Activating the Corrective Emotional Experience



Michael R. Bridges Temple University

Since the concept of the corrective emotional experience was first introduced, an impressive body of research has supported the contention that patient in-session processing of painful emotional conflicts within a safe and empathic relationship is necessary for therapeutic change. In this article, I summarize what we know about how emotions can be accessed, expressed, and processed within the therapeutic relationship to bring about a corrective emotional experience. I then provide clinical vignettes and data on three patients, all of whom displayed distinct patterns of arousal, experience, expression, and depth of processing that were differentially related to outcome in short-term emotion-focused therapy. © 2006 Wiley Periodicals, Inc. J Clin Psychol: In Session 62: 551-568, 2006.

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It has been nearly 60 years since Alexander and French (1946) coined that evocative and oft-cited phrase "the corrective emotional experience" to describe the transformation of painful emotional conflicts within the therapeutic relationship. Their definition of the corrective emotional experience as "reexperiencing the old, unsettled conflict but with a new ending" emphasized the importance of working through painful emotional conflicts by experiencing new and more adaptive feelings within the therapeutic relationship. In addition, in a radical shift away from the prevailing technical neutrality that dominated the psychoanalytic technique of the time, they explicitly emphasized the importance of the therapist's actively providing empathy, compassion, and encouragement as an integral part of this corrective emotional experience.

Over the years, an impressive body of research (e.g., Greenberg, this volume; Kennedy-Moore & Watson, 1999; Pos, Greenberg, Goldman, & Korman, 2003; Wiser & Arnow, 2001) has supported Alexander and French's contention that patients' in-session experiencing and processing of painful unresolved emotions in a safe and empathetic therapeutic relationship are necessary to bring about this "new ending" and, thus,

Correspondence concerning this article should be addressed to: Michael R. Bridges, Ph.D., Temple University, Department of Psychology, 1701 N. 13th Street, Philadelphia, PA 19122; e-mail: mrbridge@temple.edu



therapeutic change. However, exactly what types of emotions should be accessed, how intensely they should be expressed, how expression relates to physiological arousal, and what exactly the therapist does to help the patient bring about a corrective emotional experience have remained sources of debate (Kennedy-Moore & Watson, 1999; Littrell, 1998).

In this article, I present clinical vignettes accompanied by in-session data that include operational measures of what most emotion theorists (e.g., Kennedy-Moore & Watson, 1999) would agree are four key components of emotion: (1) Emotional arousal relates to the physiological aspects of emotion, primarily autonomic nervous system activity. In the following arousal is operationally defined as patient in-session cardiovascular activity recorded via a noninvasive but highly accurate wristwatch cardiac monitor. (2) Emotional experience is the patient's subjective, felt sense of the quality and intensity of emotions and in this study involves responses on various emotion and process measures (e.g., Derogatis Affect Balance Scale (DABS; Derogatis, 1975) at the end of each session. (3) Emotional expression involves observable verbal and nonverbal expressive behaviors such as facial expression, gestures, and tone of voice. The measure of expression used is trained observers' ratings from session videos of type and intensity of emotions using the Specific Affects Coding System (SPAFF; Gottman, Coan, Collier, & McCoy, 1996). Finally, and of great importance for psychotherapy, (4) emotional processing as defined here involves the meaningful integration of emotion and cognition, resulting in emotional insight and a reorganization of the patient's sense of self and/or others and improved ability to resolve problems and respond adaptively. In the following, emotional processing is operationally defined as observer ratings from session videotapes of the patient's level of processing using the Experiencing Scale (EXP; Klein et al., 1969).

What Is the Optimal Level of Therapeutic Emotional Arousal?

Psychotherapists from a variety of orientations seem to agree that there is an optimal level of emotional arousal for effective psychotherapy. The idea of an optimal level of emotional arousal is similar to the Yerkes-Dodson law, which hypothesizes an inverse U-shaped relationship between arousal and performance on complex tasks. After an optimal level of arousal has been surpassed, performance starts to deteriorate along with a subjective shift from one of motivated interest to one of anxiety or feeling of being overwhelmed. In a similar vein, behavior therapists have long noted that for techniques such as systematic desensitization and exposure to be effective the patient must become emotionally aroused in the session, but such arousal must dissipate over the course of the session (Foa & Kosak, 1986; Littrell, 1998). A patient who is too aroused may be so emotionally and physiologically flooded that cognitive skills necessary for both modulating emotional arousal and making it meaningful may not be available. On the other hand, if the patient is minimally aroused, the underlying problematic emotional schema is not fully accessed and no desensitization can occur.

More experientially oriented therapists have used different terms but in a similar vein have emphasized the importance of establishing an optimal level of emotional arousal in the therapy session. Gendlin (1981) coined the phrase working distance; Sigal (1999) emphasized the importance of operating within the patient's window of tolerance. The idea that therapists from different orientations agree on is that emotional arousal must reach but not exceed this optimal zone for the patient to access his or her emotional experience in order to integrate and process this experience in a way that leads to resolution of problematic emotional reactions. Most of us, however, are unable actually to observe our patients' physiological arousal and must infer it from their expression or

self-report. One of the unique aspects of the following case presentations is that all patients' in-session cardiovascular arousal was recorded via noninvasive but highly accurate wristwatch cardiac monitors. Heart-rate graphs that illustrate clinical vignettes allow the reader to relate the patient's actual level of arousal to the in-session process.

Do Positive Emotions Contribute to the Processing of Negative Emotions?

Even a cursory review of the psychotherapy literature of the past 20 years reveals that the primary focus has been on the reduction of negative emotions such as depression and anxiety or on the processing of negative emotions such as sadness and anger, and not on experiencing or processing positive emotions (Littrell, 1999). There has even been a tendency to view positive emotions as primarily appearing as the result of the change process and not as an essential component of that process (Greenberg & Paivio, 1997). It is now clear that the experience and expression of positive emotions such as love, compassion, gratitude, and forgiveness are essential for adaptive and healthy functioning across a multitude of human endeavors ranging from individual coping with bereavement and trauma, to marital relationships, and even to corporate team building (e.g., Bonnano & Keltner, 1997; Fredrickson, 1998, 2005; Kennedy-Moore & Watson, 2001). There are indications that in psychotherapy a shift from negative to positive emotions is often an indication of significant emotional processing and resolution (Fosha, 2000; Greenberg & Safran, 1987; Kennedy-Moore & Watson, 2001). For example, increasing of positive affect during psychotherapy with depressed patients has been found to be as important as the reduction of negative affect and, in terms of preventing depressive relapse, even more important (Derogates, 1996). Emotional processing that leads to therapeutic change is frequently associated with positive emotions regarding the self associated with mastery, such as joy, exuberance, and pride, as well as positive feelings toward others such as gratitude and love (Fosha, 2000).

Of particular relevance to the question of how positive emotions may impact emotional processing in psychotherapy are Tugade and Frederickson's (2003) findings that resilient individuals cope with adversity and associated negative emotions by using positive emotions to modulate their experience. Additionally, negative emotions tend to narrow and limit perceptions and appraisals, for example, when afraid to scan and attend to only potential threats while simultaneously increasing cardiovascular activity that prepares the body for specific actions (e.g., fight or flight). In contrast, numerous studies have shown that positive emotions broaden one's thought-action repertoire while also "undoing" the physiological arousal associated with negative emotions and specific action tendencies (see Fredrickson, 2005, for a review). One of the aims of this article is to provide examples of a similar pattern in therapy in which patients express intense levels of negative emotions, such as grief and sadness, which, as expected, lead to an intense increase in their cardiovascular arousal. However, as the patients are able to access positive memories and emotions to regulate and make sense of the experience, they experience a similar pattern of physiological "undoing," as reflected in a rapid cardiovascular recovery. Positive affect and "broad-minded" coping and problem solving serially enhance one another (Fredrickson & Joiner, 2002). Such findings suggest that positive emotions may not only appear as a result of successful processing of negative emotions, but be an integral, and perhaps overlooked part of modulating and deepening this processing.

Emotional Processing and the Experiencing Construct

Early cognitive-behavioral views of emotional processing (e.g., Foa & Kozak, 1986; Rachman, 1980) primarily focused on pathological fear and anxiety and defined emo-

tional processing as decreases in emotional arousal due to activating the fear state while providing new information or responses that are inconsistent with the maladaptive fear structure. Experientially oriented psychodynamic (Fosha, 2000, this volume) and emotion-focused approaches (Elliot et al., 2004; Greenberg, this volume; Pos et al., 2003) have viewed emotional processing in a broader sense: not solely in terms of decreases or increases in physiological arousal or subjective discomfort but as more of a dialectical process, involving the meaningful integration of emotion and cognition in session that results in the reorganization of the patient's tacit sense of self and others and an improved ability to resolve problems and respond accordingly (Greenberg & Safran, 1984; Pos et al., 2003; Wisner & Arnow, 2001).

Examining levels of patient in-session emotional experience by using the Experiencing Scale (EXP; Klein, Mathieu, Gendlin, & Kiesler, 1969) provides a sound operational measure of the emotional processing continuum (from low to high; Pos et al., 2003). The EXP scale measures the degree to which patients orient to their internal experience, symbolize this experience in language, and use this information in the solving of their problems. Raters who use the EXP scale use grammatical, expressive, and content distinctions to classify segments of therapy according to a 7-point, ordinal scale.

Because the levels of the EXP scale are used in the following case examples, a brief description of each level follows. At level 1, patients are objective and intellectual in their accounts, giving no evidence of the emotional significance of the events they describe. At level 2, patients give nonverbal or behavioral evidence of the personal relevance of material but do not explicitly refer to their emotions or internal reactions. At level 3, more journalistic narratives of external events are the patients' primary focus, but occasional, brief references to emotions and feelings give them a more personal feel. Level 4 denotes a marked shift in focus to the patients' more immediate, internal experience of emotions and their personal meaning. Feelings and emotions become more of the focus than events. At level 5, patients begin to pose problems and explore questions about themselves in terms of their emotions as they struggle to understand the meaning of their reactions and experiences. At level 6, marked shifts in meanings and emotions occur and positive feelings of resolution and relief are expressed. At level 7, shifts and understandings the patient has worked through in one particular area of personal experience are broadened and generalized to a wider range of personal experiences to find clarity and meaning, and expression is "often euphoric, buoyant, or confident; the speaker conveys a sense of things falling quickly and meaningfully into place" (Klein et al., 1969). I elaborate on the relationship between positive emotions and emotional processing in the Discussion.

Three Case Illustrations

I have selected three patients from an ongoing research project based on helping patients resolve interpersonal injuries with attachment figures from their past. Each of these patients displayed a characteristic pattern of emotional arousal, expression, experience, and processing that differentially related to psychotherapy outcome. To illustrate aspects of the preceding discussion and provide clinical relevance, I selected one patient who rapidly responded in terms of symptom reduction and problem resolution; another, who had more intense negative mood and emotional processing difficulties but eventually derived great benefit; and one patient who clearly neither engaged in nor benefited from treatment.

These three patients displayed individual patterns consistent with those described in the literature (e.g., Kennedy-Moore & Watson, 1999). Patient 1 displayed a pattern of *venting*, defined as the tendency to ruminate on whatever distress one is experiencing and to verbalize those feelings in an affect-laden manner (Carver et al., 2005). Patient 2

manifested a pattern of *emotional interruption*, defined as the interruption of adaptive emotional processing in therapy after the emotion has been accessed by returning to a more superficial level of emotional processing. Finally, Patient 3 provides a poignant example of the therapeutic expression of unresolved grief. She allows herself to cry deeply which results in a marked increase in heart rate. However, with the therapist's assistance, she is able to access and incorporate positive memories and emotions resulting in both a sense of resolution and rapid cardiovascular recovery.

Patient 1

Emotional venting as a means of expressing negative emotions may lead to a temporary reduction of stressful physiological reactions. Thus, "the process of venting may temporarily exhaust the body's capacity for emotionality, thereby establishing limited control over intrusive thoughts and feelings" (Carver et al., 2005).

Patient 1 was a 48-year-old woman in her second marriage with three grown children. Her primary unresolved emotional conflict was with her deceased first husband, who, although wealthy and a successful businessman, was an alcoholic who had died in an alcohol-related auto accident more than 15 years ago. She reported lingering feelings of guilt related to his death but also a great deal of anger and resentment because he had died without a will and she did not believe she received a fair share of his estate.

Initial structured diagnostic interviewing revealed great dissatisfaction in both work and intimate relationships, but only transient anxiety and dysphoric mood, which did not clearly meet any diagnostic criteria. Given how unhappy she reported being in multiple relationships related to both home and work, it was surprising to find that she reported only minimal pretreatment levels of depression (Beck Depression Inventory-II [BDI-II] = 13), global distress (Symptom Checklist-90 [SCL-90], General Stress Index [GSI] = T score of 58), or problems in functioning (Outcome Questionnaire-45 [OQ-45] Total = 31).

Patient 1 was able to "fly under the radar" of a both a comprehensive diagnostic interview and a battery of pretreatment measures that included several shown to be sensitive to personality disorders and emotional liability. Although patient 1 reported only minimal levels of dysphoric mood and difficulty in functioning during the initial interview and on self-report measures, over time in psychotherapy she reported frequent arguments, labile mood, sporadic substance abuse (primarily marijuana), and mistreatment of others with no remorse. This patient had a severe personality disorder with prominent borderline features. Concern has been expressed that short-term, emotion-focused approaches may not be appropriate for patients who have borderline features because of concerns that they will become emotionally overwhelmed and disorganized. However, the opposite problem emerged in patient 1, as all measures of arousal, expression, and processing indicated that she had great difficulty accessing emotions in sessions. On self-report measures she often endorsed experiencing intense levels of negative emotion such as anger or sadness that were not consistent with either her cardiovascular arousal or observer ratings of intensity of expression.

The following exchange is 10 minutes into session 11. Figure 1 shows a graph of her heart rate for this session and the following excerpt begins at time 3:47 and ends at 3:52. The patient has been speaking in a pressured manner about various aspects of her week and the therapist appears to be struggling to get a word in.

PATIENT (P): So anyway, on Sunday my dog had a stroke. THERAPIST (T): Oh my God!

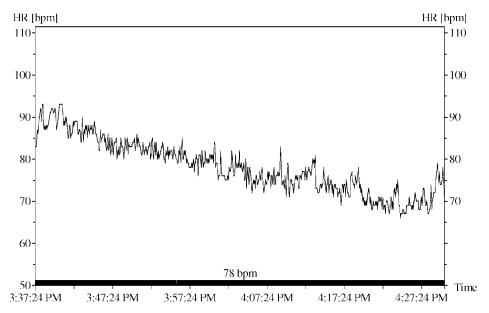


Figure 1. Heart rate of patient 1: emotional venting, superficial processing, and cardiovascular rigidity.

The patient continues speaking in a pressured manner and makes only intermittent eye contact with therapist. Although she is speaking of an apparently distressing event, other than her pressured speech and a slight, forced smile, there are no nonverbal expressions of emotion.

- P: Uh-huh. And he is about to die. I'm pretty sure it is a stroke, because he is paralyzed on the right side and has a high temperature. So I give him antibiotics and go to work, not knowing if he is going to live or die. So he is barely alive and I hold him. And then G (current husband) calls on Monday and I say, "So say good-bye to the dog." I put him on the phone so he could say good-bye and . . . somehow the dog came out of it. He's walking and he's fine. So during that time G tries to call to see how the dog is. He calls and leaves a message he's going to the movies with the group, and then he calls the next day and he's going to dinner with the group. And I figure, he's having a good time and I'm nursing this dog. (shakes her head and rolls her eyes) So, on Tuesday morning I wake up and I can't move my neck!
- T: Oh gosh what . . .
- P: (doesn't pause for therapist to finish question) And I'm in severe pain and I went to the doctor and he said it was just totally swollen, and I went to the acupuncturist and he said that my neck muscles were so tight that my neck muscles were so tight (clenches fist to illustrate) that the blood couldn't get into that area, then I went to the chiropractor this morning and . . . I'm pretty sure that I'm a little bit nervous about living a lie . . . I mean . . . (trails off and pauses for a moment)
- T: Well, tell me about this. You mentioned you were crying at the lawyer's office; what was that about?
- P: Well, first I was crying because he told me . . . that if it wasn't for the prenuptial the way G had written it, then I would have had to leave him the money. I would have had to sit him down and . . . so he pays the life insurance premiums so in a way he is entitled to them or we pay them. And second of all we've been living together and the

[individual retirement accounts] IRAs and what we had before and really what I think fair is he should not get anything, and the other thing the lawyer told me that was real interesting was that . . .

This patient continues in this manner for the rest of the session. This vignette is typical of most of her sessions. Even in this brief excerpt, there are moments when the patient's feelings seem about to surface. Her general tone is one of blame, complaint, and resentment toward her husband for being away and enjoying himself while she is left to deal with the dog's illness. Yet, at no point does she mention that she is angry or even irritated. Her inability to put her anger into words and its relationship to her later waking with a "pain in the neck" almost cries out for interpretation. When she does mention her feelings, it is in regard to the puzzling, perhaps existential statement of feeling "nervous about living a lie." When the therapist makes an explicit attempt to inquire about her feelings related to the recent incident when she had started crying, she responds not by referring to her emotions but by instead focusing on legal details. The overall impression is one of the patient's skipping over the surface of her emotional life via her pressured, externally focused speech as a stone skips over the surface of water.

To summarize, this patient with a "venting" style displayed a pattern characterized by (1) high initial heart rate (HR) with little variability that gradually decreased from beginning to end of session; (2) rapid, incessant speech involving low-intensity expression of negative emotions, primarily complaint, resentment, and externalized blame of others; (3) very low levels of emotional processing (e.g., EXP < 2) characterized by an external focus on frustrating others and events with few references to their personal relevance or meaning or her immediate in-session experience; and (4) self-reports of experiencing intense negative emotions during sessions that were incongruent with her observable emotional behavior.

One of the most surprising and interesting findings was that, on a purely physiological level, venting works! This patient showed an average decrease in heart rate from the beginning to end of each session of at least 18 beats per minute (bpm) for 9 of 12 sessions. If one were using progressive relaxation or desensitization and focusing only on decreased arousal as a measure, treatment would appear to be going very well indeed. Although this is obviously not the case, at least for this patient the opportunity to go to a session each week and "get out feelings" while experiencing a very real sense of physiological relief appeared to be very reinforcing in the short term but resulted in little if any long-term change.

Patient 2

The second patient was a 50-year-old divorced female with three grown children who had unresolved feelings of anger and resentment caused by her discovery that her fiancé and her younger sister were having an affair. Two years had passed but she continued to ruminate about the circumstances of the affair and how she might have prevented it. Although she was able to continue functioning reasonably well at her job, she had withdrawn from friends and family and felt emotionally depleted. A pretreatment diagnostic interview revealed both dysthymic disorder and a current major depressive episode. Her pretreatment self-report measures revealed severe depression (BDI-II = 36), high levels of global distress (SCL-90 GSI = 74), and substantial dissatisfaction with her overall quality of life.

As this exchange begins, the patient is near the end of her first session. During most of this time she has been speaking at a rapid pace as she lists a multitude of events that led

to the discovery of the affair. There is a shift in tone as she starts to discuss her supportiveness of her sister over the years, and the way that added to the pain of her betrayal. Her heart rate as the transcript begins is at 90 beats bpm and this, along with her posture, vocal tone, and facial expression, suggests a tense but attentive state.

P: Whenever she asked me to be there for her . . . I would just go. I was always there when she asked. And I felt . . . I never . . . you know, it makes me kind of sick to just be listing these things, all that I did for her. But it makes a difference . . . to then find out what she had been doing during that whole period.

Here she is at EXP level 3, providing a personal narrative while noting her emotions and feelings but not elaborating on them. There is some element of self-disgust, "it makes me sick," expressed as she judges herself as falling into self-pity.

- T: So you had been so supportive and gone out of your way to make her life easier . . . and then to find that betrayal going on in the background. (*Therapist uses empathy and reflection to deepen emotional experience and strengthen alliance*.)
- P: Yes! And that she could look into my eyes and with that reality going on . . . it's really shaken my whole . . .

Here the patient pauses as if searching for words, shakes her head, and looks into the distance. Such pauses and struggles to articulate unclear feelings in words are often a sign of moving to a deeper level of emotional processing (Gendlin, 1981).

T: It sounds like it really shattered your whole view of yourself and those around you.

In response to the therapist's empathetic reflection, the patient silently nods her head, tears up, and reaches for a tissue. At the moment she starts to tear up, her HR increases from 81 bpm to 114 bpm. Partially because it is near the end of the session, the therapist decides not to comment on the patient's tears and sad expression but instead moves to providing information about how the therapy may be useful.

- T: Well, part of what we are going to be doing in here, you said before that you were not even really sure of how you felt about this. Part of what we are going to be doing is try to figure this out. (*HR has stayed at about 114 bpm.*)
- P: Some things, I do know how I feel about them! Very much! But I feel really confused about how I feel about certain things.

Patient tears up again at this point and dabs at her eyes with tissue. She looks down, glances at the therapist, and with a shy, vulnerable smile almost whispers, "Thank you for listening." The patient emphatically moves the focus back to her feelings and again attempts to put her confusing experience into words while expressing gratitude to the therapist. At EXP = 4, her feelings are more the focus than events, HR = 111 bpm.

T: Before we go, you started talking about exactly how you found out about the affair?

The therapist does not respond to the patient's shift in affect and expression of gratitude and instead directs the patient's awareness away from her immediate emotional experience to gathering of information from the past P: Oh! I got distracted, didn't I? I got off on something else, didn't I? Well, he picked me up and then we went to pick his son up. (*Her speech again becomes more pressured*.) And I had just moved to a new apartment. His son was in the backseat and he was kind of chattering and asking how my move was. And he said something about a model I had made of the floor plan

Her narrative shifts away from expressing and making sense of her immediate experience to a more detached, journalistic account of events. Although her interest in the events is clear, she makes no references to the meaning of these events or her feelings about them, indicating that she has now moved to a more superficial level 2 EXP. She continues in this vein for the rest of the session, and her heart rate takes more than 10 minutes to return to her average baseline for this session.

To summarize, the characteristics of emotional interruption include moderately intense expression of emotion, in this case, sadness, with a consequent moderate increase in cardiovascular arousal (from 90 to 114 bpm), an initial deepening of emotional processing as she starts to focus on her here and now emotional experience and struggles to put these feelings into words (e.g., "it's really shaken my whole . . . "; EXP = 4). Unfortunately, her therapist directs her away from her more immediate expression of sadness, gratitude to the therapist for her support, and processing of the betrayal, and she returns to a more superficial focus on past events (EXP = 2) that is accompanied by a long delay in cardiovascular recovery.

Compare this exchange characterized by an interruption of emotional processing with the following excerpt from session 5, in which the same patient accesses and expresses secondary anger and then moves on to accessing the more basic attachment injury and related sadness 35 minutes into session 4:

- P: How could she be at my son's graduation? It's such a conflict! I don't even want my kids knowing the burden of all that, and yet, it's there. She is so disingenuous. She would be there like, going through the motions like, "It's so wonderful that F. is graduating!" but she doesn't mean it; it doesn't give her joy. And, ahh! (*runs fingers through hair, looks exasperated*) I don't know how a person, I don't know what to do about that. (*EXP* = 3)
- T: I can imagine it is so conflicting to want her to be part of your life but to know that she really doesn't feel what she expressed when she is around. So I would like to suggest something that we've tried before. I want you to go back to that image you had of her a minute ago, that tight-lipped, really set jaw, and to put your sister here in this chair and to tell her why you don't want her to be at your son's graduation, how it makes you feel when you see her with that tight mouth and set jaw. All those things you were just saying, tell her how you feel. (*Therapist uses empty chair and empathetic reflection to facilitate emotional experience and strengthen alliance.*)
- P: (patient sighs, looks at empty chair, and pauses) Oh gosh... I can feel the expression of it... but it just feels so hopeless. Like what is the use of expressing it to her? She doesn't get it; she's just not capable; she's not able to receive any of this. I can kind of go through this exercise, but there is this overriding sense that it is fruitless. I have no hope whatsoever that it could prick her awareness. That turned down mouth, that set jaw, is there.
- T: So it feels like its just "what's the use," she'll never get it. So just tell her that . . . (points to empty chair) tell her how fruitless it feels.
- P: (*Patient leans forward in chair.*) I don't want to tell you anything that has any meaning, anything about my feelings, because you are so into yourself, and your decisions

- to really . . . harm yourself and harm others. God knows why. And it is just so extreme with you, there is just . . . left to work with.
- T: There is just nothing, nothing left. Tell her about the mask.
- P: (12:23) And that mask you wear, if you could just see the horror of it, the tragedy of it, the arrogance of it; if you could have any idea; with you, I don't know. You can't see it, and if you could, you wouldn't have the response; you wouldn't be horrified. You'd just resolve that it was going to be that way. You've just taken a stand in your life; this is the way you are going to be with people and there is nothing that is going to change it. There is no loss big enough to make you stop and fall to your knees and just say, "I've been wrong. I don't want this kind of life. I don't want to lose precious people. But it never works that way with you. . . . I mean . . . who's been a better friend to you than I have? You say you have no friends. And I've tried to be your friend. I've tried to comfort you." (11:24: She puts her head in her arms and begins to sob. HR jumps from 82 bpm to 115 bpm, and she sobs for about 20 seconds, unable to speak; then raises her head slowly and continues.) Growing up things were so hard. And we could be available to each other in ways that helped us get through it. And that all our history together, that I thought was such a connection, was so expendable to her. That was not worth protecting and being loyal to. (HR takes only about 55 seconds to recover back to baseline average for session, from 115 to 80 bpm.) (Shakes head and claps head together; moves to external reference)
- T: It is just so much more than just this one situation; there is such a shared history together, and there is the loss of that mutual comfort and support. And this hurt feeling that all that didn't mean as much to her as it did to you.
- P: (Nodding) Yeah. And there is more, not just that I didn't mean as much to her but that I was someone she wanted to act out against. There wasn't just that pure give and take that I thought our relationship was based on. There was another side to it, another strand to it that was really . . . dark and awful. And she really wanted to . . . hurt me actually. And I knew she had those kind of tendencies but I thought our relationship was so precious that she would never let it slip in. But she did this over a long period of time;, the deception she went through showed a lot of purpose and clarity . . . and . . . (long pause, sighs, face softens and looks sadder) (11:28: HR had dropped down but started back up as she took external blaming focus.)
- T: What is that? What is happening inside?
- P: (in a softer voice) Just the thing of having been her friend and having trusted her and wanting her in my life. It wasn't just a one-way street; I enjoyed her and there are ways I respected her opinion and enjoyed her company. And there are things from our past; we are repositories for each other. No one else went through those times. What a huge loss! I just feel like someone who has gone to war, and you come limping out, and maybe you've lost your home, you've lost your town; I've lost just a whole part of my life that has been wiped out and for what? Why?
- т: It seems too tragic.
- P: Yes, it's tragic. What does a person really have in life if they can't be replaced in one way or another? It's those bonds; those are precious and irreplaceable.

After moving to deeper level 4 EXP and exploring the impact of her shattered attachment to her sister and accessing childhood memories of the importance of their mutual dependency, her HR drops down to 61 bpm, the lowest in the entire session. In this case it appears that deeper emotional processing leads to more rapid cardiovascular recovery. This pattern is even more evident for the final patient.

The third patient is a 41-year-old woman who sought psychotherapy because of lingering feelings related to her discovery 4 years earlier of her husband's affair with one of her best friends and the eventual breakup of their marriage.

A structured diagnostic interview and assessment battery revealed that immediately after her divorce she experienced a major depressive episode that was successfully treated with a selective serotonin reuptake inhibitor antidepressant and a year of supportive psychotherapy. At the time of the intake, she had been off antidepressant medication for 3 years with no relapse of depressive mood. Her most pressing concern was that since her divorce she had avoided establishing a romantic relationship. Although she was an attractive, articulate, creative woman who had been pursued by several men, in the first session she said, "I always hold them at arm's length. I know at some level that I just don't want to get hurt again and, although I know that I am stronger than I was during my marriage, I just can't seem to let myself really trust a man again. Some part of me always seems to be saying, 'Watch out! Be careful! You don't want it to happen again!'" (*This ability to articulate her current problem in terms of her own thoughts and feelings denotes a level 5 EXP and a good prognostic sign for short-term emotion-focused therapy*.)

Although she did not currently meet full criteria for any *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition (DSM-IV), Axis I or Axis II disorder, various self-report measures revealed moderate levels of dysphoric affect, low levels of positive affect, and substantial dissatisfaction with her work and romantic life. Her history of a previous major depressive episode in conjunction with current dysphoric mood, general life dissatisfaction, and lack of an intimate relationship placed her at risk for relapse into another depressive episode.

During our second session, I suggested we try a focusing (Gendlin, 1981) exercise to help her become aware of the sensations associated with her emotional experience and the way these related to unresolved feelings related to her divorce. Gendlin (1981) developed focusing as a means of helping patients access a "felt sense" as a way of deepening emotional processing while maintaining an optimal level of emotional arousal for therapeutic work. The following exchange is also a good example of an emotion-focused therapy method that encourages "bottom-up" emotional processing by directing the patient to focus on nonverbal visceral sensations, feelings, and images as a way of accessing core emotions. In contrast, a "top-down" approach uses more verbally mediated methods such as interpretations or cognitive disputations.

The following exchange occurs 41 minutes into the second session (see Figure 2 for her heart rate). As this vignette begins, the patient has been led through the initial steps of focusing and is sitting quietly with eyes closed. Her heart rate as the transcript begins is at 60 bpm, and this, along with her posture, vocal tone, and expression, suggests a relaxed but attentive state. At this point, I encourage her to turn her awareness inward to her immediate physical and emotional experience.

- T: And so the first question to kind of ask yourself and to ask your body is "How are you feeling right now? How are you feeling in this moment just sitting here with me?"
- P: Umm, first, the image I get and the word that comes to that question is *energy*, like energy in my core, like a storm that is gathering speed, a good storm. It feels likes a circular spiral of energy that is starting to build. (*makes spinning motion with her hand and smiles*) It's red, all excitement and energy.

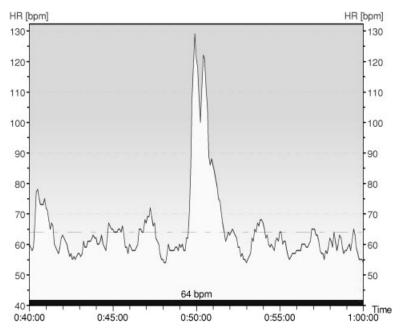


Figure 2. Heart rate of patient 3: expression of primary sadness and accessing of positive affects to deepen emotional processing, resulting in resolution and rapid cardiovascular recovery.

She immediately goes to EXP = 4. Her feelings and images are described in detail and emphasized more than events. Her smile and words are congruent with her experience of "excitement and energy."

- T: Uh-huh, so excitement and energy. So where do you feel that excitement and energy in your body?
- P: Right in here . . . (patient rubs her stomach)
- T: So, kind of a fire in your belly? (*Therapist notes patient's imagery and uses empathetic conjecture to provide an evocative metaphor.*)
- P: (patient immediately laughs) Yeah, yeah that's it! (Patient resonates with and enjoys metaphor and feels understood.)
- T: So just let yourself kind of hang out in this area of energy in your belly. Just sit with it for a little bit . . . and just take your time, but let me know if it stays the same, or does it shift in any way?
- P: Ah, well, I feel the energy shift and flowing out my legs and dance . . . it's very much about dancing. I guess I see it here, (*again makes circular motion around stomach*) but as it flows down my legs it flows out and touches a lot of people in a good way. (*makes open back-and-forth dancing gesture with hand*)
- T: So that has a good feeling, kind of connecting you with other people.
- P: Yes. Yes, well... I don't want to be too much in my head but... it's also like... Yes! Yes! Yes! This is why I'm here. (Voice gets stronger, and there is a stronger, more determined set to her face as she says this.)

- T: So now I'm going to ask you a different question. Just stay in your body and breathe in. You're probably still in touch with the energy in your body, but just let your awareness kind of move away from that a little bit and kind of roam. And the question is, Right now in your life what is really between you and feeling fine and good about your life?
- P: (*laughs*) A silly thing comes up, sleeping more consistently. But you're asking more what is in here. (*touches heart area*)
- T: Yeah, that's good; you're in touch with the process now; your mind kind of immediately pops up with "I need more consistent sleep." I'm sure you probably do, but then you just breathe into the center of your body and go back to that place and . . .
- P: OK, what is standing between me and . . . oh, it's up here. (raises hand and places it over her heart)
- T: Umm, so yeah it's in your heart? So just breathe into your heart and stay with this physical sensation and see what comes.
- P: (Patient's face shows sadness; she gasps.) It's sad!
- T: So there is sadness there in your heart. Just continue to breathe into it and just stay with this and allow the feelings to come.
- P: (Patient starts to cry softly.) It's fear and it's just sad.

At this point, about minute 40 on the heart rate graph, the patient's heart rate moves from about 60 bpm to 77 bpm, reflecting the sympathetic nervous system activation associated with her increased awareness of sadness and the expression of this in a quiet, gentle crying.

- T: What's the saddest thing about what you are feeling? And really take your time. . . . If my question takes you away from your experience, go back to your experience.
- P: (touching heart again) I get the image of it still being tender here . . . sore still.
- T: Uh-huh, yeah, so it is almost like there is still almost a physical hurt quality to it.
- P: Right, like "must touch lightly."
- T: So your heart really has been bruised?
- P: I guess so. Yes, it feels sore and bruised.
- T: So can you find like a word or simple phrase that really describes the quality of this feeling?
- P: (long pause) I'm so out of my head that it's hard to find the words, but it's like, "Go slowly, tread lightly, be careful. . . . It's not don't love; it's be careful." (Her comment that she is out of her head and having some difficulty in finding words emphasizes that she is involved in an inner-directed, imagery-based, emotion-focused process.)
- T: So there is like a cautious, be careful quality to this?
- P: Yeah.
- T: So if you were to ask your heart, literally ask that area in your heart, "What is it you need in order to heal?" what would it say?
- P: (She pauses; then a big smile comes over her face and she gestures toward her stomach.) More of that! More of that, connected to that, focusing on this. Like (gestures toward heart) "Leave me alone for a little while"; let's go somewhere that feels a lot safer, a lot more energetic, a lot more powerful. It's like she is saying, I'm healing; we know I'm healing, but its almost like turning away from looking at it directly, turning the energy somewhere else, allows, helps the healing to complete. She wants to pay attention here. . . . (places hand on stomach) (Although she looks and sounds more activated in her posture and voice when she shifts her direction to the more

- active and vital place in her stomach, her heart rate actually starts to decrease at this point.)
- T: And is there anything she wants to ask for from that storm, that creative whirlwind in your belly?
- P: Joy . . . dancing . . .
- T: So just try this, as a different perspective. Can you just move down into that area in your belly again? And just let me know when you are there?
- P: (pause) Yeah, I'm there.
- T: Does it feel like it has shifted or changed any?
- P: Umm, its more multidimensional, more colors; it's not a flat spiral; it's a three-dimensional cone of energy.
- T: So, what I'm going to ask you to do is to kind of stand in that three-dimensional cone of energy, and when you're able to get to that place, let me know.
- P: OK, I'm there.
- T: And from that place, look from that place up to your heart and just tell me what you see.

Patient pauses; a smile starts to break across her face. The smile quickly fades. Her hands move up to her face; then she leans forward in the chair, cradling her head between her hands and sobbing deeply. At this point her heart rate accelerates from 62 bpm to 129 bpm. She continues sobbing for a few moments, unable to talk.

- P: Oh, oh . . . at first I saw a big, red bruised heart, but then I looked again and I saw light. White light . . . (gestures outward from heart with arms) just shooting out in all directions. Which is really good . . . like there is a lot, there is a lot of love in there; there is a lot of energy that wants to burst out; it is bursting out already . . . it's just a little held back by the bruises.
- T: What is it your tears are telling you about what was so touching?
- P: (*She smiles although still crying*.) Seeing the light, yeah, like the joy that is in my heart, the joy that is really there. That's who I really am; that's what's really in here. It's just that there is still some padding and bruises around it and some . . . debris.

Although her heart rate shot up dramatically as she began to sob, this elevation lasted for less than 2 minutes and rapidly dropped as she began to express the positive affects of hope and compassion associated with the image of white light bursting out of her heart.

- T: Ah, yes, yes. And if you stay with this, what is the image of the debris that comes to you? What is it composed of?
- P: Well, it's like when I first looked up it was almost like a literal heart, and it was mostly red with some purple here and there, the bruises. But as I looked deeper into the heart and that was where the light was, bursting out. (*gestures out with hands*) And as we talked, it was like the literal heart, the organ, the red and the purple, just started coming into pieces and moving out, and the energy and the light was shining through . . . sort of like the heart, the exterior organ. Or my head construction of it started to dissolve and just the energy and light was left. It just dissolved. Almost like in a film when the camera zooms in on something and everything else disappears from view. But if I zoom back out, there is still a tender organ, (*reaches out with hands as if she is cradling her heart*) a very human organ that is bruised there. But it's sweet. It's

- really powerful to see the light there. (sighs) Yeah. (By this point her heart rate has dropped to 53 beats per minute, the lowest point of the entire session.)
- T: So just one final thing, and we will kind of start to wind this experience down. Just ask yourself, what is it you really want to take from this powerful experience that you've just had? (*Here I was prompting her to take a more cognitive, reflective stance in order to integrate the powerful experiential work.*)
- P: (*smiles, sits up in chair*) I liked standing in that whirlwind of energy and colors. I liked looking out from that place . . . out at something like my heart that was so painful. And I thought, wow, it would be great to look at a lot of things from here, like school, dance; to look at important choices from that powerful place. Like life is more, like standing in that place, there is nothing to be afraid of; there is no reason to fear or doubt my desires. Like from there fear won't cloud my vision. (EXP = 6)
- T: So just keep that with you. And just take your time, but start letting yourself come back from that place, back to the room here with me.
- P: (She sits forward and slowly opens her eyes.) Wow, (laughs) I don't want to leave. But I guess I can go back anytime.
- T: Yeah, you can. It's always there waiting for you.
- P: (looking directly at therapist and smiling) Thank you. Thank you so much.
- T: Oh, you're welcome; you're welcome. I was very touched, too.

This segment is also a good example of what Fosha (2003) describes as working with the "self-at-best" to heal the "self-at-worst." After the patient's explicit statement that her bruised heart "needed more of that," I encouraged her to return to this vantage point of her "self at best." From there she was able to access the associated resources and positive affects of energy, strength, joy, and excitement that flowed through her and out, connecting her to those she loved. From this stronger and more joyous place she was able to view her bruised heart with more compassion and begin to transform her fear of being hurt in love to a more hopeful longing for love and connection with a man.

Clinical Issues and Summary

Patients 2 and 3, who were able to attain resolution, showed (1) a willingness to stay focused on a central theme of unfinished business with a significant other, (2) early development of a strong working alliance, and (3) emotional congruence in terms of emotional expression, self-report, and cardiovascular arousal. Additionally, each patient experienced several sessions characterized by the expression of moderate to high levels of anger or sadness with consequent increases in cardiovascular arousal, followed by deeper emotional processing and increases in positive emotions and a rapid return to cardiovascular baseline. Finally, both patients who resolved displayed more heart rate variability both within and between sessions that was congruent with process related tasks and emotions, such as higher heart rates when crying and expressing sadness and lower heart rates when reflecting on the meaning of their experience. Such emotional and physiological flexibility is viewed as adaptive because it allows for flexibility and responsiveness to changing conditions (Frederickson & Losada, 2005).

The notion of an optimal level of patient emotional arousal has intrinsic appeal and some empirical support in terms of effectiveness of exposure therapies (see Littrell, 1998, for a review); however, the cases and data reviewed suggest that the interplay among arousal, expression, and emotional processing is complex and does not always follow a simple inverted-U pattern. In the vignettes, there are certainly times when both patients 2 and 3 "break down," sob deeply, are unable to speak, and show intense levels of cardio-

vascular arousal. However, as we follow their process, each "breaking down" also leads to a "breaking through" to deeper, more meaningful processing, leading to both insight and a sense of resolution. Neither patient reported a sense of being overwhelmed, flooded, or pushed beyond her window of tolerance to the therapist or on end-of-session self-report measures. On the contrary, both patients rated these sessions as "extremely helpful."

These case vignettes suggest that an interpretation of an optimal level of arousal as having static parameters that must always be maintained by therapist interventions may not always be in the patient's best interest if there are signs that significant emotional processing is taking place. In clinical supervision, I have observed at times a tendency for some therapists to maintain an excessive focus on keeping the patient within a hypothetical optimal level of arousal via repeated questions, interpretations, and so on, that actually interfere with the deepening of expression, processing, and subsequent rapid cardiovascular recovery.

In contrast, the rigid levels of autonomic activation coupled with superficial, highly verbal levels of emotional processing demonstrated by patient 1 resemble the rigid autonomic activation coupled with verbal rumination found in individuals who have generalized anxiety disorder (GAD; e.g., Borkovec & Hu, 1990; Hoehn-Saric et al., 1988, 1989). I have observed a similar pattern of cardiovascular rigidity in my current research for almost all sessions that are primarily characterized by low levels of EXP and "venting." This might suggest that this pattern of cardiovascular inflexibility and use of non-reflective, externalized verbal accounts as a way of avoiding immediate emotional experience is a more universal emotional processing deficit for patients and not confined to individuals who have GAD.

Initial data from the ongoing research project from which these three cases were taken are compatible with research (Fredrickson & Losada, 2005) on the effects of positive emotions on both the processing of negative emotions and cardiovascular recovery from the arousal associated with negative emotions. This finding has led me to propose that patient expression of negative emotions in session results in cardiovascular arousal. With the therapist's help, the patient deepens his or her emotional processing with all that this entails, putting feelings into words, accessing adaptive action tendencies, gaining insight into the nature of his or her problems, and constructing a meaningful narrative (Fosha, 2004; Greenberg, 2001). Positive emotions are not viewed as simply caused by a sense of relief or resolution but are seen as a vital component that actually enhances emotional processing. This relationship between depth of emotional processing and positive emotions is not viewed as a simple linear process, but as a dialectical process whereby depth of emotional processing and positive affect mutually influence each other. That is, as depth of emotional processing increases, the patient experiences positive affects such as relief or compassion, which in turn broaden the patient's perspective, renew hope, and continue to enhance more adaptive emotional processing. This process is particularly evident for patient 3, as her ability to access strong feelings of compassion and love while processing her grief and sadness broadens her perspective and restores a sense of hope and connection to others while also leading to a rapid cardiovascular recovery and improved emotion regulation.

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