EMOTION IN HUMAN FUNCTIONING

A major premise of Emotion-focused therapy (EFT) is that emotion is foundational in the construction of the self and is a key determinant of self-organization. At the most basic level of functioning emotions are an adaptive form of information-processing and action readiness that orients people to their environment and promotes their well-being (Frijda, 1986; Greenberg & Paivio, 1997; Greenberg & Safran, 1987; Lang, 1995). EFT suggests that emotional intelligence involves honing the capacity to use emotions as a, without being a slave to emotions.

According to a number of emotion theories, an important although not the only source of emotion production at the psychological level is the tacit appraisal of a situation in terms of personal goals, concerns or needs (Frijda, 1986; Izard, 1991; Oatley & Jenkins, 1992; Tomkins, 1986). Thus, emotions are important because they inform people that an important need, value, or goal may be advanced or harmed in a situation (Frijda, 1986) and they indicate how individuals appraise themselves and their worlds (Greenberg & Korman, 1993; Lazarus, 1991). Emotions then are involved in setting goal priorities (Oatley & Jenkins, 1992) and are biologically-based relational action tendencies that result from the appraisal of the situation based on these goals/needs/concerns (Arnold, 1960; Frijda, 1986; Greenberg & Korman, 1993; Greenberg & Safran, 1987, 1989; Oatley & Jenkins, 1992). Different action tendencies correspond to different emotions. For example, fear is associated with the mobilization for flight, while anger involves the urge to attack, repel, or break free.

As well as involving a primary meaning system, that informs people of the significance of events to their well-being and a rapid adaptive action tendency (Frijda, 1986) emotion also is a primary signalling system that communicates intentions and regulates interaction (Sroufe, 1996). Emotion thus regulates self and other, and gives life much of its meaning.

Recent research has shown that a common earlier view, that emotion is post cognitive, is inadequate (LeDoux, 1996; Zajonc, 1980). Emotion can and often does precede cognition, but, more importantly, it makes an integral contribution to information processing in its own right (Forgas, 1995,
Neuroscience has shown emotion to be an indispensable foundation for many cognitive processes, particularly for making decisions (Bechera, Damasio, Tranel, & Damasio, 1997; Damasio, 1994) and changing emotions as we will see leads to change in modes of cognitive processing.

The amygdala, at the centre of the emotional brain, serves as the ‘smoke detector’ that preconsciously interprets whether incoming sensory information is a threat. The amygdala forms emotional memories in response to particular sensations such as sounds and images that have become associated with physical threats. These emotional interpretations appear to be extraordinarily difficult to change (LeDoux, 1996). Therefore, the challenge of any effective psychotherapy, be it of trauma, anxiety or depression is to transform amygdala reactions so that innocuous reminders of past experience are not seen as a return of past loss, failure or trauma.

Forgas (2000), in his affect infusion model, has recently shown that the infusion of affect into cognition depends on the type of processing that is occurring. It is when processing is substantive in ambiguous, open situations, like most interpersonal experiences, that affect is most likely to influence the construction of beliefs. By contrast more controlled processing in explicit problem-solving situations is most impervious to affect infusion effects. Cognition and memory clearly have been found to be mood dependent (Blaney, 1986; Forgas, 2000; Palfia & Salovey, 1993). Ultimately it is important to understand the independent contribution of both emotion and cognition and their interaction in the production of human distress.

Significant new findings have also emerged about the relationship between positive emotion and psychological resilience. Fredrickson (2001), for example, has helped to identify the adaptive function of positive emotions. Positive emotion improves problem solving by making thought processes more flexible, creative and efficient. The playful creativity associated with emotions like joy and interest motivate people to learn and achieve more than they otherwise would, which helps them to accrue future personal and social resources. Fredrickson (2001) also found that positive emotion builds resilience by undoing the effects of negative emotion, a finding which may have important relevance for recovery from the effects of self-criticism. Furthermore, in the neuro-psychological research of Davidson (2000) a tendency to low positive affect confers a vulnerability to depression whereas a stable positive affective style builds psychological resilience. The ability to recruit positive emotions in the face of stress appears to be a crucial component of resilience (Davidson, 2000).

Evolution however has blessed humanity with more negative basic emotions than positive ones, in order to aid survival. An important conclusion to be drawn from an evolutionary point of view is that negative emotions are often useful. Anxiety, anger, sorrows and regret are useful or they would not exist. Unpleasant feelings draw people’s attention to matters important to their well-being. However when unpleasant emotions endure even when the circumstances that evoked them have changed, or are so intense that they overwhelm, or evoke past loss or trauma they can become dysfunctional. Healthy adaptation thus necessitates learning to be aware of, to tolerate, and to regulate negative emotionality (Frijda, 1986; Tomkins, 1963) as well as to enjoy positive emotionality for the benefits it endows (Frederickson, 1998). Dysfunction in the ability to access and process emotional information, both positive and negative, thus disconnects people from one of their most adaptive orientation and meaning production systems (Frijda, 1986; Izard, 1984, 1991).

A DIALECTICAL–CONSTRUCTIVIST VIEW: INTEGRATING BIOLOGY AND CULTURE

As well as having emotion we also live in a constant process of making sense of our emotions. We have proposed a dialectical–constructivist view of human functioning to explain this process (Greenberg, Rice, & Elliott, 1993; Greenberg & Pascual-Leone, 1995, 2001; Guidano, 1991; Mahoney, 1991; Neimeyer & Mahoney, 1995; Pascual-Leone, 1987, 1990a, 1990b, 1991; Watson & Greenberg, 1997). In this view personal meaning emerges by the self-organization and explication of one’s own emotional experience and optimal adaptation involves an integration of reason and emotion. This integration is achieved by an ongoing circular process of making sense of experience by symbolizing bodily-felt sensations in awareness and articulating them in language, thereby constructing new experience.

In a dialectical–constructivist view the person is seen as an agent who is in a constant process of symbolizing bodily-felt referents to create new meaning, and who creates new experience by the
ways in which bodily-felt experience is organized. Attending to, and discovery of, pre-conceptual, elements of experience, influences the process of meaning construction while the process of meaning construction influences what is experienced. There are in this view essentially two important streams of experience and knowing, an embodied experiential stream and a more social, conceptual linguistic stream.

With development, emotional experience, rather than being governed simply by biologically- and evolutionarily-based affect motor programmes, is produced by highly differentiated structures, that have been refined through experience and bound by culture into what have been called emotion schemes (Greenberg et al., 1993; Oatley, 1992; Pascual-Leone, 1991). These are organized response- and experience-producing units stored in memory networks. Much adult emotional experience is of this higher order, generated by idiosyncratic schemes based on biology and learning that serve to help the individual to tacitly anticipate future outcomes. Thus for example over time the innate response of joy at a human facial configuration becomes differentiated into feelings of pleasure with a specific caretaker and contributes to the development of basic trust. Feeling an emotion involves experiencing body changes in relation to, and integrated with the evoking object or situation and one’s past emotional learning. It is the feeling of the emotion that allows for the formation of emotion networks or schemes, because consciously feeling something involves higher levels of the brain, and entails a synthesis of emotion–cognition–motivation and action into internal organizations. Emotion schematic processing is the principal target of intervention and therapeutic change in emotion-focused therapy (Greenberg & Paivio, 1997; Greenberg et al., 1993).

Although it is important to recognize the adaptive function of emotion it is clear that given that emotions reflect experience they can become maladaptive responses to situations. Emotions become maladaptive through learning and socialization and especially to failures early on in the dyadic regulation of affect (Fosha, 2000). In addition affect repertoires show individual differences. Some people are more easily triggered into anxiety, rage or joy and some people may be born with damaged emotional systems.

An example of the development of a maladaptive depressogenic emotion scheme is seen in a child whose initiatives either for closeness or autonomy are met with criticism and rejection from parents. As a consequence, the child is likely to develop schemes in which intimacy or autonomy is associated with fear and shame. Later in life, when the individual is criticized or rejected, these schemes may be activated out of awareness, and patterns of physiological arousal and response tendencies associated with the original lack of support and associated negative beliefs or expectations formed by this experience will be evoked. The person may feel afraid and physically shrink away from closeness or risk taking and tacitly appraise intimacy or assertion as threatening and likely to meet with failure. Even though the individual may consciously know that this defeatist pessimistic stance may be unfounded in any given situation, the emotional response endures.

Change in emotional experience is brought about in therapy first by activating the maladaptive experience of fear and shame underlying the hopelessness and then by accessing adaptive feelings of sadness at what is missed and the yearning for closeness, and the anger at the maltreatment. These adaptive emotions are attended to and validated, are used to vitalize a more resilient sense of self to help transform the person’s maladaptive affects and to explicitly challenge maladaptive beliefs. In this way the new self-experience and views are integrated with the existing negative experience and views to consolidate a new self-organization. Thus a process of accessing the adaptive and bringing it into contact with the maladaptive helps transform or undo the maladaptive schemes (Greenberg, 2002; Greenberg & Paivio, 1997). In this view, in order to change, clients need to activate new adaptive experience in therapy in order to change maladaptive experience, and they need to develop new narratives that assimilate experience into existing cognitive structures and generate new ones. Therapy thus involves changing both emotional experience and the narratives in which they are embedded (Greenberg & Angus, 2003).

In a dialectical–constructivist view people are thus viewed as constantly striving towards making sense of their pre-conceptual experience by symbolizing it, explaining it and putting it into narrative form. Pre-conceptual tacit meaning carries implications and acts to constrain but does not fully determine meaning. Rather it is synthesized with conceptual, explicit meaning to form explanations constrained by experiencing (Greenberg & Pascual-Leone, 1995, 2001). This provides the ongoing narrative of a person’s life.
The brain thus can be seen to possess two important meaning systems, one based on a symbolic conceptual language and the other based on a sensory motor affective language. Body talk then is intelligent brain talk and people need to pay attention to ‘feeling knowledge’ and to make sense of it with their linguistic conceptual abilities in order to be able to benefit consciously from its evolutionarily adaptive offerings.

It is likely that in traditional, more cognitive and insight-oriented psychotherapy, people learn to understand that certain emotional or somatic reactions are erroneous interpretations of what is occurring or belong to the past and are now irrelevant. This may help them override automatic physiological responses to reminders of past experience but not abolish them. Although re-appraisal or insight provides people with a new way of thinking or deeper understanding of the reasons they feel the way they do, cognitive change of this nature is unlikely to reconfigure the alarm systems of the brain, or the emotion schematic networks that have been organized from them. More conceptually oriented or instructional forms of intervention rely on top-down techniques to manage disruptive emotions and sensations. Emotions are often approached as unwanted disruptions of ‘normal’ functioning that need to be harnessed by reason rather than as adaptive information or as reactivated associations and unintegrated fragments of prior emotional states. Top-down processing generally promotes problem-focused coping and focuses on inhibiting unpleasant sensations and emotions rather than on promoting emotion-focused coping which focuses on processing emotion to completion, transforming emotion and integrating emotion into ongoing narratives.

Emotion-focused therapy views bottom-up processing as essential in changing automatic emotional responding. In bottom-up processing clients are asked to become aware of and track sensori-motor processes (the sequence of physical sensations and impulses) as they progress through the body (Perls, Hefferline, & Goodman, 1951) and to be mindful of their internal experience (Kabat-Zin, 1993). They are asked to disregard thoughts that arise until the bodily sensations and impulses resolve or crystallize into a clear meaning and to symbolize the bodily-felt sense in words (Gendlin, 1996). The bottom-up element of the process consists of people learning to observe and follow the unattended to or avoided sensori-motor reactions that are activated in the present.

EMOTION COACHING

Emotion coaching is aimed at enhancing emotion-focused coping by helping people become aware of, accept and make sense of their emotional experience. Coaching is defined in general as involving a mutually accountable relationship in which both client (trainee) and therapist (coach) collaborate actively in the creation of an educational experience for the client who is an active participant in the process. Emotion coaching entails a highly collaborative relationship involving both acceptance and change (Linehan, 1993). The goals of emotion coaching are acceptance, utilization and transformation of emotional experience. This involves awareness and deepening of experience, processing of emotion as well as the generation of alternative emotional responses. In emotion coaching a safe, empathic and validating relationship is offered throughout to promote acceptance of emotional experience. An accepting, empathic relational environment provides safety leading to greater openness and provides people with the new interpersonal experience of emotional soothing and support that over time becomes internalized (Fosha, 2000; Greenberg & Johnson, 1988). As well as providing interpersonal validation this type of safe relational environment reduces interpersonal anxiety and thereby frees up clients’ processing capacities enabling them to pay attention to their bodily-felt experience. In this type of relational environment people sort out their feelings, develop self-empathy and gain access to alternate resilient responses based on their internal resources. Emotion coaching is a collaborative effort to help clients use their emotions intelligently to solve problems in living by accepting emotion rather than avoiding it, utilizing both the information and response tendency information provided by it, and transforming it when it is maladaptive.

In addition to following where the client is moment by moment the therapist also coaches the client in new ways of processing experiential information. Change and novelty can be introduced into the emotional domain by guiding people’s attention and meaning construction processes and also by helping people to become aware of their emotional processes. Although difficult, it is possible to enter into the highly subjective domain of unformulated personal experience, a place beyond reason and often beyond words, and have a positive influence. The steps involved in coaching people to experience their emotions skilfully are elaborated below.
Emotion coaching (Greenberg, 2002) in therapy is based on two phases: Arriving and Leaving. A major premise is that one cannot leave a place until one has arrived at it. The first phase of arriving at one’s emotions, involves the following four steps. These are focused on awareness and acceptance of emotion.

- First, it is important to help people become aware of their emotions.
- Second, people need to be coached to welcome their emotional experience and allow it (this does not necessarily mean they must express everything they feel to other people but rather acknowledge it themselves). People also need to be coached in skills of regulation if needed to help them tolerate their emotions.
- Third, people need to be helped to describe their feelings in words in order to aid them in solving problems.
- Fourth, they need to be helped to become aware of whether their emotional reactions are their primary feelings in this situation. If not, they need help in discovering what their primary feelings are.

The second phase focuses on emotion utilization or transformation to promote leaving the place arrived at. This stage involves moving on or transforming core feelings. It is here that the coaching aspect is more central.

- Fifth, once the person has been helped to experience a primary emotion, the coach and person together need to evaluate if the emotion is a healthy or unhealthy response to the current situation. If it is healthy it should be used as a guide to action. If it is unhealthy it needs to be changed.
- Sixth, when the person’s accessed primary emotions are unhealthy, the person has to be helped to identify the negative voice associated with these emotions.
- Seventh, the person is helped to find and rely on alternate healthy emotional responses and needs.
- Eighth, people need to be coached to challenge the destructive thoughts, in their unhealthy emotions, from a new inner voice based on their healthy primary emotions and needs, and to learn to regulate when necessary.

The dialectic of acceptance and change, is embodied in a style of following and leading. Following provides direction for the exploration not by suggesting what content clients should focus on, nor by interpreting the meaning of their experience, but rather by guiding the type of processing in which they engage. Each therapist response is viewed as a processing proposal that guides the type of emotion in which the client engages. The types of proposals used in emotion coaching are those that help people symbolize their internal experience and make sense of them. Coaching in the emotional domain involves helping verbally label emotions being felt, helping people accept the emotion, talking with the client about what it is like to experience the emotion, facilitating new ways of processing the emotion, and teaching ways of soothing or regulating the emotion. It is important to note that people often cannot simply be explicitly taught new strategies for dealing with difficult emotion but often have to be facilitated experientially to engage in the new process. For example accessing a need or goal may be very helpful in overcoming a sense of passivity or defeat or to help move out of a painful feeling. However, explicitly teaching people that this is what they should feel is not nearly as helpful as interpersonally facilitating this by asking them at the right time, in the right way, when they are feeling hopeless and have processed the feeling, what it is they need. It is for example, by experiencing a process of shifting states by accessing needs that the experiential links between states are best forged. This then is consolidated only later by explicit knowledge of the process.

**PRINCIPLES OF WORKING WITH EMOTION**

**Emotion Assessment**

In working with the emotions it is important to make distinctions between different types of emotional experiences and expression that require different types of in-session intervention. We have emphasized the importance of differentiating between both primary and secondary emotions, and between emotional experience that is adaptive or maladaptive (Fosha, 2000; Greenberg & Paivio, 1997; Greenberg & Safran, 1987; Greenberg et al., 1993). Primary emotions are the person’s most fundamental direct initial reactions to a situation like being sad at a loss. Secondary emotions are those responses that are secondary to other more primary internal processes and may be defences against these such as feeling hopeless when angry.
Secondary emotions are responses to prior thoughts or feelings or to complex sequences of these. Sequences such as, feeling angry in response to feeling hurt or feeling afraid or guilty about feeling angry. Secondary emotions need to be explored in order to get at their more primary generators. Although the skills of awareness and understanding apply to most emotions, it is only awareness of some primary emotions that provides access to adaptive information that promotes orientation and problem solving. Thus accessing the healthy anger at unfairness, that underlies powerlessness, promotes adaptation, while accessing the shame at loss of esteem, that underlies rage, can promote attachment in place of destructiveness.

The next crucial distinction to be made is between those primary states that are adaptive, and are accessed for their useful information, and those primary states that are maladaptive, and need to be transformed. Maladaptive emotions are those old familiar feelings that occur repeatedly and do not change. They are feelings such as, a core sense of lonely, sad, abandonment, of wretched worthlessness, or recurrent feelings of shameful inadequacy that plague one all one’s life. These feelings do not change in response to changing circumstance nor when expressed, nor do they provide adaptive directions for solving problems. Rather they just leave the person feeling stuck, often hopeless, helpless and in despair. It does not help simply to get in touch with these emotions they need to be replaced or transformed.

Distinctions between different types of emotion provide clinicians with a map for differential intervention with emotion. Primary emotions need to be accessed for their adaptive information and capacity to organize action, whereas maladaptive emotions need to be regulated and transformed. Secondary maladaptive emotions need to be reduced by exploring them to access their more primary cognitive or emotional generators. Emotion-focused work therefore involves accessing primary adaptive emotions in order to symbolize their adaptive information and evoking maladaptive emotions in order to make them amenable to change by exposing them to new information and experience.

Goals of Emotion-focused Intervention

Emotion-focused therapy relies on three major empirically-supported principles for enhancing emotion-processing. The principles are embedded within an overarching framework that emphasizes emotional/social support as important in the promotion of change. In therapy emotional/social support is operationalized as the provision of a relationship characterized by attunement to affect, validation of experience and empathic responsiveness. Outside therapy it involves encouraging the acquisition of interpersonal emotional support characterized by listening, validating relationships as well as instrumental support when needed. Emotional support inside therapy is the foundation for the therapeutic effectiveness of the following three emotion processing principles: (1) increasing awareness of emotion, (2) enhancing emotion regulation, (3) transforming emotion. These three principles act as a general guide for working with emotion. They help understand the different goals of emotion-focused intervention and explain how to work with different types of emotion at different times.

Emotion Awareness

The first and most general goal in Emotion-focused therapy is the promotion of emotional awareness. The goal in EFT treatment is for clients to become aware of their primary emotions and more specifically their primary adaptive emotions. Increased emotional awareness is therapeutic in a variety of ways. Becoming aware of and symbolizing core emotional experience in words provides access both to the adaptive information and action tendency in the emotion. Awareness helps people make sense of their experience and promotes assimilation of it into their ongoing self-narratives. It is important to note that emotional awareness is not thinking about feeling, it involves feeling the feeling in awareness. Only once emotion is felt does its articulation in language become an important component of its awareness.

The therapist works with clients to help the client approach, tolerate and regulate as well as accept their emotions. Acceptance of emotional experience as opposed to its avoidance is the first step in awareness work. Having accepted the emotion rather than avoided it the therapist then helps the client in the utilization of emotion. Here the client learns how to utilize the emotion that they have become aware of and accepted to improve coping. Clients are helped to make sense of what their emotion is telling them and to identify the goal/need / concern that it is organizing them to attain. Emotion is thus used both to inform and to move.
Emotion awareness has now been grounded in a measure of levels of emotional awareness (LEAS) developed by Lane and associates (Lane, Quinlan, Schwartz, Walker & Zeitlin, 1990; Lane & Schwartz, 1987). Five levels of emotional awareness are measured. In ascending order these are physical sensations, action tendencies, single emotions, blends of emotion, and blends of blends of emotional experience (the capacity to appreciate complexity in the experiences of self and other). The dynamic interaction between phenomenal experience, establishing a representation of it, elaborating that representation (e.g., identifying the source of the emotional response) and integrating it with other cognitive processes are the fundamental processes involved in the cognitive elaboration of emotion addressed by the levels of this measure. LEAS has been found to correlate significantly with self-restraint and impulse control. This finding, replicated in independent samples, indicates that greater emotional awareness is associated with greater self-reported impulse control. Individual differences in emotional awareness have also been found to predict recovery of positive mood and decrements in ruminative thoughts following a distressing stimulus (Salovey, Mayer, Golman, Turvey, & Palfai, 1995).

Awareness of emotion also involves overcoming avoidance of emotional arousal and the promotion of emotional processing (Foa & Kozak, 1986; Greenberg & Safran, 1987). There is a strong human tendency to avoid painful emotions. Normal cognitive processes often distort or interrupt emotion and transform adaptive unpleasant emotions into dysfunctional behavior designed to avoid feeling. To overcome emotion avoidance clients must first be helped to approach emotion by attending to their emotional experience. This often involves changing the cognitions governing their avoidance. Then clients must allow and tolerate being in live contact with their emotions. These two steps are consistent with notions of exposure. There is a long line of evidence on the effectiveness of exposure to previously avoided feelings (Foa & Jaycox, 1998). From the experiential perspective, however, approach, arousal and tolerance of emotional experience is necessary but not sufficient. Optimum emotional processing involves in addition, the integration of cognition and affect (Greenberg, 2002; Greenberg & Pascual-Leone, 1995; Greenberg & Safran, 1987; Pos & Greenberg, 2003). Once contact with emotional experience is achieved, clients must also cognitively orient to that experience as information, and explore, reflect on, and make sense of it.

Emotional expression has recently been shown to be a unique aspect of emotional processing that predicts adjustment to breast cancer (Stanton et al., 2000). Women who coped with cancer through expressing emotion had fewer medical appointments, enhanced physical health and vigour and decreased distress compared to those low in expression. Expressive coping was also related to increased quality of life for those who perceived their social environment to be highly receptive. Analyses suggested that expressive coping enhanced the pursuit of goals, but that this was mediated by hope. Emotional arousal, awareness and in some situations its expression therefore appears to be therapeutic aspects of emotional processing. Expressing emotion in therapy does not involve the venting of emotion but rather expressing strongly experienced emotions in therapeutic environments rather than constricting them.

In addition to the informational value of emotion awareness, symbolizing emotion in awareness promotes reflection on experience to create new meaning and this helps people develop new narratives to explain their experience (Greenberg & Pascual-Leone, 1995; Guidano, 1995; Pennebaker, 1990; Watson & Greenberg, 1996; Whelton & Greenberg, 2000). For example, symbolizing traumatic emotion memories in words helps promote their assimilation into a person’s ongoing self-narrative (Van der Kolk, 1995). Putting emotion into words thus allows previously unsymbolized experience in emotion memory to be assimilated into people’s conscious, conceptual understandings of self and world where it can be organized into a coherent story. In addition, once emotions are in words they allow people to reflect on what they are feeling, create new meanings and evaluate their own emotional experience.

EMOTION REGULATION

The second principle of emotional processing involves the regulation of emotion. Important issues in any treatment are what emotions are to be regulated and how these emotions are to be regulated. Emotions that require regulation generally are either secondary emotions, such as despair and hopelessness, or primary maladaptive emotions such as the shame of being worthless, the anxiety of basic insecurity and/or panic.

Clients with under-regulated affect have been shown to benefit both from validation and the learning of emotion regulation and distress toler-
EMOTION TRANSFORMATION

The third and probably most fundamental principle of emotional processing involves the transformation of one emotion into another. Although the more traditional ways of transforming emotion either through their experience, expression and completion or through reflection on them to gain new understanding do occur, we have found another process to be more important. This is a process of changing emotion with emotion. This novel principle suggests that a maladaptive emotional state can be transformed best by undoing it with another more adaptive emotion. In time the co-activation of the more adaptive emotion along with or in response to the maladaptive emotion helps transform the maladaptive emotion. Spinoza (1967) was the first to note that emotion is needed to change emotion. He proposed that ‘An emotion cannot be restrained nor removed unless by an opposed and stronger emotion’ (Spinoza, 1976, p. 195). Reason clearly is seldom sufficient to change automatic emergency-based emotional responses. Darwin (1897) on jumping back from the strike of
a glassed in snake, noted that having approached it with the determination not to start back, that his will and reason were powerless against the imagination of a danger which he had never even experienced. Rather than reason with emotion one can transform one emotion with another. While thinking usually changes thoughts, only feeling can change emotions.

Empirical evidence is mounting to support the importance of a process of changing emotion with emotion. Parrot and Sabini (1990) early on found that mood repair occurs by people recalling events that counteract both sad and happy moods and that this is done without awareness. In a further interesting line of investigation positive emotions have been found to undo lingering negative emotions (Fredrickson, 2001; Fredrickson & Levenson, 1998). The basic observation is that key components of positive emotions are incompatible with negative emotions. The experience of joy and contentment were found to produce faster cardiovascular recovery from negative emotions than a neutral experience. These results suggest that positive emotions fuel psychological resilience. In a further study Tugade and Fredrickson (M. Tugade & B. Frederickson, paper presented at the meeting of the International Society for Research in Emotion, Quebec City, August 2000) found that resilient individuals cope by recruiting positive emotions to regulate negative emotional experiences. They found that these individuals manifested a physiological bounce back that helped them to return to cardiovascular baseline more quickly. In a study of dealing with self-criticism Whelton and Greenberg (2000) found that people who were more vulnerable to depression showed more contempt but also less resilience in response to self-criticism than peoples less vulnerable to depression. The less vulnerable people were able to recruit positive emotional resources like pride and anger to combat the depressogenic contempt and negative cognitions. These studies together indicate that emotion can be used to change emotion.

Davidson, also suggests that the right hemispheric, withdrawal-related, negative affect system can be transformed by activation of the approach system in the left prefrontal cortex. He defines resilience as the maintenance of high levels of positive affect and well-being in the face of adversity and highlights that it is not that resilient people do not feel negative affect but that what characterizes resilience is that the negative affect does not persist (Davidson, 2000). Levenson (1992) has also reviewed research that indicates that specific emotions are associated with specific patterns of autonomic nervous system activity providing evidence that different emotions change one’s physiology differentially. Emotion also has been shown to be differentially transformed by peoples’ differing capacity to self-generate imagery to replace unwanted, automatically-generated emotions with more desirable imagery scripts (Derryberry & Reed, 1996) suggesting the importance of individual differences in this domain.

Bad feelings appear thus to be able to be replaced by happy feelings, not in a simple manner by trying to look on the bright side, but by the evocation of meaningfully embodied alternate experience to undo the negative feeling. For example in grief, laughter has been found to be a predictor of recovery. Thus being able to remember the happy times, to experience joy, helps as an antidote to sadness (Bonanno & Keltner, 1997). Warmth and affection similarly often is an antidote to anxiety. In depression a protest-filled, submissive, sense of worthlessness can be transformed therapeutically by guiding people to the desire that drives their protest—a desire to be free of their entrapment. Isen (1999) notes that it has been hypothesized that at least some of the positive effect of happy feelings depends on the effects of the neurotransmitters involved in the emotion of joy on specific parts of the brain that influence purposive thinking. Mild positive affect has been found to facilitate problem solving. There is growing evidence that positive affect enhances flexibility, problem solving and sociability (Isen, 1999). In addition research on mood congruent judgement has shown that moods effect thinking and types of reasoning (Mayer & Hansan, 1995; Palfia & Salovey, 1993). Shifts in mood lead to shifts in thinking. Good moods lead to optimism, bad moods to pessimism. In a different line of research on the effect of motor expression on experience Berkowitz (1999) reports a study on the effect of muscular action on mood. Subjects who had talked about an angering incident while making a tightly clenched fist reported having stronger angry feelings, whereas fist clenching led to a reduction in sadness when talking about a saddening incident. This indicates both the effects of motor expression on intensifying congruent emotions but on dampening other emotions. Thus it appears that the expression of even the muscular expressions of one emotion can change another emotion. In addition, in line with the James Lange theory, Flack, Laird and Cavallaro (1999) have demonstrated that adopting the facial,
postural and vocal expressions of an emotion increases the experience of the emotion whether or not the subject is aware of what emotion they are expressing. The experience of an emotion to some degree can thus be induced or intensified by putting one’s body into its expression. It is interesting to note that there are individual differences in this capacity, with those who are more body sensitive showing this tendency to a greater degree. A more general line of research in social psychology on the effects of role playing on attitude change, also supports the idea that performing actions in a role brings people’s experience and attitudes in line with the role (Zimbardo, Ebensee, & Malasch, 1997). Thus role-playing can transform what is at first not real into something real, as saying something can lead to believing it (Myers, 1996). Thus a possible way to evoke another emotion is to have people role-play its expression. As they express an emotion it will change their experience towards the expression.

In psychotherapy research music has been found to be helpful in evoking alternate emotions and even more helpful than imagery for changing emotion (Russell, 1992). Right frontal EEG activation normally associated with sad affect was shifted toward symmetry by both massage and music (Fields, 1998). Shifts to more positive mood or at least to symmetry between sad and happy affect were accompanied by shifts from right to left frontal EEG activation, in both mothers and children (Fields, 1998).

Finally results of our single case investigations of therapies of depression combined with the larger groups studies, relating emotional arousal to outcome (Greenberg, 2002; N. Warwar & L. Greenberg, paper presented at the International Society for Psychotherapy Research, Annual Meeting, Braga, Portugal, June, 1999), supported the principle that emotional arousal, and the attendant replacement of emotion with emotion, occurred significantly more in good than in poor outcome cases. In a number of intensive analyses of good outcomes we found reductions in shame and fear and increases in anger, sadness, contentment and joy. The patterns of emotional transformation however were idiosyncratic. Which emotions replaced which were idiosyncratic to each case.

It is important to note that the process of changing emotion with emotion goes beyond ideas of catharsis or completion, exposure or habituation, in that the maladaptive feeling is not purged, nor does it simply attenuate by the person feeling it. Rather another feeling is used to transform or undo it. Although exposure to emotion at times may be helpful to overcome affect phobia in many situations in therapy, change occurs because one emotion transforms into or is replaced by another emotion rather than simply attenuating. In these instances emotional change occurs by the activation of an incompatible, more adaptive experience that undoes or transforms the old response.

Clinical observation and our descriptive research suggest that emotional transformation often occurs by a process of dialectical synthesis of opposing schemes. When opposing schemes are co-activated they synthesize compatible elements from the co-activated schemes to form new higher level schemes, just as in development when schemes for standing and falling in a toddler, are dynamically synthesized into a higher level scheme for walking (Greenberg & Pascual-Leone, 1995; Pascual-Leone, 1991). Schemes of different emotional states similarly are synthesized to form new integrations. Thus in therapy maladaptive fear, once aroused, can be transformed into security by the more boundary-establishing emotions of adaptive anger or disgust, or by evoking the softer feelings of compassion or forgiveness. Similarly maladaptive anger can be undone by adaptive sadness resulting in acceptance. Maladaptive shame can be transformed into acceptance by accessing both anger at violation, self-comforting compassion and by accessing pride and self worth. Thus the tendency to shrink into the ground in shame is transformed by the thrusting forward tendency in newly accessed anger at violation to produce confidence. Withdrawal emotions from one side of the brain are transformed by approach emotions from another part of the brain or vice versa (Davidson, 2000).

How then are new emotions accessed? How does a therapist help people in the midst of their maladaptive experience to access emotions that will help them transform their maladaptive feelings and beliefs? A number of ways are listed below (see Greenberg (2002) for a fuller description of methods of accessing new emotions).

**Shift Attention**

Shifting people’s focus of attention to pay attention to a background or subdominant feeling is a key method of helping them change their states. The subdominant emotion is often present in the room non-verbally in tone of voice or manner of expression.
Access Needs/Goals
Ask clients, when they are in their maladaptive state, what they need to resolve their pain. Raising a need or a goal to a conscious self-organizing system opens a problem space to search for a solution. At the affective level it conjures up a feeling of what it is like to reach the goal and opens up neural pathways both the feeling and the goal.

Positive Imagery
Imagination is a means of bringing about an emotional response. With practice people can learn how to generate opposing emotions through imagery and use these as an antidote to negative emotions.

Expressive Enactment of the Emotion
Ask people to adopt certain emotional stances and help them deliberately assume the expressive posture of that feeling and then intensify it. Thus you might use psychodramatic enactments and instruct your client to ‘try telling him I’m angry. Say it again, yes louder. Can you put your feet on the floor and sit up straight?’ Coach the person in expressing until the emotion is experienced.

Remember Another Emotion
Remembering a situation in which an emotion occurred can bring the memory alive in the present.

Cognitively Create a New Meaning
Changing how one views a situation or talking about the meaning of an emotional episode often helps people experience new feelings.

The Therapist Expresses the Emotion for the Client
The therapist might express the outrage, pain or sadness the client is unable to express.

Utilizing the Therapy Relationship to Generate New Emotion
A new emotion is evoked in response to new interactions with the therapist.

CASE EXAMPLE
This therapy focused on a client with multiple presenting concerns, including major depression, anxiety disorder and interpersonal problems overcoming her core maladaptive fear by accessing her sadness at loss and anger at violation, and mobilizing her current abilities to protect herself. Three major means of accessing new emotions are exemplified, shifting attention, accessing needs and expressive enactment. Having spent the first three sessions establishing an empathic bond the therapy first focused on her primary fear of her abusive parents and her fear of her dependence/weakness and vulnerability. Her frequent expressions of shame and embarrassment in therapy were often mixed with her fear. Her parents had disciplined her with harsh criticism and ridicule, as well as physical abuse, and she stated that her greatest pain was that ‘they never believed in me’. She was called stupid, crazy, a whore and a slut and grew up utterly paralysed in interpersonal relationships. Interventions were aimed at becoming aware of and accessing her fear and shame in the session by talking about her childhood. This led to experiencing and reprocessing these emotions and to a strengthening of her sense of self.

One of her earliest memories was of her father forcing her and her siblings to watch him drown a litter of kittens. This was to ‘teach her a lesson about life’ and the client believed that he enjoyed it. The client accessed a core self-organization, which included her ‘suppressed scream of horror’ from this experience. While imaginably reliving this scene in therapy the therapist guided her attention to the expression of disgust in her mouth while she was feeling afraid. This mobilized this subdominant adaptive emotion as a resource to begin building a stronger sense of self. Rather than feeling afraid she accessed her alternate emotions of disgust and anger, which she actively expressed toward her father in an empty chair. She mobilized her adaptive needs to not be violated by her father and to be protected by her mother and expressed these to her parent in the empty chair dialogues. Expression and exploration of her vulnerability (fear and sadness) took place, not to the imagined father, but in the affirming and safe dialogue with the therapist.

There often were times of shame mixed with fear in therapy. For example, in evoking the shame in the session she felt small and insignificant in front of her imagined parents, at first she was completely unable to imagine facing them or to look them in
the eye, and shrank away from being the object of their scorn. The shame associated with her father was mixed with fear and disgust at recalling his sexual innuendoes. These imaginary confrontations with the father evoked her fear and her painful memories of childhood beatings, of being told she was bad, and of being aware of nothing but her desperate need to escape. The therapist responded supportively to her overwhelming fear and powerlessness at the time and asked how she felt, now, as she thought about herself as a little kid going through that and what she had needed. This directed attention to her internal experience and helped her access and express her primary anger at being treated so cruelly. Access to her primary adaptive emotion mobilized her self-protective responses, and she began to stand up for herself saying such things to him as ‘I don’t really think I was bad, you are bad’. Her anger undid her fear and the therapist supported the client’s newfound sense of power, heightening her awareness of her strengths. This motivated further assertion and self-validation. The client acknowledged that she was worthy and had deserved more than she got from her parents. She began to create a new identity narrative, one in which she was worthy and had unfairly suffered abuse at the hands of cruel parents. She also began to feel that it would be possible to need love and that she was now open to learn to love.

CONCLUSION

EFT suggests that it is important to access primary emotions. A two-phase process of arriving and leaving is proposed. When the core emotion arrived at is adaptive then it is used as a guide to action which promotes leaving of that emotion. In this process often the symptomatic secondary emotions, such as, feeling upset, despairing, hopeless are evoked first in therapy, then the core primary adaptive emotion such as sadness of grief or empowering anger are accessed and validated. This involves a two-step sequence of moving from secondary to adaptive primary emotion. A more complex three-step sequence is required to transform maladaptive core emotion. In this sequence, first the secondary emotion is evoked, then core maladaptive emotions, such as shame, fear or anger are arrived at. These are then transformed by accessing adaptive emotions such as anger, sadness and compassion and the maladaptive state is left behind. Finally once adaptive emotions have been accessed to guide action and transform maladaptive emotions, experience is reflected on and incorporated into new views of self that are used to transform personal narratives.

REFERENCES


