initial perceptual appraisal processes associated with emotional experience. This research, discussed later, provides some credence for James's notion of emotional processing that is immediate and less cognitively elaborated.

Darwin (1872/1965), James (1884/1984), and Cannon (1929) emphasized the role of physiological changes in emotion, and the functions such changes served. James also challenged the prevailing notion that the subjective experience of affect preceded and resulted in physiological changes. His work also raised the difficult question of how

appraisals actually are associated with emotional experience. These theorists, incorporating early philosophers' emphases on the roles of appraisal and directional action tendencies in emotions, laid the groundwork for current emotion theories.

Current Emotion Theories

Current theories approach emotion in a number of different ways. More recent bioevolutionary research (Ekman, 1984; Ekman & Friesan, 1975; Izard, 1977) suggests that there are a number of innate primary emotions, each with a characteristic facial expression and probably one or more action tendencies. The concept of action tendency has its roots in the work of Pradines (1958, reported in Arnold, 1970), who argued that the power to act was inherent in emotions, and that emotion served to express one's reaction to particular situations.

Arnold (1960, 1970) combined Pradines' emphasis on the actional quality of emotions with the idea that emotional reactions resulted from the appraisal of harm or benefit to the individual. Specifically, Arnold argued that situational appraisals of "this is good for me or mine," or "this is bad for me or mine" resulted in impulses for action toward or away from the object being appraised. Thus, for example, an appraisal of an approaching animal as threatening would likely result in the organization of the individual in a way fostering flight (e.g., increased heart rate, trembling, etc.).

Rather than being elaborated and reflective, Arnold conceptualized emotion-related appraisals as implicit, immediate, and intuitive evaluations. The experience of the

motor changes resulting from these appraisals constitute the felt quality of emotions. This notion is consistent with James's (1884/1984) idea that our apprehension of certain patterns of bodily changes is what we experience as emotion.

Arnold's (1960, 1970) definition of emotion as the felt action tendency toward a benefit-appraised object, and away from a harm-appraised object was found wanting by Frijda (1986) for inadequately accounting for the relational quality of emotions. Fridjda (1986) and Lazarus (1993) argued that emotions regulate our relationships with our environments, and that awareness of the relational features associated with bodily changes constitute a dominant feature of emotional experiences. For example, sadness and weeping are felt not only as tearing, raised eyebrows, lowered mouth corners, etc., but also as felt helplessness and surrender in relation to closing off to the external world.

Thus, action tendencies do not always entail a preparedness for overt action, but can instead involve a readiness for mental acts like turning inward, opening up to, or cutting oneself off from others. The key for Frijda is that emotion regulates relational activity. A fundamental characteristic of emotion is that it involves action tendencies that establish, end, strengthen, weaken or disrupt individuals' psychological and physical relations with their environments.

Frijda (1986) and Lazarus (1991) have emphasized that motivation and cognition are intrinsic components of emotion. Lazarus criticized the cognitive view of emotion that predominated in the 1960s and 1970s for neglecting the role of motivation. Without

motivation, or an agenda of needs, goal, or concerns, emotion would be bereft of affect. Thus, the appraisal of being rejected by another would not necessarily result in an emotional response unless there is a need to be accepted. Recognizing the importance of motivation, Frijda (1986) viewed emotions as responses to events that are considered to be important to the individual. He characterized emotions as "output" of an adaptive system that monitored relevant events in order to safeguard the individual's needs and concerns.

According to Frijda (1986), concerns underlie all emotions, and the expression of emotion therefore signals that the individual's concerns have been engaged in a situation. Fridja preferred the term "concern" over "need" because the former connoted a broader ranger of human interests. For example, one might feel angry at social injustice, joyful about inspired art, and so forth. Frijda (1988) defined a concern as the disposition to desire the occurrence or non-occurrence of a given kind of situation. In Fridja's model, concerns exist as internal representations of standards, against which situations are judged. Action tendencies result when the appraised situation and the internal standard are sufficiently mismatched. Thus, Frijda defined emotion as the felt action tendency resulting from the appraisal of a situation in relation to a concern.

Frijda's (1986) definition of emotion sees appraisal as automatic evaluations of situations in relation to one's well-being. The appraisals are typically implicit assessments about what is good or bad for the self, or for those with whom the individual

identifies. The appraisals are considered to have high survival value, and are made at least partially in reference to one's perceived coping potential (Lazarus, 1991). For example, the appraisal that one will be able to cope with an otherwise difficult situation might attenuate or even preclude a subsequent emotional response.

Contemporary emotion theory has integrated cognition, motivation, affect, and directional action tendencies, aspects that were emphasized in earlier philosophical and evolutionary views on emotion. Frijda's (1986) theory of emotion, currently a prevailing view, is that emotion is the felt action tendency resulting from the individual's appraisal of a situation in relation to an underlying need or concern. The action tendency serves as a mobilization of the individual's physiological and/or mental capacities that prepares it to regulate its relationship with its environment. The question of the exact nature of the appraisals associated with emotions has received considerable attention, and is the subject of the following section.

Types of Emotion Appraisal Theories

A number of studies have specifically investigated appraisals associated with emotional experience. Generally speaking, investigators have theorized about, and studied two qualitative different modes of appraisal in association with emotional experience. With rare exceptions, however, the literature (mostly in personality and experimental social psychology) has failed to discriminate adequately between these two kinds of appraisals. One of these exceptions, Lazarus (1991) distinguished between

automatic and deliberate forms of appraisals, each co-existing in an adaptive emotion system. The first mode of appraisal involve automatic, basic, fairly primitive and inchoate assessments of situation and self. These are pre-conscious, immediate responses to environmental stimuli, and can be considered highly akin to William James' (1884/1994) notion of the initial perceptions of stimuli that result directly in changes in an individual's physiological arousal. The second mode of appraisal involves more articulated (although not necessarily in awareness) appraisal themes that can be thought of as more thematic. These appraisals are more complex, finely graded, and may be more embedded in language (Lazarus, 1991). Lazarus viewed this second type of appraisal as conscious, volitional, and deliberate. Their generic, issue-like quality suggests that they are probably best described as "thematic." Below I review some of the literature exploring both automatic and thematic types of appraisal.

Automatic or Basic Appraisals

Stimulus Evaluation Checks.

One of the most influential of the basic emotion-appraisal theories was proposed by Scherer (1984), who contended that emotional experience results from a sequence of stimulus evaluation checks. According to Scherer, new stimuli are first appraised for their novelty value. Stimuli that are assessed as novel lead the individual to attend and to orient itself, and produce an initial, context-dependent autonomic nervous system (ANS) response. The stimulus is next checked for "intrinsic pleasantness," leading to an

approach or avoidance response tendency. The third evaluation check involves an appraisal of whether or not the stimulus is conducive to one's goals. An appraisal of goal conduciveness leads to parasympathetic ANS activation, while an assessment that the situation is not conduciveness to one's goals leads to sympathetic ANS activation. The final two evaluation checks involve appraisals of the individual's coping potential, and assessments of the situation's relevance vis-a-vis internal and external standards.

The sequential stimulus checks proposed by Scherer (1984) are similar to "cognitive antecedents" proposed by a number of other theorists (e.g., deRivera, 1977; Roseman, 1979; Smith & Ellsworth, 1988). The functional argument made by proponents of stimulus appraisal theories is that they are adaptive systems able to regulate information processing in an economical manner. For example, such systems rapidly orient the organism to potentially life-threatening events, but also can serve to stop processing when further information is not useful. Schnieder and Shiffrin (1977) have argued that the adaptiveness of highly automated perceptual systems like these can be obviated if such systems become overly rigid and schematized, and then applied in inappropriate situations.

Studies of the Appraisal Dimensions of Emotion Terms.

A second line of basic appraisal research views emotions as involving a number of underlying appraisal dimensions. This line of research has its roots in Schlosberg's (1952) notion that emotions are organized in a circular pattern around two bipolar

dimensions (pleasantness-unpleasantness and attention-rejection), and in Osgoode's work on the affective semantics of natural languages. Osgoode, who developed a "semantic differential method" for quantitatively measuring meaning (Osgood, 1969), contended that three affective factors, evaluation, potency (i.e., control), and activity, comprise the major components of meaning of natural languages (Osgood, May, & Miron, 1975).

Studies looking specifically at emotion terms have typically found that the two factors of evaluation (with one bipolar dimension of pleasantness-unpleasantness) and arousal or activity (with one bipolar dimension of arousal-sleep) accounted for the majority of variance in the judged similarity of emotion words (e.g., Bush, 1973; Neufield, 1975). Russell (1980), for example, had participants conduct category sortings of 28 emotion terms, and he then scaled these in four different ways. Russell concluded that the cognitive structure of emotion terms was circumplex in nature, with emotion terms falling in a relatively continuous manner at the periphery of a circle around the two axes representing pleasure-displeasure and arousal-sleepiness bipolar dimensions. It should be noted that Russell's scalings employed a number of words more indicative of simple physiological states (e.g., sleepy, tired, droopy) than of emotional states.

A number of studies have also found evidence of at least one other emotion-term factor, usually related to potency or control (Averill, 1975; Morgan & Heise, 1988: MacKinnon & Keating, 1989; Russell & Mehrabian, 1977). Shaver, Schwartz, Kirson, and O'Connor (1987) contributed one of the most comprehensive and rigorous of these

studies on emotion terms. These authors were particularly careful in their selection of emotion words for scaling. Shaver et al. consulted a number of emotion word lists (e.g., Averill, 1975; Davitz, 1969; deRivera, 1977), eliminating all words that did not possess familiar noun forms (e.g., blasé) as well as words that represented traits (e.g., patriotic, religious). The resulting list of 213 words were then presented to 112 psychology students, who were asked to rate, along a 4-point scale, how prototypically emotional each word was. The authors then calculated mean "prototypicality" ratings, and culled 135 of the highest rated emotion words from the list. Although it did not make the cut-off mean of 2.75, "surprise" was included in the final list, because other emotion theorists usually included it as a basic emotion.

Shaver et al. (1987) then gave the 135-term list to a different group of 1000 students, who were asked to free-sort the words into categories based on their similarity to one another. For each participant's ratings, the investigators assigned a value of 1 for each pair of emotion terms categorized together, and a value of 0 for each pair categorized apart. A cluster analysis was then performed on an aggregate 135 x 135 co-occurrence matrix, composed of all 100 participants' pair-wise comparisons (thus, the maximum similarity score for any single pair of emotion words was 100). The cluster analysis yielded five or six main clusters of emotion, each with multiple attendant subclusters or subcategories of emotion words (with the exception of surprise, which subsumed a single subcluster of three words). Shaver et al.'s hierarchical list of emotion

categories is presented in Figure 1.

To test if their data fit a circumplex model, Shaver et al. (1987) performed a multidimensional scaling analysis of the 135 x 134 co-occurrence matrix. Kruskal stress tests indicated that three dimensions most efficiently reduced stress: The three dimensions were evaluation, activity, and potency. The most salient findings were as follows: 1. The 135 words fell roughly around a circle defined by two dimensions, which were considered best characterized as evaluation and arousal or intensity. However, words tended to fall in the two arcs at opposite ends of the evaluation dimension, with very few words in proximity to neutral-evaluation space. Thus, the "affect space" does not appear to be perfectly circumplex unless non-emotion words like sleepy, aroused and tired are used (Scherer, 1984; Shaver et al.). 2. The two dimensions did not discriminate fear and anger basic-emotion clusters. Their attendant subcategory words were almost completely interspersed in the high activity, low activation quadrant of the circumplex. The third dimension of potency much better discriminated between anger and fear, with anger words represented as higher in potency than fear words.

Shaver et al.'s (1987) findings were largely supported by two subsequent studies on the structure of emotion terms. Morgan and Heise (1988) and MacKinnon and Keating (1989) both found that emotion terms were arrayed in three-dimensional space involving evaluation, activation, and potency. In both studies, the circumplex model was deemed inappropriate because few words described neutral evaluation emotions, and thus the

Figure 1. Shaver et al.'s hierarchical list of emotion categories

LOVE			JOY						
adoration	arousal	longing*	amusement	enthusiasm	contentment*	pride*	eagerness	enthralment*	relief*
affection*	desire		bliss	zeal	pleasure	triumph	hope	rapture	
love	lust*		cheerfulness*	zest*			optimism*		
fondness	passion		gaiety	excitement					
liking	infatuation		glee	thrill					
attraction			jolliness	exhilaration					
caring			joviality						
tenderness			joy						
compassion			delight						
sentimentality			enjoyment						
			gladness						
			happiness						
			jubilation						
			elation						
			satisfaction						
			ecstasy						
			euphoria						

* denotes name of emotion subcategory

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Figure 1 (cond.). Shaver et al.'s hierarchical list of emotion categories

SURPRISE

amazement
surprise*
astonishment

ANGER

aggravation
irritation*
agitation
annoyance
grouchiness
grumpiness

exasperation*
frustration

anger
rage*
outrage
fury
wrath
hostility
ferocity
bitterness
hate
loathing
scorn
spite
vengefulness
dislike
resentment

disgust*
revulsion
contempt

envy*
jealous

torment*

* denotes name of emotion subcategory

(continued next page)

Figure 1 (cond.). Shaver et al.'s hierarchical list of emotion categories

SADNESS

agony	depression	dismay	guilt	alienation	pity
suffering	despair	disappointment*	shame*	isolation	sympathy*
	hopelessness	displeasure	regret	neglect*	
	gloom		remorse	loneliness	
	glumness			rejection	
	sadness*			homesickness	
	unhappiness			defeat	
	grief			dejection	
	sorrow			insecurity	
	woe			embarrassment	
	misery			humiliation	
	melancholy			insult	

FEAR

alarm	anxiety
shock	nervousness*
fear	tenseness
fright	uneasiness
horror*	apprehension
terror	worry
panic	distress
hysteria	dread
mortification	

* denotes name of emotion subcategory

circumplex was "broken" in the middle between two arcs. Finally, though potency was redundant in the ratings of most emotion words, it was the only factor to discriminate between feelings related to fear and anger, which would otherwise be indistinguishable in the high activation, low evaluation space.

Experiments Manipulating Appraisal Dimensions.

A number of other studies have provided evidence that particular appraisal dimensions are relevant to emotion by manipulating appraisal dimensions. A comprehensive survey of this literature is beyond the scope of this dissertation. Below, two studies in this domain are briefly reviewed that have demonstrated empirically the connection between certain types of appraisals and particular kinds of emotional experience.

Smith (1989) demonstrated relationships between certain appraisal dimensions and systematic changes in emotion-relevant physiological activity. Smith had participants imagine pleasant experiences, but manipulated pleasantness, effort, and agency by altering the instructions. For example, in the imagined story involving high agency, participants were told to "focus on how it feels to be the one in charge of the situation." Smith found that effort-related appraisals influenced brow activity and heart rate, and that perceived goal-obstacles affected eyebrow frown. These findings were interpreted as evidence supporting the notions that the emotion system is organized so that changes in physiological activity systematically reflect specific properties of

appraisal that communicate the individual's emotional state to self and others, and also facilitate coping.

Ellsworth and Smith (1988) asked participants to recall unpleasant experiences that were associated with particular types of appraisals. For example, in the self-agency condition, participants were asked to recall a situation in which they felt that they "were in control of what was happening." The results suggested that situations defined by particular appraisals associated with human agency or situational control dimensions were associated with different levels of anger, sadness, and guilt. The authors concluded that certain types of appraisals are central to the experience of particular emotions. Interestingly, participants also reported experiencing blends of two or more emotions on occasion. Ellsworth and Smith also spoke of the importance of developing methodology for studying action tendencies and appraisals together with emotional experience.

The three kinds of automatic appraisal theories discussed above see appraisals as primitive, inchoate assessments of self and environment. A different view sees emotion-related appraisals as more articulated, interpretative themes associated with emotional experience. This perspective is discussed in the next section.

Appraisals as Themes

A second level of appraisal that has been studied in relation to emotional experience involves a view of appraisals as more elaborated, thematic assessments of self and situation. They have been referred to variously as "core relational themes" (Lazarus,

1991) and "antecedents of emotion" (Scherer, Summerfield, & Wallbott, 1983). Unlike the more basic, automatic-type appraisals described above, the literature on the theme-type appraisals is relatively small, and has tended to be theoretical and not empirically based. The major contributor in this area has been Richard Lazarus.

Core Relational Themes.

According to Lazarus (1991), each emotion is characterized by a unique central relational theme. Lazarus defined a core relational theme as the central theme of harm or benefit underlying each emotion. Put differently, a core relational theme for a given emotion represents the generic type or theme of harm or benefit to an individual's well-being. According to Lazarus, an appraisal pattern consistent with a given core relational theme will produce an action impulse (i.e., what Arnold {1960} and Fridja {1986} have termed "action readiness" or "action tendencies"), from which emotion "flows." Lazarus's list of core relational themes associated with particular emotions is presented in Figure 2.

Emotional Antecedents.

Scherer, Summerfield, and Wallbott (1983) explored the types of themes or "antecedents" that were associated cross-nationally with particular emotions. Participants were asked to recall recent situations in which they had felt one of: joy, anger, sadness, or fear. The participants were given the following open-ended questions: "What happened? Who was present? Where did it happen? How did you react?" Scherer et al.

Figure 2. Lazarus's (1991) core relational themes for particular emotions

Anger	A demeaning offense against me and mine
Anxiety	Facing uncertain, existential threat
Fright	Facing an immediate, concrete, and overwhelming physical danger
Guilt	Having transgressed a moral imperative
Shame	Having failed to live up to an ego-ideal
Sadness	Having experienced an irrevocable loss
Envy	Wanting what someone else has
Jealousy	Resenting a third party for loss or threat to another's affection
Disgust	Taking in or being too close to an indigestible object or idea (metaphorically speaking)
Happiness	Making reasonable progress toward the realization of a goal
Pride	Enhancement of one's ego-identity by taking credit for a valued object or achievement, either our own or that of someone or group with whom we identify
Relief	A distressing goal-incongruent condition that has changed for the better or gone away
Hope	Fearing the worst but yearning for better
Love	Desiring or participating in affection, usually but not necessarily reciprocated
Compassion	Being moved by another's suffering and wanting to help

found that characteristic antecedents tended to be associated with the experience of particular emotions. The antecedents for each of the four emotions are presented in Figure 3.

Lazarus's (1991) core relational themes and Scherer's (1984) emotion antecedents serve as more developed, elaborated and thematic forms of appraisals. They suggest a greater degree of processing than the simple dimensional appraisals discussed earlier. This notion of two forms or levels of emotion-related appraisals, evident in appraisal theories of, and research in emotion, is supported by recent neuroscientific findings. These are discussed in the next section.

Neurophysiology and the Generation of Emotional Experience

In the previous section, two different views of appraisal evident in emotion research were presented. These two views of appraisals are consistent with a two-levelled theory of emotional processing proposed by clinically-minded researchers. Greenberg and colleagues (Greenberg et al., 1993; Greenberg and Korman, 1993) argued that many emotional experiences initially involve automatic and very simple perceptual appraisals resulting in primary responses. These are then followed immediately by more complex processing, guided by a prototype, integrating information of a sensory, memorial, and ideational nature.

Recent findings in neuroscience have also provided evidence supporting the notion of dual appraisal systems associated with the generation of emotional experience.

Figure 3. Major antecedents of four different emotions listed by Scherer et al. (1983).

EMOTION	MAJOR ANTECEDENTS
Joy	Affiliation
	Success Experiences
Sadness	Death of close organisms
	Depression or alienation
	Sickness of others
	Separation from lovers and friends
	Problems with relationships (often, being rejected)
	Failure and frustration
Fear	Threat to physical survival or well-being
Anger	Unwanted behaviours by partners in social relationships
	Inappropriate behaviours by others (e.g., negligence)
	Damage to social property
	Unnecessary inconvenience

According to LeDoux (1993), the initial emotional processing of simple sensory features occurs subcortically, as inputs from the thalamus are received in the amygdala. This processing occurs prior to the synthesis of objects and events from simple sensory perceptions. Possible features of stimuli to which we may be hard-wired subcortically to emotionally respond include size, span (e.g., flying eagle), type of motion, sound, and certain configurations of body states (Damasio, 1994). The detection of these features by limbic system structures like the amygdala appears to trigger the enactment of bodily states of emotional arousal.

LeDoux (1993) has argued that this early processing is adaptive since it enables the individual to respond very quickly to environmental exigencies without being subject to the time demands of more complex processing. Quick reactions of, or tendencies toward flight, expressions of anger, etc., are likely to be more survival enhancing than are complex understandings of the eliciting situation. Though the amygdala does receive information from the cortex, this occurs after information is first relayed from the thalamus. The amygdala also receives feedback from the viscera, allowing it to monitor and regulate the emotional reaction. For example, heart rate and blood pressure are monitored via afferent input to the amygdala from the nucleus of the solitary tract. According to Damasio (1994), the feelings that are produced in emotional experience are also adaptive because they permit the organism a flexibility of response associated with its memories of similar contexts and reactions.

Damasio (1994) has argued that the formation of systematic connections between categories of objects and situations, on the one hand, and primary (i.e., primitive, pre-organized) emotions, on the other, leads the maturing human to be capable of a second type of emotion experience. This new category of emotional experience is made possible by the acquisition of dispositional representations located in the ventromedial sectors of the prefrontal cortices. Damasio viewed these representations as non-conscious and automatic, responding automatically to signals arising from the processing of mental images. In effect, the prefrontal cortex representations posited by Damasio are learned, idiosyncratic schemes used to anticipate future outcomes. Once activated, these prefrontal representations then signal the amygdala and anterior cingulate, leading to changes in the viscera, skeletal muscles, and endocrine, neuropeptide, and neurotransmitter systems. In monkeys' brains, the prefrontal cortices have also been shown to activate the primary motor cortex, as well as the supplementary, third, and basal ganglia motor areas (Morecraft & Van Hoesen, 1993). According to Damasio, the schematic representations located in

... the prefrontal cortices and in particular their ventromedial sector are ideally suited to acquire a three-way link among signals concerned with particular types of situations; the different types and magnitudes of body state, which have been associated with certain types of situations in the individual's unique experience; and the effectors of those body states. (p. 183)

Among the evidence cited by Damasio (1994) supporting the two distinguishable emotion substrates is the clinical observation that patients with limbic system damage (especially to the amygdala and the anterior cingulate) suffer extremely pervasive emotional dysfunction. In contrast, patients who have sustained damage to their prefrontal cortices exhibit impairment to what Damasio has termed the secondary-emotion system. These patients respond in an emotionally appropriate manner and report feeling fear when someone sneaks up on them and yells "boo!" They are, however, unable to generate emotional feelings by imagining emotional situations.

An example of a second level type emotion that has been proposed by Damasio (1994) would be the pit in one's stomach that one might experience upon unexpectedly encountering one's ex-spouse. Regardless of whether or not the experience *can subsequently* be fully articulated (i.e., exactly what, and why one feels the way one does), generation of the experience is nonetheless automatic. Perhaps most importantly, Damasio's representations serve as memory-based schemes associated with emotional experiences that guide appraisals and serves as blueprints for physiological arousal and action. Damasio argued that when triggered, awareness of the scheme-consistent bodily changes that are associated with the implicit, scheme-based personal meanings, provide us with our embodied sense of ourselves and our environments.

The recent neuroscientific findings discussed in this section suggest the existence of two systems associated with emotional experience. The two systems are an automatic,

hard-wired, perceptual system, involving primitive appraisals that result in primary responses, and a schematic system, involving thematic appraisals that produce a complex, synthesized sense of self in the world. The existence of two such systems might account for the two different approaches to emotion appraisal systems evident in the cognitive sciences discussed in the previous section, which tended to view appraisals as either pre-conscious perceptions of environmental stimuli, or as more articulated thematic interpretations.

Damasio's (1994) concept of a scheme-based emotion system has important implications for psychotherapy, where a key task for clinicians is to help clients change their felt sense of themselves and their worlds. Targeting the schemes that generate clients' emotional experience is in fact a key therapeutic task in emotionally-focused therapies (e.g., Greenberg et al., 1993). The role of emotion generating schemes in emotionally-focused therapies is discussed in the next section.

Emotion-Generating Schemes in Therapy

Damasio's (1994) concept of a memory-based representational system in the prefontal cortex that integrates cognition (in the form of appraisals), affect (by triggering scheme-congruent physiological arousal) and action (via the evocation of scheme-based action tendencies and expressive-motor responses), is highly akin to the notions of schematically-generated emotional experience posited by Leventhal (1979) and Greenberg et al (1993). Leventhal viewed emotion as resulting from schemas integrating

emotional memory, expressive cue-dependent motor processing, and conceptual deliberate thought. Greenberg et al. defined emotion schemes as structures that preconsciously and automatically synthesize cognitive, affective, and sensory information, generating a felt sense of being-in-the-world, and a sense of personal meaning-- examples of meaning-imbued feelings resulting from complex schematic syntheses include feeling unloveable or worthless. Like Damasio, Greenberg et al. contended that emotion schemes are created by previous, salient emotional experiences, and come to guide subsequent processing. An example of the development of a maladaptive emotion scheme is a child whose initiatives for closeness are met with unpredictable responses of love and abusive rejection on the part of its parents. As a consequence, the child is likely to develop schemes in which intimacy and fear are associated. Later in life, when the individual gets close to others, these schemes may be activated, and patterns of physiological arousal associated with the original abuse will be evoked. In intimate relationships, the person may feel afraid and shrink physically away from closeness. Intimate relations are likely to be appraised implicitly and automatically as threatening, even though the individual knows consciously that the reaction may be unfounded in a current relationship.

In therapy, emotion schemes are considered extremely important therapeutic targets because they are involved in generating our emotional experience and our felt sense of ourselves in the world (Greenberg & Korman, 1993; Korman & Greenberg,

1996). Emotionally-focused therapists (e.g., Greenberg & Safran, 1987; Rice, 1974) have argued that in order to modify clients' problematic, enduring, felt sense of themselves, therapeutic interventions must address the schemes generating such experience. The contents of maladaptive schemes become more accessible and amenable to restructuring when they are activated and running (Lang, 1977; Foa & Kozak, 1986). Therefore, a principal tenet of emotionally-focused therapies is that because the contents of emotion schemes are implicit and operate largely independently of conscious thought, the schemes must be evoked in order for them to be accessed and restructured.

Emotion and Meaning in Psychotherapy

An important assumption of emotionally-focused therapies is that emotion is a meaning-producing system (Greenberg et al., 1993; Korman & Greenberg, 1996). That is, emotion informs us about ourselves and about the personal significance of situations. The experience of emotion signifies that something matters to us (Frijda, 1986). When functional, emotion serves as an adaptive system that provides us with information about our appraisals and needs, as well as about the situational cues that elicited our visceral reactions. Thus, for example, a client might report that upon unexpectedly meeting his ex-spouse in the street, he felt a pit in his stomach and the urge to head for cover. When explored and articulated in therapy, the client might discover that his experience involved the appraisal of "our marriage is really over. My ex-spouse has gone on with life without me. Seeing her looking so different and happy brought this home." The action tendencies

associated with the episode might be both to pull back and to grieve.

In the early stages of therapy, clients often report feeling puzzled by their emotional reactions, and may have little or no awareness of the particular situational cues to which they have responded, nor of their significance (Greenberg et al., 1993; Korman & Greenberg, 1996; Rice, 1974). Clients are also likely to have little understanding of their unarticulated or inchoate emotional reactions, which are often experienced as problematic and puzzling. Experiential and emotionally-focused therapies (e.g., Gendlin, 1974, 1981; Greenberg et al., 1993; Rice, 1974; Rogers, 1959) therefore help clients symbolize and articulate the subjective meaning of their inchoate emotional experience. Doing so provides clients with important information about their underlying needs, as well as about their appraisals of themselves and their worlds.

Gendlin's (1974, 1981, 1997) experiential model has therapists direct clients' focus inward to locate and explore the bodily sense associated with a given problem. Clients focus intently on their inner felt experience, and are discouraged from evaluating or analysing their emerging experience. Once attended to and articulated, new feelings and perceptions emerge from clients' felt sense. The goal is to move clients from an undifferentiated, vague sense of things, to a highly differentiated explication of their bodily experience and the complex felt meaning of their experience.

Though Gendlin (1997) argued for the importance of focusing on all felt experience rather than on emotional experience *per se*, other experiential approaches, like

Process Experiential (Greenberg et al., 1993) therapy, have emphasized the exploration of emotional meaning.

Emotion in the Client-Centred Theory of Human Functioning

One of the principal assumptions of the Client-Centred theory of human functioning (Rogers, 1959) is that people are motivated by an organismic growth tendency to actualize themselves to their full potentials. The growth tendency relies on the individual's ability to attend to and process affectively-toned experience in an immediate and accurate manner (Rice & Greenberg, 1991). If these attentional processes are impaired, or the symbolization of emotional experience is distorted, the biologically adaptive function of emotion is lost, and the individual's ability to fulfill its needs are compromised.

Rice (1974) further elaborated Rogers' theory, emphasizing schemas as the basic units associated with the organization and generation of individuals' experience. Rice defined schemas as enduring informational structures that guided individuals' functioning. Rice (1992) stated "that the targets of therapy should be the schemas relevant to the recurring kinds of situations in which the client finds him or herself functioning in unsatisfying and in maladaptive ways" (p.13). Client-Centred and Experiential therapies therefore target for intervention those schemes that generate clients' emotional experience.

Recent developments in Client-Centred theory have focused on developmentally-

stunted networks of schemata that guide clients' appraisals. According to Toukmanian (1992), these "simple and undiscriminating constructs that have limited generalizability and functional value" need to be made more flexible and differentiating (pp. 88-89). Thus, Toukmanian has argued that clinicians need to engage clients in slow, deliberate, and reflective processing in order to facilitate schematic development and change.

In addition to an emphasis on the schematic structures that generate clients' emotional experience, more recent works in Client-Centred and Experiential theory have differentiated four broad types of emotional expression (Greenberg & Safran, 1984; 1989; Korman & Greenberg, 1996). Clinicians' accurate assessment of clients' current type of emotional expression is considered important in selecting appropriate therapeutic interventions. The four types of emotional expression are summarized briefly below:

1. Biologically adaptive primary emotional responses are associated with action tendencies that mobilize individuals for adaptive action. For example, anger in response to violation mobilizes the individual to attack. Primary emotional responses provide adaptive information to individuals about their own responses to situations and thus about the personal significance of events. In therapy, primary emotions are accessed, attended to, and intensified so that adaptive behaviour can be mobilized.

2. Secondary emotional responses are reactions to underlying primary emotions or to conscious cognitions. Secondary emotional expressions are learned reactions or coping strategies that prevent adaptive responses. For example, anger in response to

underlying sadness prevents grieving and the expression of vulnerability. In therapy, secondary emotional reactions are either bypassed or used to explore underlying schemes and access primary emotions.

3. Instrumental emotional responses are operant reactions that serve to manipulate or influence others. Examples of instrumental emotional expressions include expressing anger in order to dominate, and crying in order to elicit the sympathy of others.

4. Maladaptive primary responses are emotional reactions that often were adaptive in the original, often traumatic contexts in which they were learned, but which are dysfunctional in subsequent situations. For example, a parent whose close caring is followed unpredictably by cruelty and violence may lead its child to respond with fear or anger to intimacy. In therapy, maladaptive primary emotions are accessed and explored in order to activate the dysfunctional schemes generating the emotions, so that they can be restructured.

Measures of Clients' Emotions

The importance of assessing clients' emotions has led to the development of a number of instruments for measuring emotions. These are described briefly below:

Categorizations of Emotional Orientations Expressed in Therapy.

Dahl (1991) used deRivera's (1962) decision tree of emotions to devise an instrument for categorizing emotions expressed by clients in therapy. According to Dahl, all emotions can be categorized by three dimensions: Orientation (It-Me), valence

(Attraction/Repulsion- Positive/Negative), and activity (To/From- Active/Passive). Dahl was particularly interested in the orientation dimension, hypothesizing that therapeutic change results from specific changes in "Me" emotions. Dahl defined "It" emotions as those emotions that have an object other than the self. "It" emotions involve the perception of a specific intentional state, an implicit wish toward an object, and a consummatory act. "Me" emotions, on the other hand, are associated with the perception of bodily and mental feedback concerning the satisfaction or nonsatisfaction that accompany a consummatory act.

Exploring one psychoanalytic psychotherapy that spanned six years and 1,114 sessions, Dahl (1991) sampled three sessions from the beginning of therapy, three middle sessions, and the last three sessions. Dahl identified all manifest expressions of emotion, including emotion labels (e.g., sad), references to "consummatory behaviours" (e.g., fighting as the consummation of anger), and motor expressions of emotion identified by transcribers (e.g., crying). Two judges then categorized each expression of emotion as either "Me" or "It," and then further categorized each expression as positive or negative. Dahl did not describe his criteria for differentiating positive and negative emotions.

Dahl (1991) found that negative "It" emotions rose slightly in the middle sessions, and then dropped significantly in the final sessions. Negative "Me" emotions dropped significantly in the middle session, and then returned to their previous level in the final sessions. The positive emotions did not change significantly over time. He

concluded that the high number of negative "Me" emotions reflected the analysand's preoccupation with sadness at terminating. The high number of early negative "Me" emotions was thought to reflect the client's natural preoccupation with painful issues early in therapy. Beyond these conclusions, Dahl largely failed to comment on his other findings.

Dahl's lack of commentary on his own findings likely is indicative of the relatively limited heuristic utility and logic of the approach he adopted: For example, though his logic for identifying emotional episodes appeared sound, Dahl provided no explicit logic as to why "Me" rather than "It" emotions should change. In addition, Dahl did not explain, and it is not immediately apparent how he classified the client's emotions as being either positive or negative- a major classification upon which his finding was based. Moreover, beyond identifying emotion words, Dahl offered no further methodological framework for identifying other meaningful aspects (e.g., appraisals, concerns, beliefs) associated with the clients' emotional expressions. Dahl's conclusions also may have been limited by his exploration of only a single case, as well as by his sampling of an extremely small number of sessions (i.e., 9) relative to the actual number of sessions that occurred (i.e., 1,114).

Levels of Emotional Awareness.

According to Lane and Schwartz (1987), therapeutic change involves clients' gradual development of more differentiated and flexible ways of representing their

emotional experiences. According to the authors, these changes involve improvements in clients' abilities to "capture," or symbolize their emotions. Once achieved, individuals are considered less likely to express their emotions in reactive ways, and rely less on others for cues associated with the generation, understanding, and regulation of their emotional experience.

Lane and Schwartz (1987) described five levels of emotional awareness, corresponding to Piaget's levels of cognitive development (Flavell, 1963). The lowest level, termed "sensorimotor reflexive" involves wholly undifferentiated body sensations, and is associated with either little or no ability of the individual to describe the emotion experience. At a middle level, the "preoperational level" is associated with the experience of emotional extremes. At this level, the individual is able only to describe unidimensional emotions. At the highest level, termed "formal operational," the individual is able to experience and describe complex, differentiated emotional states.

Lane and Schwartz's (1987) Levels of Emotional Awareness was presented as a cognitive-developmental theory of emotional awareness. However, the authors suggested applications of the model that included using it as a measure of emotional awareness in clinical practice. Nevertheless, it has been used typically in neuropsychological research into emotion. Most recently, for example, it was used along with positron emission tomography to map neural substrates associated with emotions evoked by internal and external stimuli (Reiman et al., 1997).

The Level of Expressed Emotion Scale.

The Level of Expressed Emotion (LEE) scale (Cole & Kazarian, 1988) was designed as a self-report index of the perceived emotional climate in clients' important relationships. The 60-item self-report scale provides an overall score, and assesses four attitudes that are perceived by the client to be characteristic attitudes of significant others: emotional response to the client, negative attitude toward the subject's illness, tolerance/expectations of the client, and intrusiveness. In a recent study (Gerlsma & Hale, 1997), the LEE scale was predictive of improvement in clients' depressions six months after treatment. Strong relationships were also demonstrated between the LEE and relational dissatisfaction and coping styles.

The most recent work with the LEE (Gerlsma & Hale, 1997) cited above has proved perhaps to be one of the few successful attempts at measuring the association between emotion-related attitudes and clinical change. Nevertheless, in spite of its name, the LEE is not a measure of clients' emotions. Thus, though there is increasing recognition of the importance of emotion in therapy, little fruitful research has been done in the way of measuring clients' emotional processes as they occur in therapy, and relating them to therapeutic change.

Emotion Episodes in Psychotherapy

The importance of emotion in psychotherapy and its relation to clients' concerns and appraisals of themselves and their worlds, led to the initial development of a method

of studying of clients' emotion episodes. Because existing measures could not adequately capture changes in clients' emotional experiences, the Emotion Episode method (Greenberg & Korman, 1993; Korman, 1991) was intended as a means of focusing on and categorizing aspects of clients' emotional experiences as they are reported and expressed in therapy, and as a measure of therapeutic change. As clients change in therapy, their emotional experiences are likely to change as well (Rogers, 1959; Perls, Hefferline, & Goodman, 1959; Greenberg et al., 1993), along with the needs and appraisals of self and world associated with their emotional experience. Tracking clients' emotional episodes in early and late sessions of therapy would therefore provide a means by which to measure changes in clients' felt senses of themselves and their worlds, as well as the needs and concerns with which they are engaged.

Measuring emotional episodes reported and expressed in therapy may also provide an ecologically valid means of investigating emotion in therapy. Emotion researchers have tended to avoid the study of actual self-reports of naturally occurring emotional experiences and expressions, considering such approaches to be lacking in validity and unreliable. Instead, emotion researchers, following the general behaviouristic tendency that has until recently dominated psychology, have been content to obtain self-reports from participants filling out standardized rating sheets in the lab (Averill, 1982). However, the standardization and control gained by such an approach comes at the expense of ecological validity, and may ultimately be less valid than exploring human

emotion as it occurs or is related naturally (Scherer, 1984). In psychotherapy research, some acceptance of qualitative methodologies has already occurred (Rennie, 1996).

A number of recent advances in psychotherapy process research have demonstrated the value of measuring in-session manifestations of processes and phenomena of theoretical importance (e.g., Perry, Luborsky, Silberschatz, & Popp, 1989; Luborksy & Crits-Christoph, 1990; Luborsky et al., 1985; Rice & Greenberg, 1984; Toukmanian, 1992). These approaches typically have isolated for measurement relevant segments or episodes in therapy that are related to an underlying theory or construct. One of the most influential of these approaches was Luborsky's Core Conflictual Relationship Theme method, which has involved a multi-faceted and integrative research program lasting over a decade.

The Core Conflictual Relationship Theme Method

Luborsky and colleagues (Luborsky & Crits-Christoph, 1990; Luborsky et al., 1985) combined text analysis with the psychoanalytic theory of human functioning to create a diagnostic instrument and a measure of psychotherapeutic change. The Core Conflictual Relationship Theme (CCRT) method is a measure of transference. Though conceptualized by Freud (1924/1957) as a principal construct of clinical psychoanalysis, transference was never measured until the advent of the CCRT.

In terms of clinical research, the measurement of transference was important for a number of reasons: First, a reliable measure of consistent idiosyncratic patterns of

relating provided empirical evidence of a central construct of clinical psychoanalysis. Second, a measure of the transference provided a method to assess patients' relationship patterns, thereby providing a means for making a dynamic case formulation (Chris-Christoph et al., 1988). Third, in keeping with psychoanalytic theory, a measure of the transference would provide a relatively direct index of therapeutic change.

Luborsky et al. (1985) devised their measure by studying psychoanalytically-oriented therapy narratives in which clients spoke about their relationships with others, including the therapist. The researchers found that these relationship episodes typically contained an implicit or explicit expression of a wish by the client, a perceived or anticipated response by an other to the expression of the wish, and a response of the self to the other. Luborsky (1984) also categorized the Response of Other and Response of Self components as involving either positive or negative consequences. A response is deemed positive if it fosters fulfilment of the wish, while it considered negative if it obstructs its attainment. CCRTs are rated also by their intensity, by whether or not they relate to past or present relationships, and by the degree to which the self expresses itself or is tentative.

Luborsky and colleagues (Luborksy & Crits-Christoph, 1990; Luborsky, Barber, & Schaffer, 1990) identified clients' CCRTs by identifying the components of all the relationship episodes occurring over a number of sessions. The most frequently occurring CCRTs are considered to represent a client's central relationship pattern. The CCRT

components can be classified according to a standardized ("ready-made") category system (Luborksy & Crits-Christoph) or in a purely descriptive ("tailor-made") fashion.

Crits-Christoph and Luborsky (1990) reported that clients with poorer therapeutic outcomes demonstrated more consistency in their CCRTs from early to late in therapy. Qualitative changes in CCRTs were associated with clinical improvement, making the CCRT a measure of therapeutic change. Though changes in the wish component were not predictive of outcome, negative responses of self and other decreased among clients who improved in therapy, and positive responses of other increased. Among individual clients' CCRTs, relationship episodes involving the therapist tended to bear thematic similarity to the episodes involving others in the clients' lives. This supported Freud's idea, central to psychoanalysis theory and practice, that patients tend to recreate their central relationship patterns with their analysts.

The CCRT (Luborksy & Crits-Christoph, 1990; Luborsky, Barber, & Schaffer, 1990) demonstrated the utility of measuring of in-session manifestations of theoretically important phenomena. Inspired in part by the success of the CCRT, the Emotion Episode method (Korman, 1991) was conceived as a means of identifying and categorizing clients' emotion and emotion schemes, the latter a core construct of emotionally-focused therapies (e.g., Greenberg et al., 1993).

Development of the EE Method

The Emotion Episode (EE) method was constructed by way of rational-empirical

task analysis (Greenberg, 1984b). Task analysis is a method used to analyse events and to create models of successful task and performance resolutions. It has been used to study therapy events such as intrapersonal conflict resolution (Greenberg, 1984a). Greenberg (1984b) delineated a sequence of four steps in rational-empirical task analysis. First, the phenomenon to be studied is chosen and described. The general theory of human functioning underlying the approach to the phenomenon of study is also explicated. Second, a rational analysis is performed in which an initial theory, called an "idealized performance model," is proposed about the phenomenon or task. The next step involves observing the actual phenomenon or task, and creating detailed descriptions from these data. The final step involves making comparisons between the idealized performance model and the actual observations. This analytic process continues in successive "loops" as revised theories are checked against new observations of the data.

In the task analysis leading to the creation of the EE method (Korman, 1991), narratives involving psychotherapy clients' descriptions of themselves were initially selected for study. It was originally hypothesized that these narratives involved three to five possible components: an emotion or affect, a core cognition and/or belief about the self, an underlying need or motive, and a behaviour. The Client-Centred (Rogers, 1959) and Process-Experiential (Greenberg & Safran, 1987) theories of human functioning provided the basic theoretical assumptions about human functioning, although Frijda's (1986) emotion theory played an increasingly prominent theoretical role as the analysis

progressed.

In the original empirical analysis (Korman, 1991), clients' reports of their emotion episodes emerged as the markers for identifying segments involving narratives involving the self. Behavioural responses did not figure prominently in these segments, although emotional response tendencies akin to action tendencies (Arnold, 1960; Frijda, 1986) did. As hypothesized, a cognitive component was typically present in these episodes, although the component was found to be characterized more accurately as an appraisal of self and/or situation rather than as a core belief. The expression of a need was sometimes explicitly stated, and at other times usually could be readily inferred. Frijda's notion of "concerns" (i.e, a more holistic, less psychoanalytically-flavoured construct) was considered to characterize more appropriately this component in the segments. A more detailed description of the task analysis undertaken in the construction of the EE method is described elsewhere (Korman, 1991). The task analysis led to the definition of emotion episodes described below.

The EE Method

An EE is a segment in psychotherapy in which a client speaks about having experienced or currently experiencing an emotion in association with a specific situation or context, real or imagined. Specifically, an EE is defined as an emotion expressed or reported in response to a situation or context. Once the emotion marker for an EE is identified, the segment is demarcated by tracing back to where the theme begins in the

transcript (often the theme begins when clients describe the situation or context associated with their emotional response). The segment continues until the theme changes or a new emotional response to a different situation or context is expressed.

The components of EEs are presented in Figure 4. These are the emotional response and/or action tendency, the situation or context, the appraisal of self and/or situation, and the concern. The emotional reaction and/or action tendency constitute the marker for an EE. An emotional reaction may be an explicitly expressed emotion, or an affectively-toned adjective (e.g. abandoned). An action tendency represents the behavioural tendency, disposition, or actual action associated with an emotional reaction. Action tendencies are self-serving, meaningful behaviours or behavioural dispositions that maintain or alter individuals' relationships with their environments (Arnold, 1960; Frijda, 1986). Action tendencies typically are directional in nature, moving individuals toward, away from, or at objects in their environments, depending on the appraisal made. The action tendency is a "couplet" with the emotional reaction, serving as a behavioural tendency associated with the emotion. Straightforward examples of action tendencies are presented below:

	Situation	Emotion	Action Tendency
1	At the meeting	I was mad	and I wanted to punch him.
2.	When I saw her	I was so happy	I could have hugged her.
3.	At the knock on the door	I felt terrified	so I fled.

Figure 4. Emotion Episode Components

EMOTION EPISODE COMPONENTS
I. SITUATION
II. EMOTIONAL RESPONSE
A: Emotional Reaction
B: Action Tendency
III. APPRAISAL
A: Appraisal of Self
B: Appraisal of Situation
IV. CONCERN

Identification of the emotional reaction and/or action tendency, serves as the marker for the EE. When an emotion and/or action tendency marker is located, the next step is to identify the situation, context, or event associated with the emotional response. The situation typically has been found to precede closely the the emotional response in the transcript. An emotion marker and situation are the necessary criteria for a segment to be considered an EE.

The appraisal represents the idiosyncratic evaluation or interpretation by the individual that is associated with the emotional response. Identifying the appraisal requires addressing the issues of: 1. What idiosyncratic meaning the situation associated with the observed emotional reaction holds for the individual; 2. How the individual views the situation in relation to self; 3. The appraisal of, or belief and/or understanding about the self and/or situation associated with the emotion response.

Typically, all of these components except the concern are explicitly stated by the client, and they are thus fairly easy to distill from transcripts. EEs do not always contain both an emotional reaction and an action tendency. In any case, to be considered an EE, a narrative must contain either an emotional response or an action tendency marker, and a situation or context. The emotional response and/or action tendency must either be explicitly stated by the client, or be confirmed explicitly by the client in response to a therapist's statement (e.g., T: You felt sad. C: Yeah). Appraisals of self and/or situation are sometimes not fully or explicitly stated- in these cases judges may extrapolate

somewhat, but are directed to make as few inferences as possible beyond what has been actually stated or confirmed by the client. If clients say nothing about their appraisals, or in the absence of sufficient observable evidence, the appraisal component for a segment is classified as "unstated." The explicit or implicit presence of an appraisal and/or concern are not necessary criteria for a segment to be considered an EE. When the concern is not explicitly stated, judges using the EE method are instructed to infer the concern from the segment, if possible. If a meaningful inference about the concern is impossible, the concern component for the segment is classified as "unclassifiable." In initial studies of EEs (Greenberg & Korman, 1993; Korman, 1991), judges classified concerns using standardized lists of needs and concerns (e.g., Maslow, 1987; Murray, 1938).

Once the components for an EE segment are identified, they are organized into a standard protocol like the one presented in Figure 4. An example of an EE transcript segment is presented in Figure 5. The standard protocol for this segment is shown in Figure 6.

Reliability and Validity of the EE Method

Initial demonstrations of the validity and reliability of the EE method have been reported elsewhere (Greenberg & Korman, 1993; Korman, 1991). In a test of the validity of the EE method, three judges rated 30 psychotherapy transcript segments to see if they could discriminate between segments that had been judged by experts to be either EEs or

Figure 5. Example of an EE segment in therapy.

C1: Yeah. Like, I mean *the fight with my husband just kept escalating and escalating, until finally he just became quiet, turned over, and went to sleep* (SITUATION). I, I wasn't sleeping. And I, then I woke my husband up, he woke up and went over and did something. At first I was really *terrified* (EMOTIONAL REACTION) because I was afraid *he'd been awake that whole time, and hadn't responded* (APPRAISAL OF SITUATION), and...

T1: That, that he ignored you on purpose?

C2: Yeah.

T2: Punished you?

C3: *He didn't care that I was in such distress* (APPRAISAL OF SITUATION) and that just terrified me. I was *shaking* (Action tendency). So I asked him if he'd been awake, and he said no, and then I sort of make him wake up. I.... I don't know. *I needed to know that he really cared that I was suffering* (CONCERN).

Figure 6. EE protocol derived from transcript segment in Figure 5.

EMOTION EPISODE PROTOCOL		
I.	SITUATION:	Husband goes to sleep after fight.
II.	EMOTIONAL RESPONSE	
	A: Emotional Reaction:	Terrified, Afraid
	B: Action Tendency:	Shaking
III.	APPRAISAL	
	A: Appraisal of Self:	
	B: Appraisal of Situation:	My husband was awake the whole time and didn't respond. He did not care that I was suffering.
IV.	CONCERN:	Love/Belongingness

non-EEs . On a 6-point scale of certainty, the judges rated the degree to which each segment constituted an EE. A Pearson coefficient statistic yielded significant interrater correlations on the certainty scores ($p < .01$). A one-factor repeated measures analysis of variance yielded significant differences between ratings of the 15 EE and 15 control segments ($p. < .01$). The judges thus were able to discriminate reliably segments identified as EEs from non-EE control segments.

A test was also conducted on the inter-rater reliability of the EE method. Korman (1991) tested if raters could successfully match descriptions of EE protocols produced by two different judges from the same EE transcript segments. Both judges had been trained beforehand in the use of the EE method. The matched protocols were rated as significantly more similar than the unmatched control protocols ($p. < .01$), suggesting that trained judges are able to use the EE method reliably.

The demonstrations of the validity and reliability described above were intended as necessary initial steps toward testing the EE method to measure therapeutic change. In order to test the EE method as a measure of emotional and schematic therapeutic change, it was decided to select a population suffering from depression, a disorder in which emotions have been posited to play an important role.

Emotion and Depression

Depression, a disorder of depressed affect, is typically characterized by overwhelming and/or persistent feelings of sadness, fear, shame and guilt (Kendall &

Watson, 1989). Depression has been associated with negative appraisals of self and others, dysfunctional beliefs, and misinterpretations of events (Beck, 1976). However, very little is actually known about what happens with emotion in depression. Therefore, it would be of interest to begin to describe the emotional change processes associated with the treatment of depression. Given that different kinds of depression have been delineated (e.g., Blatt, 1974), an important question worth exploring is if there are different kinds of emotional changes associated with different forms of depression.

Greenberg and colleagues (Greenberg, Elliott, & Foerster, 1990; Greenberg & Paivio, 1997; Korman & Greenberg, 1996) have presented an emotionally-focused model of the cognitive-affective processes generating depression. Mild to moderate forms of depressive disorders are viewed as complex secondary emotional responses. In the emotionally-focused model, tacit appraisal processes first result in adaptive emotional responses. These appraisal processes are similar to the automatic or basic appraisals discussed earlier-- i.e., they are most akin to the "stimulus checks" (e.g., novelty, intrinsic pleasantness) proposed by Scherer (1984). In normal and depressive processing, the apprehension of loss or failure is associated with the generation of the primary emotional experience of sadness/distress, and the action tendency to withdraw. In depression, however, the primary emotional response of sadness/distress activates a core, maladadaptive, schematic prototype, stored in memory, that is associated with similar experience. Activation of the characteristically depressogenic self-organization leads the

individual to feel bad, weak, and/or hopeless. In addition, information from the primary, adaptive emotional responses may be ignored or distorted. In a recent study of the diaries of depressed individuals, Smith (1996) found that participants reported a high incidence of negative emotion memories about events in the distant past, rather than just recalling memories pertaining to the negative life events precipitating their current depressions. Smith's findings support the notion that the activation of depressogenic emotion schemes may have an important role in generating depression.

Two general forms of depressive self-organizations have been described by Experiential theorists (Greenberg et al., 1990; Greenberg & Paivio, 1997). Self-critical/bad self-organizations are associated with the introjected harsh criticisms of significant others in early relationships. Insecure/weak self-organizations are associated with an insecure sense of self, and passive, helpless depressions. Insecure/weak self-organizations may result from unsupportive or abusive early relationships in which the child's initiatives were experienced as futile, or the child felt unsupported.

The two depressive self-organizations described by Greenberg and colleagues (Greenberg et al., 1990; Greenberg & Paivio, 1997) bear similarity to the two forms of depression described by other theoretical orientations. In fact, across emotionally-focused, cognitive behavioural, psychodynamic, and interpersonal theories of human functioning, there is remarkable convergence about the existence, basic etiology, and nature of two distinct types of depressions. In the first type of depression, referred to

variously as "introjective" (Blatt, 1974), "self-critical" (Blatt, D'Afflitti, & Quinlan, 1976), "autonomous" (Beck, 1983), "compulsively self-reliant" (Bowlby, 1969, 1985) "bad" (Greenberg et al., 1993), and "dominant goal" (Arieti & Bemporad, 1978), the individual has experienced a disruption in an effective, essentially positive sense of self. Experiential theorists (Greenberg et al; Greenberg & Paivio) have posited that this form of depression typically involves the introjection of harsh criticisms from significant others in early relationships. Self-critical depressions may be typified by problems in self-definition, high degrees of self-criticism, and preoccupation with feelings of worthlessness, failure, shame and guilt (Blatt & Bers, 1993). Individuals suffering from these depressions are thought to assume more blame and responsibility for negative events, strive constantly to prove that they are worthwhile, and feel hopeless about ever succeeding. Affective experience among individuals with self-critical depressions is likely to be stable, persistent and negative (Blatt & Bers).

The second form of depression has been referred to as "dependent" (Blatt, Quinlan, Chevron, McDonald, & Zuroff, 1982), "anaclitic" (Blatt, 1974), "socially dependent" (Beck, 1983), "dominant other" (Arieti & Bemporad, 1978), and "anxiously attached" (Bowlby, 1969, 1985). This form of depression is characterized by disruptions of interpersonal relatedness, dependent behaviours like clinging, and by feelings of loneliness and being unloved (Blatt & Bers, 1993). Its genesis is in early disruption of gratifying interpersonal experiences. Blatt and Bers have described typical

characterological traits of individuals with dependent depressions: When in contact with others, these individuals may be content, but separation may induce depression, loneliness, helplessness, and the feeling that one's isolation will never end. Thus, feelings of anger are likely to be denied for fear of losing or disrupting relationships. Such individuals are likely to feel anxious, fearful, weak and helpless, and are preoccupied with loss. They are likely to rely principally upon others for support, and may have difficulty tolerating affect.

The Activation of Emotion-Generating Schemes in Psychotherapy

In spite of the similarities between the different views of the two forms of depressive self-organizations described in the last section, there are important theoretical and practical differences between the cognitive and emotionally-focused theories of therapy. These differences extend to the domain of depression, and render cognitive and emotionally-focused treatments for depression extremely dissimilar.

Beck's (1967, 1976) cognitive model, for example, posits that psychological disorders are caused by information-processing biases dominated by negative, automatic thoughts and images. According to Beck, depressive cognitive styles result from enduring dysfunctional schemas that have their genesis in painful early experience. The

[1]Recently, Beck (1987, 1993) has been more equivocal, stating that neither biased cognitive styles nor depressive schemes are sufficient conditions to cause depression. Instead, some combination of these two factors are considered necessary, along with an underlying depressive personality orientation, and sometimes also a precipitating life event. Beck (1983) identified two depressive personality orientations as sociotypic and autonomous, akin to Blatt's (1982) dependent and self-critical depressions.

existence of underlying dysfunctional schemas renders the individual vulnerable to depression, even if depression is not currently manifest. In adulthood, events perceived to match the original pathogenic experience trigger activation of the depressive schemas, leading to the selection, interpretation, and integration of information in a depressive manner. According to Teasdale (1988), attention is directed to schema-consistent features of experience. Perceptions, thoughts and memories are dominated by depressive themes related to loss and failure (Clark & Steer, 1996). Information related to these themes is processed and interpreted in a negative, global, pervasive, absolute, and exclusive fashion. Negative thinking styles, applied to self, world, and future, result in depressed affect and feelings like hopelessness, worthlessness, and despair[1]. The *primary hypothesis* of cognitive therapy is therefore that the targeting of biased styles of cognitive processing will lead to corresponding changes in clients' emotions, cognitions, and behaviours (Beck, 1987). That is, cognitive therapy "means that we get to the person's emotions through his cognitions" (Beck, 1976, p.214).

Despite their shared emphases on underlying depressogenic schemes, emotionally focused theories (e.g., Greenberg et al., 1993) view depression and other disorders quite differently. While these approaches also posit the existence of depressive schemes or self-organizations underlying depression, the schemes are viewed as primarily implicit. In addition, an important key feature of these schemes is their ability to evoke not only cognition but also affective experience, including physiological patterns of arousal and

motor activation associated with individuals' felt sense of themselves. A key principle of emotionally-focused theory and practice is that dysfunctional emotion schemes must be activated in order for this affective experience to be accessed and restructured, to modify the emotional experience generated by them. Paradoxically, this principle is actually derived from the cognitive sciences. Bartlett (1932), an originator of the concept of the schema, argued that schematic information is represented in generic and abstract form. Schematic processing is considered unavailable to consciousness and introspection. More currently, schemas have been defined as cohesive cognitive structures that consist of organized elements, "constructs," or "nodes" of past experiences and reactions. The activation of schematic elements or nodes may spread to, activate, and increase the accessibility of other nodes within the same schema. This notion of "spreading activation" distinguishes schemas from other cognitive structures (Segal, 1988; Spielman & Bargh, 1990). Once evoked, spreading activation within a schema is automatic, and governs the processing of information outside of awareness. According to emotionally-focused theory (Greenberg, et al., 1993; Korman & Greenberg, 1996), the activation of emotion schemes directly generates emotional experience and individuals' felt sense of themselves in the world. Emotionally-focused therapists therefore use emotionally evocative interventions in order to activate dysfunctional schemes and modify the otherwise implicit actional blueprints organized within them. This is in marked contrast to the cognitive model, in which cognitive distortions are identified and subjected to such

interventions as countering and logical analyses (e.g., McMullin, 1986).

Thus, as described above, a central tenet of emotionally-focused therapy (Greenberg, et al., 1993) is that emotionally-evocative interventions activate dysfunctional emotional schemes that generate clients' problematic, felt sense of themselves in the world. When activated, these dysfunctional emotion schemes are thought to become accessible for exploration and change. The restructuring of these schemes is thought to result in the generation of new, different, and more adaptive emotional experience. Though the latter is a central working postulate of emotionally-focused treatment, it has never been tested empirically.

Conclusion and Rationale for Study

The importance of emotions and emotion-generating schemes in therapy, and the lack of existing measures of emotion, led to the development of the EE method as an in-session means of identifying and classifying clients' emotions and emotion schemes.

The present study of clients' emotional episodes in therapy was inspired by the success of approaches like the Core Conflictual Relationship Theme Method (Luborksy & Crits-Christoph, 1990; Luborsky, Barber, & Schaffer, 1990), which measures in-session manifestations of important theoretical constructs. Emotion schemes are a key theoretical construct in the emotionally-focused theory of psychotherapy (Greenberg et al., 1993). These schemes are thought to automatically generate clients' felt sense of themselves in the world, and they are thus a principal target for change in therapy. In a

recent comparative treatment study (Greenberg & Watson, in press), emotionally-focused therapies were found to be effective in alleviating clients' depressive symptoms. Therapeutic restructuring of clients' emotion schemes was thought to be the primary mechanism of change in these treatments. A demonstration of an association between changes in clients' emotion schemes and therapeutic improvement would therefore serve as a validation of a key theoretical construct in emotionally-focused therapies.

According to current emotion theories (e.g., Frijda, 1986; Lazarus, 1991), emotion results from the appraisal of a situation in relation to a concern. Emotions also reflect clients' felt sense of themselves and their world. Tracking clients' emotional episodes in therapy would therefore provide a means for identifying and measuring changes in clients' emotionally-felt sense of self and world, their appraisals, as well as the needs and concerns with which they are engaged. Emotionally-focused treatments like Client-Centred and Process-Experiential therapies specifically target clients' emotional experience for change. The EE method was designed as a measure of clients' emotional experiences. That is, rather than gauging true/false or likert-scaled responses to pre-established questions, the EE method is used to distill meaning from the therapy transcripts of clients' reports of their emotional experience. The EE method is therefore suited to study if successful treatments in these two modalities are associated with changes in clients' emotional experiences and their felt senses of self and world. In addition, because it is intended to identify actual instances of emotional experiences (i.e.,

emotional experiences that have already been generated), the EE method may provide a means for tapping and measuring emotional experiences that are schematically and implicitly generated.

Hypotheses

The first question under investigation is whether or not changes in emotions reported in clients' EEs are associated with therapeutic improvement in depressed clients undergoing emotionally-focused therapy. The first hypothesis was that the degree of change in clients' configurations of reported emotions from early to late in therapy would discriminate between those clients with better and poorer treatment outcomes, as measured by standardized outcome indices. Specifically, it was hypothesized that better outcome clients would exhibit, overall, more changes in the proportions of different types of emotions from early to late in therapy. The second hypothesis was that changes in the EE protocols of better outcome clients from early to late in therapy would be rated by clinical judges to be more reflective of therapeutic improvement than changes in the protocols of clients with poorer outcomes. These hypotheses were generated not only by the emotionally-focused theories of therapy described earlier (e.g., Greenberg et al., 1993), but also by the author's own clinical experience in using experiential interventions to target clients' emotions and emotion schemes for change.

Three further aims involved investigating an exploratory question related to changes in clients' emotion schemes, and engaging in further methodological

development of the EE method. The exploratory question investigated by this dissertation involved whether or not the EE method provides a meaningful means of representing and tracking changes in clients' emotion schemes from early to late in therapy. This question was investigated by following the EE protocols of two better outcome and two poorer outcome clients from early to late in therapy. It was predicted that the EEs of the better outcome clients would demonstrate more changes in those clients' appraisals of self and situation and their concerns over therapy. The descriptions of better and poorer clients' EE protocols reported early and late in treatment would also serve as examples of changes in these clients' emotion schemes.

A series of tests were conducted to further test the psychometric properties of the EE method. Specifically, it was hypothesized that trained raters would be able to: 1. Discriminate reliably EE segments from non-EE segments; 2. Identify reliably the first instance of an EE marker in a section of transcript; 3. Classify reliably emotions and action tendencies found in EE segments according to a modified, standard list of emotions (Shaver et al., 1987); 4. Reliably produce EE protocols from identical transcript segments that are rated by others as being recognizably similar. Finally, an additional aim was to develop a means of visually representing the distributions of clients' emotional experiences reported in early and late sessions in therapy. The goal was to demonstrate the changes in individual clients' emotional configurations, and to elaborate further on the nature of these clients' emotional changes in therapy.

CHAPTER III: METHOD

Participants

Clients

Participants in the present study were clients suffering from mild to moderate depression who participated in the York Psychotherapy Research Centre's study on the experiential treatment of depression, funded by the National Institute of Mental Health (NIMH). From the larger pool of 36 clients who participated in the depression study, Project Director Leslie Greenberg had already selected a sample of 6 cases that had been transcribed. The sample consisted of 3 successful clients and 3 unsuccessful clients in Client-Centred psychotherapy, and 3 successful and 3 unsuccessful clients in Process-Experiential therapy. The determination of whether or not these clients were successful or unsuccessful in therapy was based on outcome data as well as from information gained from the supervisor's and therapists' reports. In addition, Dr. Greenberg randomly selected another 12 clients for inclusion in this study. The sample of 24 clients therefore can be seen as containing better and worse cases, and although containing some of the most and least improved clients, it was not fully an extreme groups design.

The York study involved a comparison of Client-Centred and Process-Experiential therapies for depression, and ran from 1992 to 1995. The clients were recruited from the Toronto community through radio and newspaper advertisements, and through posters posted at York University. A number of clients were also referred by the

York University Counselling and Development Centre. Advertisements were directed toward individuals who were currently experiencing depression.

Inclusion and Exclusion Criteria.

Potential client-participants were first screened by telephone, and were informed about the nature of the study. The inclusion criteria included informed consent, an age of 18 years or older, fulfilment of DSM-III-R criteria for an episode of major depression, and a Global adjustment score greater than 50 on the Structured Clinical Interview for the DSM-III-R (SCID) (Spitzer, Williams, Gibbon, & First, 1989). All clients agreed to participate in the research and to be audio- and videotaped. Exclusion criteria were: (1) high risk of suicide (current plan, past attempts, lack of support) (2) current participation in psychotherapy or counselling (3) use of psychotropic medications (4) diagnosis of a concurrent psychiatric disorder (5) history of three or more previous episodes of depression (6) first disclosure of having been sexually abused (7) experience of physical abuse in current relationship (8) the current experience of an intense sense of crisis (9) untreated alcohol or drug addiction (if the addiction was recent, the client needed to have been in treatment for at least one year).

Potential client-participants who passed the telephone screening were invited to a first interview, during which they were assessed for depression. Individuals were included in the study if they met the criteria for a mild episode of clinical depression on the SCID (Axis 1, Form I) (Spitzer, Williams, Gibbon, & First, 1989). Other inclusion

criteria determined in the first interview included a score of 16 or above on the Beck Depression Inventory (Beck et al., 1961), and a score above the 30th percentile on the Symptom Checklist (SCL-90-R) Depression Scale. Participants were also interviewed about their life histories, their depression, and their current resources available to deal with their depressions.

Further screening was conducted in a second interview, in which the SCID was used to screen out individuals with Axis I disorders other than Major Depressive Disorder and Generalized Anxiety Disorder (the latter is subsumed by major depressive disorder) The SCID was also used to screen out Axis II classifications of antisocial, borderline, or schizoaffective personality disorders.

Client Demographics.

The 24 clients ranged in age from 27 to 63 years, with a mean of 42.7 and a standard deviation of 11.69 years. Seventeen of the clients in this sample were female, and seven were male. Fifteen clients were married, five were in long-term relationships, and four were separated or divorced. Clients' educational experience ranged from high school completion to post-graduate and professional degrees.

Therapists

Eleven psychotherapists saw the 24 clients involved in the present study. Six of the therapists were Ph.Ds in clinical psychology, and five had completed all doctoral requirements save the defence of their dissertations. All therapists had at least five years

of clinical experience in both treatment modalities. Nine of the therapists were female, and two were male.

Measures

The Rosenberg Self-Esteem Scale (RSE)

The RSE (Rosenberg, 1965) is a 10-item self-report inventory of respondents' attitudes about themselves, designed to measure self-esteem. Respondents are asked to rate, on a 5-point scale, from 0 (never) to 5 (almost always), how frequently certain attitudes about themselves are thought to be true (e.g., "I feel that I have a number of good qualities."). The scale includes six positively-worded items and four negatively-worded items. Test-retest reliability on the RSE is .85, with a reproducibility coefficient of .92. The RSE has a convergent validity of .60 with Coopersmith's Self-Esteem Inventory as well as predictive validity, with low shyness, low depression, and high assertiveness (Robinson & Shaver, 1973).

The Inventory of Interpersonal Problems (IIP)

The IIP (Horowitz, Baer, Ureno, & Villasenor, 1988) was designed to measure the severity of distress in interpersonal functioning. The test was constructed through interviews with psychotherapy clients, in which 100 interpersonal problems were identified. These were found to constitute five major factors or subscales: assertive, sociable, intimate, submissive, responsible, and controlling. Q-sorting of the items

demonstrated good internal consistency. The IIP is made up of 127 items describing different interpersonal situations, of which 48 describe "things I do too much" (e.g., being critical of others), and 78 describe "things I find hard to do" (e.g., being assertive). Respondents are asked to rate, on a 5-point scale, the degree to which each situation is experienced as being problematic. Scores can be derived for an overall level of interpersonal dysfunction, as well as for each of the five subscales. Test-retest reliability of overall interpersonal dysfunction has been reported to range from .82 to .94, while reliability coefficients for each subscale ranged from .80 to .90 (Horowitz et al., 1988). In terms of validity, the IIP has been shown to correlate with other measures of therapeutic change (e.g., the UCLA Loneliness Scale, the Rathus Assertiveness Schedule, Interpersonal Dependency Inventory), and is reported to be highly sensitive to clinical change.

The Beck Depression Inventory (BDI)

The BDI (Beck et al., 1961) is a 21-item self-report inventory designed to measure severity of depression. Scores on the BDI can range from 0 to 63, with higher scores indicative of greater depressive severity. The inventory includes items related to different aspects of depression, including affect (e.g., "I am so sad or unhappy that everything is painful."), behaviour (e.g., "I can sleep as well as usual."), and attitudes about self (e.g., "I feel that I have many bad faults."). For each item, respondents are asked to select one of five alternatives that best characterizes them at present. The

responses are totalled, with higher scores reflecting greater degrees of depression. Tests of the BDI's internal reliability have yielded estimates ranging from .82 to .93 (Beck et al., 1961; Beck, Rush, Shaw, & Emery, 1979; Bosscher, Konig, & Van-Meurs, 1986; Gould, 1982). The BDI has also been shown to possess good construct validity (Beck, Steer, & Garbin, 1988), convergent validity (Gould, 1982), divergent validity (Beck et al., 1961). Concurrent validity was demonstrated with the MMPI depression scale and the Zung Self-Rating Depression Scale (Beck & Steer, 1987).

General Severity Index (GSI) of the Symptom Checklist-90-Revised (SCL-90-R)

The SCL-90-R (Derogatis, 1983a,b) is a self-report index designed to measure psychopathology. The SCL-R lists 90 psychopathological symptoms, to which respondents are asked to assign a value of from 0 (not at all) to 4 (extremely) depending on the extent to which they experienced the given symptom over the past week. The SCL-90-R can be tallied to produce data on nine separate subscales (Psychoticism, Paranoid Ideation, Obsessive-Compulsiveness, Depression, Anxiety, Phobic Anxiety, Somatization, and Interpersonal Sensitivity), as well as three general indices of pathology (Global Severity Index, Positive Symptom Distress, Positive Symptom Total). The Global Severity Index (GSI) was used as an outcome measure in this study.

Derogatis (1983b) reported that test-retest reliability for the SCL-90 over a one-week period ranged from .80 to .90. Internal consistency reliability estimates for the nine subscales range from .77 to .90. Derogatis also reviewed a number of studies

demonstrating good convergent validity of the SCL with other psychopathological indices.

The Emotion Episode (EE) Method

The EE method (Korman, 1991) is used to identify clients' emotional episodes as they are reported or expressed in therapy. EE segments are identified by locating markers of clients' emotional reactions and/or action tendencies. The segments are demarcated by following the transcript back from the EE marker to where the theme or context begins, and forward until the theme changes or another, new EE marker is identified. Once the EE segment has been demarcated, three additional components are identified: the situation or context, the appraisal of self and/or situation associated with the EE, and the underlying concern or need. A more detailed description of the EE method and its demonstrated reliability and validity (Greenberg & Korman, 1993; Korman, 1991) is provided in the literature review of this dissertation, and in the EE Manual presented in Appendix A.

Procedure

Treatment

Individuals who participated in the study were asked to fill out questionnaires before and after treatment, as well as before and after some sessions (for a full description of the York study, see Greenberg & Watson, in press). Participants had one hour of therapy per week, during which they were audio- and video taped. Treatments

ranged from 14 to 20 sessions, with a mean of 17.6 sessions. Participants were randomly assigned to one of two different treatment modalities. Fourteen of the 24 clients in this sample received Process Experiential treatment, and 10 underwent Client-Centred therapy.

Treatment Modalities

Client-Centred therapy (Rogers, 1959) involves the provision by the therapist of three necessary conditions, in the presence of which clients are thought to feel increasingly safe to initiate and direct explorations of their experience. The three conditions are unconditional positive regard (i.e., prizing of the client), empathy, and congruence (i.e., genuiness).

A major purpose of both Client-Centred and Process Experiential therapies is to enable clients to attend to their emotional experience in an immediate, accurate, and undistorted fashion, so that the adaptive and growth-enhancing functions of emotional experiences can function effectively (Greenberg et al., 1993; Rogers, 1959). Client-Centred and Process-Experiential therapies attempt to engender in the client a processing style in which emotional experience is fully and fluidly attended to (Rice, 1974). Interventions include having clients attend carefully to aspects of their bodily felt experience, encouraging the expression of previously unacknowledged wants and needs, and generally by engendering a deliberate, less automatic style of processing (Toukmanian, 1990, 1992). These changes facilitate the processing of affectively-toned

experiences in more adaptive ways, and are thought to result in qualitative changes in clients' emotional experiences (Greenberg & Safran, 1987; Rice & Greenberg, 1991).

The Process Experiential treatment modality (Greenberg et al., 1993) employs the basic Client-Centred framework-- i.e., therapists undertake to provide and maintain the three necessary conditions described above. In addition, therapists attend to particular markers of cognitive-affective processing difficulties ("process diagnosis") exhibited *in vivo* by clients, and engage clients in appropriate therapeutic tasks thought to best facilitate resolution and change. Many of these affective interventions have their roots in the Gestalt psychotherapy tradition (Perls, Hefferline, & Goodman, 1951). Three Process-Experiential interventions were used in the York NIMH study, and are described in a manual appearing in Parts II and III of the book "Facilitating Emotional Change" (Greenberg et al., 1993). They are outlined briefly below:

1. "Splits" occur when two aspects or sides of the individual are in conflict or are working in opposition: a) Conflict splits occur when one part of the self is critical of or coercive with another aspect of the self. The therapist initiates a two-chair dialogue between the two conflicting aspects, referred to by Perls et al. (1951) as the "top dog" and "underdog;" b) Self-interruptive splits occur when one part of the self interrupts or inhibits emotional experience and expression. The appropriate intervention is a two-chair enactment of how the client interrupts her or his experience. 2. The expression of lingering unresolved feelings toward significant others in the past (often manifested as

complaining) suggests "unfinished business." At such markers, the therapist initiates an empty-chair dialogue between the client and the imagined other. 3. Problematic reactions are indicated by clients expressing a sense of puzzlement about a problematic emotional or behavioural response. Systematic evocative unfolding (Rice & Saperia, 1984) is used to re-evoke and further clients' incomplete processing the experience.

Outcome Designation

Clients were classified as having better or poorer outcomes based on their residual change scores on four standard outcome measures: the RSE (Rosenberg, 1965), the IIP (Horowitz et al., 1988), the BDI (Beck et al., 1961), and the GSI section of the SCL-90-R (Derogatis, 1983a,b). Residual gains scores partial out post-test data that is predictable linearly from pretest data (Cronbach & Furby, 1970; DuBois, 1957), taking into account regression toward the mean. Gains are residualized by expressing post-test scores as deviations from the post-test-on-pretest regression line. Residual gains thus provide a measure of how far the actual post score is from the predicted post score.

The four outcome measures were administered to the clients at the beginning and at the end of treatment. On each of the individual measures, clients were rank-ordered by the magnitude of their residual gains from early to late in therapy. Each client's ranking on the four tests was then summed, and this summary statistic was then itself ranked, yielding a grand outcome ranking for the 24 clients. The better outcome group consisted of the 12 highest ranking clients on the grand outcome ranking, and the poorer outcome

group consisted of the 12 lowest ranking clients.

Collection of EE Data From Transcripts

Prior to having any knowledge about the clients' outcomes, the author read transcripts from the first three sessions and the last three sessions of all 24 clients' psychotherapies. All EE markers were identified in these sessions, and the beginning and end of each episode was demarcated. The author then identified the components of each EE (i.e., the situation, emotion and/or action tendency, appraisal of self and/or situation, and concern), and the components of each EE were organized into standard protocols like the one presented in Figure 6.

Classification of Emotions

Prior to having any knowledge about the clients' outcomes, the EEs occurring in the first three and last three sessions of all 24 clients were categorized by the author according to one of the basic categories from the emotion word list modified from Shaver et al.'s (1987) empirically-generated hierarchy (see Figure 1). This word list was modified in a number of ways for use in the present study. First surprise/amazement was dropped as a category in this study, because it occurred extremely rarely in the transcripts. On the two or three occasions when it did occur, this emotion was categorized as instances of joy, since there were expressed as interest/excitement (e.g., "I was astonished that it didn't bother me any more."). Interestingly, Shaver et al. presented surprise as a tentative sixth category, because the emotion was not rated sufficiently

highly by their raters to be considered an emotion- the authors added surprise to their list because of its presence on other researchers' basic emotion lists.

In addition to deleting surprise from the list of basic emotion categories used in the present study, three new categories were added: Shame/Guilt was added as a distinct category because of their distinct clinical relevance. In Shaver et al.s' (1987) original word hierarchy, guilt, shame, regret, and remorse, and embarrassment, humiliation, and insult were located respectively in two adjoining subclusters under the category of sadness (see Figure 1). Second, a "mixed" category was used to classify EEs in which the client talked equally about having experienced two emotions in reaction to one situation (e.g., "When my mother did that, it made me angry and sad). A category for unclassifiable emotions was also added (e.g., "It upset me.").

A number of guidelines were followed in classifying the emotions in EEs. First, Shaver et al.'s (1987) hierarchy of emotion words, modified in the manner described above, was used to classify clients' emotions. This modified list is presented in Figure 7. In reviewing clients' EEs, it became apparent that a number of emotion words and phrases, many of them more colloquial (e.g., "pissed off," "devastated"), were not included in Shaver et al.'s list. These additions are presented in Figure 8. To help identify action tendencies associated with emotional experience, judges consulted a published list of action tendencies (Frijda, Kuipers, & ter Schure, 1989), presented in Figure 9.

If two emotions from different categories were expressed in one EE, the judge

Figure 7. List used to classify emotions, modified from the list of emotion words by Shaver et al. (1987).

LOVE

adoration
affection
arousal
attraction
caring
compassion
desire
fondness
infatuation
liking
love
longing
lust
passion
sentimentality
tenderness

SADNESS

agony
alienation
anguish
defeat
dejection
depression
despair
dismay
disappointment
displeasure
gloom
glumness
grief
homesickness
hopelessness
hurt
isolation
melancholy
misery
neglect
loneliness
pity
rejection
sadness
suffering
sorrow
sympathy
unhappiness
woe

MIXED

ANGER

aggravation
agitation
anger
annoyance
bitterness
contempt
disgust
dislike
envy
exasperation
ferocity
frustration
fury
grouchiness
grumpiness
hate
hostility
irritation
jealousy
loathing
outrage
rage
resentment
revulsion
scorn
spite
torment
vengefulness
wrath

FEAR

alarm
anxiety
apprehension
distress
dread
fear
fright
horror
hysteria
mortification
nervousness
panic
shock
tenseness
terror
uneasiness
worry

JOY

amusement
bliss
cheerfulness
contentment
delight
eagerness
ecstasy
elation
enjoyment
enthrallment
enthusiasm
euphoria
excitement
exhilaration
gaiety
gladness
glee
happiness
hope
jolliness
joviality
joy
jubilation
optimism
pleasure
pride
rapture
relief
satisfaction
thrill
triumph
zeal
zest

GUILT/SHAME

embarrassment
guilt
humiliation
insecurity
insult
shame
regret
remorse

UNCLASSIFIABLE

Figure 8. Emotion word additions to the list of Shaver et al. (1987), used to classify emotions words in EEs.

ANGER

abhor
bugged
fed up
hate it
on my nerves
sick and tired
stubborn

SAD

discouragement
devastated
pain/painful
loss

SHAME/GUILT

degraded (=humiliated)
demeaned (=humiliated)
inadequate
used (=insult)
worthless

FEAR

avoid
concern
desperate
intimidated
paralysed
pressure
stress
suffocated
trapped
whimpering

JOY

better (=relief)
confident
comfortable
comforted (=relief)
good
good time
hopeful
powerful
refreshing (=zest)

LOVE

appreciate
grateful
touched
warm

UNCLASSIFIABLE WORDS (ON THEIR OWN)

awkward (check for shame/ guilt appraisal)
bad
bothered
cry (check for shame/guilt appraisal)
disturbed
overwhelmed
shaking
upset (check for shame/guilt appraisal)

Figure 9. List of action tendencies by Frijda et al. (1989).

Variable[a]	*Item*
Approach (Moving toward)	I wanted to approach, to make contact.
Be with (Moving toward)	I wanted to be or stay close, to be receptive to someone.
Protection (Moving away)	I wanted to protect myself from something or someone.
Avoidance (Moving away)	I wanted to have nothing to do with something or someone, to be bothered by it as little as possible, to stay away.
Attending	I wanted to observe well, to understand, or I paid attention.
Distance (Rejection)	I wanted to keep something out of my way, to keep it at a distance.
Rejection (Rejection)	I did not want to have anything to do with someone or something.
Disinterest	Things going on did not involve me: I did not pay attention.
Don't want	I wanted something not to be so, not to exist.
Boiling inwardly (Moving against)	I boiled inside.
Antagonistic (Moving against)	I wanted to oppose, to assault, hurt, or insult
Reactant (Moving against)	I wanted to go against an obstacle or difficulty, or to conquer it.
Interrupted (Interruption)	I interrupted what I was doing, or I was interrupted.
Preoccupied (Interruption)	I could not concentrate or order my thoughts
In command	I stood above the situation: I felt I was in command; I held the ropes.
Helping	I wanted to help someone, to take care of someone.
Disappear from view	I wanted to sink into the ground, to disappear from the Earth, not to be noticed by anyone.
Inhibition (Inhibition)	I felt inhibited, paralysed, or frozen.
Blushing (Inhibition)	I blushed or was afraid to blush.
Submitting	I did not want to oppose, or I wanted to yield to someone else's wishes.
Apathy (Hypoactivation)	I did not feel like doing anything; nothing interested me: I was apathetic.
Giving up (Hypoactivation)	I quit; I gave up.
Shutting off (Hypoactivation)	I shut myself off from the surroundings.
Helplessness (Helplessness)	I wanted to do something, but I did not know what: I was helpless.
Crying (Helplessness)	I cried, had to cry, or wanted to cry.
Excited	I was excited, restless, could not sit still.
Exuberant (Exuberance)	I wanted to move, be exuberant, sing, jump, undertake things.
Laughter (Exuberance)	I laughed, had to laugh, or wanted to laugh.
Rest	I felt at rest, thought everything was o.k., felt no need to do anything.

[a]Dimension names in parentheses to distinguish alternative items belonging to the same dimension.

categorized the EE as *Mixed*. However, if more than two emotions from two or more categories were expressed in one EE, a judgment call favouring one emotion category was made if it clearly predominated. Thus, for example, an EE in which a client expressed "sorrow" (*Sadness*), "grief" (*Sadness*), "despair" (*Sadness*), and "frustration" (*Anger*) would have been classified as *Sadness*. If, in the opinion of the judge, two or more emotions appeared equally salient, the EE was classified as *Mixed*.

When emotions or action tendencies expressed in EEs were ambiguous, the appraisals expressed in the EE were not used to determine the emotion category. For example, if a client said he cried because his girlfriend had left him, no inference was made as to whether he was sad, or afraid, ashamed, etc., and the EE was listed as Unclassifiable, barring further evidence. This decision was based on the rationale and observation that individuals often respond differently to a given appraisal. For example, even though the appraisal most adaptively associated with sadness is loss (Greenberg & Safran, 1989; Lazarus, 1991), the two do not invariably co-occur. "Mismatches" of emotions and appraisals, which occur in "instrumental" and "primary maladaptive" emotional expressions are in fact considered to be indicative of deficits in processing (Greenberg & Safran, 1989; Korman & Greenberg, 1996).

Thus, appraisals were not used to inform decisions regarding the classification of emotions. However, one key exception to this rule was implemented: When clients said they felt "awkward," "bad," or "terrible," a check was made for an appraisal of guilt or

shame. Because clients often used "bad" or "terrible" as a synonym for guilt and "awkward" as a synonym for shame or embarrassment, it was decided to categorize these otherwise ambiguous words as *Shame/Guilt* in the presence of a corroborating appraisal.

Training of the Emotion Episode Raters and Judges

Three graduate students were trained in the use of the EE method by the author. All three of these students were Masters students in Clinical or Counselling Psychology. Training sessions lasted two hours, and took place approximately once per week over nine sessions. Training was done using the Emotion Episode Manual (Appendix A), Shaver et al.'s (1987) modified list of emotion words and categories (Figure 7), the collection of words additional to Shaver et al.'s list (Figure 8), Frijda's et al.'s (1989) list of action tendencies (Figure 9), and practice transcripts taken from emotionally-focused therapies that were not part of the present study.

Tests of the Reliability of the Emotion Episode Method

In this study, the investigator collected all the EE data himself: This included identifying the EE segments in therapy transcripts, identifying each EE segment's components, and classifying the emotions and/or action tendencies expressed in each EE according to the modified Shaver et al. (1987) list of emotions. Therefore, it was necessary to subject samples of the author's work to reliability tests, in order to check if other trained raters could locate EEs, identify EE components, and classify EE emotions in a reliable fashion. The following procedures were used to test reliability:

Test of the Inter-Rater Reliability of the Identification of EE Segments

The first test investigated if trained judges could discriminate reliably segments identified previously by the author as constituting EEs. To assess if trained judges could agree reliably on what does and does not constitute an EE segment in therapy transcripts, two judges were given 24 EE segments taken from the larger sample of 24 clients' EEs. An additional 24 transcript segments were given to the raters that had been judged previously by an expert to not constitute EEs. Each of these control segments was paired length-wise with one of the 24 EE segments, and was derived from the same session transcript from which its paired EE segment was derived. All the control segments were of unified theme, a characteristic typical of EE segments. The raters received the 48 segments in random order-- ie., the segments matched in length were not presented in pairs. The raters were asked to rate, along a 6-point likert scale, if each segment constituted an EE. The likert scale for this analysis is presented in Appendix B.

Test of the Inter-Judge Reliability of the Location of EE Markers

A test was conducted to see if EEs could be selected reliably from transcript segments. From the sample of transcripts used in this study, the author selected 30 segments in which he had located an EE. The author then pared these segments, so that each contained 44 lines of text, give or take one line (i.e., just less than 2 pages), with the first instance of an EE marker occurring at a random location in any given segment (i.e., on any of the 44 lines). These 2-page transcript segments were then given to two judges,

who were asked to locate the line on which the first instance of an EE marker occurred.

Test of the Inter-judge Reliability of the Classification of Emotion Categories.

An additional test was conducted to assess the reliability of the author's emotion classification using the eight categories from the modified Shaver et al. (1987) list. Ten EE segments were selected at random from each of 10 clients used in this study. The segments were picked from the first and last three sessions of therapy. The 100 segments were given to two expert judges who independently read and classified each of the segments into one of the eight emotion categories. For the purpose of emotion categorization, the judges were instructed to follow the same set of guidelines used in the classification of the full sample to measure change in clients' EEs (see Appendix A). The judges were also asked to classify each of the 100 segments into one of the 135 emotion word categories published by Shaver et al. In instances where judges categorized a segment as "unclassifiable" or "mixed," no further categorization into the 135 emotion words was possible.

Inter-judge Reliability Test on the Derivation of Whole EE Protocols ("Similarity test").

An important question is whether or not different judges can produce identical or similar protocols from the same EE segments. To test the inter-rater reliability of the EE method, a model for the statistical comparison of non-standardized data was used. The model was designed by Luborsky and Crits-Christoph (1990) for use with the Core Conflictual Relationship Themes, and was used successfully in initial reliability testing

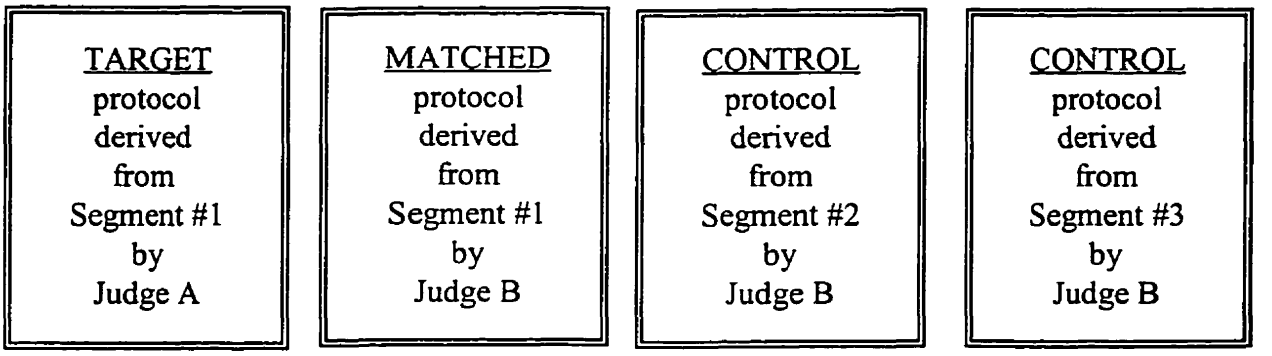
of the EE method (Korman, 1991). Ninety EE transcript segments were chosen at random from the first and last three sessions of 12 participants from the larger sample in this study.

Thirty of the 90 EE segments were then given to an expert judge, who was asked to describe the components of each segment (i.e., the emotion and/or action tendency, appraisal of self and/or situation, and the need), and organize them into standard EE protocols. These 30 were designated the "target" protocols. A second expert judge (the author) independently identified the components from the same 30 segments, and organized them into protocols. These protocols, produced from the same 30 segments by the second judge, were termed the "matched" protocols. The second judge also produced protocols from 60 different EE segments.

The EE protocols were then divided into 30 sets. Each set contained one target protocol produced by the first judge and a matched protocol derived by the second judge from the identical EE segment. Each set also contained two control protocols derived by the second judge from different EE segments. The configuration of each set is illustrated in Figure 10. In all, 120 protocols from 90 different segments were used.

Two raters then assessed, along a 6-point likert scale, how similar or dissimilar the target protocol was from the other three other protocols in each of the 30 sets. The Likert scale is presented in Appendix C. Thus, the raters were given a total of 30 sets containing four protocols each, and were asked to make three comparisons per set. For

Figure 10. The configuration of each set given to raters in the inter-rater reliability test on the derivation of whole EE protocols ("similarity test")



each set, one comparison served to measure inter-judge agreement (i.e,. target vs. matched protocol), and two comparisons served as controls (i.e, target vs. two control protocols). The "situation" component was not presented to the raters, because the idiosyncratic and easily identifiable nature of the component would render the test meaningless.

Tests of Clinical Change

The Calculation of Changes in Clients' Emotional Configurations

To test if better outcome clients had more changes in their emotional configurations than clients with poorer outcomes over therapy, the following steps were carried out on the basic emotion categorizations (from the modified list of Shaver et al., 1987) of the 24 clients' EEs that were identified in the first three and last three sessions: For each client, the frequencies of occurrence of each of the eight emotion types were summed, respectively, across the first three sessions (*early*), and across the last three sessions (*late*). Within each time period, these sums were then transformed into proportions of all emotions reported during that time period. Thus, if a client reported ten EEs early in therapy, and six of these were classified as Anger, the frequency proportion of this emotion early in therapy would be 0.6. Next each emotion category's proportion of overall occurrence in late sessions was deducted from its proportion of overall occurrence in early sessions, and then squared, yielding a difference score for each

emotion. This score provided a measure of the proportion of occurrence of each emotion over the two time periods. These difference scores were then summed and square rooted, yielding a grand difference (*D*) score in the distributions of reported emotions for each client early and late in therapy. This *D* score provided a Euclidian measure of the overall difference in the relative frequency of occurrence of all emotions, for each client, over the two periods.

Clinical Judgement of Changes in Clients' EE Protocols

The analysis of changes in clients' emotion configurations was intended to indicate if there was a difference in the changes of the overall pattern of EEs from early to late in therapy, as a function of outcome. However, the analyses shed no light on whether or not such differences reflected therapeutic improvement. That is, observed differences between the groups' changes in EEs, from early to late in therapy, say nothing about the quality of these changes. For example a client in the more successful outcome group who might have moved from experiencing predominantly joy-related EEs early in therapy to experiencing mostly shame-related EEs late in therapy, would still have had a high difference *(D)* score. However, this high D- value would likely have been reflective of negative therapeutic change. Thus, it was necessary to test whether or not changes in the overall distributions of each client's EEs were judged to reflect clinical improvement.

To do this, a clinical judge, experienced in Client-Centred and Process Experiential therapies, read each client's EE protocols from the early and late sessions.

The judge was unfamiliar with the clients in the NIMH depression study, and was blind as to each client's outcome. For each of the 24 clients in this study, the judge was asked to rate, along a 5-point likert scale, if the changes from early to late sessions in EE protocols reflected positive clinical improvement. The Likert scale for this task appears in Appendix D. Correlations were then performed between the judge's ratings of clinical improvement, based on early to late session changes in clients' EE protocols, and: 1) clients' overall residual gains rankings on outcome, and; 2) clients' *D*-values. In order to check the reliability of the judge's ratings of clinical improvement, a second clinical judge who was familiar with the NIMH project and the clients' outcomes, performed the same task. Correlations were then performed between the two judges' ratings of clinical improvement based on clients' EE protocols.

Descriptions of Changes in Four Clients' EEs

Two illustrative clients with poorer outcomes, and two illustrative clients with better outcomes were selected. The therapist for each of these clients was interviewed by the author after the termination of treatment. The interviews were open-ended, although therapists were asked to comment on the clients' major issues dealt with in therapy, and on if and how clients changed in therapy.

The author reread all of the early and late session EE transcript segments and protocols from the four clients. For each client, the two or three most frequently occurring emotions were determined for both early and late sessions. In those, the

predominant appraisals were determined, as well as the concerns. The emotion, plus appraisal, plus concern were used to determine clients' predominant emotion schemes. That is, for each client, the predominantly occurring emotion category was first identified. The appraisal occurring most frequently in EEs of the predominant emotion category was then determined. Finally, the most frequently occurring concern associated with the predominant emotion-appraisal combinations was identified. The predominant emotion-appraisal-concern combinations were considered to be clients' predominant emotion schemes. The change in these schemes over the two periods was used to describe the type of change in emotion scheme that occurred.

CHAPTER IV: RESULTS

Correlations Between the Four Measures of Outcome

A test was conducted to check that the four outcome indices demonstrated reasonable convergence with regard to their measurement of aspects of a single construct, therapeutic outcome, so that the grand outcome rankings of residual change scores used in this study were meaningful.

A Spearman's rank-order correlational analysis yielded significant correlations between the residual gains scores of the 24 clients on all four outcome measures. The correlation matrix for this analysis appears in Table 1. As shown in Table 1, the residual gains on the GSI and BDI were most highly correlated, while scores on the IIP and RSE were the least correlated of all pair-wise comparisons. Because the four outcome indices were all significantly correlated, it was decided to use them together as a measure of therapeutic outcome.

Tests of the Reliability of the EE Method

Test of the Inter-Rater Reliability of the Identification of EE Segments

The first test was designed to measure if trained raters could discriminate reliably between segments that had been determined by the author to constitute either EEs or non-EE controls. The overall mean of the two raters' ratings of the segments that were identified previously by the author to be EEs was 5.21, and for the non-EE control segments, 1.44, where 6.0 was "definitely an EE" and 1.0 was "definitely not an EE."

Table 1. Correlation matrix for the clients' residual gains scores on the four outcome measures

	GSI	IIP	RSE	BDI
BDI	.7061 p= .000	.5270 p= .008	.5993 p= .002	*
RSE	.6223 p= .001	.4092 p= .047	*	*
IIP	.4687 p= .021	*	*	*
GSI	*	*	*	*

Note: BDI, Beck Depression Inventory; RSE, Rosenberg Self-Esteem Scale; IIP, Inventory of Interpersonal Problems; GSI, General Severity Index of the Symtom Checklist-90-Revised.

A *t*-test on the differences between the identification ratings of the two types of segments yielded a *t*-value significant at the .001 level ($t = 24.12$, $d.f. = 23$, one-tailed).. Mean identification ratings of the EE and non-EE segments are presented in Table 2.

Both raters rated all 24 EE segments as being "definitely an EE," "an EE," or "probably an EE" (i.e, a rating of 6, 5, or 4, respectively), and rated the control segments as "definitely not an EE," "not an EE," or "probably not an EE" (ie., a rating of 1, 2, or 3, respectively) on 23 of 24 occasions. A chi square analysis using this division of the ratings yielded a significant chi square value of 40.40 ($d.f.= 1$), significant at the .001 level, indicating that the raters' discriminations of EE and control segments were more accurate than would be observed normally by chance. Differences were apparent between the two raters. On average, Rater A tended to rate the EE segments as more definitely being EEs, and the non-EE control segments as more definitely not being EEs. A *t*-test on the two raters' differences between their ratings of the EE and control segments yielded a significant *t*-value ($t = -3.8$, $p. < .001$, $d.f. = 23$).

Test of the Inter-judge Reliability of the Location of EE Markers

A test was conducted to assess if trained raters could select EEs from transcript segments in a manner reliably similar to the author. This test examined if trained raters could identify reliably the locations of the first instance of an EE marker in a section of transcript. Pearson correlation coefficients were calculated between the raters' line locations, as well as between each rater's line locations and the locations identified by

Table 2. Mean identification ratings of EE and non-EE segments

	Rater A	Rater B	Mean
Segment Type			
EE	4.96	5.46	5.21
Control	1.58	1.29	1.44

the author. Each of the three correlations was significant at the .001 level. The matrix for these Pearson correlation coefficients is presented in Table 3. Thus, there was significant agreement between the locations of EE markers identified by the two raters and the author. In addition, to further assess if the two raters' judgments varied significantly, a paired *t*-test was calculated on the two judges' line locations for the paired segments. The *t*-value was not significant ($t = .60$, $d.f. = 29$, $p = .551$), suggesting that the two judges did not differ significantly in their decisions about where the first instance of the EE marker occurred.

Test of the Inter-judge Reliability of the Classification of Emotion Categories

An additional test was conducted to assess judges' abilities to classify reliably the emotions and/or action tendencies in clients' EEs into one of the eight basic emotion categories from the modified Shaver et al. (1987) list. On their classifications of 100 EE segments into one of the eight emotion categories, the two judges were in agreement 89 times. An unweighted Cohen's *kappa* analysis yielded a k of .868 ($z = 20.379$, $p < .00001$), suggesting the judges' rate of agreement was significantly greater than chance. The column and row totals of the two judges' classifications are presented in Table 4. Disagreement was greatest in segments where at least one judge classified the segment as either mixed or unclassified. Disagreement involving the use of one of these categories accounted for 9 of the 11 disagreements.

Table 3. Pearson correlation matrix between the line location ratings of the first instance of an EE marker in a section of transcript, as judged by the two trained raters and the author.

	Rater A	***Rater B***
Author	0.82*	0.80*
Rater B	0.62*	-

* denotes significant at $p. < .000$

Table 4. Column and row totals of the two judges' classifications of 100 EE segments into one of eight basic emotion categories from the modified Shaver et al. (1987) list.

JUDGE 2

JUDGE 1

Category	**Anger**	**Sad**	**Fear**	**Shame**	**Joy**	**Love**	**Mixed**	**Unclas.**	**Row Totals**
Anger	26							2	28
Sad		10					1	2	13
Fear			16						16
Shame				9				1	10
Joy					13		1		14
Love						1	1		2
Mixed							4	1	5
Unclas.		1		1				10	12
Column Totals	26	11	16	10	13	1	7	16	100

To check the representativeness of the subsample of emotion categories of the 100 segments used in the reliability analysis, a chi square analysis was performed. The distribution of emotion categories of the 100 segments, as classified by the author, was compared to the distribution of all of the remaining EE segments of the 24 clients used in this study. The chi square was not significant (χ^2= 8.07, *d.f.*= 7, n.s.), indicating that the distribution of emotions in the reliability sample distribution was not significantly different from that of the overall sample.

Inter-judge Reliability Test on the Derivation of Whole EE Protocols ("Similarity test")

The "similarity test" examined if two judges could independently distill recognizably similar protocols from the identical EE transcript segments. Two judges independently produced protocols from identical segments, and these protocols (matched protocols) were grouped in a set with two other EE protocols distilled from different segments (control protocols). Two raters were given 30 such sets. In each set, the raters were asked to make, under blind conditions, one matched comparison, and two control comparisons (see Figure 10).

A *t*-test was conducted on the mean differences between the matched similarity ratings and the mean control similarity ratings in each set. The matched comparisons were rated as significantly more similar than the control comparisons (t= 35.61, *d.f.*= 29, $p < .001$, one-tailed). Thus, the protocols produced by two judges from the identical EE segment were judged to be significantly more similar than the protocols distilled from

different segments.

Rater B rated the matched protocols as being "definitely the same," "the same," or "probably the same" on 29 out of 30 occasions, and rater M, 30 out of 30 times. Rater B rated the control comparisons as being "definitely not the same," "not the same," or "probably not the same" on 57 out of 60 occasions, and Rater M, on 60 out of 60 times. Chi square analyses on these data were significant for both raters. Chi square tables and summaries appear in Table 5.

To check if the two raters tended to use the likert scale similarly, a *t*-test was conducted on the differences between the two raters' differences between matched comparisons and the mean of the two control comparisons in each set. The inter-rater differences were not significant (t= -.17, $d.f.$= 29, $p.$= .86), suggesting that the raters were consistent in their discriminations between matched and control comparisons.

Tests of Changes in Clients' Emotional Configurations

t-test of Two Outcome Groups

A *t*-test was conducted to test the hypothesis that changes in the emotional configurations (*D*-values) from early to late in therapy would be significantly greater among better outcome clients than among poorer outcome clients. The 24 clients were divided into two outcome groups of 12 clients, based on a median split of their grand outcome rankings on their residual change scores on the four outcome measures.

Table 5. Chi square summary table for similarity test

	Rater B		*Rater M*	
	matched	control	matched	control
RATED SIMILAR: rated as probably the same, the same, or definitely the same	29	3	30	0
RATED NOT SIMILAR: rated as probably *not* the same, *not* the same, or definitely *not* the same	1	57	0	60
	χ^2 = 84.55 (*df*=1) p< .0000		χ^2 =114.57(*df*=1) p< .0000	

The means and standard deviations of the two groups' emotional configuration values are presented in Table 6. A Levene's adjustment of the significance level and degrees of freedom was made after a Levene's test for equality of variances indicated that the variance in *D*-values was significantly higher in the better outcome group than in the poorer outcome group ($F = 9.16$, $p. = .006$). That is, clients in the better outcome group demonstrated significantly more variation than poorer outcome clients in the degree to which their emotional configurations changed from early to late in therapy. Equality of group variances is a principal assumption of the *t*-test. The Levene's adjustment ensures the integrity of the *t*-test when the assumption of equal group variances is violated.

A *t*-test for equality of group means indicated that the better outcome group demonstrated significantly higher mean change in their *D*-values from early to late in therapy than the poorer outcome group ($t = 1.79$, Levene adjusted $p. = .045$, Levene adjusted $d.f. = 17.36$, one-tailed). Thus, the principle hypothesis of this study was supported: On average, better outcome clients showed significantly more changes in their emotional configurations over therapy than did poorer outcome clients.

ANOVA of Three Outcome Groups

To examine with greater specificity whether or not changes in clients' emotional configurations differed significantly as a function of their therapeutic outcomes, clients were also divided into three outcome groups, again based on their grand outcome

TABLE 6. Mean emotion configuration difference values, standard deviations and standard errors of better and poorer outcome groups.

GROUP	*n*	Mean	Standard Deviation	Standard Error of Mean
Poorer Outcome	12	.295	.079	.023
Better Outcome	12	.378	.140	.040
Total	24	.336	.109	

rankings on their residual change scores on the four outcome measures. Thus, the sample was divided into three groups of 8 clients each.

A one-way analysis of variance of the changes in emotion configurations (*D* values) as a function of three outcome groups yielded a significant *F*-value ($F = 4.3$, $p = .027$, $d.f. = 2, 21$). The summary table for this analysis is presented in Table 7. As shown in Table 7, the observed mean group *D*-values were in the expected direction: The best outcome group had the highest mean *D* value; the poorest outcome group had the lowest mean *D*-value, and the mean *D*-value of the medium outcome group fell in-between the other two groups. The means, ranges, and standard deviations of the *D*-values of the three groups is presented in Table 8. A Levene's Test for Homogeneity of Variance was significant at .001 (Levene's Statistic = 12.167, $d.f. = 2,21$), indicating the presence of heterogeneity of variances in the *D*-values among the three groups. That is, variance within groups increased as a function of outcome. The best outcome group demonstrated the highest variance, and the poorest outcome group had the least variance. Heterogeneity of variance violates a principal assumption of the ANOVA, although unequal variances among groups with equal cell sizes is not considered to affect the integrity of the ANOVA (G. Monette, personal communication, August, 1997). A Scheffé post hoc analysis indicated that the only significant difference in *D*-values was between the best and the poorest outcome groups ($p. < .05$).

Table 7. Summary Table of One-Way ANOVA of Three Outcome Groups

Source	*d.f.*	Sum of Squares	Mean Squares	*F* ratio	*F* prob.
Between Groups	2	.0946	.0473	4.3046	.0271
Within Groups	21	.2208	.0110		
Total	23	.3254			

Table 8. Means, Ranges, Standard Deviations, and Standard Errors of Three Outcome Groups

Group	*n*	Mean	Range Min.	Range Max.	Standard Deviation	Standard Error
Best Outcome	8	.4185	.2321	.5979	.1473	.0521
Medium Outcome	8	.3261	.2398	.5125	.1002	.0354
Poorest Outcome	8	.2659	.2257	.3082	.0352	.0125
Total	24	.3368	.2257	.5979	.1189	.0243

Correlation between Outcome and *D*-value

To further examine the relationship between changes in clients' emotional configurations and their therapeutic outcomes, a Spearman's correlational analysis was conducted between clients' *D*-values and their overall outcome ranks on their residual change scores. The correlation between clients' *D*-values and outcome was significant ($r = .456, p = .012$). Table 9 presents the grand outcome rankings and *D*-values for all 24 clients in this study. The mean *D*-value for all 24 clients in this study was .336. As evident in Table 9, the clients' *D*-values and grand outcome rankings were by no means perfectly correlated. However, the clients with higher outcome rankings tended, for the most part, to have higher *D*-values: Four of the six highest *D*-values belonged to clients among the top six in outcome rankings. Seven of the highest 12 *D*-values belonged to clients ranked among the higher 12 in outcome. Similarly, 7 of the lowest 12 *D*-values belonged to clients ranked among the lower 12 in outcome. The proportions of each emotion category reported early and late in therapy by each of the 12 poorer outcome clients, and each of the 12 better outcome clients are presented in Appendices E and F, respectively. These proportions are represented in pie charts illustrating the emotion configurations for each of the 24 clients in Appendix G.

Clinical Judgement of Changes in Clients' EE Protocols

An analysis was conducted to test whether or not changes in clients' emotional configurations were associated with clinical judgements of therapeutic improvement.

Table 9. Grand outcome ranks and *D*-values for the 24 clients

Client	**Grand Ranking of Residual Gains Scores on Four Outcome Measures**	***D*-value**
306	1	.3013
017	2	.4787
102	3	.5978
010	4	.2320
103	5	.5784
312	6	.5381
303	7	.3581
019	8.5	.2635
110	8.5	.2685
015	10	.2397
021	11	.2502
107	12	.4335
203	13	.2625
305	14	.5125
309	15	.2797
002	16	.3618
018	17	.3082
023	18.5	.2650
109	18.5	.2278
201	20	.2599
005	21	.2340
104	22	.2256
001	23	.3019
111	24	.3042

Though the *t*-test described in the former section demonstrated that the *D*-values of better outcome clients changed significantly more over therapy than the *D*-values of poorer outcome clients, that analysis said nothing about the quality of the changes in clients' EEs. A Spearman's correlation analysis was conducted to test if changes in each client's EE protocols were judged to be reflective of therapeutic improvement. Correlational analyses were performed between the judge's 5-point Likert-scale ratings of clients' clinical improvement over therapy, based on clients' early and late EE protocols, and 1) clients' *D*-values, and 2) clients' overall residual gains rankings. To check the clinical judge's reliability, a correlational analysis was performed between the judge's ratings and those made by a second clinical judge who was familiar with the outcomes of the clients in the York depression study. These data appear in Table 10.

As indicated in Table 10, the Spearman's analysis yielded a significant correlation of .45 ($p. < .001$) between the judge's 5-point Likert-scale ratings of clients' clinical improvement over therapy, based on a reading of the clients' early and late EE protocols, and clients' *D*-values. Thus, the clinical judge's ratings of clients' therapeutic improvement, based on clients' EE protocols, were significantly correlated with the degree of proportional changes in clients EE configurations, from early to late in therapy. This suggests that to some degree, higher *D*-values are associated with clinical change. A second Spearman analysis also yielded a significant correlation ($r = .631, p. < .001$) between the judge's 5-point Likert-scale ratings of clients' clinical improvement

Table 10. Correlations between clinical improvement ratings of client's EE protocols and clients' outcome rankings, *D*-values, and second judge's clinical improvement ratings

	Clients' *D*-values	**Ranking of Clients' Overall Outcome on Four Standard Measures**	**2nd Judge's Ratings of Degree of Clinical Change in Clients' EE Protocols‡**
Judge's Ratings of Degree of Clinical Change in Clients' EE Protocols†	.456*	.631*	.817**

* $p. < .001$

** $p. < .0001$

‡ Used to assess reliability of primary judge's clinical ratings

over therapy, based on the clients' early and late EE protocols, and the clients' overall residual gains outcome rankings. Thus, the clinical judge's ratings of clients' therapeutic improvement, based on changes in their EE protocols from early to late in therapy, were significantly correlated with clients' grand outcome rankings. In addition, the clinical judge's ratings of clients' therapeutic improvement, based on changes in their EE protocols from early to late in therapy, were significantly correlated ($r = .817, p. < .001$) with similar ratings made by the second judge, who was familiar with the NIMH-study. Thus, the clinical judge's ratings of clients' clinical improvement based on clients' EE protocols, was reliable.

Descriptions of Changes in Four Clients' EE Protocols

Two Clients with Poorer Outcomes

Client 001 (Poorer Outcome)

Overview.

Client 001 was a 58 year old, married woman employed as an office worker. Her grand outcome composite ranking on the four measures was 23rd. Among the residual gain outcome scores of the sample of 24 clients, client 001 ranked 24th on the BDI, 23rd on the GSI, 21st on the IIP, and 14th on the RSE. Her emotion configuration change value *(D)* ranked 12th among the 24 clients.

Therapist's Perspectives on Client 001's Therapy.

Client 001's therapist viewed this client as being extremely depressed. The client

and her husband were going through a massive bankruptcy during the client's treatment. The client felt impotent to do anything about the situation. The client was angry that her husband had got them into this plight and was unable to extricate them from it. The bankruptcy process was long and drawn out.

The therapist reported that the client was disappointed in her husband for not taking care of her, especially as she was on the brink of being homeless close to her twilight years. In therapy, the client did some grief work around unfinished business of losing her grandfather. The therapist reported that the client's life circumstances were such that therapy was unable to effect significant change.

Client 001's Emotion Schemes

As seen in Figure 11, anger was the predominant emotion expressed in client 001's early EEs, accounting for 63.6% (n = 7) of EEs during this period. Among client 001's EEs reported early in therapy that expressed anger, 100% (n = 7) involved appraisals that her husband was inconsiderate, irresponsible, and/or had failed to protect her financially. In addition, all of these EEs were rated as involving concerns for the client's safety. In late sessions, anger was also the predominant emotion expressed, accounting for 54% (n = 7) of 001's EEs. Of the client's EEs reported late in therapy that expressed anger, 86% (n = 6) of these involved appraisals that her husband did not care about her and/or had hurt her financially or had embarrassed her; 5 of the 6 (83%) concerns expressed in these EEs were related to esteem. The other EE involved the

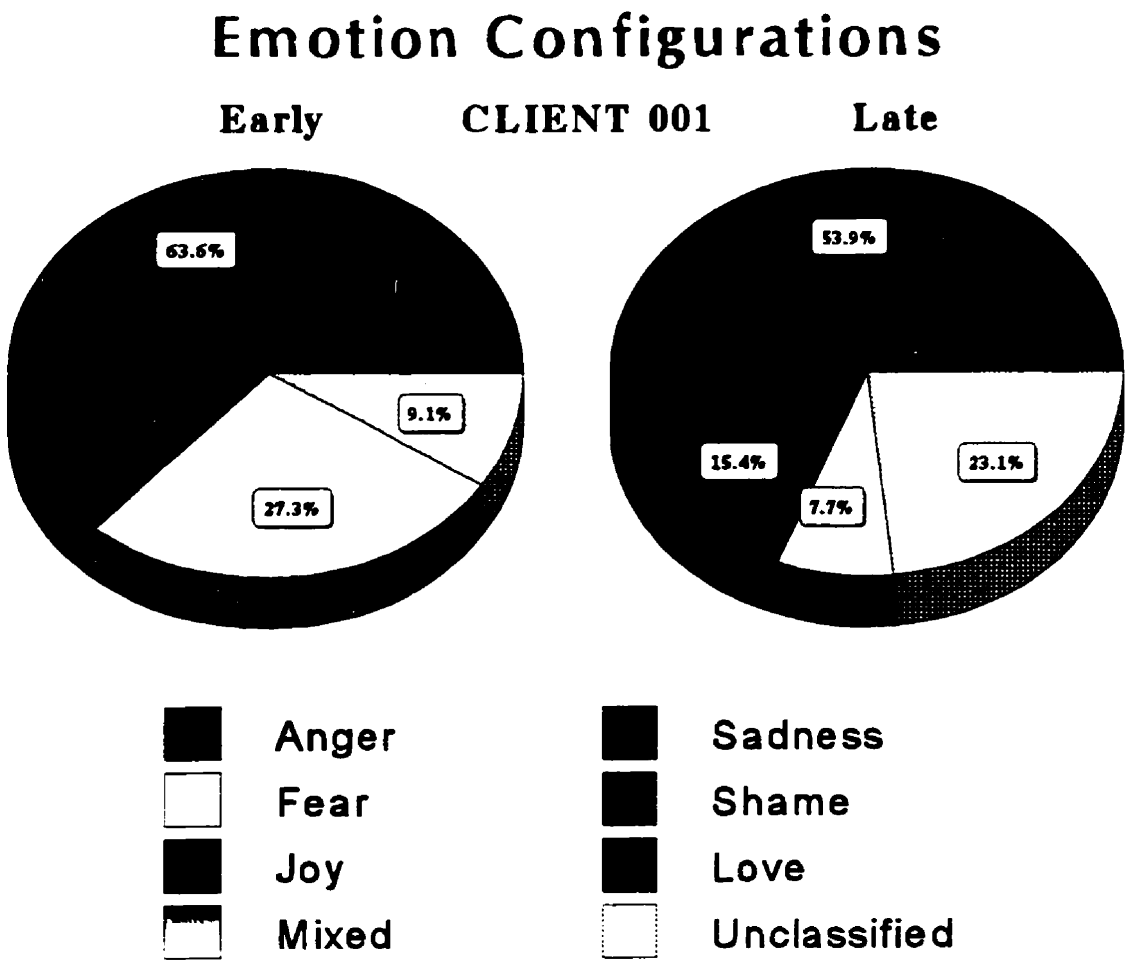


Figure 11. Client 001's Emotion Configurations

unelaborated appraisal that her husband was "negative." Of the client's late EEs expressing anger, 43% (n = 3) involved esteem concerns, 43% were unclassifiable but were thought to involve affiliation and/or esteem, and the remaining EE involved a concern for affiliation.

Fear was the second-most predominant emotion in 001's early EEs, apparent in 27.3% (n = 3) of her EEs. All of these early fear EEs involved appraisals that her financial situation was bad, and all were in relation to concerns for her safety. Fear EEs were only the fourth-most predominant emotion expressed in late sessions, accounting for 7.7% (n = 1) of all late EEs. The one late fear EE and also involved the appraisal that she was in trouble financially, in relation to a need for safety. In late sessions, unclassifiable emotions were the second-most predominant emotions expressed, accounting for 23.1% (n = 3) of late EEs. Of these, 2 involved appraisals that her husband was inconsiderate (esteem concern) or not taking care of her (safety concern).

Sadness was the third most predominant emotion expressed in late EEs, accounting for 15.4% (n = 2) of late EEs. Both late sadness EEs were associated with the appraisal of herself as alone and unprotected, in relation to an unclassifiable concern that involved safety and/or affiliation.

Client 001's Predominant Emotion Schemes Early and Late in Therapy

Client 001's predominant emotion scheme in early sessions involved anger associated with the appraisal that her husband had hurt her or had failed to protect her

financially, in relation to a concern for safety. The second most predominant emotion scheme in early sessions was fear associated with the appraisal of herself as being in financial danger, in relation to a concern for safety.

In late sessions, client 001's predominant emotion scheme continued to be anger associated with the appraisal that her husband did not care about her, embarrassed her, and had hurt her financially, in relation to a concern for esteem. This scheme is similar to the anger scheme in the early sessions, but the concern has changed to esteem from safety. The second most predominant emotion scheme late in therapy involved sadness associated with seeing herself as alone and unprotected, in relation to an unclassifiable concern involving safety and affiliation. There was a single EE (i.e., no longer second most predominant) of fear associated with the appraisal that she was in financial danger in relation to a concern for safety.

General Description of Client 001's EEs in Early and Late Sessions.

The majority of this client's EEs, both early and late in therapy, involve anger. Most of her anger was directed at her husband, whom she appraised as responsible for putting her in an extremely precarious financial position. She resented that he had not protected her, and thought him to be inconsiderate and irresponsible. The client was also afraid of what would happen to her as a result of her financial predicament.

The final sessions are also dominated by EEs involving anger and resentment at her husband for being inactive and irresponsible in the face of their financial woes. She

also expressed anger at him for his perceived inappropriate behaviour in social contexts. However, rather than focusing on the danger that she felt his actions had placed her in (safety concern), as she had in early sessions, the client focused on her husband's violations of her and his shortcomings (esteem concern).

Interestingly, in the final sessions there appears to have been a partial giving-way of her anger and fear in the face of unresolved grief over losing her grandfather. In reading over the case transcripts, it appeared almost as if the client had just begun to move from an external to an internal stance in the final sessions. That is, rather than always reacting with anger to external events- namely, blaming her husband for what she perceived he did *to* her, the client also began to feel sadness in response to internal events, in which she played a greater role in the creation of her experience. For example, the client expressed sadness in EEs in which she appraised *herself* as having to give up her cherished illusions of being safe, which she associated with her late grandfather. A number of unclassifiable EEs also involved her feeling upset at others for perceived violations- although in these EEs the client also seemed to be expressing anger. Because the classification of emotions was based solely on stated emotional reactions and/or action tendencies, and not on stated appraisals (for a description of the rationale behind this convention, please see the "Classification of Emotions" subsection of the Procedure section), these EEs were classified as Unclassifiable, since "upset" is an ambiguous term, used at various times in the 24 clients' transcripts to describe anger or sadness, and

sometimes fear.

Client 005 (Poorer Outcome)

Overview.

Client 005 was a 53 year old, married woman who worked as an administrator in a service company. Her grand outcome composite ranking on the four measures was 21st. Among the residual gains outcome scores of the sample of 24 clients, client 005 ranked 13th on the BDI, 13th on the GSI, 24th on the IIP, and 22nd on the RSE. Her emotion configuration change value *(D)* ranked 21st among the 24 clients.

Therapist's Perspective on Client 005.

The client had issues revolving around family and work. The client had elderly parents who were infirm and in nursing homes two hours outside the city in which the client lived. The client expended significant energy taking care of her parents. Though she felt that the lion's share of responsibility fell on her own shoulders, the client perceived her sister as constantly challenging her decisions vis-a-vis the care of their parents. Client 005 had experienced considerable conflict with her sister, and felt that the current disagreements over their parents had stirred up angry and painful feelings that she had not resolved in earlier conflicts with her sister. The client felt that while she had been saddled by her sister with the work of taking care of her elderly parents, she was also frequently challenged or excluded by her sister in decisions concerning the care of

their parents. The client rarely spoke of her husband, but characterized him as being unsupportive.

Client 005 also reported having problems at work. She was intimidated by her supervisor, and often felt trapped between the competing demands of her supervisors and the company's clients. She became extremely despondent at times when she was unable to answer her superiors' queries at meetings, and was considering quitting. The client expressed distress at her perception that she was playing out similar dysfunctional patterns with family and work.

The therapist felt that the client's depression did not lift appreciably in therapy, and that in general, the treatment did not concretely help the client. The client also expressed to the therapist reservations about the helpfulness of therapy, and actually terminated therapy for a brief time in the middle of treatment. At the point of termination, the client was unable to make a number of important decisions with regard to her family and work, and this inability was considered symptomatic of the client's enduring depression. Nevertheless, the therapist experienced the client as inwardly focused in therapy. She felt that empathic explorations seemed to help the client focus on her experience.

Client 005's Emotion Schemes.

As evident in Figure 12, guilt/shame, joy, and unclassifiable emotions were the three most predominant emotions expressed in client 005's early EEs. These categories

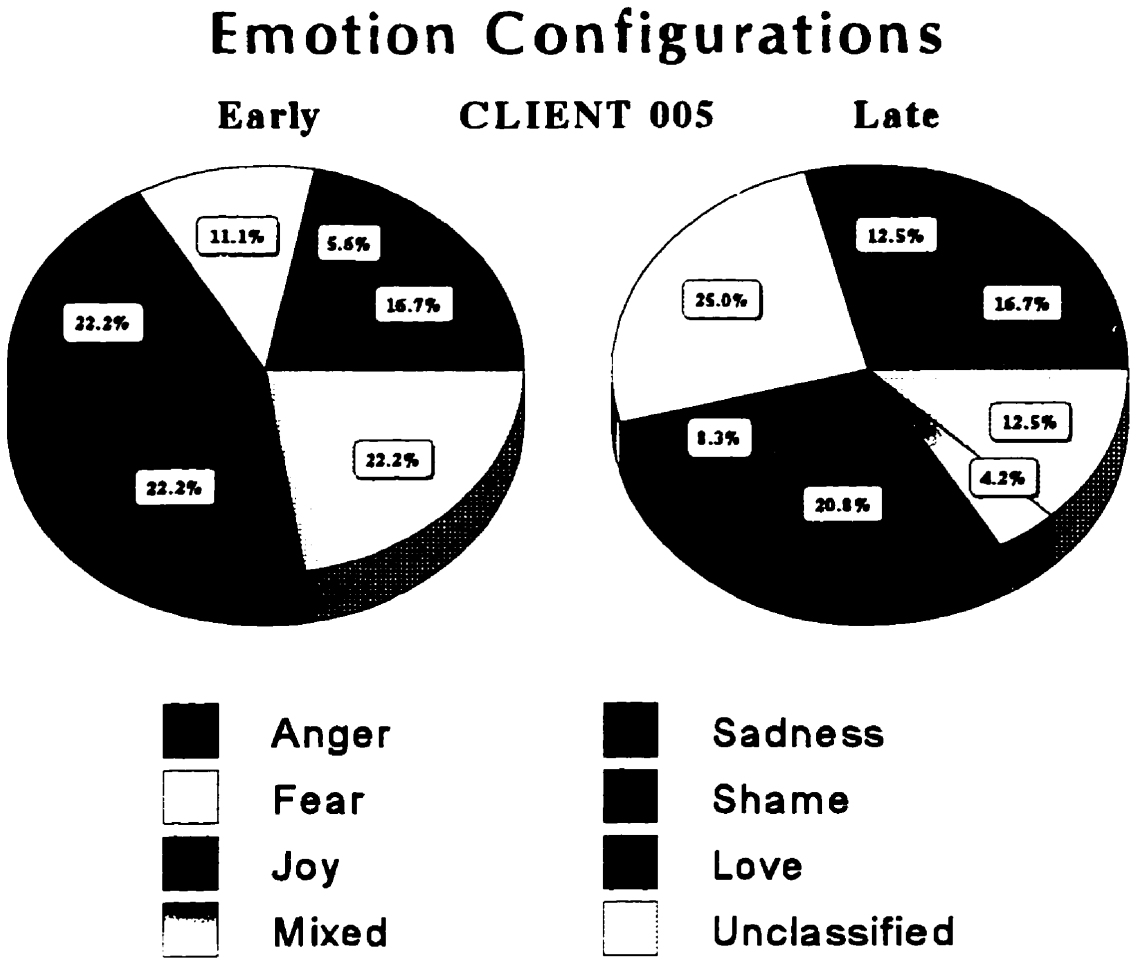


Figure 12. Client 005's Emotion Configurations

each accounted for 22.2% (n = 4, for each category) of all early EEs. Guilt/shame EEs accounted for 8.3% (n = 2) of all late EEs. Among client 005's guilt/shame EEs reported both early and late in therapy, 100% involved appraisals of herself as being inadequate at work, at housekeeping, or emotionally, and all related to concerns of esteem.

Of the client's EEs reported early in therapy that expressed joy (n = 4), 75% involved appraisals that she was successful at her work in relation to the concern for esteem. Joy accounted for 20.8% (n = 5) of all late EEs. In late sessions, 40% (n = 2) of the client's EEs expressing joy involved appraisals that she was successful at work, in relation to an esteem concern. Another 40% (n = 2) of joy EEs in late sessions involved the appraisal that she was emotionally independent or that therapist thought she was improving- the needs for these EEs were unclassifiable.

Among the client 005's early unclassifiable emotion EEs (n = 4), 50% involved the appraisal that she had failed, in relation to an esteem need. Late session unclassifiable EEs accounted for 12.5% (n = 2) of all late EEs- each of these 2 EEs involved a different appraisal and concern.

Fear was the predominant emotion expressed in late EEs, accounting for 25% (n = 4) of all late episodes. Of these, 50% (n = 2) involved the appraisal that she would do poorly or "crack" if she explored her problems or feelings (safety concern). Fear was the fifth most frequently occurring emotion in early sessions, accounting for 11.1% (n = 2), with each episode involving a different appraisal and concern.

Client 005's Predominant Emotion Schemes Early and Late in Therapy.

There were two predominant emotion schemes expressed by client 005 in early sessions: She experienced guilt/shame associated with the appraisal of herself as inadequate in different situations, in relation to the concern for esteem. Client 005 also expressed joy associated with the appraisal of herself as successful at work, in relation to the concern for esteem.

In late sessions, client 005's predominant emotion scheme was fear associated with the appraisal of herself as being emotionally unable to withstand facing her problems, in relation to the concern for safety. The second most predominant scheme in late sessions continued to be joy associated with appraisal of self as successful at work, in relation to the concern for esteem. The client also continued to report the scheme of guilt/shame associated with the appraisal of self as inadequate, although this scheme did not predominate in late sessions.

General Comments on Client 005's EEs in Early and Late Sessions.

In the first three sessions, there were a number of EEs involving shame- these were in response to the client appraising herself as superficial, a bad housekeeper, and as poor employee who was caught in her mistakes at work. Joy episodes involved appraisal of self-competence at work. Anger was directed at her husband and a colleague for perceiving them as not listening to her and treating her unfairly.

In the late sessions, 005 expressed fear about losing control of her feelings and

possibly cracking up at work. Joy episodes once again mostly involved appraisals of competence and efficacy at work. The client also reported feeling angry at members of her family for excluding her and treating her like a little girl.. There were also episodes of disappointment and shame related to appraisals that she had let herself down and had not overcome her problems in therapy.

Two Clients with Better Outcomes

Client 312 (Better Outcome)

Overview.

Client 312 was a 34 year old, divorced woman, employed in an office. Her grand outcome composite ranking on the four measures was 6th. Her emotional configuration change (*D*) value ranked 3rd among the 24 clients. Among the residual gains outcome scores of the sample of 24 clients, client 312 ranked 8th on the BDI, 4th on the GSI, 6th on the IIP, and 8th on the RSE.

Therapist's Perspective on Client 312.

The client claimed that she had been depressed since age 15, but that her depression had worsened after separating from her husband. She entered therapy feeling worthless, guilty, and numb. She also reported difficulties sleeping and concentrating. Her parents were from central Europe, and the client felt that they were completely unable to relate to her. She saw herself as parenting her mother, and experienced her

father as absent although controlling, while growing up. The client had one sister, who she experienced as controlling, and with whom relations were poor. In general, she felt her parents to be uncaring and ungiving, although she maintained contact with them.

The client experienced her father as harsh and judgmental. In therapy, the client worked on unresolved emotional experiences (e.g., initially, the client complained of continuing to blame him for being withholding and critical) with her father and reclaimed her strength in relation to her father by asserting herself. She was very sensitive to what other people thought of her, and in therapy she became less dependent on other people's approval of her by self-critical dialogues, in which she took responsibility for her own internalized self-critical projections.

Client 312's Emotion Schemes

As shown in Figure 13, fear was the predominant emotion expressed in client 312's early EEs, accounting for 25% (n = 8) of all early EEs. Among client 312's EEs reported early in therapy that expressed fear, 38% (n = 3) involved appraisals that she would embarrass herself or that she was a weird person, all in relation to a concern for esteem. Twenty-five percent (n = 2) of this client's EEs expressing fear in early sessions involved the appraisal that others were hurting or manipulating her, in relation to a concern for safety. An additional 25% (n = 2) of client 312's early EEs expressing fear involved the appraisal that someone was invading her space, or that she could not say no to another- the concerns for these EEs were unclassifiable. In late sessions, fear EEs

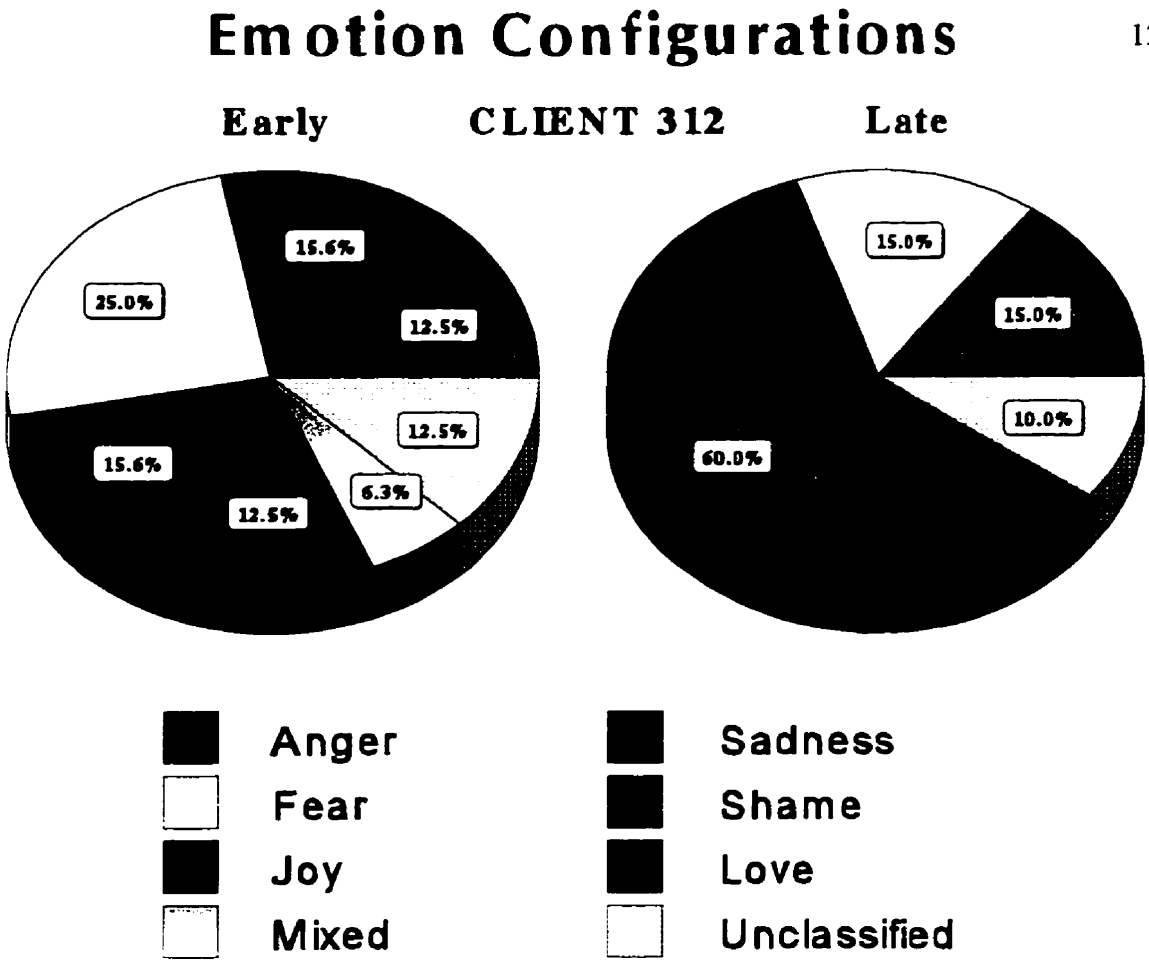


Figure 13. Client 312's Emotion Configurations

accounted for 15% (n = 3) of all late EEs. The 3 late fear EEs, involved three different appraisals and concerns.

The two second most frequently occurring categories of emotions expressed in early sessions, sadness and shame/guilt, each accounting for 15.6% (n = 5 for each of the two categories) of all early EEs, were completely absent in late sessions. Among the 5 early sadness EEs, 40% (n = 2) involved appraisals that her parents had not supported her or had burdened her, in relation to affiliation concerns. Among the 5 early shame EEs, 60% (n = 3) involved appraisals that she had not done enough for others and in her relationships- 2 of these episodes involved esteem concerns.

Joy was the predominant emotion expressed in late episodes, accounting for 60% (n = 12) of all late session EEs. Of these early joy EEs, 42% (n = 5) involved the appraisal of herself as being powerful, asserting herself, not selling out, and doing a job well (esteem concern). An additional 33% (n = 4) involved the appraisal of herself as having overcome her fears, being more aware of herself, and being able to trust and support herself (esteem concern). Joy was tied with anger as the fourth most frequently expressed emotion in early sessions, accounting for 12.5% (n = 4) of all early EEs. Fifty percent of 312's early joy EEs (n = 2) involved appraisals that others understood her, or that she had a good rapport with another (affiliation concern). One joy EE involved the appraisal that she had worked well on her own (esteem concern).

Client 312's Predominant Emotion Schemes Early and Late in Therapy.

Early in therapy, client 312's predominant emotion scheme was fear associated with the appraisal that she would embarrass herself, in relation to concern for her esteem. There were two major additional emotion schemes: The client experienced guilt/shame associated with the appraisal that she had not done enough for others, in relation to a need for esteem. The client also experienced sadness associated with the appraisal that her parents had not supported her, in relation to a need for affiliation.

In late sessions, client 312's predominant emotion schemes was joy associated with the appraisal of herself as powerful, assertive and competent, in relation to a concern for esteem. The second most predominant scheme involved joy associated with the appraisal of herself as being aware of herself and able to trust herself, in relation to an esteem concern. Although fear episodes were the third most frequently occurring EEs late in therapy, the appraisals and concerns were different in each episode.

General Comments on Client 312's EEs in Early and Late Sessions.

A quarter of the client's episodes in early sessions involved feeling fearful, typically in response to imagining making a fool of herself. She also feared that she was unable to assert herself, and that she was being manipulated and hurt by others. She also feared that she could not relate well to others, and that she was weird. The client also expressed a number of EEs in which she felt guilty for not having been nicer with others, and in which she felt responsible for conflicts in which she was engaged. There was also

sadness that her parents had not supported and listened to her. The client also felt angry at her father and at her husband for taking advantage of her and controlling her.

In late sessions, more than half of the client's EEs involved joy. The client expressed joy that she could trust herself, that she could support herself emotionally, and that she could overcome her fears and concerns. She also felt good about asserting herself, for not feeling bad for not always pleasing everyone when it did not suit her, and for no longer always feeling responsible for others. There was also a smaller number of fear EEs in which the client felt intimidated by the confidence of others, feeling that she could not match it. There was also some frustration with herself for not always being able to be clear and act on her feelings.

Client 017 (Better Outcome)

Overview.

Client 017 was a 49 year-old unemployed, married man with children. His grand outcome composite ranking on the four measures was 2nd. Among the residual gains outcome scores of the sample of 24 clients, client 017 ranked 4th on the BDI, 1st on the GSI, 7th on the IIP, and 1st on the RSE. His emotional configuration change (*D*) value ranked 5th among the 24 clients.

Therapist's Perspective on Client 017.

Client 017 entered therapy with extremely low self-esteem. At the beginning of

therapy, the client reported having lost faith in himself. He was unemployed, and felt himself to be hopelessly stuck and going nowhere. He spent most of his time passively sitting in front of a computer. He reported feeling dead and numb. Some years earlier the client's company went bankrupt, dragging down a number of his family members who had invested in his firm. The client expressed a deep sense of shame and guilt about the bankruptcy. The client was especially concerned that his teenaged son would have a low opinion of him. In therapy it emerged that the client experienced profound unresolved guilt and grief about relinquishing care of a severely disabled son many years before, following the breakup of an earlier marriage. He had done so reluctantly under the urgings of the Children's Aid Service.

During therapy the client became aware of how unrelentingly critical he was of himself, recognizing that "I often wipe myself out." After working on this issue in a two-chair interventions, the client began to let up on himself. He began to initiate business deals and ideas, and began networking. He started to feel enthusiastic. As the client began to acknowledge his profound feelings of sadness around his family, he became much more alive, open to his feelings, and emotionally available. He also became less "super-rational." Though his shame subsided, the client reported that he felt responsible for the welfare of his family, and that he worried for them. The client repeatedly expressed to the therapist how tremendously he had changed in treatment, a view shared by the therapist.

Client 017's Emotion Schemes

As shown in Figure 14, sadness was the predominant emotion expressed in client 017's early EEs, accounting for 33.5% (n = 4) of all early episodes. All early sadness EEs involved appraisals that he was powerless, and that he was unable to help himself out of his depression. Three of these EEs had esteem concerns, and one episode's concern was unclassifiable. Late in therapy, sadness was the fourth most frequently expressed emotion, accounting for 12.5% (n = 3) of all late EEs. The three late sadness EEs involved different appraisals and concerns.

Episodes expressing shame/guilt, accounted for 25% (n = 3) of 017's early EEs. All early shame/guilt EEs involved appraisals that he was disgusting and phoney (esteem concerns). There were no shame/guilt EEs in late sessions.

Fear was the predominant emotion expressed in 017's late session EEs, accounting for 41.7% (n = 10) of late episodes. Thirty-three percent (n = 3) of late fear EEs involved the appraisal that the client could get hurt by opening himself to others (safety concern). Another 33% (n = 3) late fear EEs involved appraisals that he was not progressing fast enough in therapy and that he did not yet know who he wanted to be (self-actualization concerns), and that he was not as confident as he appeared (safety concern). One EE involving fear was expressed in early sessions, accounting for 8.3% of all early EEs- this EE involved the appraisal the client would be overwhelmed if he acknowledged his guilt around his wife and son (unclassifiable concern).

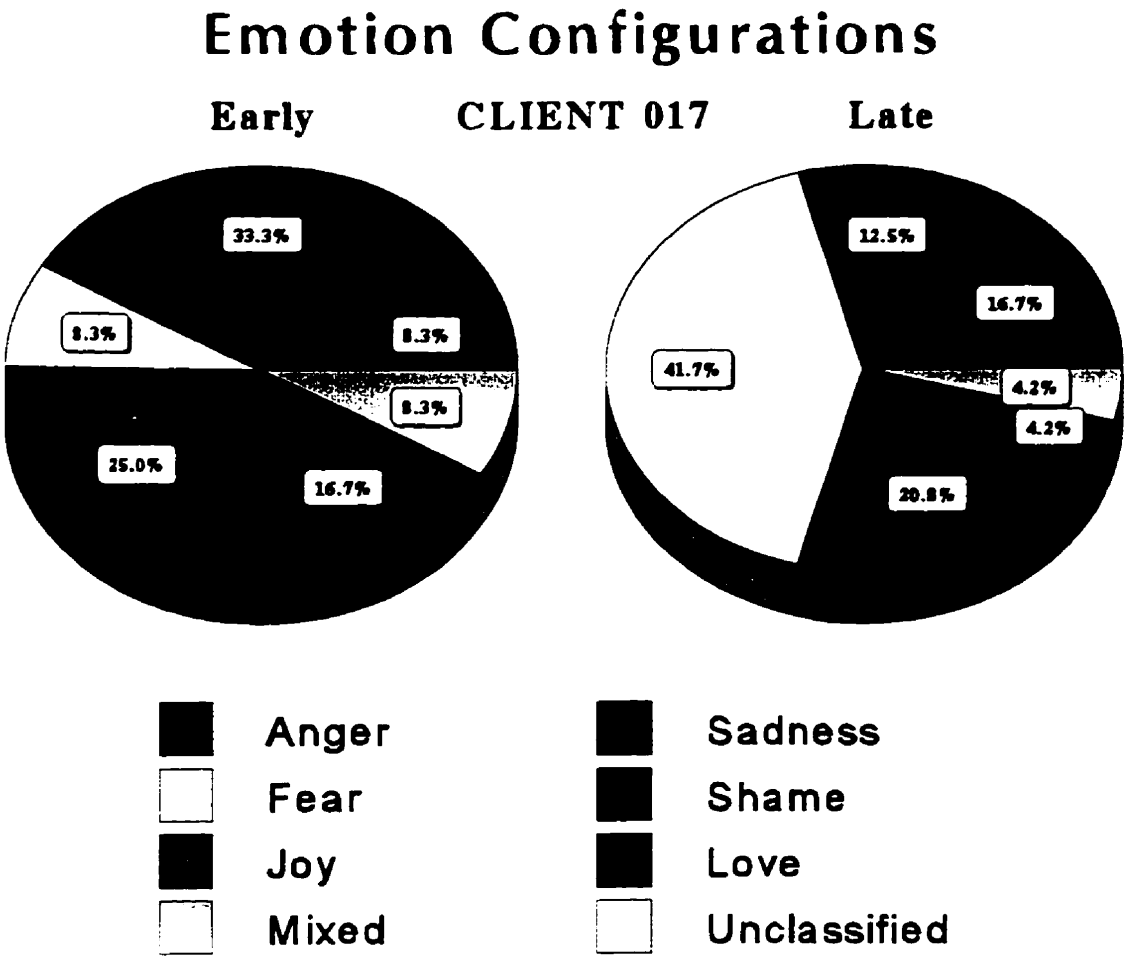


Figure 14. Client 017's Emotion Configurations

Joy was second most predominant emotion expressed in 017's late EEs, accounting for 20.3% (n = 5) of all late EEs. Among late joy EEs, 80% (n = 4) involved appraisals that he had made great strides in overcoming his problems in therapy and that he was strong for showing his vulnerabilities (esteem concerns). Joy EEs accounted for 16.7% (n = 2) of 017's early episodes. Client 017's two EEs expressing joy early in therapy both involved appraisals that he was beginning to be genuine in therapy (esteem concern), and that there was hope for him (unclassifiable concern).

Client 017's Predominant Emotion Schemes Early and Late in Therapy.

Client 017's predominant emotion scheme early in therapy involved sadness associated with the appraisal of himself as powerless and unable to help himself, in relation to esteem concerns. The second most predominant emotion scheme involved guilt/shame associated with the appraisal of himself as disgusting and being phoney, in relation to a concern for esteem.

In late sessions, the predominant emotion scheme was joy associated with the appraisal of himself as having done well in therapy and for being strong for allowing his vulnerability, in relation to the concern of esteem. A second major emotion scheme involved fear in association with the appraisal that he could get hurt if he opened himself to others, in relation to a safety concern.

General Comments about Client 017's EEs in Early and Late Sessions.

The client's early configuration is dominated by EEs involving feeling sad and

depressed that his hope would backfire and that he would fail in therapy. The client expressed feelings of powerlessness and hopelessness about ever being able to cope with his depression. There were also a number of EEs involving shame about himself as disgusting and phoney. He also felt guilty for his perceived inability to help himself or his family. A few EEs also involved optimism that there might be hope for himself, usually expressed after talking about his pain.

The client's late session configuration is dominated by EEs involving fear. Shame/Guilt-based EEs are absent. He expressed fear and anxiety about being hurt by others if he made himself vulnerable to them, and about not being able to handle the pain he was newly acknowledging. The client also feared that he might not be able to bring his family together and protect them. A number of joy EEs involved appraisals that he had made great progress in therapy and confidence about the future. The client also expressed joy associated with seeing himself as a spontaneous, likeable person. The client also now expressed joy about finally feeling free of his depression, and about being emotionally available to others for the first time in his life- although, as mentioned earlier, this also evoked fear in him. The client also expressed anger at his parents for abuse and neglect, and sadness about his parents' perceived dysfunctionality.

CHAPTER V: DISCUSSION

Study Summary

The principal hypothesis of this study was supported: Clients who exhibited better treatment outcomes demonstrated significantly more change in their emotional configurations from early to late sessions in therapy. Also, as hypothesized, clinical ratings of clients' therapeutic improvement, based on the changes in clients' EE protocols from early to late in therapy, were significantly correlated with grand outcome rankings. These findings suggest that experiential therapies which target clients' emotional experiences, when successful, are associated with positive changes in clients' emotional experiences.

These results were mediated by the Emotion Episode (EE) method, which appears to provide a meaningful way of identifying and measuring changes in clients' emotionally felt sense of self and world, their appraisals, and concerns. EE protocols gave a cohesive and meaningful representation of clients' emotion schemes, involving affective, expressive, cognitive, and motivational aspects.

The results of this study thus provide initial correlational support for a central working assumption of emotionally-focused therapy (Greenberg et al., 1993): Therapies that targeted clients' emotion-generating schemes, when successful, were associated with positive changes in the configurations of clients' emotional experiences. The descriptions of the two better outcome and the two poorer outcome clients' EE protocols early and

late in therapy served to illustrate the nature of changes in these clients' emotion schemes.

Combined with descriptions of clients' complete EEs, the pie chart representations of clients' emotional configurations appeared to be a meaningful way of visually illustrating clients' emotional changes from early to late in therapy. Although not subjected to a test of significant difference, noticeable patterns appeared in the graphic representations of the emotional configurations of better and poorer outcome clients. The early and late emotional configurations (as illustrated in pie charts) of poorer outcome clients typically appeared strikingly similar. In contrast, the early and late configurations of better outcome clients rarely appeared similar. This observation, though not evaluated empirically, is perhaps especially noteworthy given that the configurations were derived from dialogues occurring in sessions months apart.

Reliability

This study replicated an earlier finding (Korman, 1991) that trained judges were able to discriminate reliably EE segments that had been identified previously by the author, from non-EE segments. EEs selected from transcripts therefore appear to be readily identifiable. Thus, this method of identifying EEs can be regarded as highly reliable. In this study, of the two judges charged with this task, on average one judge rated the EE segments as more definitely constituting EEs, and the non-EE control segments as more definitely not being EEs. These inter-judge differences were found to

be significantly different. Debriefing of the two judges revealed that one of the two judges had read the original EE reliability and validity study (i.e., Korman, 1991), and had correctly surmised that all the segments in the present study had been similarly labelled in a dichotomous fashion by the author as being either EEs or not being EEs. Thus, this judge reported *post facto* that once having determined if a given segment met criteria for constituting an EE, she assigned her ratings with greater certainty. Though both judges demonstrated good accuracy in discriminating EE and non-segments, the significantly better accuracy of one judge is likely attributable to her understanding of the test's design.

This study also replicated the finding of an earlier study (Korman, 1991) that demonstrated that EE protocols produced by two trained judges from an identical transcript segment were rated to be significantly more similar than protocols derived from different segments. Thus, trained judges appear to be able to produce in a reliable fashion protocols from identical EE transcript segments that are rated to be more similar than unrelated protocols. This replicates the earlier finding (Korman, 1991) demonstrating that different trained judges can employ the EE method with reliability, producing similar protocols (i.e., deriving similar or identical EE components) from the same EE transcript segment.

In addition, trained raters were able to identify reliably the first marker of an EE located at random points within two-page transcript segments. This finding suggests that

trained raters are able to identify the markers for an EE segment in a reliable fashion.

The Question of Unequal Variances in the Better and Poorer Outcome Groups

Upon inspection, the significant differences between the better and poorer outcome groups in the variances of their emotion configuration changes, appears to be related to two factors. The clients in the poorer outcome group demonstrated a surprising degree of stability in their EE configurations over therapy. Among the good outcome clients, however, two subpopulations appeared to emerge. This explains the higher variance in this group. One subgroup of clients in the better outcome group seemed to have resolved successfully most of their core issues in earlier sessions, and used the final three sessions to talk largely about their improvements and the changes that they had undergone.

A second subgroup of better outcome clients appeared to be very much in process right until the end of treatment- that is, they were still engaged in working on problematic issues until the end of therapy. These clients typically had not fully resolved, and often waited until the final session to discuss and consolidate gains. Nevertheless, these clients had often made substantial gains in therapy, and these were reflected in the post-session outcome questionnaires. Thus, these clients continued to express more problematic EEs in later sessions, working, for example, on as yet unresolved emotional experiences with significant others, and on painful self-criticisms. Some of these depression-related issues (Greenberg & Paivio, 1997) appeared to be resolved in the very

final sessions, but clients nevertheless reported EEs in those sessions in which they expressed emotions like sadness, fear, anger, and shame. These emotions were often similar to the emotions these clients presented in the first three sessions of therapy- thus changes in their emotional configurations were less pronounced, reflected in a subgroup of lower *D*-values.

The Role of Appraisals and Concerns in Emotional Experience

As described in the literature review, appraisal and needs have long been viewed as being associated with emotional experience. Philosophers like Aristotle (c.320/1961), Spinoza (1677/1989), and Hobbes (1651/1962) saw individuals' interpretations of events as playing an important role in determining their emotional responses to events. In addition, Spinoza introduced the notion of goal conduciveness as a factor determining emotional experience. Currently, Frijda's (1986) theory of emotions, which is a prevailing view, sees emotions as being associated with the appraisal of situations in relation to concerns. Empirical examinations of this relationship have tended to be limited to the domain of experimental social psychology and linguistics. Some of the more compelling research, described earlier, involved researchers manipulating appraisal dimensions in order to demonstrate their influence over subsequent emotional experience (e.g., Ellsworth & Smith, 1988; Roseman, 1991; Smith, 1989). Virtually all of this research has taken place in the laboratory, and did not involve studies of participants' actually occurring emotional experiences.

The present study may be viewed as an ecologically-valid, therapy-based, empirical validation of the association between emotional experience, appraisals, and concerns. The author's experience while reviewing the therapy transcripts was that clients' appraisals were readily identifiable in their EEs. Clients often spoke explicitly about why they felt what they did. That is, clients' expressions of emotional responses typically were associated with explanations of why they felt the way they did. For example, clients typically stated that they were angry *because* they were slighted or violated in some way. In addition, therapists often reflected and attempted to clarify explicitly clients' stated appraisals, especially if the clients' statement was vague or undifferentiated. Thus, if a client said he was angry because he felt he had been poorly treated, the therapist would likely attempt initially to explore with the client exactly how he felt he had been maltreated.

A random sample of five of the 24 clients in this study appears to support the observation regarding the readiness with which clients' appraisals were identified. Table 11 presents the frequencies and proportions of clearly defined appraisals, unstated appraisals, and unclear appraisals from the EEs of five clients in this study. It is evident from the table that the gross majority of clients' appraisals were either explicitly stated by clients or were stated by the therapist and confirmed by the client.

In contrast, clients' concerns were more difficult to ascertain from their EEs. Table 12 presents the frequencies and proportions of clearly identifiable concerns,

Table 11. Frequencies and proportions of clearly defined appraisals, unstated appraisals, and unclear appraisals from the EEs of five clients in this study.

Client	*Clearly Defined Appraisal*	*Unstated Appraisal*	*Unclear Appraisal*	*Total EEs*
001	21 (95%)	1 (5%)	0	**22**
010	50 (86%)	7 (12%)	1 (2%)	**58**
017	35 (100%)	0	0	**35**
021	41 (93%)	0	3 (7%)	**44**
306	58 (97%)	2 (3%)	0	**60**
Means	**94.2%**	**4%**	**1.8%**	

Table 12. Frequencies and proportions of clearly identifiable concerns, unidentifiable or unclear concerns, and EEs in which more than one concern was apparent among the EEs of five randomly selected clients from this study

Client	*Clearly Identifiable Concern*	*Unidentifiable or Unclear Concern*	*More than One Concern Apparent*	*Total EEs*
001	7 (31.8%)	10 (45.4%)	5 (23%)	**22**
010	33 (56.9%)	16 (27.5%)	9 (15.5%)	**58**
017	21 (60%)	5 (14.3%)	9 (25.7%)	**35**
021	22 (50%)	16 (36.4%)	6 (13.6%)	**44**
306	27 (45%)	17 (28.3%)	16 (26.7%)	**60**
Means	**48.7%**	**30.4%**	**20.9%**	

unidentifiable or unclear concerns, and EEs in which more than one concern was apparent among the same subsample of five clients. As presented in Table 12, on average, approximately half of these clients' concerns were readily identifiable, usually because they were stated explicitly by the client or were stated by the therapist and then confirmed by the client.

As a rule, clients' concerns were much harder to ascertain because they were much less often stated explicitly by the clients. For example, when saying "I felt angry because he insulted me...," clients often would not elaborate with "*... and I needed to feel important.*" Of the five clients sampled, an average of 30.4% of their EEs had unidentifiable or unclear concerns. The concerns were easier to identify when clients' emotions and appraisals were congruent, in terms of both Lazarus's (1991) core relational themes (Figure 2) or Scherer et al.'s (1983) major antecedents of emotions (Figure 3). For example, when clients expressed sadness in association with the appraisal of the loss of an intimate relation, the concern of love/belongingness was attributed with relative ease. However, when clients expressed anger in association with the appraisal of the loss of an intimate relation, it was much more difficult to ascertain whether the underlying concern was one of love/belongingness or one of self-esteem. In EEs with unclear concern components, a determination of the underlying concern often would have hinged on whether the judge had attributed more importance to the emotion or to the appraisal. Consider for example, an EE in which a client expressed anger because he

had appraised a friend as rejecting: Attributing more importance to the emotion (anger) would more likely have resulted in the concern being judged as "esteem," while closer attention to the appraisal component ("my friend rejected me") would more likely have resulted in the concern being judged as one of love/belongingness.

To a degree, this uncertainty likely reflects both the complexity of emotional expression and the limitations of the EE method and manual. The latter is discussed below in the section on limitations of this study. With regard to the complexity of emotional expression, it had initially been thought that many EEs in which clients' emotions and appraisals were thematically incongruent (e.g., anger in response to having lost an intimate relation) would represent secondary, instrumental, or maladaptive primary emotional expressions (Greenberg & Safran, 1984,1989; Korman & Greenberg, 1996), while thematically congruent emotions and appraisals would reflect primary emotional expressions. Anecdotally, this did not appear to be the case. For example, one client consistently reported feeling angry because he felt others had violated him. Even though the emotion and appraisals "matched" thematically, the client appeared stuck in a reactive, secondary type of anger. Thus, a more refined assessment of the client's emotional expression would have required the measurement of an additional dimension, like the client's depth of experiencing (Klein, Matieu, Gendlin, & Kiesler, 1969). This notion is elaborated in a following section on suggested further research.

Limitations of this Study

Reliability

The demonstration of the reliability of episode identification in this study was less than ideal. A more robust demonstration of this reliability would have involved testing if two or more raters would have detected the same EE markers at the same locations throughout an entire transcript. In this dissertation, testing of the method's reliability was confined to inter-judge agreement on discrete segments that had been already selected. In practice, however, EEs can sometimes occur closely together, and judges can be called upon to make difficult decisions with regard to deciding where one episode ends and a second begins, or whether one segment is comprised of one or more different EEs. For example, a potentially difficult decision may involve a segment in which a client is both angry and sad. Though the EE manual is explicit about identifying and demarcating EEs occurring closely together (i.e., if the second emotional reaction is in response to the same situation as the first marker, the emotions are considered to be part of one EE. If, on the other hand, the second emotion is in response to a new situation, the segment is judged to be two different EEs.), uncertainty can arise if the situation component is ambiguous.

Thus, an important additional step would be to demonstrate that two judges can identify the same EEs at the same locations over entire transcripts. Unfortunately, attempts to develop an adequate methodological and statistical paradigm for measuring

inter-rater reliability over whole transcripts proved unsuccessful. This shortcoming has also applied to reliability measurement of the Core Conflictual Relationship Theme method (Luborsky & Crits-Christoph, 1990).

Sampling Issues

The inclusion of the first and final sessions may not have been an ideal strategy for sampling clients' emotional experiences in early and late sessions. In the final session, clients often reviewed their treatments and bid their farewells to their therapists. Similarly, in the first session, clients introduced themselves and sometimes delayed in describing their experiences in detail, including recounting problematic and painful EEs. Thus, some clients reported relatively fewer EEs in the first and last sessions of their therapy. More importantly, because clients sometimes evaluated their life changes and progress in treatment during the final sessions, these sessions may have not been representative of clients' affective-cognitive processing or of the emotional episodes discussed in other sessions. Thus, there is a danger that clients' retrospective positive evaluations of their emotional experience, rather than changes in their emotions *per se,* may have resulted in exaggerated findings. Using the second through fourth sessions, and the three sessions before the last session likely would have circumvented this problem and resulted in a greater, more fluid, and more representative sample of clients' EEs across all six sessions.

With regard to the sampling of sessions, because half the clients in this study

were selected in a fashion consistent with an extreme cases design, it is possible that the findings might not be generalizable to a randomly selected sample.

Insensitivity of the EE Method

In later sessions of therapy, clients sometimes recounted EEs that occurred prior to, or earlier in therapy, to compare how they *had* been, in order to illustrate how they had changed in treatment. While such situations were sometimes very good illustrators of change (e.g., "In the past, something like that would have devastated me, but now it didn't and I feel good about it), the EE method on numerous occasions was insensitive to similar examples where a new, positive EE was not expressed (e.g., "In the past, I would have been devastated, but this time I wasn't"). The latter types of segments appeared to be important signifiers of clients' change, but were not identified by the EE method.

Identification of the Concern Component

Both reliability judges and the author reported some difficulties in identifying the concern component in EE segments. However, this problem did not affect the principal results of this study, since the concern component was not used in the measurement of clients' emotional configurations. In the present study, only the results of the inter-judge reliability test on the derivation of whole EE protocols ("similarity test") could have benefited from an improved methodology in distilling and classifying clients' concerns, but inter-judge reliability on this test was nevertheless extremely good.

As described earlier, the problem in identifying clients' concerns was likely due

in part to the fact that unlike the emotion and appraisal components, the concern was more frequently not stated explicitly by clients. Thus, judges more often inferred the underlying concern (although if a concern was not apparent in a segment, judges were instructed to leave that component blank on the protocol form). At times, it was difficult to determine which of two different needs was being engaged in an EE. For example, client 001 reported a number of EEs in which she spoke about feeling angry at her husband for not protecting her financially. In these EEs, it was sometimes difficult to determine if the underlying need was one of safety or of self-esteem and the EE manual offered no explicit directions regarding how judges were to determine the concern component.

In addition, Maslow (1987) and Murray's (1938) standardized concern/need lists sometimes appeared to be overly reductionistic and inadequate. For example, a concern that frequently appeared to underlie clients' EEs involved equality or justice. These situations often involved the appraisal that another individual had not treated the client fairly. While some of these EEs might best be characterized as involving a concern for self-esteem, other EEs would have been better characterized as involving a concern for equality or justice. Thus the EE method would benefit from a more comprehensive, therapy-based list of concerns, and more explicit criteria for determining clients' underlying EE concerns.

Judge's Awareness of the Experimental Hypothesis

The 24 clients' EEs were identified by the author of this thesis, who was aware of the study's hypothesis. A potential way in which the results could have been biased would have involved the author successfully making judgements about clients' therapeutic outcomes based on reading the transcripts of the third or penultimate sessions. Based on these judgements, the author could have attended more carefully to identifying more "positive" EEs (e.g., joy, love) among better outcome clients, and attended less carefully to identifying less "positive" (e.g., shame, fear) EEs. The author also could have behaved inversely for clients identified as having poorer outcomes, thereby biasing the results in a direction favouring the experimental hypothesis. To the best of my knowledge, however, this did not occur.

Future Research

A number of suggestions for further research are outlined below:

Measuring Schematic Change

This study involved quantitative analyses of changes in clients' emotions reported in early and late sessions, and a descriptive analysis of the EE protocols of two better outcome and two poorer outcome clients. Though clients' emotions may be generated by emotion schemes, it is the full EE protocol that is considered to be an attempt at measuring clients' emotion schemes, as protocols describe expressive-motor, cognitive, and motivational aspects associated with clients' EEs. Future research could involve a

quantitative analysis of changes in clients' complete EE protocols from early to late in therapy. This might entail tracking EEs associated with clients' idiosyncratic core themes (Goldman, 1997) across therapy, and using clinical judges to assess therapeutic improvement.

Multiple Measurements of Processing Attributes in EEs

The present study identified and measured the categories of emotions expressed in clients' EEs. However, the study did not specifically measure the *quality* of clients' emotional experiences. Thus, a client who predominantly experienced a low intensity "complaining" hopelessness could have produced a profile of sadness identical to another client who predominantly experienced profound and elaborately articulated grief. Because both hopelessness and grief were subsumed under the basic category of sadness, no discrimination between them would have been made in the quantitative portion of the configurational analysis. This limitation held true not only between clients, but also within clients across time- thus, a client who moved from 100% "stuck" hopelessness in early sessions to 100% grief in later sessions would have evidence no configurational change, even though the change might have represented important (albeit unresolved) therapeutic progress. Thus the study was limited in the extent to which it could describe and assess changes in the qualities of clients' EEs.

Future research could measure a number of relevant processing dimensions within clients' EEs. The Depth of Experiencing Scale (Klein, Mathieu, Gendlin, &

Kiesler, 1969) measures the degree to which clients are fully engaged in their experience. Measuring clients' experiencing levels would help discriminate EEs that are more deeply processed, from those which are more superficial and reactive.

The measurement of depth of experiencing in EEs could also be executed within the context of clients' core themes. Goldman (1997) recently studied changes in depth of experiencing in core themes across therapy. Goldman's research emerged from Rogers (1959) notion that successful treatments consisted of a gradual and cumulative process in which clients progressed from rigid to fluid expression, associated with increased awareness. Contrary to Rogers hypothesis, however, a clear linear trend in experiencing over treatment was never established (c.f. Klein, Mathieu-Coughlan, & Kiesler, 1986). Goldman argued that the failure to find a clear linear increase in experiencing has been due to the inability of previous studies' to differentiate and isolate thematic emotional episodes in therapy for measurement. Goldman argued that taking experiencing measurements from random samples of therapy moments across therapy is not meaningful because clients are not always dealing with their core issues, and thus are not constantly processing at their highest levels of experience. Thus, Goldman identified clients' core themes, and found that changes in theme-related experiencing predicted outcome in experiential treatments of depression. Measuring depth of experiencing levels in EEs associated with clients' core themes would provide a high degree of specificity and relatively complex differentiation of meaningful therapy segments for measuring

change. Such segments might also provide useful samples for measurements of levels of client perceptual processing (Toukmanian, 1992). Interestingly, in the description of five clients' therapies in this study, there appeared to be considerable descriptive convergence between clients' EE protocols, their core themes (Goldman, 1997), and therapist's retrospective accounts of their clients' treatments.

Comparative Study of Cognitive and Emotionally-Focused Treatments

A principal finding of this dissertation is that clients' emotional configurations change from early to late in emotionally-focused therapies when these treatments are more successful. Because this study looked only at emotionally-focused therapies, some of the conclusions that can be drawn with respect to the findings are necessarily limited, pending a study involving other, non-emotionally-focused therapies. This raises the question of whether or not this study's finding of an association between outcome and emotional change would also be observed in therapeutic modalities that do not specifically target emotional experience for change. As outlined in the literature review, Beck's (1967, 1976) cognitive model contends that psychological disorders like depression are caused by information-processing biases, essentially dysfunctional styles of thought related to the self, world and future. Thus a primary working assumption of cognitive therapy is that the modification of biased styles of cognitive processing will lead to corresponding changes in clients' emotions, cognitions, and behaviours (Beck, 1987). This is in marked contrast to the emotionally-focused view, which sees emotion-

generating dysfunctional schemes as a primary target of therapy (Greenberg et al., 1993).

Future research could involve a comparative study of cognitive and emotionally-focused treatments that could exploit the theoretical and practical differences between the two approaches. A key question is whether or not interventions targeting conscious cognitions result in as many changes to clients' emotional experiences as a treatment specifically targeting dysfunctional, implicit, emotion schemes. A proposed study would involve identifying emotion episodes reported and expressed by clients in the first and last sessions of therapy, and categorizing the emotions in a manner similar to that employed in the present study. Differences in the changes of emotion configurations over treatment between the cognitive and emotionally-focused clients would then be assessed. Clients' individual configurational change scores could be adjusted to factor out the effects of outcome as measured by standardized outcome indices. Doing so would provide a clearer picture of the effects of treatment modality on changes in clients' emotional experiences. Anecdotally, a perusal of three transcripts from cognitive therapies yielded extremely few EEs, suggesting that something about that treatment modality might not foster a process in which clients discuss their emotional experience.

In comparison to standard outcome questionnaires like the Beck Depression Inventory and the Rosenberg Self-Esteem Scale, the EE measure is based on the interpretation of transcripts, and may be more reflective of clients' actual experiences and less subject to the demand characteristics associated with pencil and paper tests. Unlike

the questionnaires, which ask clients to rate their mood and conceptual attitudes on discrete, predetermined questions (e.g., "I feel I am a worthy person"), the EE method provides grounded and open-ended records of clients' emotional experiences as they are reported in therapy. That is, the EE method is grounded in clients' descriptions of their emotional experiences to their therapists. While clients may choose to censor or alter their disclosures, the social context of the therapy session as a venue for discussing one's problematic experiences, suggests that clients' descriptions of their emotional experiences are likely to reflect their actual experiences. A strength of the EE method is that the information contained within these episodes is derived subsequent to actual emotional experiences. That is, rather than discussing how they *think* they feel, the EEs are derived from experiences of how clients actually *did* feel. Thus, research with the EE method might provide an alternative means whereby to measure schematic change, and to assess the effectiveness of fundamentally different approaches as well as their underlying theories of human functioning.

Lists of Clients' Appraisals and Concerns

Future work with the EE method could involve developing an empirically-generated category lists of appraisals and concerns associated with client's EEs expressed in therapy. This would involve describing the appraisals and concerns identified in a number of clients' EE segments in therapy. These descriptions would then be used to generate representative categories of appraisals and concerns expressed by

clients in EEs reported in therapy. Such lists would have at least two functions: First, standard lists of appraisal and concern categories would allow for the quantitative measurement of changes in clients' appraisals and concerns across therapy. This would follow what Luborksy and Crits-Christoph (1990) have done with the CCRT. These researchers analysed empirically-derived lists of clients' wishes, and responses of self and other to generate standardized category lists of these components. Researcher using the CCRT have thus been able to derive and make use both of "tailor-made" (i.e., untransformed) and standard categories. Secondly, the development of nomothetic category lists of EE components would provide an ecologically-valid, therapeutically relevant contribution, both to existing taxonomies of motivation (e.g., Frijda, 1986; Maslow, 1987; Murray, 1938) and cognition (e.g., Roseman, 1984, 1991) and could have a broad range of applications within and beyond the field of psychotherapy research.

Patterns of Change

A larger sample would allow for statistical analyses to measure whether or not specific patterns of configurational changes in emotion were associated with therapeutic change. Specific patterns of emotional change might also be related to particular therapeutic gains; decreases in shame, for example, might be associated with improvement on the Rosenberg Self-Esteem Scale. In the present sample, a number of differences were observed between the better and poorer outcome groups in terms of their emotional configuration changes from early to late in therapy.

Conclusion and Implications

The results of this study provide preliminary correlational support for a major tenet and working assumption of emotionally-focused therapy (Greenberg et al., 1993): Therapies targeting clients' emotion-generating schemes were associated with changes in the configurations of clients' reported emotional experiences when the treatments were successful. This study represented a first step in exploring the relationship between the foci of therapeutic intervention and emotional change. Further research will be required to assess if changes in clients' emotional configurations also occur in therapies that do not target emotion schemes for activation and change. In addition, studies are needed to assess the potential differences between the effects of emotionally-focused and other therapies on the quality of changes in clients' emotion schemes and experiencing.

The current study, however, does demonstrate an association between emotionally-focused therapies and emotional change. The notion that emotion-generating schemes in particular must be activated in order to be restructured is also consistent with the neuroscientific evidence described earlier (Damasio, 1994; LeDoux, 1992, 1993; Morecraft & Van Hoesen, 1993) suggesting that schematic emotional experience is generated by a *separate, specialized* system in the brain. Neuroscientists like Damasio (1994) have argued that much of adult emotional experience is generated by learned, idiosyncratic schemes that serve to help the individual to anticipate future outcomes. These memory-based emotion schemes are thought to be located in the prefontal cortex,

and when activated, signal the amygdala and anterior cingulate, which in turn, lead to changes in the viscera, skeletal muscles, and endocrine, neuropeptide, and neurotransmitter systems, and possibly other motor areas of the brain (Morecraft & Van Hoesne, 1993). Damasio argues that these changes, together with the often implicit meaning represented in the prefontal cortex, generate humans' complex, synthesized, and embodied sense of self in the world. Thus, both neuroscientists and emotionally-focused psychotherapists have argued that much of non-infant emotional experience is generated through the activation of a memory-based schematic representational system that integrates cognition (i.e, appraisals and beliefs), affect (i.e, by activating scheme-based physiological arousal), and action (i.e., via scheme-based action tendencies and expressive-motor responses). This would explain James's (1884/1984) observation, over a century ago, that people's immediate emotional reactions are often initially what they experience in their bodies, of which they then work mentally to make sense. His observation mirrors clinicians' anecdotal reports (e.g., Korman & Greenberg, 1996) that clients often enter therapy perplexed by their own emotional reactions to events.

The convergence of neuroscientific findings and emotionally-focused theory points to the importance of intervening at the level of the systems responsible for generating the emotional experiences that clients find problematic. The emotionally-focused theory of therapy (e.g., Greenberg et al., 1993) contends that emotion-generating schemes must be activated and explored in order to be restructured. The findings of the

present study provide preliminary correlational evidence suggesting that when successful, emotionally-focused therapies, which seek to activate and restructure clients' dysfunctional emotion schemes, are associated with changes in clients' reported emotions over treatment.

References

Arietti, S., & Bemporad, J.R. (1978). Severe and mild depression: The therapeutic approach. New York: Basic Books.

Aristotle. (1941). Rhetoric. In R. McKeon (Ed.), The basic works of Aristotle. New York: Random House.

Aristotle. (1954). Rhetoric. New York: Modern Library. (Original work produced *c.* 320 B.C.)

Aristotle. (1961). Poetics. Chicago: H.Regnery Co. (Original work produced *c.* 320 B.C.)

Arnold, M. (1960). Emotion and personality. New York: Colombia University Press.

Arnold, M.(1970). Perennial problems in the field of emotion. In Magda B. Arnold (Ed.), Feelings and emotions (pp.169-185). Orlando, Florida: Academic Press.

Averill, J.R. (1975). A semantic atlas of emotion concepts. JSAS: Catalog of Selected Documents in Psychology, 5, 330. (Ms. No. 421).

Averill, J.R. (1982) Anger and aggression: An essay on emotion. New York: Springer-Verlag.

Bartlett, T.C. (1932). Remembering. Cambridge: Cambridge University Press.

Beck, A.T. (1967). Depression: Clinical, experimental, and theoretical aspects. New York: Hoeber.

Beck, A.T. (1976). Cognitive therapy and the emotional disorders. New York: Guilford Press.

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 Press.

Beck, A.T. (1987). Cognitive models of depression. Journal of Cognitive Psychotherapy, An International Quarterly, 1, 5-37.

Beck, A. T. (1993). Cognitive therapy: Past, present, and future. Journal of Consulting and Clinical Psychology, 61(2): 194-198.

Beck, A.T., & Steer, R.A. (1987). Beck Depression Inventory Manual. San Antonio, CA: The Psychological Corporation, Harcourt Brace Jovanovich, Inc.

Beck, A.T., Rush, A.J., Shaw, B.F., & Emery, G. (1979). Cognitive therapy of depression. New York, NY: Guildford Press.

Beck, A.T., Steer, R.A., & Garbin, M. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation., Clinical Psychology Review, 8, 77-100.

Beck, A.T., Ward, C.H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. Archives of General Psychiatry, 4, 561-571.

Blatt, S.J. (1974). Levels of object representation in anaclitic and introjective depression. Psychoanalytic Study of the Child, 24, 107-157.

Blatt, S.J. (1982) Dependency and self-criticism: Psychological dimensions of depression. Journal of Consulting and Clinical Psychology, 50(1), 113-124.

Blatt, S.J., & Bers, S.A. (1993). The sense of self in depression: A psychodynamic perspective. In Z.V. Segal & S.J. Blatt (Eds.), The self in emotional distress: Cognitive and psychodynamic perspectives (pp. 171-210), Guilford Press: New York.

Blatt, S.J., D'Afflitti, J.P., & Quinlan, D.M. (1976). Experiences of depression in normal young adults. Journal of Abnormal Psychology, 85, 383-389.

Blatt, S.J., Chevron, E.S., Quinlan, D.M., McDonald, C., & Zuroff, D. (1982). Dependency and self-criticism: Psychological dimensions of depression. Journal of Consulting and Clinical Psychology, 50, 113-124.

Bordin, E. (1979). The generalizability of the psychoanalytic concept of the working alliance. Psychotherapy: Theory, Research and Practice, 16, 252-260.

Bordin, E. (1994). Theory and research on the therapeutic working alliance: New directions. In A. O. Horvath & L. S. Greenberg (Eds.), The Working Alliance: Theory, Research, and Practice (pp.13-37), New York: Wiley-Interscience.

Bosscher, R.J., Koning, H., & Van-Meurs, R. (1986). Relability and validity of the Beck Depression Inventory in a Dutch college population. Psychological Reports, 58, 696-698.

Bowlby, J.(1969). Attachment and loss: Vol. 1. Attachment. New York: Basic Books.

Bowlby, J. (1985). Attachment and Loss: Vol. 3. Loss: Sadness and depression. London: Penguin Books.

Bush, L.E, II. (1973). Individual differences multidimensional scaling of adjectives denoting feelings. Journal of Personality and Social Psychology, 25, 50-57

Cannon, W.B. (1927). The James-Lange theory of emotions: A critical examination and an alternative theory. The American Journal of Psychology, 39, 106-124.

Cannon, W.B. (1929). Bodily changes in pain, hunger, gear, and rage (2nd ed.). New York: Aplleton-Century-Crofts.

Clark, D.A., & Steer, R.A. (1996). Empirical status of the cognitive model of anxiety and depression. In Paul A. Salkovskis (Ed.), Frontiers of Cognitive Therapy, (pp. 75-97). Guilford press.

Cole, J.D., & Kazarian, S.S. (1988). The Level of Expressed Emotion scale: A new measure of expressed emotion. Journal of Clinical Psychology, 44(3), 392-397.

Crits-Christoph, P., & Luborsky, L. (1990). The changes in CCRT pervasiveness during psychotherapy. In L. Luborsky & P.Crits-Christoph (Eds.), Understanding transference: The core conflictual relationship theme method, (pp. 133-146). New York: Basic Books.

Cronbach, L.J., & Furby, L. (1970). How we should measure "change"- Or should we? Psychological Bulletin, 74(1), 68-80.

Damasio, A. (1994). Descartes' error: Emotion, reason, and the human brain. New York: G.P. Putnam's Sons.

Dahl, H. (1991). The key to understanding change: Emotions as appetitive wishes and beliefs about their fulfillment. In J.D. Safran & L.S. Greenberg (Eds.), Emotion, psychotherapy, and change (pp. 130-165). New York: Guilford Press.

Darwin, C. (1965). The expression of the emotions in man and animals. Chicago: University of Chicago Press. (Original work published 1872).

Davitz, J.R. (1969). The language of emotion. New York & London: Academic Press.

de Rivera, J. (1962). A decision tree of emotions. Dissertations Abstracts International. (University Microfilm no. 62-2356).

de Rivera, J. (1977). A structural theory of the emotions. Psychological Issues, 10(4, Monograph No.40).

de Rivera, T. (1982). A structural theory of the emotions. New York: International University Press.

Derogatis, L.R. (1983a). The Symptom Checklist-90-Revised. Towson, MD: Clinical Psychometric Research.

Derogatis, L.R. (1983b). SCL-90-R: Administration, scoring and procedures manual- II for the revised version. Towson, MD: Clinical Psychometric Research.

DuBois, P.H. (1957). Multivariate correlational analysis. New York: Harper.

Ekman, P. (1984). Expression and the nature of emotion. In K.S. Scherer & P. Ekman (Eds.), Approaches to emotion (pp. 319-343). Hillsdale, N.J: Erlbaum.

Ekman, P., & Friesen, W.V. (1975). Unmasking the face. Englewood Cliffs, N.J: Prentice-Hall.

Flavell, J.H. (1963). The developmental psychology of Jean Piaget. New York: Van Nostrand.

Foa, E.B., & Kozak, M.J. (1986). Emotional processing of fear: Exposure to corrective information. Psychological Bulletin, 99(1), 20-35.

Freud, S. (1957). The dynamics of the transference. In Sigmund Freud: Collected Papers, Vol. II (pp. 312-322). London: Hogarth Press. (Original work published 1924).

Frijda, N.H. (1986). The emotions. Cambridge: Cambridge University Press.

Frijda, N.H. (1988) The laws of emotion. American Psychologist, 43, 349-358.

Frijda, N.H., Kuipers, P., & ter Schure, E. (1989). Relations among emotion, appraisal, and emotional action readiness. Journal of Personality and Social Psychology, 57(2), 212-228.

Gendlin, E.T. (1962). Experiencing and the creation of meaning. New York: Free Press.

Gendlin, E.T. (1974). Client-centred and experiential psycotherapy. In D.A. Wexler & L.N. Rice (Eds.), Innovations in client-centred therapy. New York: Wiley.

Gendlin, E.T. (1981). Focusing. New York: Bantam.

Gendlin, E.T. (1996). Focusing-oriented psychotherapy: A manual of the experiential method. New York: Guildford Press.

Gerlsma, C., & Hale III, W.M. (1997). Predictive power and the construct validity of the Level of Expressed Emotion (LEE) scale. British Journal of Psychiatry, 170, 520-525.

Goldman. R.N. (1997). Theme-related depth of experiencing and change in experiential psychotherapy with depressed clients. Unpublished doctoral dissertation. York University, Toronto.

Gould, J. (1982). A psychometric investigation of the standard and short-form Beck Depression Inventory. Psychological Reports, 51, 1167-1170.

Greenberg, L.S. (1984a). A task analysis of intrapersonal conflict resolution. In Laura N. Rice and Leslie S. Greenberg, (Eds.), Patterns of Change (pp. 67-123). New York & London: The Guilford Press.

Greenberg, L.S. (1984b). Task analysis: The general approach. In Laura N. Rice and Leslie S. Greenberg, (Eds.), Patterns of Change (pp. 67-123). New York & London: The Guilford Press.

Greenberg, L.S. (1991). Research on the process of change. Psychotherapy Research, 1, 4-11.

Greenberg, L.S., Elliot, R.K., & Foerster, F.S. (1990).Experiential processes in the psychotherapeutic treatment of depression. In McCann, C.D., & Endler, N.S. Depression: New directions in theory, research and practice. Toronto: Wall & Emerson.

Greenberg, L.S., & Korman, L. (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 & London: Guilford Press.

Greenberg, L.S., Rice, L.N., & Elliott, R. (1993). Facilitating emotional change: The moment by moment process. New York: Guilford Press.

Greenberg, L.S. & Safran, J.D. (1984). Integrating affect and cognition: A perspective on the process of therapeutic change. Cognitive Therapy and Research, 8(6), 559-578.

Greenberg, L.S. & Safran, J.D. (1987). Emotion in psychotherapy. New York: Guilford.

Greenberg, L.S., & Safran, J.D. (1989). Emotion in psychotherapy. American Psychologist, 44, 19-29.

Greenberg, L.S., & Watson, J. (in press). Client-centered and process experiential treatment of depression: A preliminary comparative outcome study. Psychotherapy Research.

Harber, K.D., & Pennebaker, J.W. (1992). Overcoming traumatic memories. In S. Christianson (Ed.), The handbook of emotion and memory (pp. 359-387). Hillsdale, N.J: Lawrence Erlbaum.

Hobbes, T (1962). Leviathan. New York: Collier Books. (Original work published 1651).

Horowitz, L. M., Rosenberg, S. E., Baer, B. A., Ureno, G., & Villasenor, V. S. (1988). Inventory of Interpersonal Problems: Psychometric properties and clinical applications. Journal of Consulting and Clinical Psychology, 56, 885-892.

Horvath, A.O., & Greenberg, L.S. (1989). The development and validation of the Working Alliance Inventory. Journal of Counseling Psychology, 36, 223-233.

Horvath, A. & Greenberg, L.S. (1994). (Eds.) The working alliance: Theory research and Practice. New York: John Wiley & Sons.

Izard, E.E. (1977). Human emotions. New York: Plenum Press.

James, W. (1984). What is an emotion? In C. Calhoun & R. Solomon (Eds.), What is an emotion? (pp. 127-141). New York: Oxford University Press. (Orignial work published 1884).

Kendall, P.C., & Watson, D. (1989). Anxiety and depression: Distinctive and overlapping features. San Diego, California: Academic Press.

Klein, M. H., Mathieu, P. L., Kiesler, D. J., & Gendlin, E. T. (1969). The Experiencing Scale: A research and training manual. Madison: University of Wisconsin, Bureau of AudioVisual Research.

Klein, M. H., Mathieu-Couglan, P., & Kiesler, D. J. (1986). The Experiencing Scales. In L.S.Greenberg & W. M. Pinsof (Eds.), The Psychotherapeutic Process: A Research Handbook. (pp. 21-71). New York: Guilford.

Korman, L.M. (1991). Emotion episodes. Unpublished master's thesis, York University, Toronto, Ontario.

Korman, L.M., & Greenberg, L.S. (1996). Emotion and therapeutic change. In J. Panksepp (Ed.), Advances in biological psychiatry, Vol. II. (pp. 1-22). JAI Press: Greenwich, CT.

Lane, R.D., & Schwartz, G.E. (1987). Levels of emotional awareness: A cognitive-developmental theory and its application to psychopathology. American Journal of Psychiatry, 144, 133-143.

Lang, P.J. (1977). Imagery in therapy: An information processing analysis of fear. Behavior Therapy, 8, 862-886.

Lazarus, R.S. (1991). Emotion and adaptation. New York & Oxford: Oxford University Press.

LeDoux, J.E. (1992). Emotion as memory: Anatomical systems underlying indelible neural traces. In S. Christianson (Ed.), The handbook of emotion and memory (pp. 269-288). Hillsdale, N.J: Lawrence Erlbaum.

LeDoux, J.E. (1993). Emotional networks in the brain. In M. Lewis & J.M. Haviland (Eds.), Handbook of emotions (pp. 109-118). New York & London: Guilford Press.

Leeper, R.W. (1970). the motiovational and perceptual properties of emotions as indicating their fundamenatal character and role. In Magda B. Arnold (Ed.), Feelings and emotions (pp. 151-168). Orlando, Florida: Academic Press.

Leventhal, H. (1979). A perceptual-motor processing model of emotion. In P. Pliner, K. Blankenstein, & I.M. Spigel (Eds.), Perception of emotion in self and others, (Vol. 5, pp. 1-40). New York: Plenum.

Luborsky, L. (1984). Principles of psychoanalytic psychotherapy: A manual for supportive and expressive treatment. New York: Basic Books.

Luborsky, L., Barber, J., & Schaffer, P. (1990,June). The self-other narratives told during psychotherapy-- A promising unit for empirical studies. Paper presented at the meeting of the Society for Psychotherapy Research, Philadelphia, Pennsylvania.

Luborsky, L., & Crits-Christoph, P. (1990). Understanding transference: The CCRT method. N.Y: Basic Books.

Luborsky, L., Mellon, J., van Ravenswaay, P., Childress, A.R., Cohen, K.D,, Hole, A.V., Ming, S., Crits-Christoph, P., Levine, F.J., & Alexander, K. (1985). A verification of Freud's grandest clinical hypothesis: The transference. Clinical Psychology Review, 5, 231-246.

Luria, A.R. (1981). Language and cognition. New York: Wiley.

MacKinnon, J. & Keating, L. (1989). The Structure of emotions: Canada-United States comparisons. Social Psychology Quarterly, 52 : 70-83.

Maslow, A.H. (1987). Motivation and personality (3rd ed.). New York: Harper & Row.

McMullin, R.E. (1986). Handbook of cognitive therapy techniques. New York: W.W. Norton & Co.

Morecraft, R.J., & van Hoesen, G.W. (1993). Frontal granular cortex input to the cingulate (M_3), supplementary (M_2), and primary (M_1) motor cortices in the resus monkey. Journal of Comparative Neurology, 337, 669-689.

Morgan, R.L., & Heise, D. (1988). Structure of emotions. Social Psychology Quarterly, 51(1),19-31.

Murray, H.A. (1938). Explorations in personality. New York: Oxford University Press.

Neufeld, R.W.J. (1975). A multidimensional scaling analysis of schizophrenics' and normals' perceptions of verbal similarity. Journal of Abnormal Psychology, 84, 498-507.

Oatley, K., & Jenkins, J.M. (1992). Human emotions: Function and dysfunction. Annual Review of Psychology, 43, 55-85.

Omdahl, B.L. (1995). Cognitive appraisal, emotion, and empathy. Mahwah, N.J: Lawrence Erlbaum Associates.

Osgood, C.E. (1969). On the whys and wherefores of E, P, and A. Journal of Personality and Social Psychology. 12, 194-199.

Osgood, C.E. (1976). Focus on meaning. The Hague & Paris: Mouton.

Osgood, C.E., May, W.H., & Miron, M.S. (1975). Cross-cultural universals of affective meaning.Urbana, Illinois & London: University of Illinois Press.

Perls, F., Hefferline, R.F., & Goodman, P. (1951). Gestalt therapy. New York: Dell Publishing.

Perry, J.C., Luborsky, L., Silberschatz, G.,& Popp, C.(1989). An examination of three methods of psychodynamic formulation based on the same videotaped interview. Psychiatry, 52(Aug.), 300-323.

Plato. (1941). The republic of Plato. London: Oxford University Press. (Original work produced c. 370 B.C.)

Plutchik, R. (1980). Emotion: A psychoevolutionary synthesis. New York: Harper & Row.

Pradines. (1958). Traite de Psychologie (6th ed.). Paris: Presse Universitaires de France.

Reiman, E.M., Lane, R.D., Ahern, G.L., Schwartz, G.E., Davidson, R.J., Friston, K.J., Yun, L.S., & Chen, K. (1997). Neuroanatomical correlates of externally and internally generated human emotion. American Journal of Psychiatry, 154(7), 918-925.

Rennie, D.L. (1996). Fifteen years of doing qualitative research on psychotherapy. British Journal of Guidance and Counselling, 24(3), 317-327.

Rice, L.N. (1974). The evocative function of the therapist. In D.Wexler & L.N. Rice (Eds.), Innovations in client-centered therapy, (pp. 289-311). New York: Wiley.

Rice, L.N. (1992). From naturalistic observation of psychotherapy process to microtheories of change. In S.G. Toukmanian & D.L. Rennie (Eds.), Psychotherapy process research: Paradigmatic and narrative approaches (pp. 1-22). Newburk Park, California: Sage.

Rice, L.N. & Greenberg, L.S. (1984). The new research paradigm. In L.N. Rice & L.S. Greenberg (Eds.), Patterns of change (pp. 7-26). New York: Guilford.

Rice, L.N., & Greenberg, L.S. (1991). Two affective change events in client-centered therapy. In J.D. Safran & L.S. Greenberg (Eds.), Emotion, psychotherapy and change (pp.197-226). New York & London: Guilford Press.

Rice, L.N., & Greenberg, L.S. (1992). Humanistic approaches to psychotherapy. In D. Freedheim (Ed.), History of psychotherapy: A century of change (pp. 197-224). Washington, D.C: American Psychological Association.

Rice, L.N. & Saperia, E.P. (1984). Task analysis of the resolution of problematic reactions. In L.N. Rice & L.S. Greenberg (Eds.), Patterns of change (pp. 29-66). New York: Guilford.

Robinson, J.P., & Shaver, P.R. (1973). Measures of social psychological attitudes. Ann Arbor, MI: Institute for Social Research.

Rogers, C.R. (1959). A theory of therapy, personality and interpersonal relationships, as developed in the client-centered framework. In Sigmund Koch (Ed.), Psychology: A study of a science, Vol. 3 (pp.184-256). New York, Toronto, London: McGraw Hill.

Rogers, C.R. (1961). On becoming a person. Houghton Mifflin: Boston.

Roseman, I.J. (1984). Cognitive determinants of emotion: A structural theory. In P.Shaver (Ed.),Review of personality and social psychology, (Vol. 5, pp. 11-36). Beverly Hills, CA:Sage.

Roseman, I.J. (1991). Appraisal determinants of discrete emotions. Cognition and Emotion, 5(3), 161-200.

Rosenberg, M. (1965). The self-esteem scale. Princeton: Princeton University Press.

Russell, J.(1980). A circumplex model of affect. Journal of Personality and Social Psychology,39, 1161-1178.

Russell, J., & Mehrabian, A. Evidence for a three-factor theory of emotions. Journal of Research in Personality, 11, 273-294.

Schacter, S. & Singer, J. (1962). Cognitive, social nad physiological determinants of emotional state. Psychological Review, 63, 379-399.

Scherer, K.R. (1984). Emotion as a multicomponent process: A model and some cross-cultural data. In P. Shaver (Ed.), Review of personality and social psychology (vol. 5, pp.37-63). Beverly Hill, CA: Sage.

Scherer, K.R., Summerfield, A.B., & Wallbott, H.G. (1983). Cross-national research on antecedents and components of emotion: A progress report. Social Science Information, 22, 355-385.

Schlosberg, H. (1952). The description of facial expressions in terms of two dimensions. Journal of Experimental Psychology, 44, 229-237.

Schneider, W., & Shiffrin, R. M. (1977). Controlled and automatic human information processing: I. Detection, search and attention. Psychological Review, 84, 1 -66.

Segal, Z.V. (1988). Appraisal of the self-schema construct in cognitive models of depression. Psychological Bulletin, 103, 147-162.

Shaver, P., Schwartz, J., Kirson, D., & O'Connor, C. (1987). Emotion knowledge: Further exploration of a prototype approach. Journal of Personality and Social Psychology, 52(6), 1061-1086.

Smith, C.A. (1989). Dimensions of appraisal and physiological response in emotion. Journal of Personality and Social Psychology, 56(3), 339-353.

Smith, C.A., & Ellsworth, P.C. (1985). Patterns of cognitive appraisal in emotion. Journal of Personality and Social Psychology, 48, 813-838.

Smith, C.A., & Ellsworth, P.C. (1988). From appraisal to emotion: Differences among unpleasant feelings. Motivation and Emotion, 12(3), 271-302.

Smith, T. (1996, August). Emotion diaries and depression. Paper presented at the meeting of the International Society for Research in Emotion. Toronto, Ontario, Canada.

Spielman, L.A., & Bargh, J.A. (1990). Does the depressive self-schema really exist? In C.D. McCann & N.S. Endler (Eds.), Depression: New directions in theory, research, and practice (pp. 111-126). Toronto: Wall & Emerson.

Spinoza, B. (1989). Ethics. Buffalo, New York: Prometheus Books. (Orignial work published 1677).

Spitzer, Williams, Gibbon, & First (1989). Structured Clinical Interview for DSM-III-R. Washington, D.C: American Psychiatric Press.

Teasdale, J.D. (1988). Cognitive vulnerability to persistent depression. Cognition and Emotion, 2,(3), 247-275.

Toukmanian, S.G. (1990). A schema-based information processing perspective on client-change in experiential psychotherapy. In G. Lietaer, J. Rombarts, & L. van Bieren (Eds.), Client-centered and experiential psychotherapy in the nineties. Leuven, Belgium: Leuven University Press.

Toukmanian, S.G. (1992). Studying the client's perceptual processes and their outcomes in psychotherapy. In S.G.Toukmanian & D.L. Rennie (Eds.), Psychotherapy process research: Paradigmatic and narrative approaches (pp. 88-89). Newburk Park, California: Sage.

APPENDIX A

Emotion Episode Manual

An Emotion Episode (EE) is a segment of psychotherapy in which the client speaks about experiencing or having experienced emotion in response to a specific context or context that has occurred. There are five components of the EE to be identified: These are the emotional response and /or accompanying action tendency, the situation or context, the appraisal, and the concern or need. The first three of these are typically made explicit by the client are therefore relatively easy to extract from the therapy transcript.

Some EEs do not contain both an emotional reaction and an action tendency. However, to be considered an EE, a narrative must contain either an emotional response or an action tendency (or both), and a situation or context. The presence of a situation or context is necessary to help differentiate emotional responses from moods. The explicit presence of the appraisal and concern are not necessary criteria for the segment to be an EE. Identification of the first component, the "Emotional Response," serves as the marker for the EE.

Emotion Episode Components

1. A) Emotional Reaction (ER): Recognition of an EE is first established by identifying a client's description of an affective reaction experienced in response to a situation, context, or event that has occurred, or that is occurring presently in-session (e.g.,

the client is weeping). While ERs are more often explicitly of an emotional nature (e.g., "I felt terrified"), any expression of affect may constitute an emotional response (e.g., "I felt abandoned," or "something was disturbing"), and therefore serves as a marker for the EE. While often of a problematic nature, and affective reaction constitutes an emotional response, including joy, excitement, etc.

1. B) Action Tendency (AT): The AT represents the behavioural disposition or tendency that is associated with the emotional reaction, including tendencies toward changes in relatedness (e.g., I wanted to push him away; I felt like attacking him) to others. The presence of an AT is also a marker for an EE. The AT is a self-serving meaningful action or tendency for action that is directed by individuals in order to manage in the situation.

Below are three simple illustrations of partial EE sequences involving ATs:

	Situation	Emotional Reaction	Action Tendency
1.	On the bus	I felt afraid,	and I wanted to get off.
2.	At the party	I was overwhelmed,	and I pulled back.
3.	When I walked in,	I felt happy to see him	so I embraced him.

To reiterate, the AT is part of a couplet with the ER, in that it is the meaningfully directed behaviour or tendency that is associated with the subjective experience of the emotional reaction. Usually, the AT serves to alter, maintain, or terminate the individuals' relationships with their environments- often the relationship is with another human being.

In the absence of co-occurring expressions of emotion words, raters need to attend carefully to affectively toned expressions of AT markers, such as "I just walled off from him."

2. Situation (S): Having located an ER and/or AT, the next step is to identify the situation, context or event associated with the affective response. Usually the S will be found to immediately precede the emotional response in the transcript, although not always. Like the emotional response, the S is often relatively straightforward and explicitly stated by the client (e.g., "I was talking to my boss..." or "in class...," or "When I came home..."). Segments that do not have a clearly identifiable situation, context, or event (e.g., mood) are not EEs.

3. Appraisal of Self or Situation (A): The A represents the idiosyncratic meaning that the situation hold for the individual. Identifying the appraisal requires addressing the questions: "How does the individual construe the situation in relation to her or himself? What is the person's belief about the situation and/or about her or himself that leads the individual to react emotionally in such a way? How is the situation understood by the person in relation to self and others?" Infrequently, the A has been found to be less explicitly stated by the client than the three preceding EE components. In such cases, the rater may need to extrapolate or interpret in a limited manner to identify the appraisal. If the client explicitly concurs with a therapist's reflection that seems to best characterize the appraisal, the rater may include the therapist's reflection as the A. Nevertheless, in general, the rater should be cautious in making inferences much beyond what has actually been stated by the client. If

there is no statement, affirmation, or other evidence, the rater should leave the appraisal category blank on the protocol. The statement of an appraisal is not a necessary condition for an EE.

Note that any A may involve either an A of the self or of the situation, or both. Note also that the ER/AT and A can sometimes be identical. In the statement, "I felt abandoned," "abandoned" is both an emotion marker and the appraisal.

Continuing with the three examples from above, three relatively strait forward instances of appraisals are illustrated below:

1. On the bus I experienced terror, and I felt like getting off. I was afraid *I wasn't going to be able to get enough air."*

2. At the party I was overwhelmed and I pulled back. *Everyone seemed to be looking at me, thinking that I was inadequate.*

3. When I walked in, I felt happy to see him, so I embraced him. It was wonderful *to be loved.*

4. Concern (C): The C represents the basic concern, need, goal, or value of the individual that is expressed, sometimes implicitly, in the EE. Identifying the C requires addressing the question: "Given the person's appraisal of the situation in relation to the self, what is the core concern under consideration?" Thus, in example 1 above, the person's concern can be inferred by the desire to get enough air, or a need to survive. In example 2

above, the individual's concern is to feel adequate or for esteem. In example 3 above, the person's concern is for affiliation. Often, the identification of the concern will require the rater to infer beyond what the client has actually stated. However, when a client's underlying concern is unclear, this component should be filled in as "unclear" on the EE protocol. Categorization of the concern is sometimes done using "ready-made" lists of concerns or needs.

Additional Rules for Differentiating EEs

1. To be an EE, there must be an emotional reaction or action tendency marker, or a strong felt sense indicative of underlying emotion (eg., "crushed," "I felt like a failure," "worthless," "trapped," "hated it," "It was a nightmare") to be an EE.

2. While a client's use of the words "I feel.." often constitute pre-markers (ie. they inform us that an EE marker may be just ahead), they are not in themselves markers. Thus, the statement, "I feel like he was trying to hurt me" is not an EE marker, although "I feel like he hurt me" is. Use your judgment- we are trying to identify if a felt sense of an emotion or action tendency is present.

3. The following are <u>*NOT*</u> EE markers:

feeling "closed-minded"

feeling "cynical"

feeling "skeptical"

feeling "Blocked"

4. In general, use the Shaver et al.'s modified emotion list to categorize emotion words. Other examples and exceptions follow below:

5. "Hopeful," "relieved," "enjoyed," "satisfied," "glad," "great," "good" (egs. "I feel good," "It was really good"), "proud of self," and strong expressions of positive interest typically are to be classified as Joy.

6. <u>Disgust</u>- expressed *at others*, it constitutes Anger

- expressed *at self*, it constitutes Shame/Guilt

7. "I felt bad" "I was upset" "It really bothered me"

These EEs are often tricky to categorize. On the one hand, they definitely do constitute EEs.. When expressed in conjuntion with other emotion words (even if the therapist is the one to utter the words), the categorization may be easy. Thus, "I felt bad...

really guilty" should be labelled as Guilt/Shame. "It really upset me. I was furious" is Anger. However, these EEs may be hard to categorize into emotion categories when expressed in isolation- eg., "He rejected me. I was really upset"- though an EE, the emotion label should be categorized as Unclassifiable unless there is additional evidence.

8. a) "Feeling Bad" and "terrible" are special cases. Sometimes "bad" or "terrible" are used to express Guilt/Shame. When the appraisal clearly indicates that individuals have evaluated themselves worthy of shame or guilt, "feeling bad" or "terrible" are categorized as Shame/Guilt-- eg. "what I did was really wrong. I feel bad." The same is true when the appraisal indicates sadness: e.g. "My girlfriend rejected me. I feel terrible." this last example could be rated as Sadness, although it is borderline, and judges must use their own judgement for each episode.

8. b) "Exposed" typically is either categorized as Guilt/Shame, although sometimes it is Fear, depending on the context:

e.g., *"When she told me that she knew what I had done, I felt exposed"- Shame/Guilt*

"I don't have any money and the rent is due. I feel exposed." -Fear

Important: Bad, Terrible, and exposed (and their variations) are the only examples where the appraisal may be used to determine emotion categorization.

9. "Withdrawal," "Avoid," "Anxious," "trapped," "dread," "urge to hide," "concern," "pressure" are typically categorized as Fear.

10. "Depressed" is typically categorized as Sadness. However caution must be used in segments where a client speaks very generally about depression:

These do not constitute EE markers:

"I think that I am depressed"

"I have a depression"

"I have been depressed for the last three years"

These do constitute EE Markers:

"When I saw him, I got depressed"

"It was so depressing to come home to an empty house"

"When she died, I got really depressed"

The last example, above, is borderline. When making your decision about whether or not a segment constitutes an EE, remember that the episode requires a somewhat specific context or situation in order to be considered an EE.

11. "Disappointed," "hurt," "lonely," "empty," "hopeless" are typically categorized as Sadness.

12. "Frustrated," "Irritated," "pissed," etc. typically are categorized as Anger.

13. "Embarrassed," "humiliated" are categorized as Shame/Guilt.

14. Unclassifiable emotions, when expressed in the absence of other clarifying emotion words: "pull back," "sick and tired," "tired."

APPENDIX B

Likert Scale Used in EE Identification Test

Is the segment an Emotion Episode?

Please circle the number below that corresponds to your answer for each segment:

1	2	3	4	5	6
Definitely	Yes	Probably	Probably Not	No	Definitely Not

APPENDIX C

Likert Scale Used in Inter-judge Reliability Test on the Derivation of Whole EE Protocols ("Similarity test")

How similar or different are the two EE protocols?

Please circle the number below that corresponds to your answer for each pair of protocols:

1	2	3	4	5	6
Identical	Very Similar	Somewhat Similar	Somewhat Disimilar	Very Different	Completely Different

APPENDIX D

Likert Scale Used in Test of Judged Clinical Change

Do the changes in Emotion Episodes, from early to late sessions in therapy, reflect positive clinical change? Please circle the number below that best characterizes your answer for this client.

1	2	3	4	5
Definitely Yes	Yes	Don't Know	No	Definitely Not

Appendix E. Proportions of Emotion Categories Reported in Early (ERL) and Late (LAT) Sessions: Twelve Poorer Outcome Clients

	EMOTION CATEGORY															
	ANGER		SADNESS		FEAR		SHAME		JOY		LOVE		MIXED		UNCLASSIF.	
CLIENT	ERL	LAT	ERL	LAT	ERL	LAT	ERL	LAT	ERL	LAT	ERL	LAT	ERL	LAT	ERL	LAT
001	.636	.539	0	.154	.273	.077	0	0	0	0	0	0	0	0	.091	.231
002	.182	.095	.091	.333	.227	.095	.182	0	.045	.095	0	0	0	0	.273	.381
005	.167	.167	.056	.125	.111	.250	.222	.083	.222	.208	0	0	0	.042	.222	.125
018	.100	.133	.200	.334	.050	.200	.250	.067	.100	.133	0	0	.200	.067	.100	.067
023	.263	.333	.211	.152	.105	.061	.263	.061	0	.061	0	.061	.053	.061	.105	.212
104	.057	.143	.143	.143	.257	.286	.229	.036	.171	.214	0	0	.057	.036	.086	.143
109	.147	.147	.294	.147	.324	.265	.029	.029	.059	.206	0	.029	.029	0	.118	.176
111	.444	.333	.333	.167	.111	.167	.111	.333	0	0	0	0	0	0	0	0
201	.147	.310	.324	.138	.088	.103	.029	.069	.176	.207	.059	.069	.059	0	.118	.103
203	.200	.167	.050	.083	.100	.375	.200	.125	.100	.083	0	0	.050	.042	.300	.125
305	.484	.074	.065	.111	.032	.111	.194	.148	.194	.482	0	0	.032	.037	0	.037
309	.087	.161	.130	.194	.043	.065	.348	.097	.130	.194	0	.032	.087	.097	.174	.161
MEANS	***.243***	***.217***	***.158***	***.173***	***.143***	***.171***	***.171***	***.087***	***.100***	***.157***	***.005***	***.016***	***.047***	***.032***	***.132***	***.147***

Note: ERL, First three sessions of therapy; LAT, Last three sessions of therapy; UNCLASSIF., Unclassfied

Appendix F. Proportions of Emotion Categories Reported in Early (ERL) and Late (LAT) Sessions: Twelve Better Outcome Clients

	EMOTION CATEGORY															
	ANGER		SADNESS		FEAR		SHAME		JOY		LOVE		MIXED		UNCLASSIF.	
CLIENT	ERL	LAT	ERL	LAT	ERL	LAT	ERL	LAT	ERL	LAT	ERL	LAT	ERL	LAT	ERL	LAT
010	.133	.069	.167	.345	.133	.138	.067	.103	.367	.241	0	0	0	0	.133	.103
015	.143	.200	.071	.143	.321	.171	.143	.200	.071	.143	0	0	.071	.057	.179	.086
017	.083	.167	.333	.125	.083	.417	.250	0	.167	.208	0	.042	.083	.042	0	0
019	.202	.143	.168	.143	.202	.229	.160	.057	.134	.257	0	.029	.067	.029	.067	.114
021	.409	.292	.182	.083	.136	.292	.091	.083	.136	.250	0	0	0	0	.045	0
102	.154	0	.385	0	.308	.375	0	0	.077	.500	0	0	0	0	.077	.125
103	.107	.103	.178	.310	.286	.034	.286	0	.036	.448	.036	0	0	0	.071	.103
107	.026	.364	.128	.273	.128	.136	.308	0	.179	.091	.026	.045	.051	0	.154	.091
110	.051	.089	.205	.067	.205	.156	.154	.156	.308	.311	0	.044	0	.022	.077	.156
303	0	.179	.211	.036	.263	.429	.053	.143	.211	.107	0	0	.053	.036	.211	.071
306	.261	.027	.391	.514	.043	.054	.130	.054	.130	.189	0	0	0	.108	.043	.054
312	.125	.150	.156	0	.250	.150	.156	0	.125	.600	0	0	.063	0	.125	.100
MEANS	***.141***	***.148***	***.214***	***.170***	***.196***	***.215***	***.150***	***.066***	***.161***	***.279***	***.005***	***.013***	***.032***	***.024***	***.098***	***.084***

Note: ERL, First three sessions of therapy; LAT, Last three sessions of therapy; UNCLASSIF., Unclassified

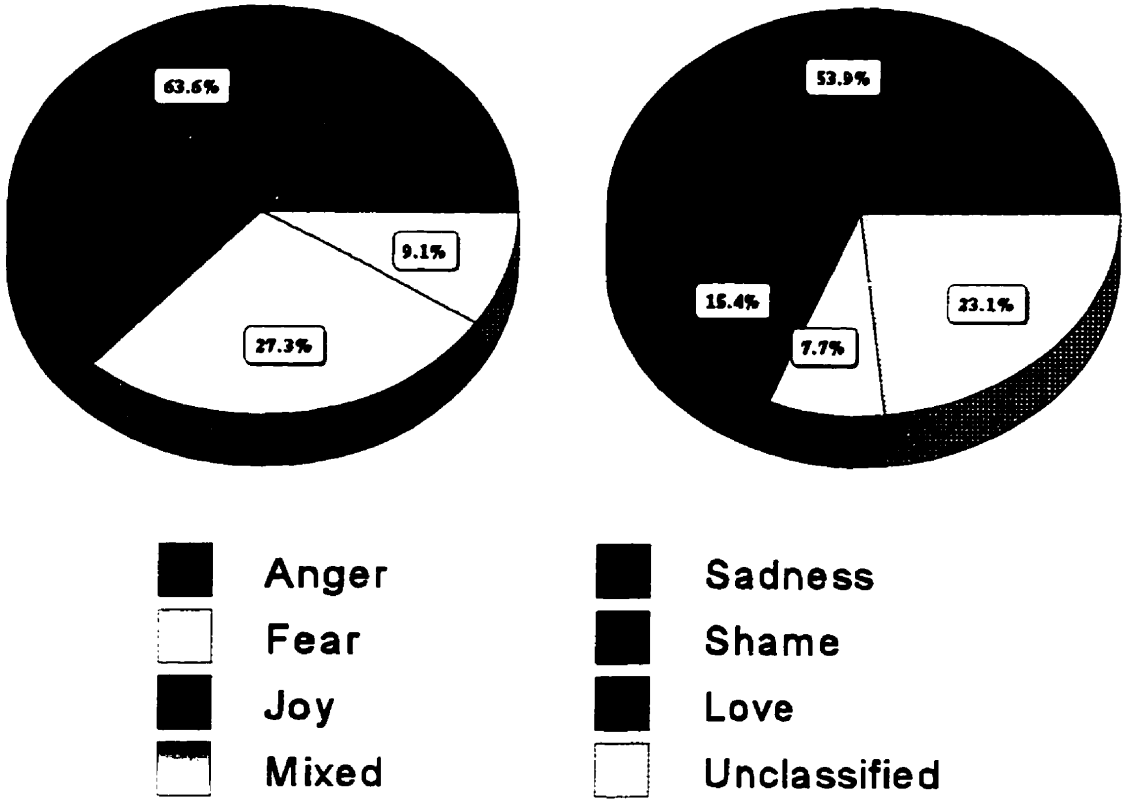
APPENDIX G

Emotion Configurations for All Twenty-Four Clients

Emotion Configurations of the Twelve Clients in the Poorer Outcome Group

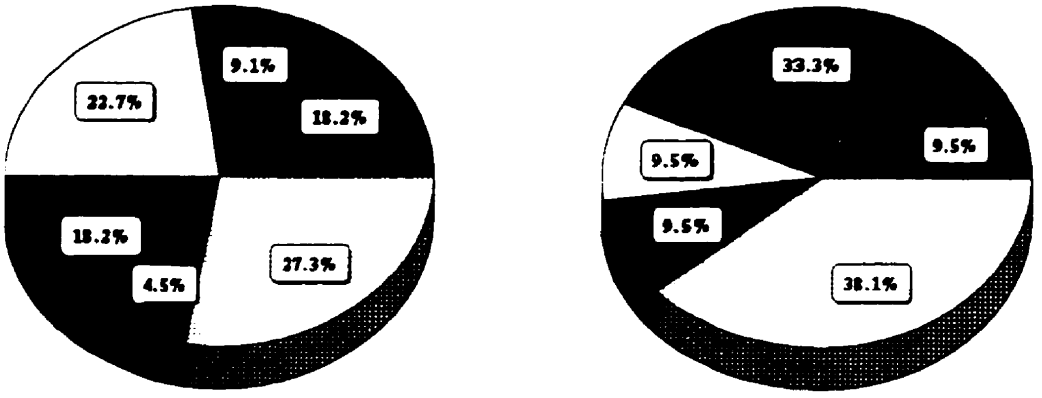
Emotion Configurations

Early **CLIENT 001** **Late**



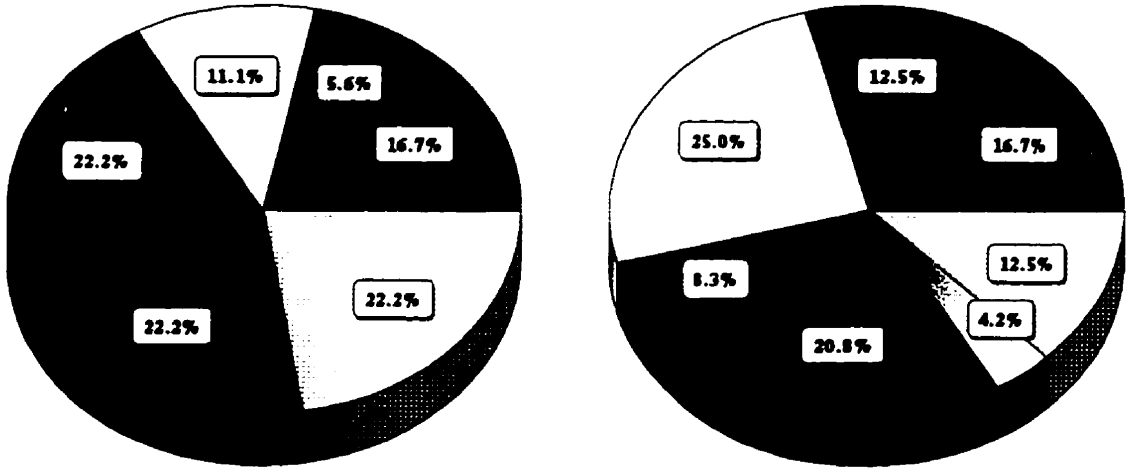
Emotion Configurations

Early **CLIENT 002** **Late**



Emotion Configurations

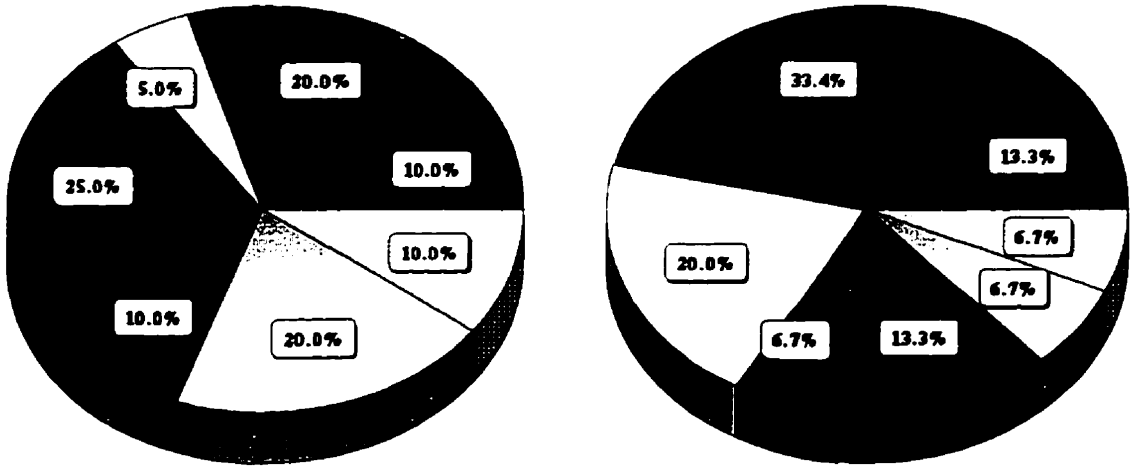
Early **CLIENT 005** **Late**



Anger
Fear
Joy
Mixed
Sadness
Shame
Love
Unclassified

Emotion Configurations

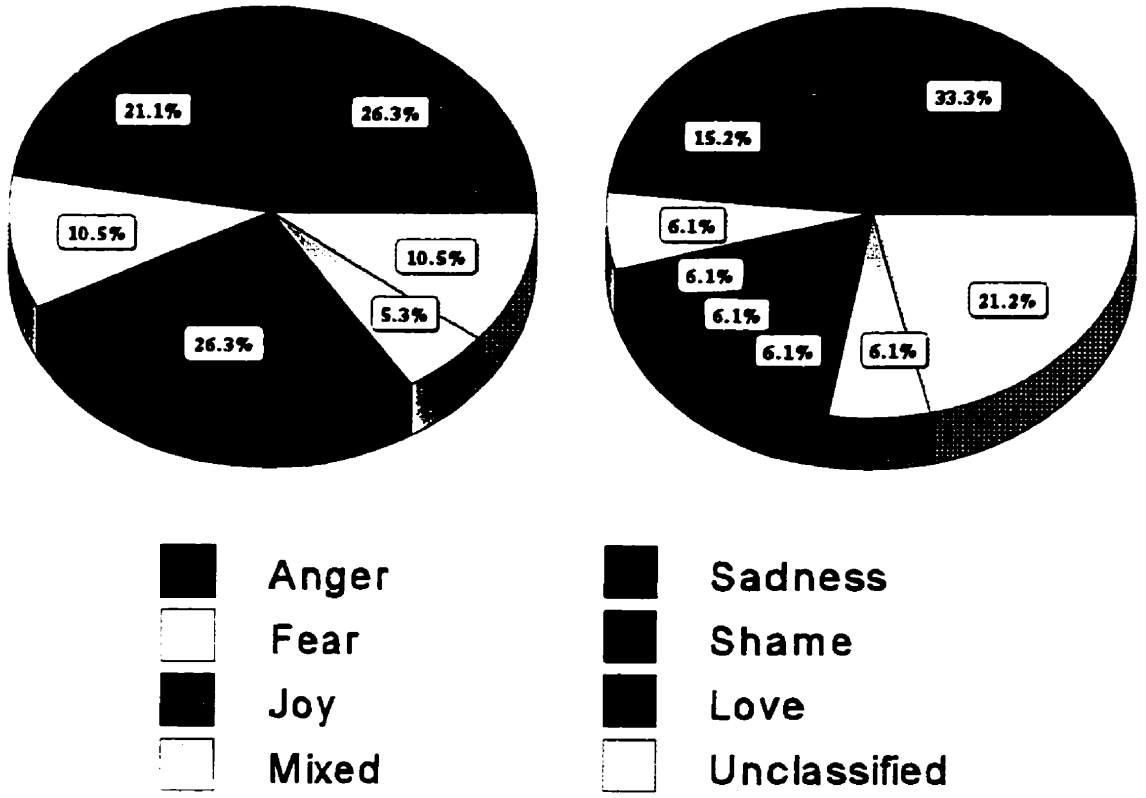
Early **CLIENT 018** **Late**



Anger
Fear
Joy
Mixed
Sadness
Shame
Love
Unclassified

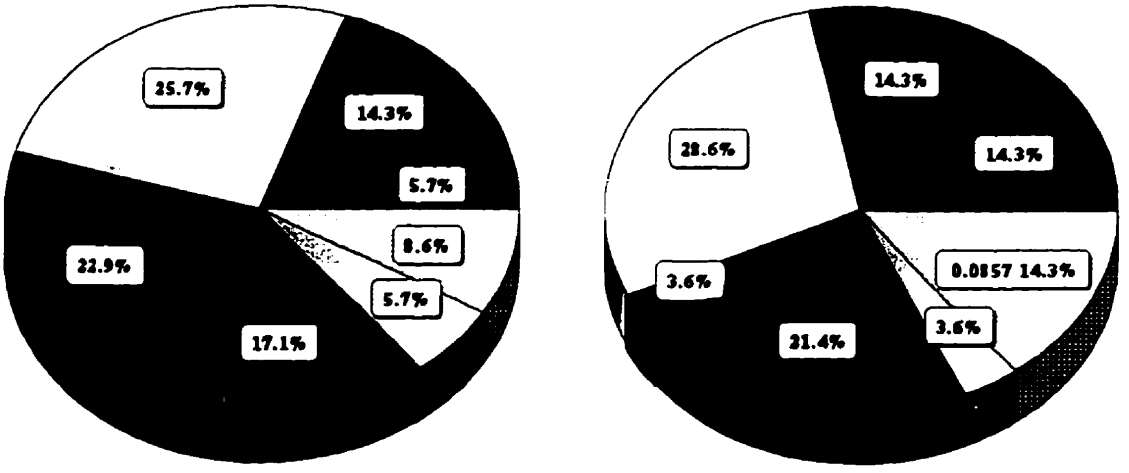
Emotion Configurations

Early **CLIENT 023** **Late**



Emotion Configurations

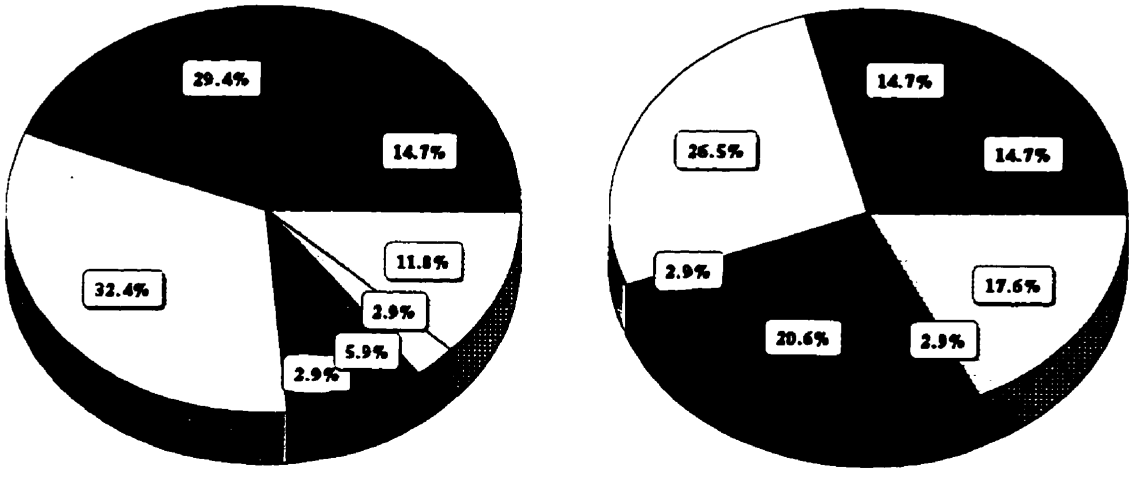
Early **CLIENT 104** **Late**



Anger
Fear
Joy
Mixed
Sadness
Shame
Love
Unclassified

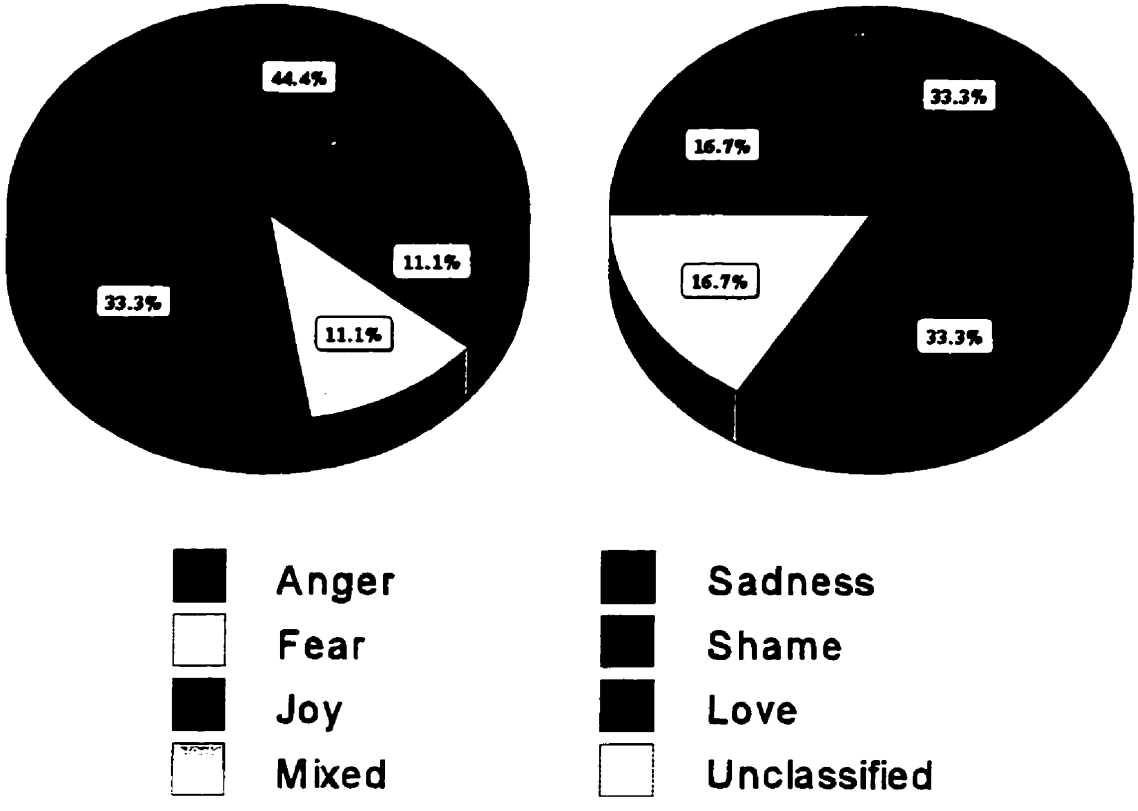
Emotion Configurations

Early **CLIENT 109** **Late**



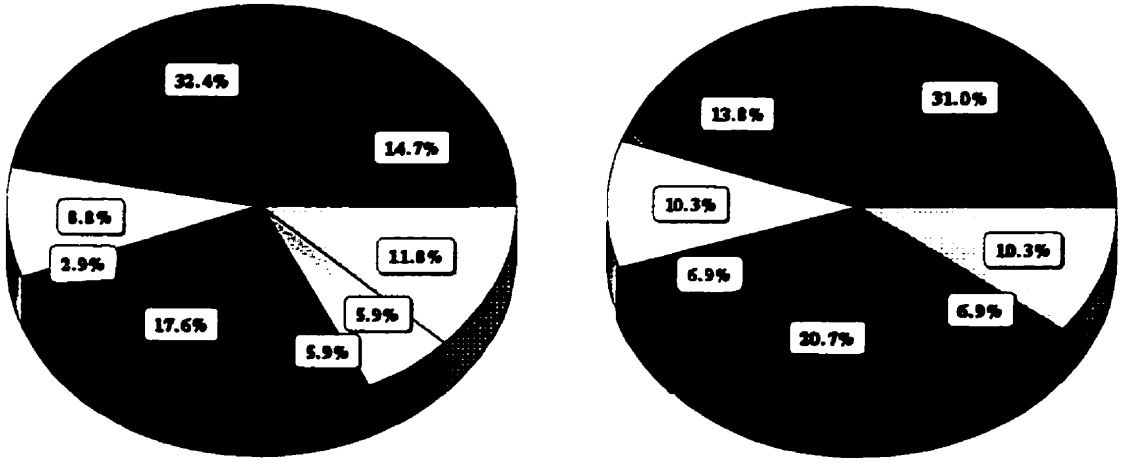
Emotion Configurations

Early **CLIENT 111** **Late**



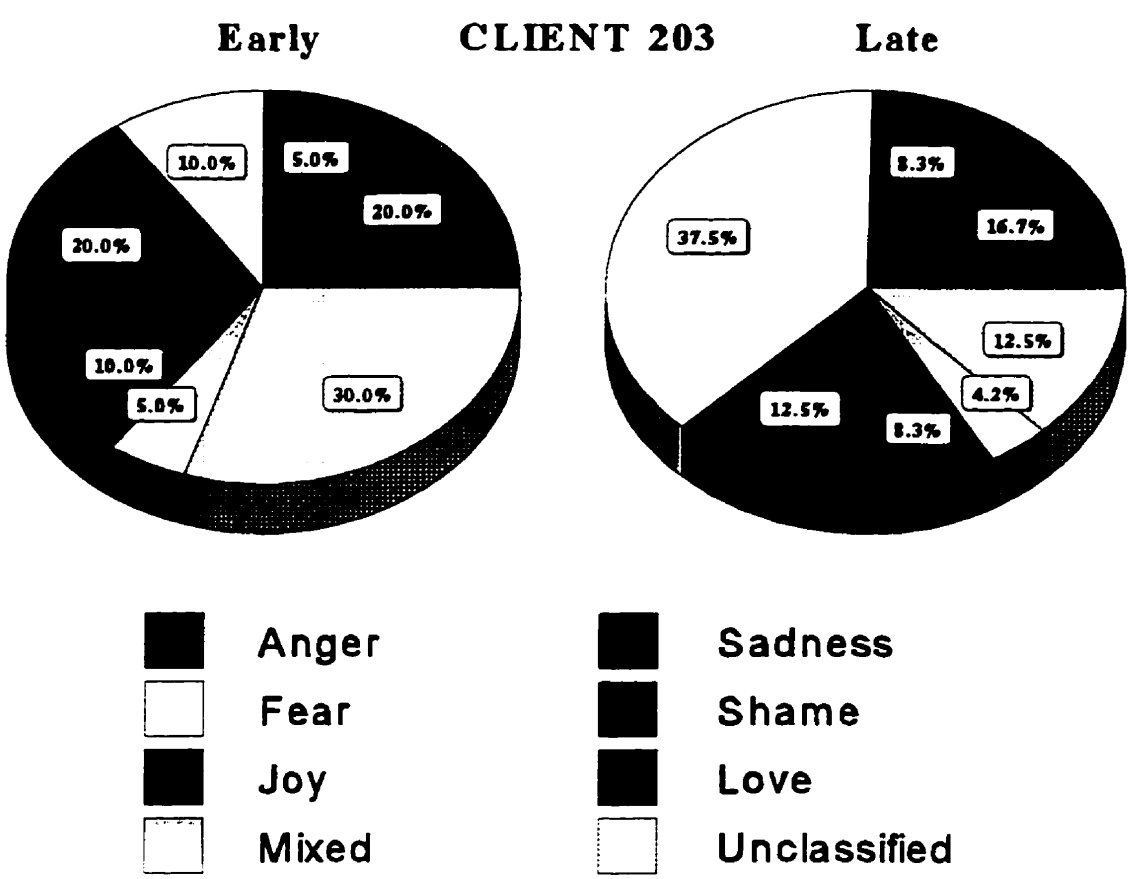
Emotion Configurations

Early **CLIENT 201** **Late**

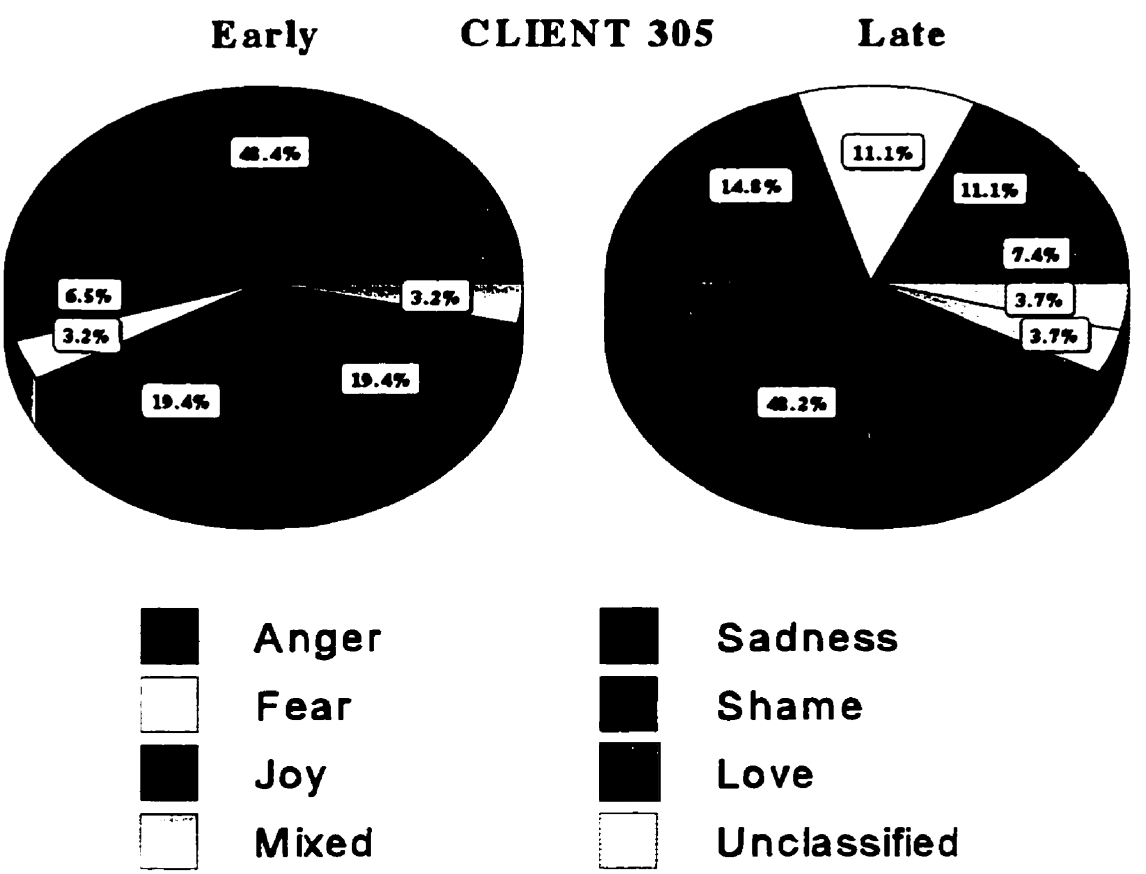


Anger
Fear
Joy
Mixed
Sadness
Shame
Love
Unclassified

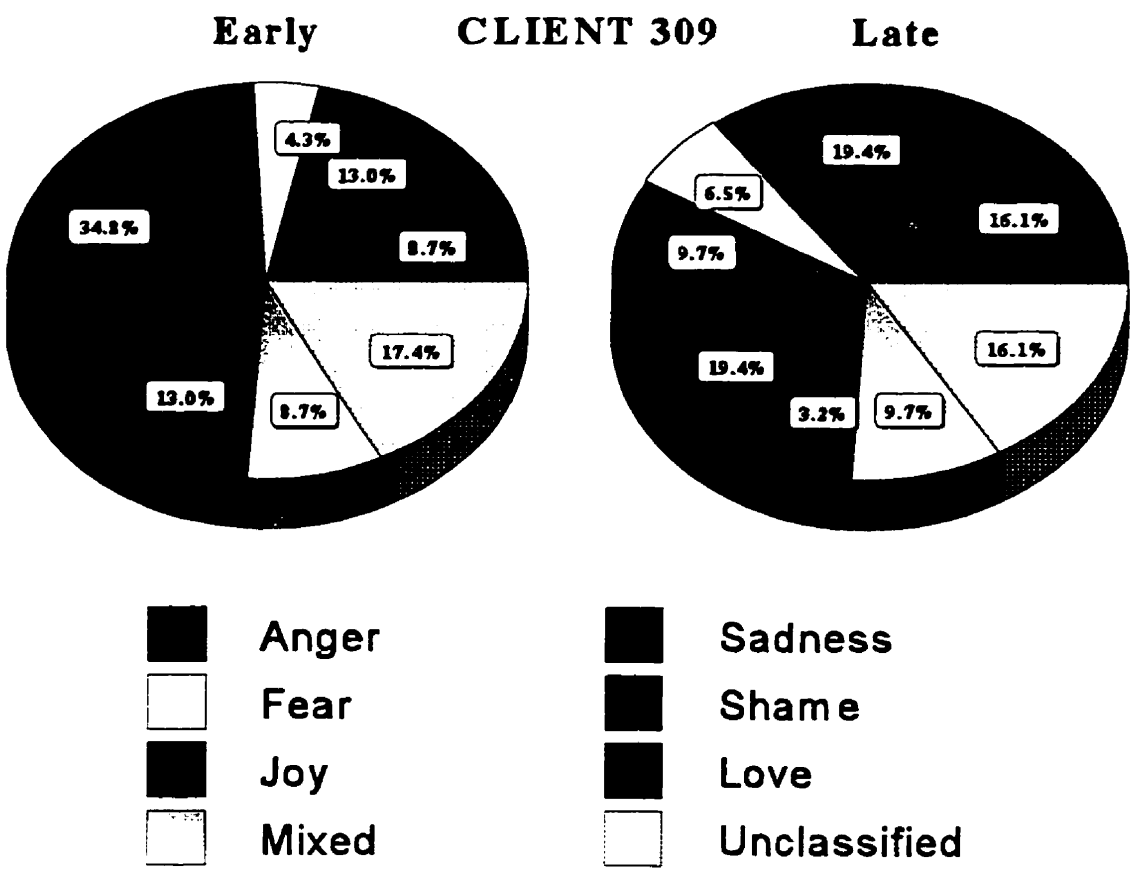
Emotion Configurations



Emotion Configurations



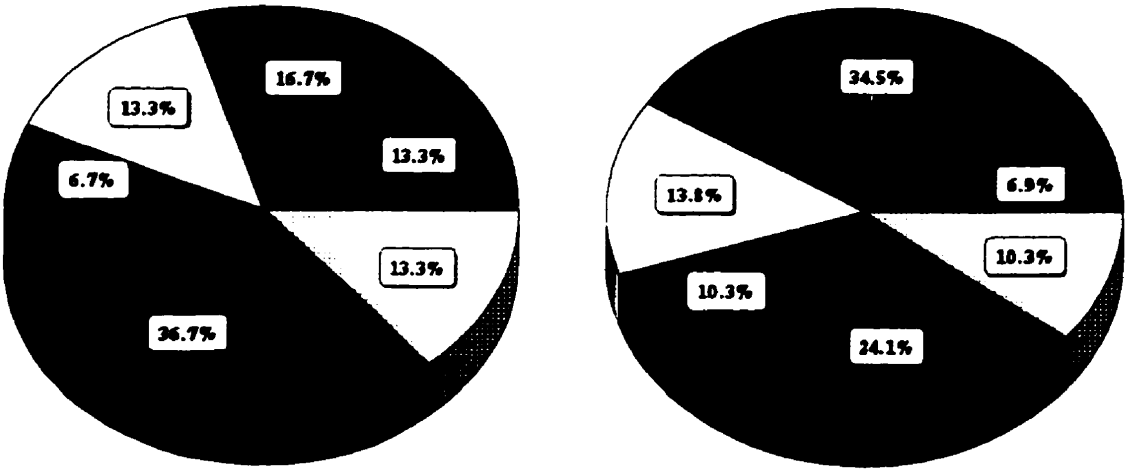
Emotion Configurations



Emotion Configurations of the Twelve Clients in the Better Outcome Group

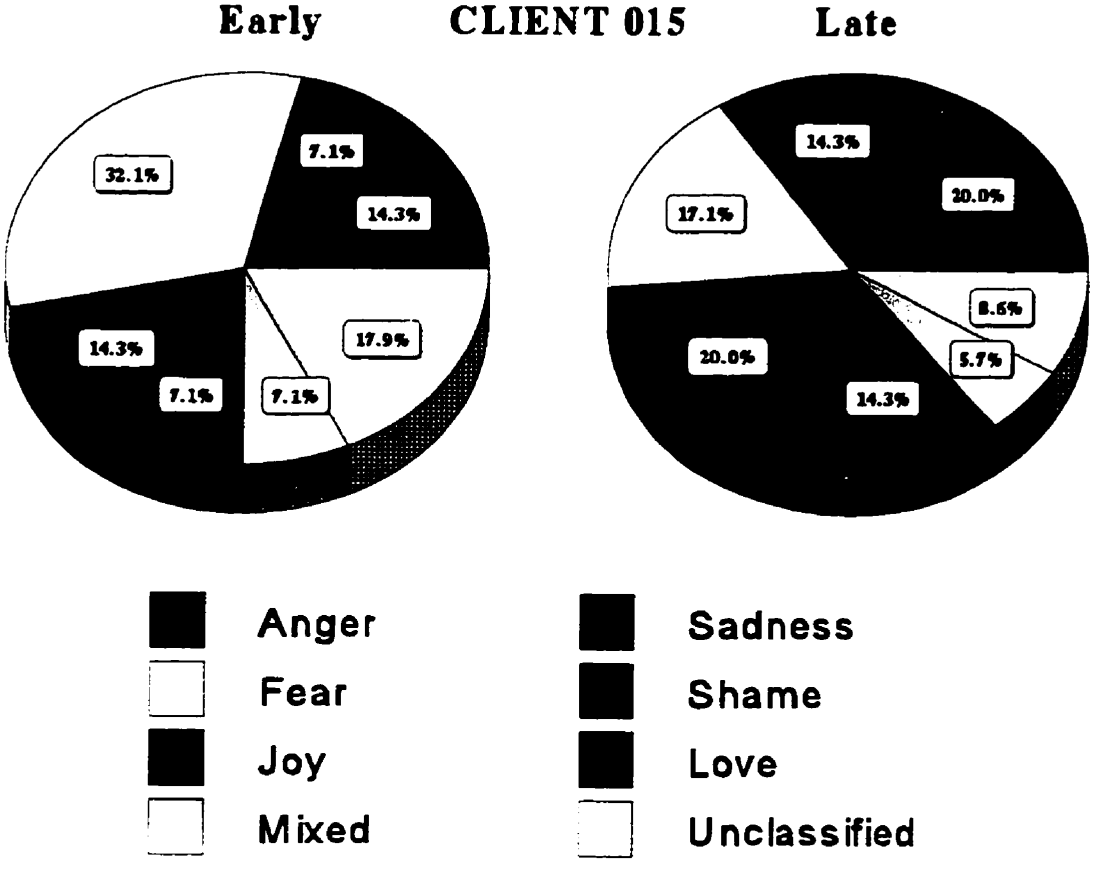
Emotion Configurations

Early **CLIENT 010** **Late**



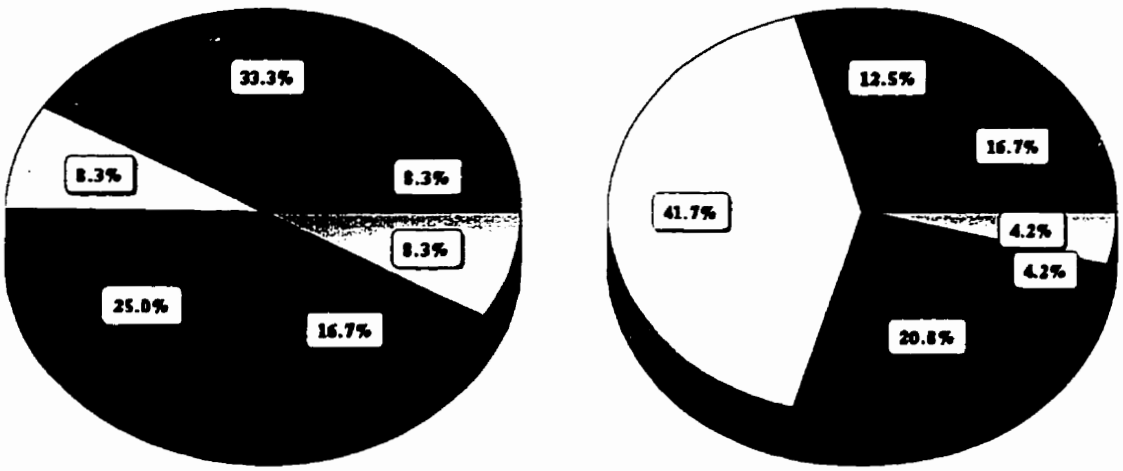
Anger
Fear
Joy
Mixed
Sadness
Shame
Love
Unclassified

Emotion Configurations



Emotion Configurations

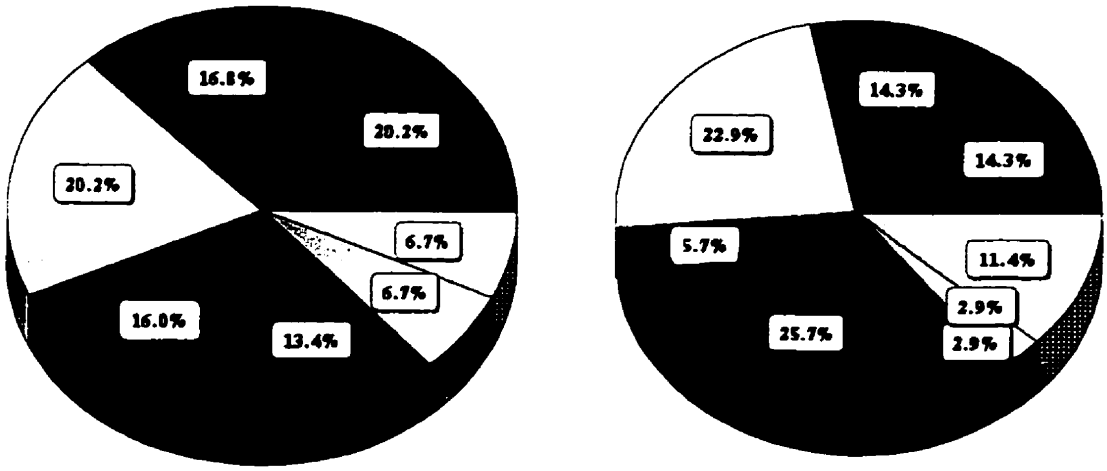
Early **CLIENT 017** **Late**



Anger
Fear
Joy
Mixed
Sadness
Shame
Love
Unclassified

Emotion Configurations

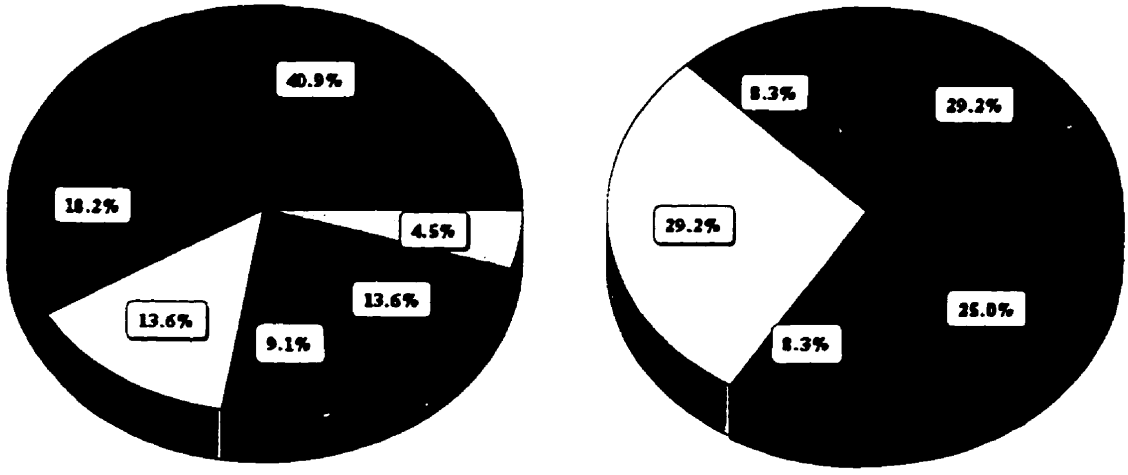
Early **CLIENT 019** **Late**



Anger
Fear
Joy
Mixed
Sadness
Shame
Love
Unclassified

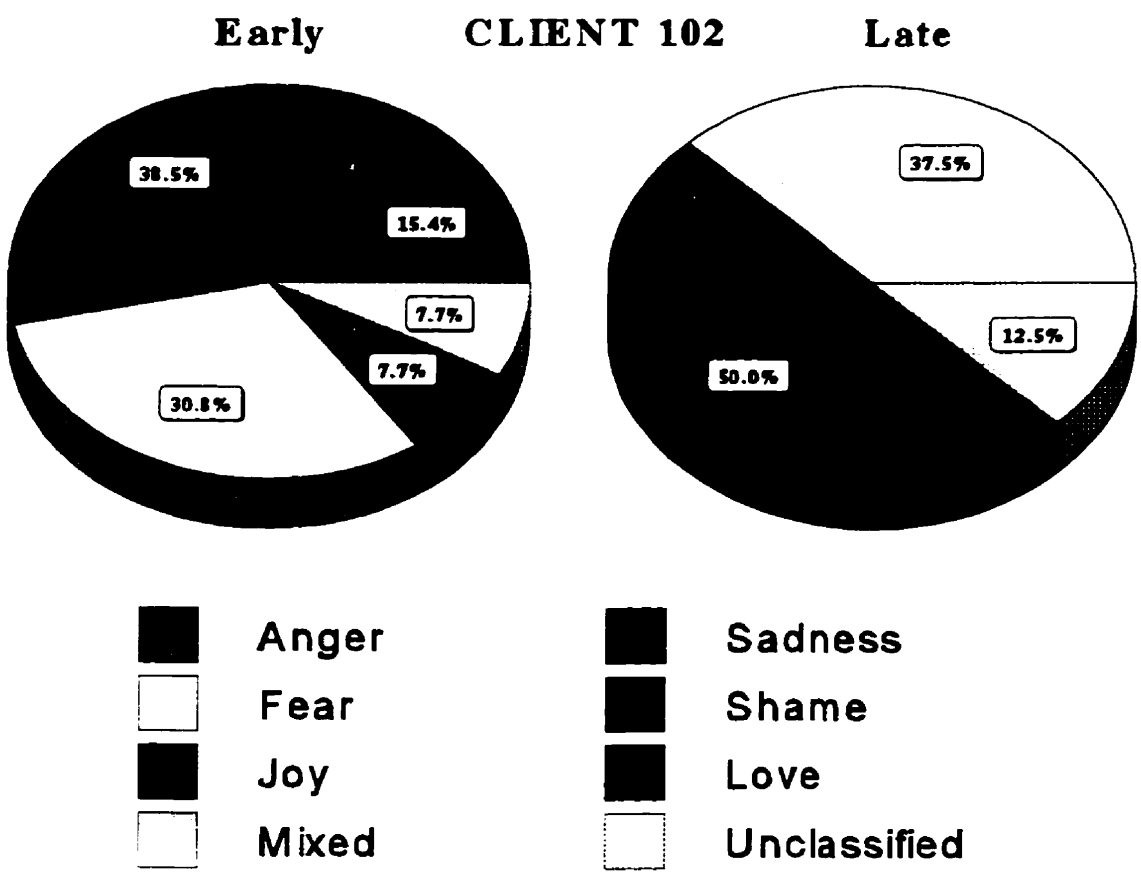
Emotion Configurations

Early **CLIENT 021** **Late**



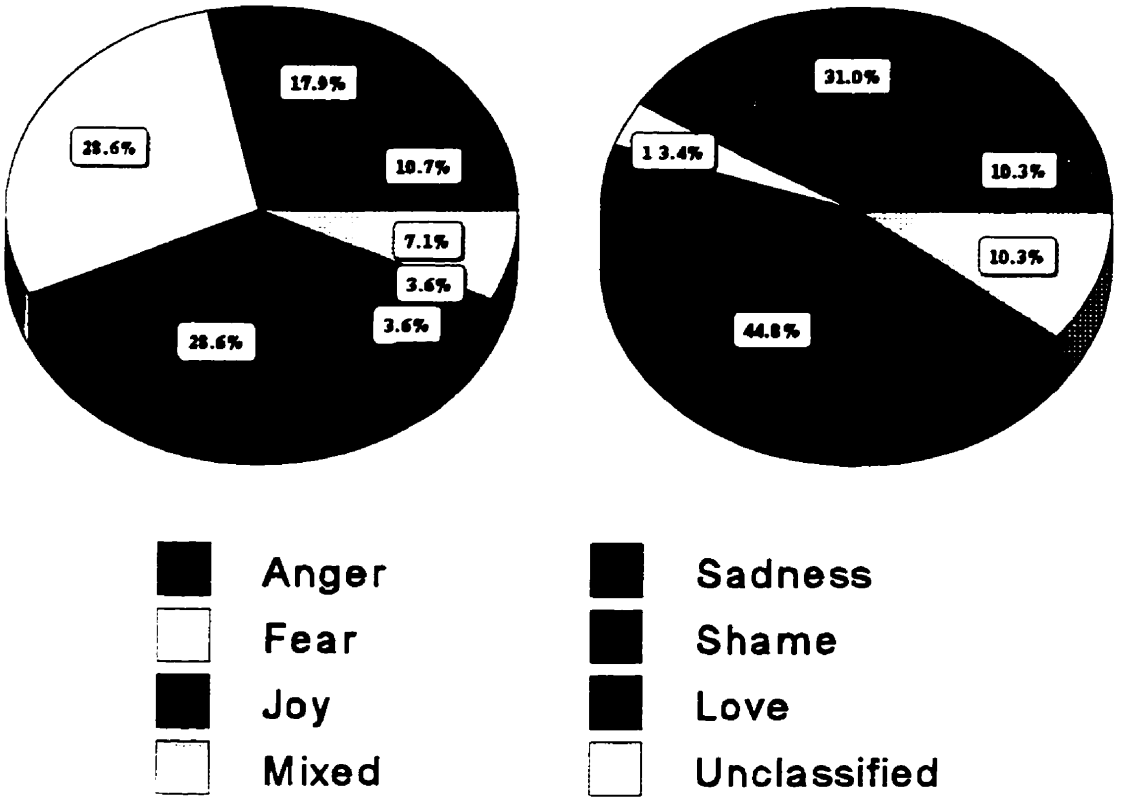
- Anger
- Fear
- Joy
- Mixed
- Sadness
- Shame
- Love
- Unclassified

Emotion Configurations

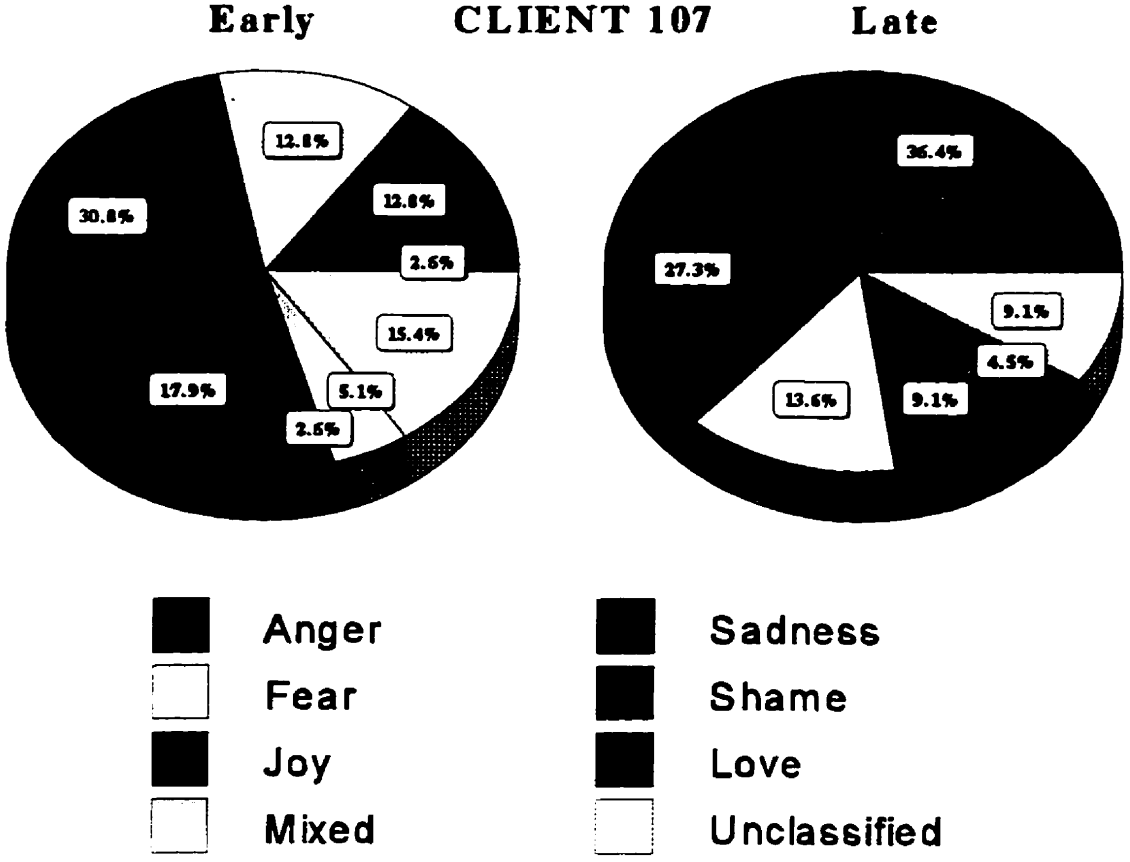


Emotion Configurations

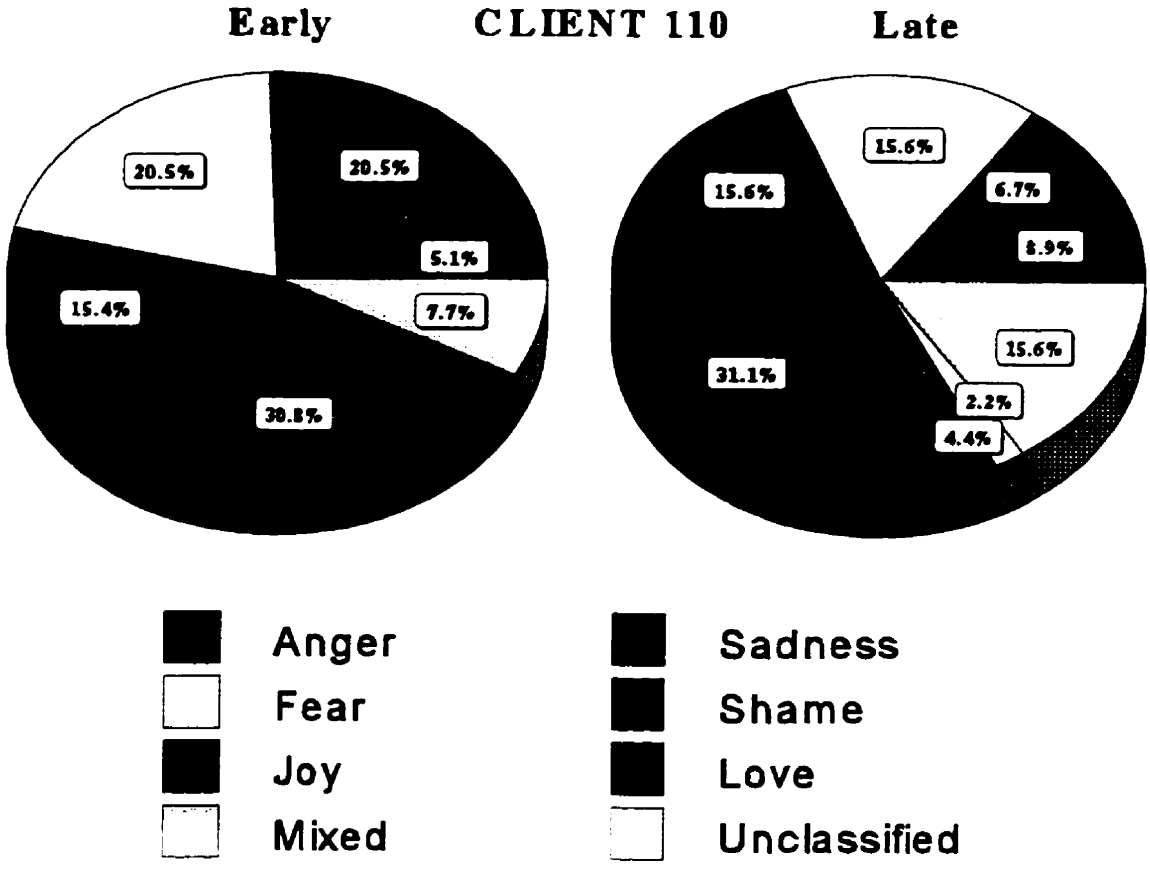
Early **CLIENT 103** **Late**



Emotion Configurations

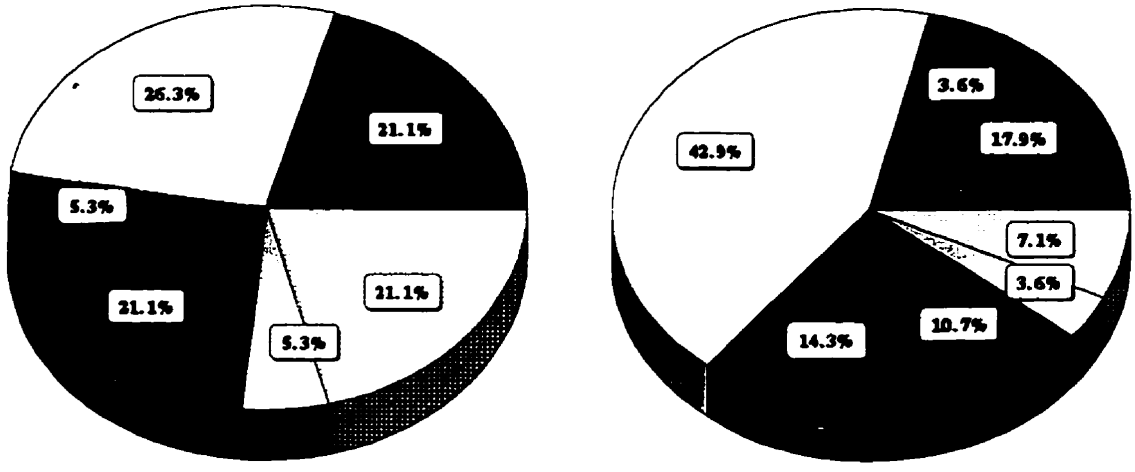


Emotion Configurations



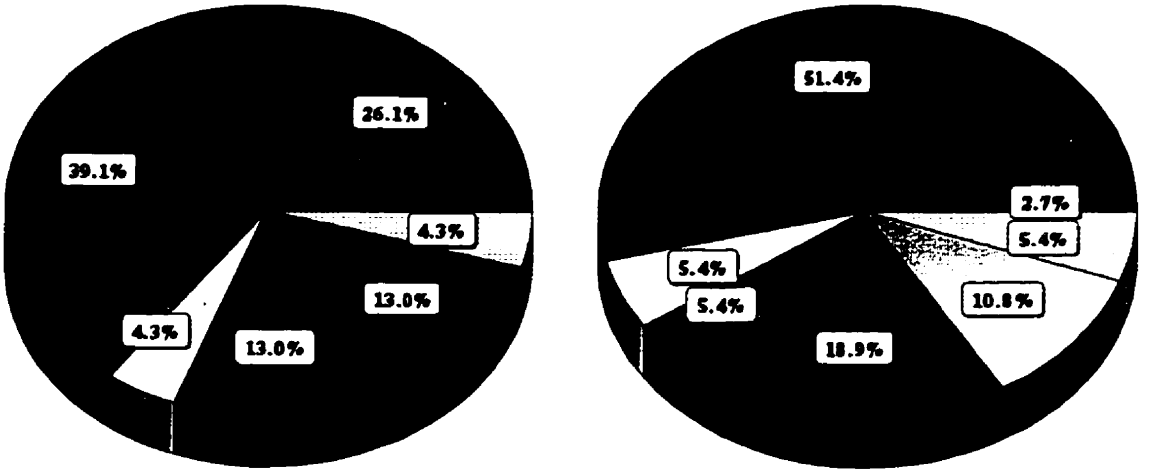
Emotion Configurations

Early **CLIENT 303** **Late**



Emotion Configurations

Early **CLIENT 306** **Late**



Anger
Fear
Joy
Mixed
Sadness
Shame
Love
Unclassified

Emotion Configurations

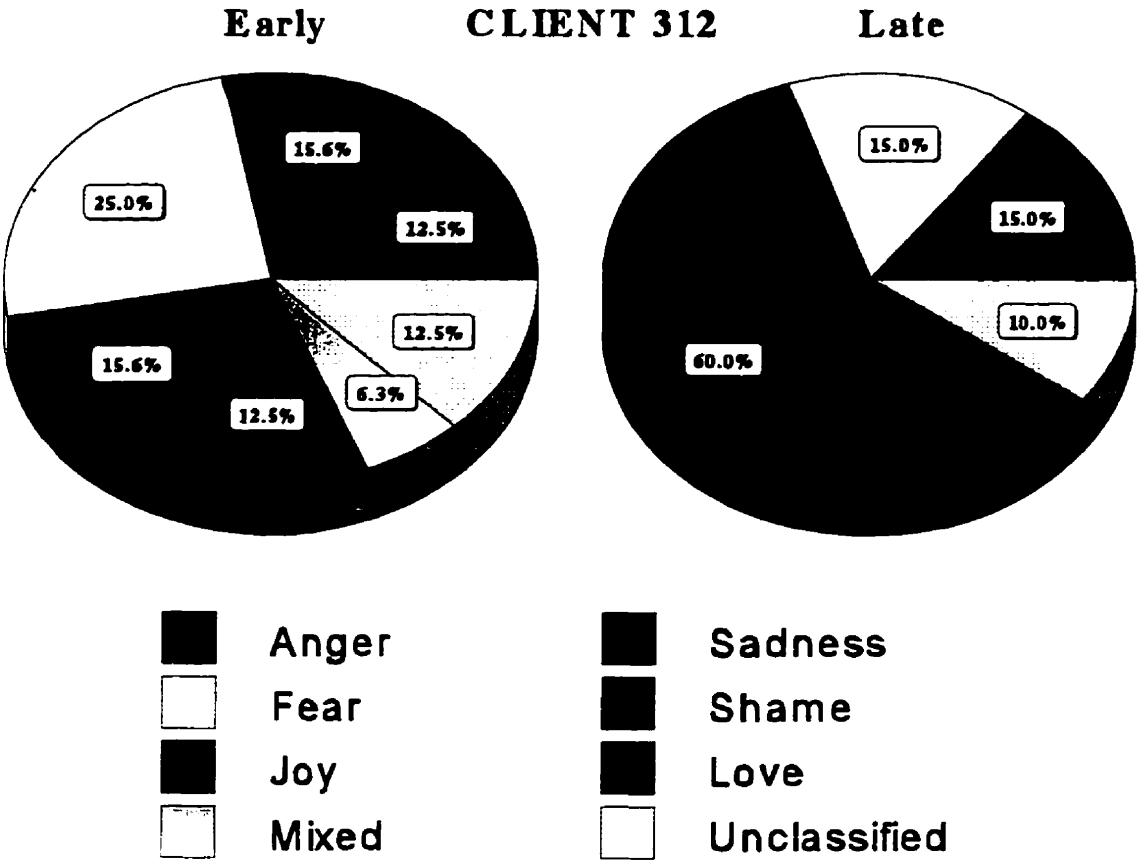
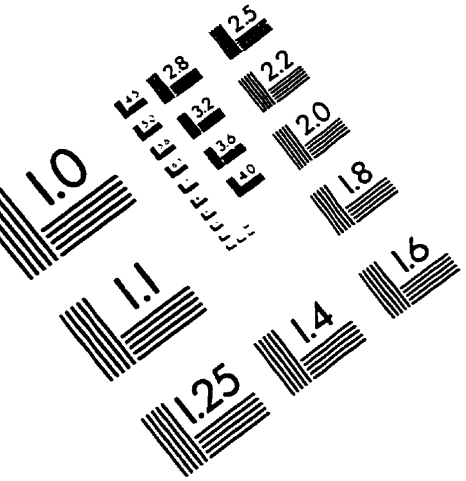
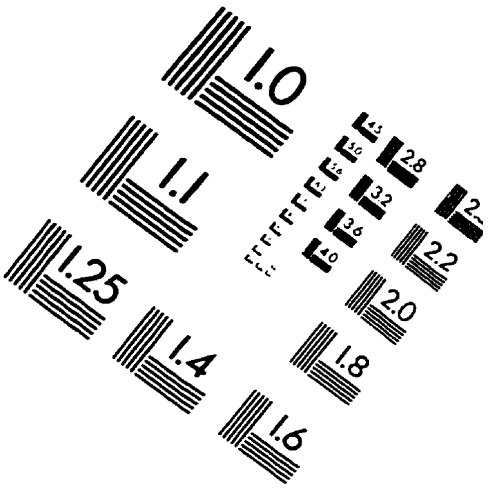
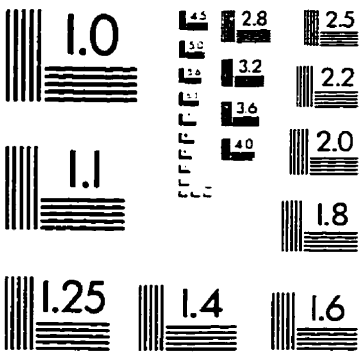
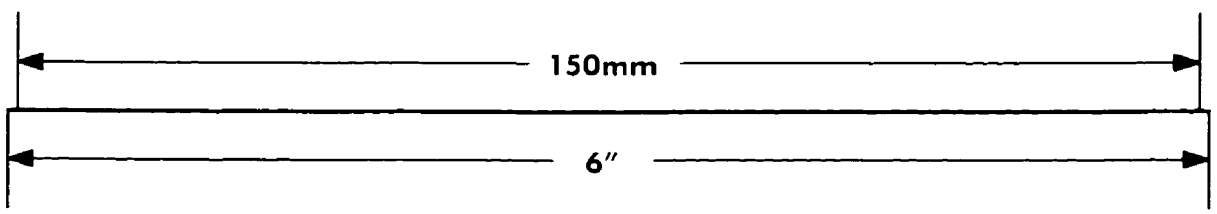


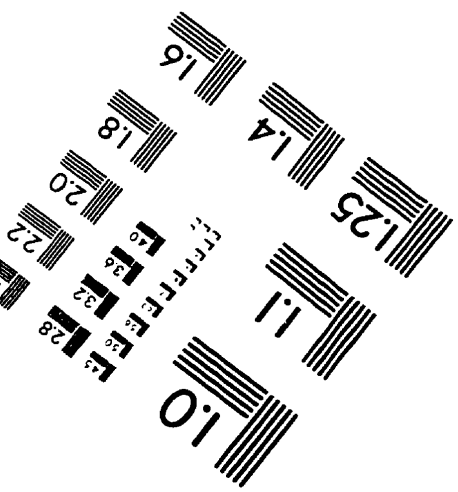
IMAGE EVALUATION TEST TARGET (QA-3)

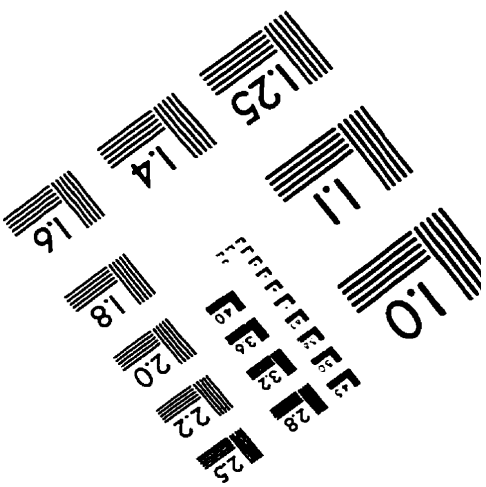












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