

Three States of Embodied Self-Awareness in Rosen Method Bodywork:

Part 1: Practitioner Observations of their Clients

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ABSTRACT

This research report establishes evidence for three distinct states or ways of experiencing Embodied Self-Awareness (Restorative, Modulated, and Dysregulated), each with distinctly different qualities of client behavior, thought and felt experience. The research is based on post-session notes of observations of client behavior made by their Rosen Method Bodywork (RMB) practitioners. This study gathered data from 3 different RMB practitioners who saw 5 clients (two clients each for two of the practitioners and one client for the other practitioner) over 16 weekly RMB sessions. Examples of each state are given from these practitioner notes. The study concludes with a proposal of a neuroscience-based grounded theory – a theory or explanation that arises from the results rather than from an established theoretical framework -- that supports the existence of the three states of Embodied Self-Awareness. Finally, some implications of this 3-state model of Embodied Self-Awareness for RMB clinical practice are explored.

GENERAL INTRODUCTION FOR ALL 3 PARTS OF THIS RESEARCH REPORT

Outline of the 3 Parts of this Research Report

This three-part research report is an investigation of Embodied Self-Awareness (ESA) during Rosen Method Bodywork (RMB). The research is based on a study of practitioner written observations of 5 clients, each of whom had 16 bodywork sessions. For ease of communication and reader comprehension, I have chosen to break the research report into 3 parts. In Part 1, I present the results of *practitioner descriptions of their clients* in each session based on post-session notes of observations of client behavior. Part 1 establishes evidence for three distinct states or ways of experiencing Embodied Self-Awareness and gives some clinical implications for RMB practice.

In Part 2, evidence is presented on the *practitioners' observations of their own feelings and thoughts* as they were working with their clients in each of the three states of Embodied Self-Awareness. This part of the research report reveals that practitioner thoughts and feelings mirror those of their clients in clinically

important ways that can lead to greater understanding of how practitioners can use their own experiences as guides for working with clients. Part 2 concludes with some general speculations about how these three states of ESA can be used to enhance our own personal growth, RMB training, and clinical practice in order to improve outcomes for clients, students, practitioners, and teachers.

Finally, Part 3 is a collection of ALL of the segments from the practitioner session notes that were used as the data for Parts 1 and 2. Part 3 has two goals: (1) to give readers the opportunity to examine these session notes as a way of verifying the author's results and conclusions, and (2) to be used as a resource for any reader to make a further study of these data beyond the studies contained in Parts 1 and 2 of this research report.

Rosen Method Bodywork and Embodied Self-Awareness

Marion Rosen discovered that simply paying attention, in the present-moment, to the experience of body sensations and emotions could lead to relaxation of muscle tension and the opening of profound emotional and even spiritual states of being. Marion's clinical practice led her to discover that once these links between feeling ourselves and relaxation are made in the client's self-awareness, the body can aid in the work of repairing itself, leading to improvements in health, well-being, and interpersonal relationships.

"Once the barriers (to feeling) are removed, growth will take place as a direct result, without effort or help from the outside . . . Rosen Method practitioners are 'midwives' who bring about the opening in patients . . . That is all we do" (Rosen & Brenner, 2003, pp. 12-13).

When I was introduced to RMB in 1996 as a client, I decided that I did not want to read about or try to understand RMB in my usual terms as a behavioral scientist and writer who had devoted a career to conceptual understanding and explaining. RMB reached me in a way that was beyond my understanding and I sensed that it was working just fine without activating this intellectual part of myself. I entered the bodywork practitioner training program in 1998, became a practitioner in 2004, but it was not until 2006 – when I felt greater certainty that I had genuinely embodied the work – that I began to embark on a path of bringing my scientific training into my engagement with RMB.

At that time, I wanted to understand Marion's insight about body awareness: that direct awareness of body feelings can evoke (parasympathetic, see below) states of deep relaxation and improve general health and well-being. The simplicity of this idea and practice makes it difficult to comprehend, especially in an era when conventional health care has created so many powerful and effective treatments and interventions. RMB, in contrast, is difficult to describe and promote because it does not deliberately fix, manipulate, or repair a trauma, illness or pain.

How is it possible that just bringing awareness to emotions, pain, and tension can help someone recover a sense of well-being? To answer this question, I spent three years of reading and studying -- which included teaching myself about neuroscience – and came up with the concept of *Embodied Self-Awareness (ESA)*, the present moment experiencing of our felt sensations and emotions (Fogel, 2009/2013). ESA includes RMB concepts -- such as presence, ease, dropping in, softening, relaxation, and a natural breath -- translated into concrete physiological language. I found that ESA was linked, via well-defined paths in the

nervous system, to the cardiovascular, respiratory, digestive, hormonal and immune systems of the body that can promote health and well-being.

I discovered that Marion's insight that ESA can alter body function is an observable fact of our neurophysiology and its links to all the cells and tissues of the entire body. This does not mean that RMB can cure a chronic disease or stop a potentially fatal illness. Rather, ESA facilitates the mind and body finding possible ways to accept the feelings connected with illness and ease the body's stress responses in a way that facilitates recovery or acceptance. See, for example, the use of RMB in hospice patients (Schultz, 2017).

The powerful effects of RMB is due to the relaxation that comes with embodied awareness: a real, physiological shift in the body. That relaxation (via the parasympathetic nervous system) frees up the body's own resources for self-repair. In addition, there is a direct neurophysiological pathway between the parts of the nervous system that can become aware of and tolerate intense feelings and the parts of the nervous system that promote restoration and recovery. The question of how does RMB work is re-framed as: What are the neurophysiological processes that link paying attention to ourselves in the present moment with a shift toward greater ease and improved well-being? These processes will be discussed later in Part 1.

At times ESA is sufficient to create a relaxation of effort and letting go of thought, judgment and unproductive beliefs. As we become comfortable with present moment feelings and sensations, our body can settle into a more parasympathetic state that itself assists in restoring health without doing anything else. Re-stating Marion's crucial discovery: The more clearly and completely we can feel ourselves, the more we can be at peace with ourselves.

The plan of Part 1 of this research report is first to review some of the recent research studies that have linked RMB to the expansion of ESA in clients. Then I will describe how ESA was conceptualized in my book, *Body Sense* (Fogel, 2009/2013), along with what led me to believe that the ideas presented in that book were incomplete. Next, I will describe the methods and results of this research study based on the practitioner post-session notes. Finally, in the discussion section of Part 1, I will present a comprehensive new theory of these three states of Embodied Self-Awareness and some clinical implications of this theory.

Review of Past Research on RMB and ESA

Research studies on RMB confirm Marion's observations that facilitating enhanced body awareness has the potential to improve health and well-being in clients. In one study, 53 RMB clients in Sweden were interviewed about their experiences receiving RMB (Hoffren-Larsson et al., 2009). Forty-eight (90%) of these clients described enhanced physical health and body awareness, and a reduction in depressed feelings, anxiety and stress. They also reported support for personal growth and an ability to self-initiate life changes as a result of their RMB treatments. This research highlights that the central principle of RMB practice – enhancing of body awareness – is indeed linked to improvements in client health and well-being.

In a sample of five women with chronic low-back pain who received six months of RMB treatments (Fogel, 2013), statistical analysis of standardized questionnaires revealed that at the end of the treatment period clients experienced less work disability and increased satisfaction with work experiences, less fatigue, less pain, increased feelings of well-being and increased sense of control over their lives. During post-treatment open-ended interviews, clients spontaneously mentioned the importance of learning to better pay attention to their body's feelings as a result of RMB. The current research report is based on *practitioner*

post-session notes – rather than client questionnaires – for these same 5 clients.

Cober, Smart and Williams (2014) conducted an inquiry using semi-structured telephone interviews with 13 Rosen Method Bodywork and Movement practitioners who had a long-term and regular practice of mindfulness. It was found that, for the individuals interviewed in this study, mindfulness-based trainings and practices – those that enhance our ability to pay attention to our body sensations and emotions -- have served as valuable resources for personal and professional development. The interviewees reported that mindfulness guides them into a deeper understanding and expanded body awareness and that they experience a greater capacity to work with sustained attention and presence when practicing Rosen Method Bodywork and Movement.

In another interview study of clients who received RMB sessions (Smart, 2018), participants reported that RMB was helpful in reducing physical pain, including chronic and intermittent pain. RMB helped the participants cope with stress and associated physical and psychological symptoms, and with depression and anxiety. Participants said that RMB was helpful for issues involving the emotions and for resolving trauma, and that the combination of words and touch is a powerful way for them to access their holistic, body-mind experience. This study also found that, over time, participants moved from feeling stuck and disconnected (this is similar to what I am calling Dysregulated ESA), to feeling safe and connected and more able and willing to become aware of and explore painful or difficult feelings (similar to Modulated ESA), and finally to find more ease and letting go, and feeling transformed in mind and body (this is similar to Restorative ESA).

We also know that the practitioner's meeting and connecting with the client's tension, pain, and inner experience is a significant factor in promoting ESA. Research on interpersonal relationships in general suggests that the felt support of another person can lead to the development of regulatory processes (the embodied self-awareness of being able to stay in the present moment with previously suppressed feelings, for example) and to enhanced health and well-being (Fogel, 2013; Hrossowyc, 2009; Zettmar, 2011).

In a qualitative study of 8 people who had received a minimum of 10 RMB sessions and who had experienced trauma in their lives, semi-structured interviews lasting 60-90 minutes were used to assess the clients' perception of self and their relationship to the practitioner (Bernard, 2016). The results show that client's perception of what the author calls *relational somatic presence* (an awareness of the relationship between the therapist's hands and the client's body and resulting sensations and responses; the emotional relationship between client and self, and practitioner and self) had a significant impact on their growth of embodied self-awareness and safe modulation of emotion within an expanding window of greater arousal tolerance. Perceived relational authenticity in the RMB therapist fostered the client's ability to sense, track, and express traumatic content, and to find more life-affirming ways to encounter the world that are conducive to restoration. The RMB therapist's perceived capacity for self-modulation, self-reflection, and embodied self-awareness was crucial in fostering body wisdom and trust in the client-therapist dyad.

Another study on the client-practitioner relationship in RMB came to similar conclusions about the client-practitioner relationship (Hoffren-Larsson et al., 2013). Detailed interviews with 11 RMB clients in Sweden showed that those who were satisfied with their treatment described trusted and caring interpersonal relations and a secure environment with their practitioners, where the participants felt accepted regardless of their problems. The interpersonal interaction seems to contribute to participants' increased awareness of their own capacities and motivation to independently develop new pathways toward well-being. Those who were dissatisfied with their RMB treatment lacked the feeling of a trusting, caring relationship with their practitioners.

Finally, in a sample of 34 healthy married couples, aged 20 to 39 years, 15 minutes per day of Rosen Method "listening" touch (compared to a behavioral intervention control group) increased oxytocin and decreased stress hormones in both males and females, and also reduced blood pressure in males compared to the control group (Holt-Lunstad et al., 2008). These physiological indices are known to enhance the feeling of interpersonal connection, or relational somatic presence. It may be, then, that "failures" of RMB treatment are due in part to a lack of perceived connection and safety in the client-practitioner relationship which then prevents the ability to stay in the present moment with felt experience.

In summary, RMB – via a trusting and relational somatic presence with the practitioner -- appears to enhance Embodied Self-Awareness, which, in turn, leads to positive health outcomes. These outcomes can include assisting in the recovery from illness and trauma, increased ability to self-regulate, making life-affirming choices with greater self-assurance, reducing pain and fatigue, helping to cope with depression and anxiety, and experiencing less life and work stress. This research, coupled with the neurophysiological processes described earlier, are the beginnings of establishing a scientific verification of the effectiveness of RMB. In the next section, I explain the process that led me to consider an expanded view of ESA. This is followed by an explanation of how these ideas apply to Part 1 of this research report.

Re-Thinking Embodied Self-Awareness

In my book, *Body Sense*, I distinguished between *Embodied Self-Awareness* and *Conceptual Self-Awareness*. My idea was that when we are engaged in conceptual and logical, or repetitive and ruminative thoughts, that we cannot not feel our ESA. I understood the neuroscience research at that time to mean that we could not be thinking and feeling simultaneously. After I completed *Body Sense*, I continued to practice RMB and began my RMB teacher training which I completed in 2012. Since I completed that book, and during my years of teacher training, practice and teaching, in many different contexts, I have been noticing more about ESA in myself, my clients and students. During this time, I developed an expanded perspective which includes not just one form ESA – being in the present moment with a sense of ease and relaxation – but also two other forms of ESA. In addition, new developments in neuroscience have revealed a much more complex relationship between thought and feeling.

We now know, for example, that some forms of felt experience can indeed occur even when people are thinking. Along with ruminative thoughts, for example, the felt experiences of pain, anxiety, hopelessness, disorientation, confusion, addictive urges, fear, etc. can be noticed just enough to send the body into a defensive state that generates more thinking (especially more ruminative thought), avoidance, dissociation, and suppression of these feelings. I began to see this as a different kind of ESA, a **Dysregulated ESA** in which the person is unable to slow down, control or regulate the embodied experiences of pain or panic or paralysis.

Near the end of 2015, I was found to have serious heart disease which resulted in a heart attack and open-heart coronary artery bypass surgery in February of 2016. During the following year, I became personally very familiar with many of the dysregulated forms of felt experience in embodied awareness. Following the surgery, I was not able to control my pain or panic without opiate medication that made me feel completely detached from my body. Once I recovered from the most severe pain of the surgery and stopped taking the opiate medication for pain, I was left with post-traumatic stress accompanied by

ongoing dysregulated thoughts, body aches, fatigue, digestive problems, anxiety and emotional distress. I was able to receive RMB and other forms of bodywork (massage, acupuncture) and conventional medical and pharmacological treatments that reduced the post-traumatic anxiety and helped in my general recovery but even after more than three years, I still can get easily dysregulated with stress and over-exertion.

Like many chronic diseases and medication interventions, people who experience heart attack and/or open heart surgery (bypass, transplants, etc.) have symptoms of post-traumatic stress that can remain for many years (Singh et al., 2017). It is also the case that heart disease, while partly hereditary, is also more likely to occur in individuals who have a life history of stress and trauma (Tulloch et al., 2015), which is also true for me. As I get older (I am now 74), and with this history of early-life trauma, it becomes less easy for me to recover from dysregulated states. In Part 2 of this research report, I discuss the importance of self-care for RMB practitioners in finding pathways to restorative states.

In contrast, Embodied Self-Awareness as described in *Body Sense*, the ability to fully experience our feelings in the present moment without intervening conceptual, logical or ruminative thoughts – the state of presence and ease – I now refer to as **Restorative ESA**. It is a state of primarily parasympathetic activation when there is a felt sense of safety. Staying in the present moment in this type of ESA actually creates physiological shifts in the whole body that can assist in the restoration of well-being.

I also began to notice -- from observing clients, students, and myself -- that there is an "in-between" or "transitional" state, one in which there might be momentary breaks from chronic muscle tension or pain, when muscles begin to move and shift under the practitioner's hands but there is not a complete release or softening into Restorative ESA. I noticed that this in-between state usually preceded a deeper relaxation into Restorative ESA, although more often, there would be this small opening that would be followed by a return to a state of Dysregulated ESA (Fogel, 2012). During my own experience following open heart surgery, there would be times when my dysregulated state would lift momentarily, when I could feel myself more clearly, when discomfort was not so overwhelming, and when I sensed some moments of hopefulness about my eventual recovery.

Another manifestation of the "in-between" state is when clients are actively engaged in thinking about or telling a story to the practitioner, a story that has a modulated logic and continuity (as opposed to dysregulated verbalizations which seem "out of control," ruminative, or catastrophizing) and when asked by the practitioner to pay attention to a shift in the body, the client is able to slow down and make an attempt to notice and feel at least for a short period of time. These might be feelings such as a momentary ease, a sense of possibility, or a felt expansion of the breath that doesn't last very long.

I now call this a state of **Modulated ESA**, meaning that there is space for the client to listen to herself or to the practitioner, to take some time to see what's there, perhaps to slow down a bit and to feel something real for a few moments. Even when the client is talking and thinking, there is a sense of modulated (and even sometimes engaging) thought and speech: the client's thinking does not seem ruminative, dissociated, or dysregulated.

In 2010, I had collected data on 5 RMB clients who presented with low-back pain. The first publication of results from this study (mentioned above, Fogel, 2013) described an analysis of questionnaires and interviews revealing that each of these clients showed improvements in pain relief, fatigue, work experience, and sense of well-being. In the present article, I return to this same research study with a different goal:

the hope of finding more concrete evidence for my working model of three states of ESA: **Restorative, Modulated, and Dysregulated**. For this purpose, I used another part of the data collection in that research project: post-session notes made by the three practitioners about each of their sessions with their clients.

In the next section, I describe in more detail how these practitioner notes were made and other details of this research. This will be followed by results and discussion that includes a theory suggesting that each of these three types of ESA have unique forms of felt experience, mental and thought process, physiological markers, and social-relational engagement styles.

GENERAL METHODOLOGY FOR ALL 3 PARTS OF THIS RESEARCH REPORT

Participants

Six clients with Chronic Low-Back Pain (CLBP) from the East San Francisco Bay area of Northern California participated in this study. Clients were recruited with flyers placed in clinics, shops, and cafes. The flyer had the following text: "Female volunteers between the ages of 25–55 who are motivated to overcome chronic back pain may qualify to participate in a research study involving an investigation of Rosen Method Bodywork. The treatment involves 16 sessions over a 4-5 month period. You will be compensated for your participation and all treatment sessions will be free of charge." We wanted only those clients who were motivated to overcome their CLBP so as to better ensure that they would remain in the study for the entire treatment period.

Clients who called were screened by a research assistant who lived in the same area. Clients were selected for the study if they met the following criteria: female, a diagnosis by their medical provider of CLBP, working at least part time (four clients were doing office work, one was caring for elderly parents), not on disability leave, without other chronic conditions or surgeries in the past year, had not ever received back surgery, not taking psychotropic or other medications except for pain, not pregnant, and not currently receiving medical treatment for back pain. All selected clients were asked to sign an informed consent document that was based on the text of the flyer. Selected clients were between the ages of 31 and 56, had CLBP symptoms between five and 25 years, had at least some postgraduate education, and reported at intake that their back pain had serious effects on their work and personal lives. Three of the clients were formerly massage/bodywork therapists and two had been chefs. They all had to change careers because of their CLBP.

Clients had no previous experience with RMB. We created a checklist of CAM (Complementary and Alternative Medical) practices for this study including acupuncture, Ayurveda, homeopathy, naturopathy; biological: chelation, diets [including Adkins, Pritikin, macrobiotic, etc.], vitamins; manipulative: chiropractic, massage, rolfing, Feldenkrais, craniosacral; Mind-body (biofeedback, EMDR, meditation, imagery, progressive relaxation, breathing, hypnosis, yoga, tai chi, Qi gong, prayer, Reiki. The total types of CAM (ever used, used in the past year) were tallied: Client 1 (18,9), client 2 (17,6), client 3 (24,13), client 4 (16,9), and client 5 (8,5). In spite of this large number of non-RMB CAM practices used by clients, these individuals still continued to experience debilitating back pain at the onset of their participation in this study.

In exchange for their participation, clients received 16 RMB treatments at no charge and \$150 at the completion of the study. One client ended her participation in the study after only five sessions, reportedly due to having too many other commitments, leaving 5 clients. The study was approved by the University of Utah Institutional Review Board and was funded by a grant from the United States National Institutes of Health (R21 AT002209).

Three certified RMB practitioners were selected because they were all located in the same area of N. California from which the clients were chosen. Each practitioner was assigned to work with two clients each, but after one client dropped out of the study, one practitioner was left with only one client. All the practitioners were female, had at least ten years of experience as a RMB practitioner, all had previously worked with CLBP, all had some level teacher training certification (Workshop, Bodywork Teacher, and Senior Bodywork Teacher), and all were paid by the research grant at their standard rate for giving the sessions. Sessions occurred in the practitioner's office weekly, or occasionally bi-weekly, depending upon client and practitioner availability.

The RMB practitioners who participated in this study were briefed by email and telephone contacts and one in-person meeting with the author. Practitioners made direct arrangements for sessions with the client-participants to whom they had been randomly assigned. Practitioners knew that the sample consisted of CLBP females and were instructed to simply provide RMB sessions in their own offices as they normally would for any client. Sessions were digitally audio-recorded by the practitioners. These recordings were used as a **fidelity check** (Bromley, 1986) to make sure that the practitioners were not deviating from standard RMB practice. The author listened to the recordings for all clients in the study as they were received from practitioners within two weeks of the session. In the author's judgment, there were no departures from standard RMB practice. Because of their extensive experience as RMB practitioners, no further supervision of the practitioners was deemed necessary.

Procedures

Practitioners were asked to write post-session notes for one hour immediately after the session, a task for which they were paid at their same hourly rate by the research grant. In their writing, they were asked to focus on what they observed in their clients and also what they thought and felt themselves. They were asked to write about the session sequentially, re-creating as much as possible from their memory of the flow of events in the session, rather than making summary statements about the session as a whole. No other guidance was given. This is important, since the categories that emerged from the research were not suggested to the practitioners at the beginning of the study. The practitioners were writing entirely from their own training and experience as Rosen Method Bodyworkers. It is also worth noting that these data were collected in 2010, some years before I started to develop the ideas for these three states of ESA so there is no way I could have – even unconsciously – communicated these categories to the practitioners.

Post-session notes were divided by me into segments (total number of segments across the 16 sessions for 5 clients was: N=431). A segment consisted of – at a minimum – an observation of the client or of the practitioner that described a single incident of experience or behavior (See Part 3 of this research report which contains the verbatim transcripts for all the segments). A **Grounded Theory** approach was used for developing a set of categories by which to classify the segments. The emergent set of categories is a "theory" or a conceptual framework that allows the researcher to classify all of the segments in a simple form. This theory is "grounded in data systematically gathered and analyzed" (Strauss & Corbin, 1994).

The Grounded Theory approach involves the **Constant Comparative Method** in which the practitioner narratives are read and re-read by a single observer, in this case myself as author. This research approach differs from traditional quantitative (statistical, numerical) approaches by taking the observer's perspective explicitly into account, that is, by not trying to be "objective" (Patton, 1990).

The accuracy of Grounded Theory research is based on the *credibility* of the observer. Credibility has three criteria: (1) prolonged engagement of the researcher with the data, (2) the researchers' cumulative experience doing similar investigations, and (3) making the data available for readers to inspect (Denzin & Lincoln, 1994). Credibility is typically the way in which people assess the trustworthiness of professionals such as health care providers: choosing providers who have experience, who have worked with many patients, and for whom reviews of their work may be found online or by referral. Credibility is also used, at least implicitly, in other case-based approaches, such as in the evaluation of clinical case reports, anthropological field work, and arguments and judgments in legal cases.

The research methods, described above, testify to my prolonged engagement with these data. Also, I have 45 years of experience doing observational and grounded theory research on human development and more recently, Rosen Method Bodywork. Finally, I have included Part 3 of this research report that contains ALL of the categorized segments from the practitioner's narrative session notes. This allows the reader to examine and verify my categorization choices, to agree or disagree.

In this role as credible observer, I studied the notes until I felt confident that the conceptual categories --primarily, the three states of ESA I was looking for (see Results section below) -- were consistent, that they captured almost all the segments in the narratives, and that by the end of this process, new interpretations, ideas, or insights did not emerge (Bromley, 1986; Patton, 1990; Robson, 1993). In this manner, I felt confident that I had captured the basic themes or categories by which I could classify the majority of what the practitioners had written.

RESULTS: PART 1

Using the Constant Comparative Method – reading and re-reading the post-session notes -- I was able to classify about 90% of the segments into one of the three states of ESA: Restorative, Modulated, and Dysregulated. Part 3 shows how all of these segments were so classified. Although, as explained in the introduction, I was "looking" for these three states, I was also open to discovering other possible descriptions.

I did, in fact, find two other types of segments in the remaining 10% of the data. I found that about 3% of these segments were composed of practitioner reflections on her role as a research participant. Practitioners wondered, in writing, if their work with these clients was somehow influenced by being in a research study or by the fact that the sessions were being recorded. The remaining 7% of these statements were about the practitioner's summary reflections about client's change process across sessions. I chose not to study these segments for this research report and I did not include them in Part 3. In addition, in some of the segments related to the three states of ESA, practitioners spontaneously described their own feelings and thoughts about the client. These descriptions of the practitioner's own feelings and thoughts are highlighted in blue in Part 3 and these highlighted notes will be used as the data for Part 2 of this research report.

The results for Part 1 will be presented in the following two sections.

- (1) A summary of practitioner observations of client behavior with the goal of confirming the conceptual model of the three distinctly different states of ESA.
- (2) A quantitative (numerical) accounting of the number of times each of the three states was observed, as well as an analysis of the sequencing of states within a session.

The goal of this analysis is to better understand how the three states of ESA are related to each other in time.

(1) Practitioner Observations of Client Behavior

In this section, I summarize practitioner observations of the client's behavior according to the three states of ESA: Restorative, Modulated, and Dysregulated. This is done in two ways. First, a table for each state presents brief descriptors of the themes used by practitioners to describe client behavior, feeling, or thought. Each table is followed by illustrative examples taken from the post-session notes in Part 3 of this research report.

Table 1: *Compilation of unique descriptors of the client from the Practitioner Observations of what was classified as Restorative ESA*

Type of Observation of the Client	Descriptors of the Client based on Practitioner Observations
Behavior	Relaxation of muscle tension and softening or melting, the touch can sink in more, breathing is deeper and more rhythmic and natural with a pause at the end of the exhale, quietness, slowing down, dropping into the table, sighing, gurgling sounds from the belly, more color in the face and softer facial expressions, eyes bright, responsiveness to the touch and words of the practitioner, aliveness.
Feeling	Genuine emotions (sadness, happiness, hopelessness, loss, excitement, enjoyment), client is more in touch with herself, tears, crying, more heart-felt, feelings of spaciousness, relief, safety, peace, acceptance, truthfulness, hope, ease, strength and vulnerability, spontaneity, connection, resonance, more access to inner sensations, authenticity, inspiration, surprise, astonishment.
Thought	Slowing down of thinking, evocative words, or complete absence of thought.

Examples of Restorative ESA: *"I can feel her whole being soften."*

She told me about the one thing that had inspired her last week. From there, everything in her body shifted. More breath, softening of the muscles in her neck. I asked her to notice the experience she was having in her body so that she would know (could learn to recognize) that this is a path for her. She

said she makes everything negative, but here, in her body and under my hands was the breath and the inspiration that had been missing.

Her body is very responsive and her thought(s)/mind is slowly, very slowly, beginning to listen. She was able then to stay longer in the heart-felt sensations. At the end of the session she said the new awareness was like a baby that needed nurturing.

I say "Oh, you are an actress." The muscles soften now and she is breathing much easier. I think she said acting makes her heart sing, but perhaps I said it. It was clear, as the breath moved through and the muscles softened, that she was connecting with that experience.

The hopelessness, the failure are so deep and authentic. I can feel the up-welling pretty far inside her with my hands. I wait while she feels and then say back, "Everything you did, nothing worked, you felt hopeless." She and I connected, her chest drops slightly, being witnessed comes through for her and for me. Here at the end is the real jewel: hopeless, impotent about someone she really, really loves and who really loved her.

As I work and wait, listening to her breath and muscles, I say "That's it" or "Yes, there you go," when I feel a shift. After a while, she says, "That's amazing!" I can feel her whole being soften a little. I wait a few seconds, then say, "What's amazing?" She responds and I can feel her excitement, "The spasming, it's letting go some!" I feel that and it is exciting.

These descriptions and examples illustrate what is meant by the concept of **Restorative ESA**. There is a softening, not only in the muscles, but *in the whole body and being of the client*. There is a relative absence of "story" or thinking and the words used are evocative and supportive of the felt experience and the *fullness of being in the present moment with whatever is there*. This, of course, is the heart of what we hope to find in RMB, this opening and dropping into a unique state of peace, safety, awareness, and connection with self. I am just giving this particular state a concrete name that distinguishes it from the other two states of ESA (Modulated and Dysregulated) that are also – as described next -- common and important aspects of client experience in RMB.

Table 2: *Compilation of unique descriptors of the client from the Practitioner Observations of what was classified as Modulated ESA*

Type of Observation of the Client	Descriptors of the Client based on Practitioner Observations
Behavior	Partial relaxation of muscles and breath that does not last very long, a small breath, no pause between exhale and inhale, partial disclosure of personal information but also holding back, small openings that may be new for the client but there is the sense that there is still more that has not been said or felt, loosening of surface muscles but deeper tightness, partial unwinding with muscle twitching or shuddering or shaking, less frantic or more slowed down, softer gaze and occasional eye contact.

Feeling	Attempts to feel something that may or may not be successful, becoming aware of confusion or puzzlement or "getting" that something is happening in the body that cannot be "understood," brief tears or emotions "leaking out" that are followed by tightening and/or conceptual thinking, beginning to feel something but getting "choked up" so it can't be fully felt, more ease in talking and sharing but with only partial relaxation of breath and muscles, growing awareness of links between stress/challenge or rushing/social demands and breath and muscle tension, expressing the desire to slow down and feel more but not being fully able, shakiness or partial resonance in the voice or a shift in facial expression suggesting that a real feeling is coming to the surface but not fully formed, growing ability to tolerate/regulate present moment awareness to emotions and sensations.
Thought	Openings that are followed immediately by thinking and talking and continuing the story, brief opening into ESA followed by talking and thinking about what it means or trying to explain it or that something is not right or how to become more aware, thinking or talking more slowly with pauses and moments of felt experience or receptivity to the practitioner.

Examples of Modulated ESA: *"She's like a little bird that settles on a limb for a moment, and then flutters off again."*

For a brief moment, her body moves with the emotion. Then the words come again, the feeling goes underground and the stillness is back.

She is not calm and relaxed but something important broke through, like an abscess opening. There is such darkness in her story.

During this period of talking, for the first time, she looks directly at me with soft, doe-like eyes.

She is quiet again, little movement, but then, gurgling in her belly. Something has shifted, but the breath doesn't follow. The deep relaxation in her belly is not in her consciousness yet.

Yes, there was more response in her body, but she wasn't in it. I am very curious about this. Her body is softer and more responsive, yet she is in her thoughts nearly the whole time.

She is very quick to move from the feeling to words and thoughts. A good thing might happen that she will relate, but quickly she is back in what doesn't work. Her body seems to be in a state of confusion: one moment she gets in touch with herself and the next, the words are there to take her out of the feeling.

"They attacked me; I felt trapped, there was nothing I could do.It was a shock..." At this point, we are on to something. The words say it and there is still more. "It was a shock:" there is a light bulb going on deep inside her; with this awareness comes a slight, softening deep inside, not much, but we have come a long way!

She has a very slight amount of wetness coming out of her eyes, certainly not tears, but she's upset. "I wish I could have someone I could rely on, someone to tell me what is happening and what to do, someone with guiding wisdom." Here she is younger, real, softer. My hands are on her chest softly and under her neck. She quickly pulls herself up and together, closes up that moment of tenderness and goes on.

She is more aware of her fear, anxiety, sadness, anger. She heard herself shift from the feeling to the thoughts and words. She allowed herself, for the first time here, to stay with the feeling and emotion for a longer time.

I have the impression of a jar lid opening, or a can being opened with a can opener; she's starting to loosen.

There is a beginning of a process I call "unwinding." A muscle fiber in one location twitches. The breath comes in. A muscle fiber in another location twitches, and the breath comes in again. More and more twitching, the body is relaxing and letting go. The person is letting go. Deepening and deepening. Less and less need to be doing. More and more just being. This process of twitching and breathing goes on for several minutes.

Thinking back on how this study evolved for me over time, and how long it took me as a practitioner to sense these "in-between" states as being important, I was genuinely amazed at how clearly these practitioners described what I am now calling **Modulated ESA**, even though the practitioners did not have a name for this state. In the section, below, about clinical implications, I explore why this state is essential for RMB practice. For now, one can see that sometimes this state seems full of possibilities for more opening and sometimes it seems like a premature closing down of felt experience. Next, we turn to Dysregulated ESA.

Table 3: *Compilation of unique descriptors of the client from the Practitioner Observations of what was classified as Dysregulated ESA*

Type of Observation of the Client	Descriptors of the Client based on Practitioner Observations
Behavior	Unrelenting tightness/tension/pressure/stress in breath or muscles or facial expression or voice, muscles spasming or jerking but without any release or softening, lack of response and no change to touch or talk by practitioner, inability of practitioner to reach or meet or penetrate hard muscles, being closed off or guarded, lack of awareness of links between mind and body or between stress and muscle tension, breath is short or shallow or irregular or effortful, body feels lifeless, rushing, inability to slow down or relax.
Feeling	Feeling stuck or lost or hopeless or not knowing what to do, feeling trapped or resentful, irritation or anger that does not dissipate while the body remains tense, emotions completely suppressed and often without awareness, unreachable or unable to speak, feeling "locked up," inability to feel anything in a particular area of the body, sense of having to hold it all together or to hold it all inside or to not lose control, paralyzing anxiety or fear, boredom, lack of passion in life, fatigue and exhaustion, dissatisfaction, dissociation, complaining.

Thought	Talking without pauses or any observed reaction in the body, words and thoughts do not resonate in the body, being quick to find a verbal response to practitioner but without a corresponding shift in the body, trying to explain or understand self but entirely "in the head," response to practitioner requests to feel with verbal narrative that does not resonate in the body, silence but muscle tension in body and face or eyes moving under the eyelids suggesting thinking, talk about indulging in addictive or self-harming behaviors as a way to temporarily ease the suffering (eating unhealthy foods, drinking too much, doing drugs, physical self-harm such as cutting or binging or purging, suicidal thoughts or preparations), self-hatred or self-doubt or self-blame or self-judgment or "second-guessing."
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Examples of Dysregulated ESA: *"So many words that keep her from the feeling/emotion. No rest(!!) in this child."*

As she talks about the history of her condition some words pop out for me... "taut," "stretched to my limit." There is no response in her breathing, no change in her voice nor change in her facial expression or coloring, as she says these things.

She looks exhausted all the time...ever since I have started seeing her. On the table it looks like she is a small, exhausted child.

I ask her what she is noticing in her neck and shoulders now. She does not respond to that query about her felt sensation but continues with her words. This happens two other times where I ask her what she is feeling in her body and she responds with her narrative.

As I put my hands on, her skin feels hot and also lifeless. Her skin doesn't seem attached to what's underneath. There is no response from her body to my touch. I have an immediate sense that she will be hard to contact today.

The movement between her thoughts and her feelings happens so quickly it takes my breath away. There is no resting place in her. Her body is holding on so tight and I can see why: the shift from thought to feeling to thought is so fast there is no room for integration of any of it.

There is barely any room for me to get my hands in, for instance between her scapula and spine. I feel mostly bone and hard muscle. She seems small, almost dwarf-like in this area. Likewise, her shoulders, especially the right one, is very bunched up and hard to get my hand in...to get hold of her.

All she sees ahead is hard work and she would rather just die.

It was a very intense experience for her and she got the desire to smoke. She finally got the cigarette, knowing that the doctor had told her there are two things that exacerbate her illness, smoking and stress. The voice she hears is one of self-hatred. She, for the first time, realizes that happy thoughts or new-age thinking is not going to get rid of this self-hatred. She is at a loss as to what to do.

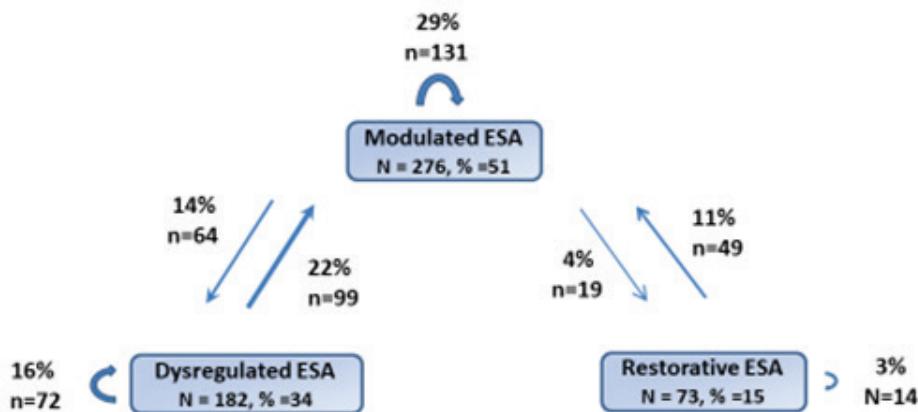
In doing the classification of these statements into the three categories of ESA, I was surprised how relatively easy it was to distinguish Modulated from Dysregulated ESA. These dysregulated forms of ESA

truly are "out of control" for the client. Practitioners were struck by—among other things -- the persistence of tightness, the lack of any resting place, the self-judgment, and the lack of response by the client to the practitioner's interventions.

(2) A quantitative (numerical) accounting of the number of times each of the three states was observed, and the sequencing between states within a session.

As mentioned earlier, I found a total of 431 segments that could be classified into one of the three states of ESA. Figure 1 summarizes how many segments were counted for each of the states as well as the number and percentages for the sequences between states within a session. Modulated ESA was the most frequent state (51%), Dysregulated ESA was the second most frequent (34%) and only 15% of segments were classified as Restorative ESA. This means, at least in these specially selected clients, that Restorative ESA was a relatively rare occurrence and Dysregulated ESA was observed in only 1/3 of the segments.

Figure 1. The total number of segments and percentages of occurrence for each of the three states is given within the blue boxes. The arrows represent the observed sequences between states and the thickness of the arrows represents the actual numbers or percentages of transitions from one state to another (percentages of sequences are based on the total number of sequences from one state to another, $n = 448$).



Of the 276 instances of the Modulated ESA state, n=131 of these were followed by another segment that was judged to be Modulated ESA, n=64 instances of Modulated ESA were followed by a segment of Dysregulated ESA and n=19 instances of Modulated ESA were followed by a segment of Restorative ESA.

This means that Modulated segments could be followed either by another segment of Modulated, or by a segment of Dysregulated or Restorative. If a segment was judged to be a Dysregulated state, it could be followed by another segment of Dysregulated or by a Modulated segment, but never by a Restorative segment. Similarly, Restorative segments could be followed by another Restorative segment or by a Modulated segment, but never by a Dysregulated segment.

The Modulated state, in other words, is indeed a transitional state that always occurs "in-between" the passage from a segment of Dysregulated to Restorative during a session. As discussed below, this research finding seems crucially important to the practice of RMB, most likely because of the slowness of change in the nervous system – clients need these "rest stops," or "brief encounters," "titrations," or the sense that their "big" emotions and hurts can be at least temporarily felt without judgement that they should be feeling "more" than they can in that moment. Practitioners, in other words, need to give clients the time and space to become familiar with just a little bit of felt experience before expecting them to drop into the depths of Restorative states.

DISCUSSION OF PART 1 A NEW PERSPECTIVE: THREE STATES OF EMBODIED SELF-AWARENESS

Summary of Results

To summarize the results of Part 1 of this research report, all of the segments in which practitioners described their clients -- excluding the 10% of segments related to change over time or practitioner observations about their role in the research project -- could be classified in one of three states of ESA: Restorative, Modulated and Dysregulated. Each of these states could be distinguished from the others by the words used by practitioners to describe their clients. Each state could be described in terms of client behavior, feeling, and thoughts, meaning that each state represents some type of embodied self-awareness even if clients are also engaged in thinking and talking. It may help to remember that the practitioners were not told to look for these three states, nor were they told to look for instances of ESA.

The quantitative results (shown in Figure 1) add another perspective on these three states of ESA. These results clearly show that there were simply no instances, during any of the $16 \times 5 = 80$ sessions that were documented in this research report, in which a client was observed to move from a state of Dysregulated ESA directly into a state of Restorative ESA, or vice-versa. To put this another way, out of a total of $n = 448$ times in which there was a sequence where one state was observed to be followed by another state (not counting the final segment of each session, which was not followed by another segment), not even one of these was between Dysregulated ESA and Restorative ESA.

Of course, in a small sample of only 5 clients, we cannot say for certain that this type of sequence never occurs. It may be the case that certain types of clients and practitioners – not included in this study – could show such sequential jumps between these two states. If such types of client-practitioner relationships exist and could be documented, they would represent a valuable perspective on the RMB therapeutic process.

From these results, it is reasonably safe to reach at least three conclusions about the state of **Modulated ESA**:

(1) If clients move from Dysregulated to Restorative ESA, they have to spend some time in a state of Modulated ESA, meaning that Modulated ESA functions as a transitional state.

(2) Clients were most often observed in Modulated ESA, around half of the number of segments, and they were most likely to sequence from a segment of Modulated ESA into another segment of Modulated ESA rather than to another state of ESA. Not only that, if we look at all the instances when a client shifted into a state of Modulated ESA ($n=279$), this comprises 62% of the 448 observed sequences. We can conclude that Modulated ESA is a kind of “home” state in which most of the session occurred. It is important to note that these findings are based on frequencies of occurrence of each state and transitions between states. Since we did not have the ability from the practitioner notes to measure the actual time clients spent in each state, we cannot accurately say that clients spent most of their time there.

(3) Modulated ESA was described in multiple ways that suggest that it served different functions for the client and practitioner at different times during sessions. Sometimes Modulated ESA was seen by practitioners as a kind of accomplishment, an unexpected opening into a deeper embodied self-awareness than had been observed in previous Dysregulated states. Other times, Modulated ESA was seen by practitioners as only a brief break from Dysregulated states in which the client was unable to stay with or prolong the felt experience. Finally, practitioners sometimes viewed Modulated states as revealing a real possibility for accessing more Restorative states. These different views suggest that *Modulated states are not all the same* and that practitioners would need to observe these states in the context of the sequencing of their occurrence to ascertain their possible meaning for the client.

Observable Components of States of ESA: Feeling, Thinking, Autonomic Activation, and Social-Relational Engagement

Based on the results of this research report and findings from neuroscience, I believe that these three states of ESA can be completely described in terms of four concrete, observable qualities: (1) Felt experience, (2) Thinking, (3) Autonomic Nervous System activation, and (4) Social-Relational Engagement style.

Felt Experience

Felt experience, or simply “feelings,” is a general term for the way in which we sense the inner condition of the body including interoceptive, proprioceptive, and emotional feelings (see Table 4 for concrete examples). **Interoceptive feelings** are those that give us the sense of being alive in a human body: all the pulsations and energies that our peripheral nervous system can communicate to the brain from the cells, tissues, and internal organs of the body. Interoceptive feelings come from sensory receptors that detect changes inside the body and that link to the insula, amygdala, hypothalamus, and prefrontal cortex (Craig, 2014; Fogel, 2009/2013). Interoceptive feelings also include those that arise from the Autonomic Nervous System (see Figures 2 and 4), such as changes in heart rate, breathing, digestion, arousal, relaxation, safety and threat. **Exteroception**, on the other hand, is not – by itself -- a felt experience. Exteroception

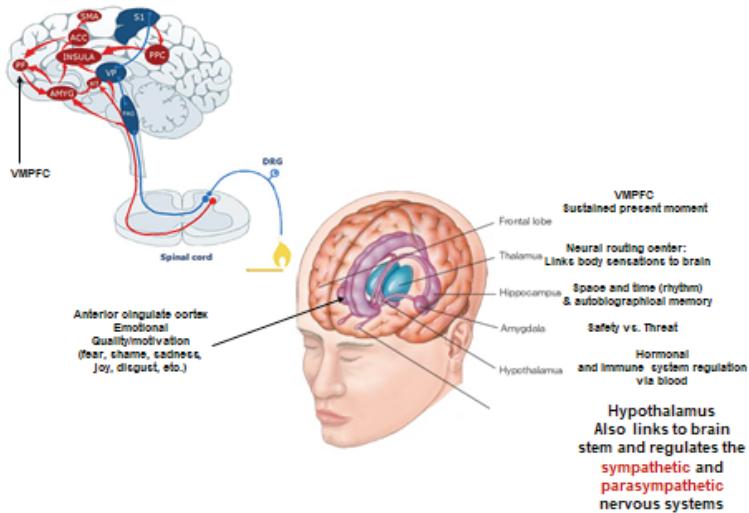
arises from receptors for stimuli that come from outside the body: vision, hearing, taste, touch, and smell. Exteroception can transform into interoceptive, proprioceptive or emotional feelings via links to the insula, as when the sounds of words, music, or noise touches or repels us in some way, or a visual sight can bring deep pleasure and relaxation (like a work of art or an inspiring landscape) or fear or disgust (images of violence or ruin), or when touch can cause us to melt or to tighten up.

Table 4. *Felt Experience that is possible in all three forms of Embodied Self-Awareness*

Types of Felt Experience	Examples
Interoceptive feelings	Being alive in a body, feeling one's heartbeat, blood pressure pulsations from vascular constriction and distension, air flow and constriction, sweatiness, digestive movements, metabolic energy or fatigue, hormonal feelings like sexual arousal or shrinking, interpersonal warmth or coldness, stress or relaxation, and feelings such as painful, achy, dizzy, bloated, strong, blocked, open, electric, melting or stiffening, hot, cold, itchy, nauseous, suffocating, dissociated, spacy, numb, burning, heavy, light, expansive, constricted, flushed, pressure, bouncy, chills, warmth, throbbing, frantic, radiating, tingly, shaky.
Proprioceptive feelings	Those related to the body schema: equilibrium and disequilibrium, coordination and discoordination of body parts, rigidity or fluidity of movement, interpersonal boundaries, distance and closeness, muscle stretch and tightness, moving with others, imitating, feeling emotions by matching body or facial expressions in another person.
Emotional feelings	Happy, sad, angry, ashamed, afraid, proud, disappointed, disgusted, irritable, frustrated, shy, lonely, depressed, excited.

Proprioceptive feelings are those that arise from particular neural receptors inside the body – specifically, in the muscle tendons, muscle cells, and inner ear. Proprioception gives rise to the felt sense of the **body schema** – the body awareness of balance and boundaries – arising in the insula and the posterior parietal cortex (Fogel, 2009/2013, see Figure 2). It is notable that most of the brain's so-called "mirror" neurons, those that allow us to imitate and follow the movements and expressions of other people, are located in the posterior parietal cortex, since a good deal of our body schema is learned by seeing and moving with other people's bodies and emotional expressions. Rosen Method Movement relies substantially on this body schema aspect of ESA as it links with interoceptive and emotional feelings.

Figure 2. The entire neural network for Embodied Self-Awareness in which the insula serves as the center of where all neural information coming from inside the body is integrated and prepared for conscious awareness. The inputs to the insula include the receptors of sensations from different body regions via the spinal cord and brainstem, receptors from the autonomic nervous system via the peri-aqueductal Gray (PAG) area of the brainstem, the hypothalamus (HP), and the amygdala (AMYG), and receptors related to the body schema that are interpreted via the posterior parietal cortex (PPC). Emotional feelings are generated by translating inputs from the insula via the anterior cingulate cortex (ACC) and the supplementary motor area (SMA) into values, movements, and expressions (Northoff & Bermpohl, 2004).



Emotional feelings are the “values” that are added to all other feelings and experiences. This is the felt sense that some feelings are “good” or “bad,” “liked” or “disliked,” “pleasurable” or “painful,” or the sense that we want “more” or “less,” or that we want to “approach” or “avoid.” Emotional-evaluative feelings are formed when the insula links to the Anterior Cingulate Cortex (ACC) and the Orbitofrontal Cortex. Emotional feelings are transformed into actions and emotional expressions via links between the ACC and the motor control areas of the brain.

The part of the brain responsible for helping us to maintain (regulate) awareness of our felt sensations and emotions and deepening our felt experience in the present moment is the ventromedial prefrontal cortex (VMPFC). The ventromedial prefrontal cortex does not work alone but it allows us to hold in the present moment the sensations from a whole-body network of neurons including the insula (translating sensory and emotional information from the body into conscious awareness), the limbic system (emotion and body state modulation of safety or threat), sensory and motor cortices (action and emotional expression), the parietal cortex (sensing body part location and movement), the autonomic nervous system (sympathetic-arousal and parasympathetic-relaxation), and brain stem (survival (fight/flight/freeze and breathing functions). All these brain regions are connected to peripheral nerves from the body that send information to and from the brain regarding self-monitoring, self-modulation, and the maintenance of homeostasis in body systems.

When the VMPFC is activated --when we are able to be in a parasympathetic state of present moment embodied self-awareness -- heart rate, blood flow, respiration, digestion, movement, and the immune system, can function better (Craig, 2014; Fogel, 2009/2013; Quadt et al., 2018; Schulz & Vögele, 2015). Pain relief and modulation is also linked to this same present-moment neural network (Fogel, 2011). The biological function of embodied self-awareness is that paying attention to signals from within the body is essential to taking action – either the body's own processes for healing and recovery or by taking deliberate steps towards self-care -- that assists the body to maintain health and well-being. Imagine if we could not feel our heart racing, our breath constricting, or even something painful. We would not be able to find ways to alleviate any potential problems.

Thinking

I noticed that clients were using different types of thought or mental activity in each of the three states. Adjacent to the VMPFC is the dorsomedial prefrontal cortex (DMPFC), which links to the parts of the brain that enable thought processes (see Figure 3). While the VMPFC links to the insula and other areas of the brain related to maintaining present moment felt experience, the DMPFC links to the thought control centers that are located in the “upper” and “outer” parts of the brain, the neocortex. These areas generate our ongoing stream of thinking that, for most of us, most of the time, is part of the background of our mental lives: our “default” state (that arises in the neocortex’s “Default Mode Network”), where our minds drift when we are not fully engaged with our body feelings.

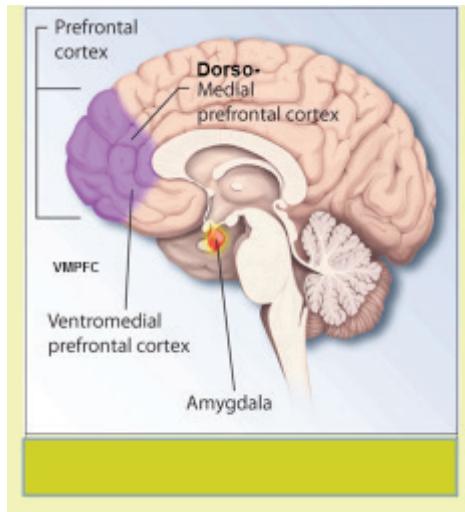
When we are thinking about ourselves or anything else, this thought comes in the form of concepts, labels, categories, logic, reason, evaluation, problem solving, decision making, storytelling, planning and judgment. These Modulated thoughts arise in the modulated “task-positive” network of the neocortex. The default mode network of the neocortex can be a source of dysregulated thoughts – such as rumination, worry, anxious and depressive thoughts -- when the body is under some form of stress.

Conversely, if the ventromedial prefrontal cortex is activated, we will have limited access to logical, conceptual or ruminative thought processes. Instead, when we are feeling something deeply, our thoughts and words are more likely to be **evocative**, meaning that they have direct links to body experiences.

“In **evocative language**, words are chosen to resonate in felt experience. If words “reach us,” they are felt as “true,” “deep,” and “powerful.” Words -- evocatively spoken from the practitioner’s own embodied self-awareness -- can enhance and amplify feelings . . . evocative words uttered during a treatment session are often experienced as surprising and unexpected by the practitioner who speaks them. This is because they do not arise from logical thought processes but from the untamed, non-suppressed flow of embodied self-awareness” (Fogel, 2009/2013, pp. 247 -251).

Such evocative thoughts and words include those that are from the “heart” instead of the “head,” as in expressing the truth of our feelings, or in poetry, or words and sounds in music, or art, or visual images, colors that we see or that come to mind. In the Results section of Part 1 of this research report, you can see how evocative language occurred during states of Restorative ESA, from both client and practitioner.

Figure 3: The dorsomedial prefrontal cortex (DMPFC) regulates thoughts and thinking as it connects to the dorsal (upper) parts of the brain where thought is generated in the task-positive and default mode networks. The ventromedial prefrontal cortex (VMPFC) is linked to the insula, amygdala and hypothalamus which helps to regulate whether we are in a fear/threat state which limits what we can feel from our bodies, or a state of safety which expands our Embodied Self-Awareness. Threat also activates defensive and protective thoughts.



Autonomic Nervous System (ANS) Activation

The autonomic nervous system regulates arousal and relaxation (see Figures 3 and 5) and it functions without direct conscious control in a process meant to maintain homeostasis (equilibrium) in body function. It has neural receptors in the gut, lungs, throat, heart, blood vessels, eyes and ears. These autonomic receptors sense something about the inner condition of the body, and thus become part of interoception, and they also connect to the limbic system of the brain. This is the oldest part of our brain which – via the amygdala, hypothalamus, hippocampus, and brain stem – senses safety or threat so that we can respond appropriately and remember danger and relax when danger has ended. These areas are linked, in turn, to the interoceptive, proprioceptive and emotional areas of the brain. This means that if we get physically or emotionally wounded, for example, this can activate the ANS into a defensive mode (fight, flight, or freeze) to cut off felt sensations from the body. When we are in danger, it is not a good time to rest, relax and feel ourselves. In addition, sensations arising from inside the body – such as past pain and trauma, of injury or disease, or of exertion or stress – can keep us in a defensive and activated mode, meaning that we continue to avoid these uncomfortable feelings even if there is not danger coming from outside the body in the present moment.

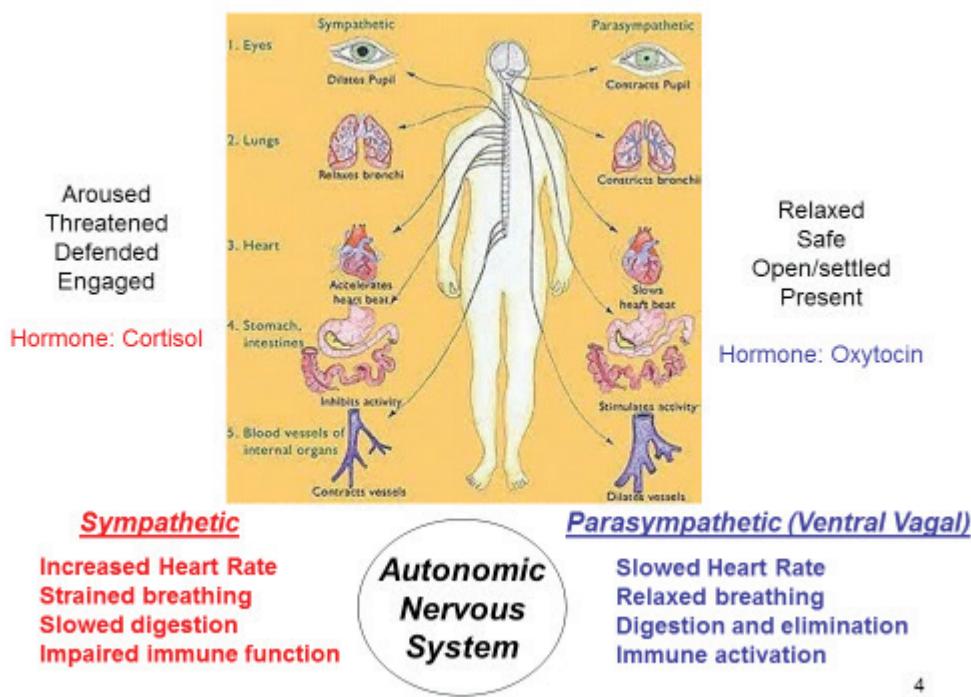
Generally speaking, activation of the **sympathetic branch of the ANS** prepares us for engaging with the world and for responding to stress and threat. As shown in Figure 4, the sympathetic peripheral nerves prepare the body for action by dilating the pupils, opening the bronchi, speeding up the heart and constricting the blood vessels to increase blood pressure, while at the same time slowing digestion and immune function so the body's resources can be directed toward the perceived threat or challenge. Sympathetic activation dulls pain and body-awareness (for survival reasons, it would not be very adaptive to really feel ourselves if we are under stress or threat or being attacked).

The **parasympathetic branch of the ANS** does the opposite, allowing for deeper felt experience, rest, immune and tissue repair, recovery, digestion, and sleep when we feel safe enough to let down our guard. If we rarely, or never, get to this sustained parasympathetic activation, our body resources become drained and our health becomes compromised. *The physiological basis of the state of Restorative ESA is the prolonged activation of the parasympathetic nervous system.*

Cognition is likewise affected when the brain perceives a threat: the VMPFC becomes suppressed while the DMPFC becomes activated so that we can think about how to deal with and survive the current situation. This can be extreme, as in a life endangering event, or it can be an everyday challenge at work or in the family. Once the sympathetic nervous system gets activated, we are going to be doing more thinking: either Modulated or Dysregulated. Also activated in sympathetic states are stress hormones such as cortisol that provide the glucose metabolism to support the expenditure of body energy in times of activity.

The sympathetic branch of the autonomic nervous system creates a state of arousal and induces protective and adaptive responses such as task-appropriate activation and engagement, vigilance, fight and flight. The neurohormonal threat response network activates the hypothalamic-pituitary-adrenal (*HPA*) axis for the secretion of cortisol and other stress hormones. Finally, digestive, growth, and immune systems are suppressed as the body devotes its energetic resources towards muscular tension and away from basic body function and repair (Krantz et al., 2004; Quadt et al., 2018; Schulz & Vögele, 2015). Muscle tension serves the function of self-protection against threats as well as to mask emotions whose expression might make a person more vulnerable.

Figure 4: A simplified view of the autonomic nervous system that regulates involuntary activity within the body in response to safety and threat, the sense of which is formed in the amygdala, hypothalamus, and brain stem (the more primitive and limbic parts of the brain) and communicated to the peripheral ANS nerves.



If the sympathetic fight or flight responses are impossible to activate in the face of an overwhelming threat, we can then go into a state of freeze or paralysis when the dorsal branch of the parasympathetic vagus nerve becomes activated leading to shut down, dissociation, numbness, mental confusion and the like. Many research studies, books, and clinical practices now rely on this understanding of the three branches of the autonomic nervous system (sympathetic (activation), the ventral vagal parasympathetic (relaxation) and dorsal vagal parasympathetic (paralysis, freeze)) to understand and to treat trauma. In a traumatic state, we are either stuck "on" in sympathetic fight or flight, or stuck "off" in freeze.

The results of this research study suggest that the state of Restorative ESA is primarily ventral vagal parasympathetic plus a dorsal vagal "immobilization without fear" along with the hormone oxytocin (Carter, 2014; Porges 2001). Modulated ESA is primarily sympathetic with the possibility of brief visits to a ventral parasympathetic state with the primary hormone cortisol (meaning that the sympathetic arousal is not stuck "on" but the system can shift into moments of relaxation). Dysregulated ESA is a state in which we are either stuck "on" in sympathetic or stuck "off" in dorsal vagal states of "immobilization with fear" and shutdown.

Social-Relational Engagement Style

Practitioners talked about how clients connected with them in each of the three states of ESA. During Restorative ESA, clients were described as more available, more open, and more connected to and resonant with the practitioner. In Dysregulated ESA, clients were described as unreachable, relatively unresponsive to the practitioner, stuck inside themselves, talking without pauses and without any connection to shifts in the clients' body. In Modulated ESA, clients were described as being more available but still not completely open. Their stories were more engaging, as if they were more aware that someone was listening, and there were occasional pauses that allowed the practitioner to make a brief connection to the client. These results suggest that the client's state of ESA directly affected how the client was, or was not, able to engage with the practitioner.

Summary of Characteristics of the Three States of Embodied Self-Awareness: Restorative, Modulated, and Dysregulated

In the following summary, each state is described in terms of four concrete, observable qualities discussed above: (1) Felt experience, (2) Thinking, (3) Autonomic Nervous System activation, and (4) Social-Relational Engagement style.

Restorative Embodied Self-Awareness

1. *Felt Experience that is sustained* and entirely in the present moment. This felt experience is lasting and leads to relief from realizing what we "really" feel about something. The feeling comes spontaneously and without conceptual thought or effort. The experience is restorative if it lasts sufficiently long to evoke an extended parasympathetic response. One has to *slow down, let go, and surrender to being fully in the moment*, in other words, without "doing," effort or deliberate control. **If you have any sense of control, planning or effort, you are most likely in Modulated ESA.**

2. *Non-conceptual thought in the form of evocative words and images that support sustained ESA including free association, daydreaming, “alive” memories that feel re-lived rather than a story, sudden insights that come without effortful thinking, words, sounds and images that feel right and true – resonant with felt experience. If you have any logical thoughts, judgments, or interpretations, you are likely to be in Modulated ESA.*
3. *Activation of the restorative ventral vagal parasympathetic nervous system including a natural and easy breath, sigh, feeling slowed down, relaxation of muscular tension/armoring, relief, feelings of restoration, spreading warmth/energy, feeling soothed, safe, seen, held, settled, vulnerable, open, content, peaceful, fully present, and fully alive. Entering into Restorative ESA also activates restorative states in the immune, hormonal, respiratory, digestive and cardiovascular systems. If you don’t feel this relaxation and spreading sense of ease and warmth, you are either in Modulated or Dysregulated ESA.*
4. *Warm and Tender Social-Relational Engagement that includes acceptance, surrender, safety, restorative ESA of self and other being together, lack of self-consciousness with the other person, ease of moving and being together, psychobiological somatic resonance and deep states of connection, love, appreciation, warmth, and receptivity to caring touch. If you are thinking about what to do or say, or trying to make the right moves with other people, you are in either Modulated or Dysregulated ESA.*

Modulated Embodied Self-Awareness

1. *Felt Experience that is transient, or a brief moment of ESA that is usually part of keeping busy, being engaged or creative but with the felt need to keep going with only a brief pause for resting or stopping. Brief ESA may include moments of grounding, reconnecting, coming back to oneself but only as a short break from ongoing activity and not as a sustained awareness. The feelings may include interoceptive, proprioceptive, and emotional experiences that are brief and that do not activate the parasympathetic nervous system for a sustained period. The person moves in and out of brief feelings, staying on the “edge” of potentially deeper experiences of Restorative ESA. Modulated ESA can take the form of “touching base” with one’s embodied self, or “re-grounding,” accessing brief but meaningful parasympathetic moments such as taking a breath, briefly feeling one’s heartbeat, or momentary relaxation.*

These brief moments of felt experience may be spontaneous (the sudden realization that one is tired, or hungry, or needs to go to the bathroom, or happy to have reached a solution to a problem) or deliberate (making the choice to stop for a moment and smell the flowers and take a breath, or being offered the opportunity to feel for a moment by another person/practitioner). In this state, however, most of the time we are not aware of our bodies. Our awareness is focused on what we are doing or thinking. Most of the time, most of us are in this state and it usually feels alive, productive, helpful, creative; but it can also feel intense and too much and can often transform into Dysregulated ESA.

2. *Purposeful or intentional thought that is conceptual, deliberate, categorical, modulated, and adaptive to the situation or task-positive including creative thinking and problem solving, decision making, explaining, understanding, planning, or thoughts about self and other that are not obsessive but move toward a specific goal (such as telling a story) or solution. Conceptual thought in Modulated ESA can also include thinking about a feeling rather than accessing the felt experience, seeking explanations about one’s momentary felt experience, such as why it is happening right now,*

where it comes from in one's life, what it might mean.

In this state, there is a near constant stream of conceptual thought that is so pervasive, so part of everyday life, that we might not even notice it. The brief moments of felt experience may "stand out" against the background of thinking and *make us think* we are more present with our feelings than we actually are. We can also use thinking to convince ourselves or another person that feeling is not needed, or that we are feeling something when we are not, or that we feel OK and can keep going.

3. *Modulated ESA activates primarily sympathetic pathways to maintain arousal and engagement:* Modulated sympathetic **mobilization** including focused, busy, creative, pleasurable and engaging athletic or dance or musical or teaching or social activity, but can also be edgy, vigilant, tense, overdoing, driven to the point of confusion, distraction, fatigue, withdrawal. Even with these more "negative" feelings, being Modulated means that we are able to activate brief parasympathetic re-grounding and refreshing.

There is a cycling between primarily sympathetic activation and brief parasympathetic activation, primarily tense or engaged muscles with occasional or partial relaxation. Breathing varies between an occasional natural breath and more effortful breathing. The autonomic interoception is primarily aroused, excited, "up," rapid pulse and respiration, intense, focused, engaged. While Restorative ESA is primarily parasympathetic, Modulated ESA is primarily sympathetic with short parasympathetic breaks.

4. *Modulated Social-Relational Engagement* in which one is present and connected with others with a goal or intention (to work together, to spend time together, to solve a common problem, to talk or share a story, etc.) that may include occasional and transient moments ESA such as feelings of relief (I'm not alone, someone else gets me), recognition (being seen and appreciated), shared emotions (tears and laughter). Overall activation is primarily sympathetic (excitement, wanting more, strong urges to speak or contribute while waiting for others, wanting to connect or prove oneself, desire), or a tendency to push beyond limits (stay engaged, keep up, come up with a clever reply or contribution to the discussion), wanting to look good, sound good, etc.

Dysregulated Embodied Self-Awareness

1. *Felt Experience* that is a perseverative and uncontrollable self-focus on feelings of acute and chronic states of physical and emotional discomfort, pain, fatigue, disorientation, dissociation, hopelessness, desperation, despair, depressive feelings, uncomfortable self-consciousness including shame. Or, on the other hand, feelings of invulnerability, risk, addictive urges, hyper-vigilance, tense muscles, hostility, addiction, racing, extreme highs and lows, anxiety.

2. *Ruminative (endlessly repetitive) conceptual thinking* including worrying, defending, denying, depressive and self-negative thoughts, suicidal thoughts, hostile, blaming (self and other) and judgmental thought patterns (good-bad), mental confusion and disorientation, all repeating in seemingly endless thought loops.

3. *There is a hyper-activation of the sympathetic and/or dorsal vagal parasympathetic nervous systems* resulting from current or prior unresolved stress and trauma. There is no ventral vagal activation and therefore no opportunity for rest, insight, discovery, grounding, etc. In Modulated ESA, we may feel that we are pushing ourselves beyond our limits, but we still have the ability to regulate, that is to slow down briefly and re-ground ourselves and our intentions. Here, we do not have that

ability and we suffer for that.

- a. *Mobilization and sympathetic hyper-activation*: During an “ordinary” stress state with dysregulated feelings such as frustration, slow-burn anger, vigilance, watchfulness, muscle tension, high arousal, tension in whole body posture or expression, strained breathing, somatization in the form of chronic pain, discomfort and fatigue (fight), or avoiding, withdrawing, shrinking, making oneself small or unnoticed, and feelings of worthlessness, doubt, shame (flight). In a more extreme trauma state: Chronic or “stuck” overt verbal or physical hostility without settling or closure, passive-aggressive, incessant pushing beyond one’s limits, tense and intense, type-A, always a step ahead of oneself, risk-taking (fight), inability to “land,” urgency to move, can’t settle, anxious, and pain avoidance strategies, hiding, suicidal thoughts, despair, self-harm (flight).
- b. *Immobilization/paralysis and dorsal vagal activation*: Includes “ordinary” dissociation such as confusion, numbness, forgetting, losing focus of attention, losing train of thought, distractible, numb, fatigued, depressed, giving up, loss of self and initiative, and traumatic dissociation such as not there, vacant gaze, hypotonic, out-of-body experience, hypo-arousal, dead inside, detached, feeling coldness, lifeless.

4. *Dysregulated Social-Relational Engagement* may include using and abusing others, power plays, dominance, harassment, inflicting harm on self and others, feeling inadequate, “not enough,” or “less than,” shame, withdrawal, defensiveness, avoidance, passivity, unwanted submission, or tuning out the other person.

Implications of this Three-State Theory of ESA for the Practice of Rosen Method Bodywork

In my own experience as a RMB practitioner, **Dysregulated Embodied Self-Awareness** is where most clients begin treatment. Most health care professionals now know how trauma affects the body, memory, behavior, felt experience, etc., via dysregulation of the autonomic nervous system and other brain regions (Jungmann et al., 2016; Levine, 1997; Ogden et al., 2006; Porges, 2001; Schore, 2003; Seliogowski et al., 2015; Thayer & Lane, 2000; van der Kolk, 2014). During trauma and later post-traumatic states, the ANS is hyper-aroused (stuck ON: fight or flight) or hypo-aroused (stuck OFF: freeze, dissociate). Working with trauma during RMB is discussed in detail by Salibian (2015), Green (2016), and Bernard (2016).

Clients typically begin treatment with a complex history of physical, emotional, and/or medical trauma, current life stresses, usually co-occurring with chronic health conditions. They have tried other health care providers and not found relief. The clients in this small sample of five women have similar histories of trying many different kinds of conventional and alternative treatments for their back pain, mostly without success.

These stuck states of the ANS alter our ability to feel ourselves: this is our Dysregulated embodied self-awareness. We can expect, therefore, that much of the RMB treatment process in the early phases will be focused on getting familiar with client histories and beginning to help the client become aware of habitual methods of modulating or feeling dysregulated by their symptoms. Rather than being judgmental about what the client appears to lack, we can view dysregulation as a “normal” or expected part of the human condition when the body is under stress or has suffered trauma (van der Kolk, 2014).

As RMB practitioners, our role is to observe, accept non-judgmentally, and help the client feel the dysregulation that is present. RMB treatment during Dysregulated states, therefore, would most likely consist of assisting the client in naming and accepting "what is." Explanations – or teaching about the nervous system -- of how the client's history may have contributed to the Dysregulation may be helpful for some clients, some of the time, but most important is helping the client "grow" the ability to shift into more Modulated states where there is the possibility to begin to feel more clearly the discomfort, pain, anger, sadness, loss or whatever is present.

From the clients' perspective, being Dysregulated is experiencing "too much" feeling: too much pain, too much fatigue, too much sadness, too much intensity and inability to slow down, too much uncontrollable urges. Their stuck fight, flight and freeze responses are serving to create this sense of "too much." This is just what Dysregulated ESA feels like. At first, the client can begin to stay more in the present moment, even for brief periods of time, with these dysregulated feelings. This is the movement between Dysregulated to Modulated ESA.

After these feelings become more tolerable (less of a sense of "too much") and the client can recognize and name them, there is the possibility of discovering the "true" feelings, the feelings "underneath" the dysregulated feelings -- the feelings of abandonment, betrayal, shame, loss, fear, justifiable anger, sadness and grief. These feelings may begin to occur briefly during states of Modulated ESA and later they can expand into more deeply felt experiences in Restorative ESA, creating the possibility for healing old wounds and trauma.

The quantitative results of Part 1 of this research report (See Figure 1) clearly show that practitioners should not expect that a client will suddenly "arrive" in a Restorative state directly from Dysregulation. There is most likely going to be a long process of gradual movement between Dysregulation and Modulation that may take many sessions as the nervous system begins to change: as the window of tolerance/modulation of strong feelings opens, as trust in the safety of the setting and the practitioner begins to develop (Bernard, 2016; Fogel, 2009/2013; Green, 2014; Salibian, 2015).

As clients begin to spend more time in states of **Modulated Embodied Self-Awareness**, the goals of treatment will also change to include (1) developing sufficient body awareness to access one's vitality and aliveness of actually feeling something real, (2) learning how to feel, tolerate, and acknowledge dysregulated ruminations, addictions, trauma states, etc., and (3) finding appropriate resources and creative activities outside the treatment sessions that are effective to re-ground and re-regulate oneself in stressful or traumatic circumstances (see also Part 2 of this research report). This emphasizes that Modulated ESA is not simply a state that one has to pass through to get to a "better" restorative state but rather a state that serves an essential function in the treatment process.

The growing body of research on outcomes of RMB treatment reviewed earlier clearly show that RMB clients gain important skills of self-awareness and self-modulation – including self-confidence in making appropriate life choices, reductions in pain, anxiety, stress, depression, and improvements in health -- that serve as a foundation of their growing ability to feel more modulated and less dysregulated.

Clients can also become aware, during Modulated ESA, of when they return to states of Dysregulated ESA. This awareness, which was not available before treatment, is an important part of regaining a more modulated state. The ESA of simply feeling ourselves moving into rumination or dissociation, for example,

can awaken strategies for self-modulation. These strategies might include acceptance that one has a tendency to get dysregulated in a particular manner or in particular locations or with particular people, reaching out for help or guidance, or finding resources in everyday life that help the person to return to a more Modulated state.

For most forms of therapy -- including most forms of bodywork and psychotherapy -- this process of self-modulation and the ability to re-ground and access Modulated ESA in order to remain functional, productive, socially engaged and generally healthy, is the end-goal of treatment. After all, if someone has been dysregulated for many years, finding the means to re-regulate and the ability to escape stuck states is a major achievement that makes the time and expense of treatment worthwhile for most people.

In my experience as a practitioner, I find that many clients are justifiably satisfied with gaining and maintaining their Modulated ESA. Sometimes clients like to continue treatments for many years because they want help in maintaining this Modulated state when they find themselves once again dysregulated. My sessions with these clients are spent primarily in Modulated ESA with some movement into Dysregulated ESA and then back to Modulated. Sometimes clients terminate treatment when they feel that they have gained this modulated, functional ability to go on with their lives.

RMB, however, offers the possibility of a third state of ESA, **Restorative Embodied Self-Awareness**, a state of being and self-awareness that many therapies do not explicitly include. Beyond cultivating self-modulation, a notable and unique benefit of treatment in RMB is the *restoration and repair of body and soul*. This means, as explained above, finding the ability to "stay with" a sustained felt experience long enough to bring deep connection, acceptance of what is, soothing, grace, peace, and wholeness. In the Results section of this article, I presented how *practitioners* described Restorative ESA states in their clients. Below are some quotes, first from Marion Rosen, and then some descriptions from *clients themselves* about Restorative states, descriptions taken from two recent interview studies on RMB.

"When the body works correctly, with the diaphragm swinging freely, the spiritual comes in . . . The healing occurs when the body and spirit come together in a state of surrender, opening, and trust. It is a state of grace for both practitioners and patients. This may sound strange or untrue but it is the reason many people have a feeling of awe about this process" (Rosen & Brenner, 2003, p. 32).

"I feel like in that moment, it's not just this connection between me and B. [her practitioner], but it's this connection between me, and the practitioner, and this greater source and being. Most times, it's that peaceful feeling of that connection. It's just not something that you ever experience with other forms of therapy necessarily or in certain times of your life. It's very meditative, very purposeful" (Bernard, 2016, p. 41).

"I realized that I could think about what I felt in talk therapy, but it was an intellectual process. Now with RMB, I have learned to discern what I think I feel and what I really can feel. I didn't even know that I can actually feel myself until now. I only knew what I could think. Now I can feel myself, feel love for myself, know that I am present, that I do exist, in a visceral way. I would say it takes my breath away, but truth is, it gives me . . . breath . . . the safety to breathe more fully, more deeply. And all the sensations are . . . in color now, so to speak, as if they had been black and white before" (Bernard, 2016, p. 43).

"On the table no matter what's been going on, how anxious I've been feeling, how upset I am about

something, I can just kind of let go within... As soon as I lie down on the table I can feel myself starting to relax and let go, and I just feel so supported and so safe. It's hard to even describe adequately... I find myself wanting to just stay like that like forever. (Laughs) ...in that place where I don't have to do anything else. Just relax and just breathe. And feel..." (Smart, 2018, p. 130).

"Rosen has helped me really feel things viscerally and integrate things so they're not just like this concept like, "Oh, of course, I know that". No. To actually feel, to experience it in my body. Then, the whole world is different. ... And it doesn't ever go back. You're changed forever!" (Smart, 2018, p. 133)

"There's kind of a deeper, quiet, knowing that there are places in me that I'm not even aware of... And it's almost like they are pathways into the spirit, or a pathway into a very deep, hidden self." (Smart, 2018, p. 157).

These comments speak in eloquent ways to the transformative power of Restorative ESA. These quotes, and others from the same sources, speak to links between Restorative ESA and spirituality, awe, grace, something bigger than the self and the other, safety, peace, surrender, breath, depth, and quiet. There is also a hint -- which could not be explored in this research project -- of sustained Restorative ESA as the entry point for a permanent and lasting change in one's state of being: "... the whole world is different. ... And it doesn't ever go back."

Most of the clients who have been coming to me for RMB sessions for a long period of time may spend at least half of their session in this Restorative state. They usually begin the session telling me what has happened in their lives since I last saw them, talking while in a mostly Modulated state. They may have experienced, and show on the table, some recent Dysregulation or re-activation of a trauma pattern. There is usually some moment in the session, however, when I feel the story slowing down and the feelings starting to arise so that, with a little encouragement and the felt sense of a safe container from me, the client can make the transition into and remain in Restorative ESA for most of the remainder of a session.

One long-term client, who I had not seen for at least a year, came in because she was dealing with a death in the family and she wanted some support. After talking about all the issues and events, she was finally able to genuinely connect with the loss and grief. She was in tears for most of the session, reviewing and feeling this and past losses, finding new strength and courage, and just coming home to herself.

After the session, while sitting across from each other in my waiting room, with her face soft and her body relaxed, her eyes that were shiny and still a bit wet looked into mine as she said to me -- in a simple and quiet way that carried with it the history of the mutual intimacy of our long-term working relationship -- "I needed that." This, to me, is a person who has achieved a level of conscious awareness and health that she no longer needs regular sessions, who knows herself sufficiently well to realize when she is having trouble modulating, and who gets -- in some deep, embodied, ineffable way -- the power of Restorative ESA for healing mind, body and/or soul/spirit.

There may be other therapeutic, artistic, athletic, and educational practices -- including some forms of mindfulness, psychotherapy and body psychotherapy, coaching, yoga, dance and ecstatic movement, Rosen Method Movement, musical performance, sports, drama, and the like -- that bring about Restorative states of ESA. My goal here is not to say that RMB is the only practice that creates this possibility. Rather, it is to emphasize that from its original conception by Marion Rosen, and evolving through multiple generations of RMB students, practitioners and teachers in different countries and cultures, Restoration remains a central

and fundamental part of this work.

In many of these practices that lead to restoration, just as with my more experienced clients, it seems that the body needs a period of time in a state of Modulated sympathetic activation that precedes entry into a state of Restorative ESA. Modulated talking in the early part of a RMB session is similar to the Modulated sympathetic activation in athletics, yoga stretching, dancing, music making, romance and love making, and other forms of creative and intense engagement, alone and with others. We know from the results of this particular sample of clients and practitioners that Modulated ESA always precedes Restorative ESA. This small sample is not representative of a wider population of client-practitioner sequential processes between states. The regularity of this sequence in this sample, however, means there must be a neurophysiological need for a felt sense of "coming down" from a "high" of a sympathetically Modulated state of activity and engagement that is a necessary prelude into a period of rest and release that has restorative properties. We should not, therefore, dismiss the client's excursions into Modulated ESA even if they feel like the person is not making progress: An appreciation and allowing of the state of Modulated ESA, in fact, is essential to making the shift into Restorative ESA.

In Part 2 of this research report, I will discuss more about the importance of this necessary transition between Modulated and Restorative ESA. I will also present how practitioners described their own feelings and thoughts and the clinical implications of how practitioners track their own ESA. There will also be a discussion about practitioner self-care and the practice of finding ways to manage and negotiate our own transitions from Dysregulated to Modulated to Restorative ESA on a regular basis.

REFERENCES

Bernard, S. (2016). Relational somatic presence: Meeting trauma with Rosen Method Bodywork. *Rosen Method International Journal*, 9, 25-53. (<https://1xhdko41sric25njz22ditir-wpengine.netdna-ssl.com/wp-content/uploads/2016/09/BernardFinalArticleSpring2016.pdf>)

Bromley, D. B. (1986). *The case-study method in psychology and related disciplines*. New York: Wiley & Sons.

Carter, S. (2014). Oxytocin pathways and the evolution of human behavior. *Annual Review of Psychology*, 65, 17-39.

Cober, C., Smart, S. & Williams, J. (2014). A preliminary inquiry on Rosen Method and Mindfulness: What we notice. *Rosen Method International Journal*, 7, 49 - 62. (<https://1xhdko41sric25njz22ditir-wpengine.netdna-ssl.com/wp-content/uploads/2015/06/2014-vol7iss1-4.pdf>)

Craig, A. D. (2014). *How Do You Feel? : An Interoceptive Moment with Your Neurobiological Self*, Princeton University Press.

Denzin, N. K. & Lincoln, Y. S. (1994). *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage Publications, Inc.

Fogel, A. (2009/2013). *Body Sense: The Science and Practice of Embodied Self-Awareness*. New York: W. W. Norton.

Fogel, A. (2011, March/April). The brain and bodywork: Exploring pain through body sense. *Massage and Bodywork*, 54-61.

Fogel, A. (2012). Rosen Method: Science and Practice. *Somatics*, 16, 8-16.

Fogel, A. (2013) Better or worse: A study of day-to-day changes over five months of Rosen Method Bodywork treatment for chronic low back pain. *International Journal of Therapeutic Massage and Bodywork*, 6, 14 – 24. (<http://www.ijtmb.org/index.php/ijtmb/article/view/200>)

Green, I. (2014). The safe container of interpersonal relationships. *Rosen Method International Journal*, 7, 6-29. (<https://1xhdko41sric25njz22ditir-wpengine.netdna-ssl.com/wp-content/uploads/2015/04/vol7iss1-2.pdf>)

Green, I. (2016). *Relaxation Awareness Resilience: Rosen Method Bodywork Science and Practice*. Fast Pencil Press.

Hoffren-Larsson, R., Gustafsson, B. & Falkenberg, T. (2009). Rosen Method Bodywork: An exploratory study of an uncharted complementary therapy. *Journal of Alternative and Complementary Medicine*, 15, 1–6.

Hoffren-Larsson, R., Löwstedt, J., Mattiasson, A. & Falkenberg, T. (2013). Caring as an essential component in Rosen Method Bodywork - Clients' experiences of interpersonal interaction from a nursing theoretical perspective. *European Journal of Integrative Medicine*, 5, 561-570.

Holt-Lunstad, J., Birmingham, W.A. & Light, K.C. (2008). The influence of a "warm touch" support enhancement intervention among married couples on ambulatory blood pressure, oxytocin, alpha amylase, and cortisol. *Psychosomatic Medicine*, 70, 976–985.

Hrossowyc, D. (2009). Resonance, regulation, and revision: Rosen Method meets the growing edge of neurological research. *Rosen Method International Journal*, 2, 3-9. (<https://1xhdko41sric25njz22ditir-wpengine.netdna-ssl.com/wp-content/uploads/2015/08/Vol2.2-2.pdf>)

Jungmann, S. M., Vollmer, N., Selby, E. A., Witthöft, M. (2016). Understanding dysregulated behaviors and compulsions: an extension of the emotional cascade model and the mediating role of intrusive thoughts. *Frontiers in Psychology*, 7, 1 – 13.

Krantz, G., Forsman, M. & Lundberg, U. (2004). Consistency in physiological stress responses and electromyographic activity during induced stress exposure in women and men. *Integrative Physiological & Behavioral Science*, 39(2), 105-118.

Levine, P. A. (1997). *Walking the tiger: Healing trauma*. Berkeley, CA: North Atlantic Books.

Northoff, G. & Bermpohl, F. (2004). Cortical midline structures and the self. *Trends in Cognitive Sciences*, 8, 102-107.

Ogden, P., Minton, K. & Pain, C. (2006). *Trauma and the body: A sensorimotor approach to psychotherapy*. New York, NY: W. W. Norton.

Porges, S. W. (2001). The polyvagal theory: Phylogenetic substrates of a social nervous system. *International Journal of Psychophysiology*, 42, 123-146.

Rosen, M. & Brenner, S. (2003). *Rosen Method Bodywork: Accessing the unconscious through touch*. Berkeley CA: North Atlantic Books.

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (second edition). Sage Publications.

Quadt, L., Critchley, H. D. & Garfinkel, S.N. (2018). The neurobiology of interoception in health and disease. *Annals of the New York Academy of Sciences, Special Issue: Health Neuroscience*, 1428, 112 – 128.

Robson, C. (1993). *Real world research: A resource for social scientists and practitioner - researchers*. Oxford, UK: Blackwell Publishers.

Salibian, A. (2015). Trauma therapy with Rosen Method Bodywork. *Rosen Method International Journal*, 8, 4-33. (<https://1xhdko41sric25njz22ditir-wpengine.netdna-ssl.com/wp-content/uploads/2015/06/2015-vol8iss1-2.pdf>)

Schore, A. N. (2003). *Affect Dysregulation and Disorders of the Self*. NY: W. E. Norton.

Schultz, S. (2017). Rosen method bodywork at the end of life: Observations from a Massage Therapist. *Rosen Method International Journal*, 10.

Schulz, A. & Vögele, C. (2015). Interoception and stress. *Frontiers in Psychology*, 6, 1 – 23.

Seligowski, A. V., Lee, D. J., Bardeen, J. R. & Orcutt, H. K. (2015). Emotion regulation and posttraumatic stress symptoms: A meta-analysis. *Cognitive Behavior Therapy*, 44, 87 – 102.

Singh, A., Agrawal, S., Gargya, S., Saluja, S., Kumar, A., Kalra, K., Thind, M., Stone, L.E., Ali, F., Duarte-Chavez, R., Marchionni, C., Sholevar, F., Shirani, J. & Nanda, S. (2017). Posttraumatic stress disorder after myocardial infarction and coronary artery bypass grafting. *International Journal of Critical Illness and Injury Science*, 7, 84-90 (<http://www.ijciis.org/article.asp?issn=2229-5151;year=2017;volume=7;issue=2;spage=84;epage=90;aulast=Singh>)

Smart, S. (2018). *Grounded Theory of Rosen Method Bodywork*. Doctoral Dissertation: Kent State University. (https://etd.ohiolink.edu/pg_10?0::NO:10:P10_ACCESSION_NUM:kent1524757138389208)

Strauss, A. & Corbin, J. (1994). Grounded Theory Methodology. In N.K .Denzin & Y.S. Lincoln (Eds.) *Handbook of Qualitative Research* (pp. 217-285). Thousand Oaks: Sage Publications.

Thayer, J. F. & Lane, R. D. (2000). A model of neurovisceral integration in emotion regulation and dysregulation. *Journal of Affective Disorders*, 61, 201–216.

Tulloch, H., Greenman, P. S. & Tassé, V. (2015). Post-Traumatic Stress Disorder among Cardiac Patients: Prevalence, Risk Factors, and Considerations for Assessment and Treatment. *Behavioral Sciences* (Basel, Switzerland), 5(1), 27-40. (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4384060/#>)

van der Kolk, B. (2014). *The Body Keeps the Score: Brain, Mind and Body in the Healing of Trauma*. New York: Penguin Books.

Zettmar, K. (2011). How love heals. *Rosen Method International Journal*, 4, 2-8.

(<https://1xhdko41sric25njz22ditir-wpengine.netdna-ssl.com/wp-content/uploads/2015/08/Vol4.1-2.pdf>)