# Chapter 9

## SOMATIC MARKERS IN CLINICAL PRACTICE

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#### **ABSTRACT**

The body provides immediate and accurate information regarding the inner world, perceptions of the outer world, and the emotional state (de Becker, 2013). Through the five senses, the body takes in far more information than the conscious mind can perceive (Wilson, 2002; Norretranders, 1998). Some of this unconscious information registers as observable responses in the body, called somatic markers (Damasio, 1994). When the psychotherapist becomes more mindful of her own bodily responses, she gains access more quickly to this deep information regarding the therapeutic process. When she is aware of somatic markers, she has a reliable reference point during treatment to identify counter-transference, emotional triggers, and recognize somatic shifts in patients. This chapter discusses how to explore and deepen somatic awareness and apply this awareness in clinical practice. It examines the crucial relationship between somatic markers and emotional triggers. It also discusses the art of embodied self-awareness in the subjective emotional present (Fogel, 2009), and explores the role of body signals, or somatic markers, in witnessing and working with patients with a range of disorders.

Keywords: somatic, embodied self-awareness, somatic psychotherapy, clinical practice, emotional triggers, mindfulness.

#### 1. INTRODUCTION

Emotions are increasingly recognized as embodied, accompanied by physiological changes (Mauss, Wilhelm, & Gross, 2004; Damasio, 2010; Kövecses, 2000). The lexicon for sensate indicators in various approaches to somatic psychotherapy, similar to challenges resulting from the many terms used for emotion-related processes, can be bewildering (Gross, 2014; Röhricht, 2009). Gut level feelings, body signals, embodied self-awareness (Fogel, 2013), the wisdom of the body (Rosen, 2011), the "embodied being" of mindfulness (Kabat-Zinn, 2010) and other references to informative, emotional, physical sensations are sometimes used interchangeably. When neuroscientist Antonio Damasio named and identified these informative sensations as "somatic markers", he provided a language, a body of research and a scientific hypothesis for a fundamental human experience central to many somatic psychotherapy approaches including Somatic Experiencing (Levine, 2010), Rosen Method (Rosen, 2011), Huma Somatic Psychotherapy (Barrie, 2002), Hakomi (Fisher, 2011), numerous mindfulness-based psychotherapies (Dunn, Callahan, & Swift, 2013; Jazaieri et al., 2014; Goldin, Ramel, & Gross, 2009) and Dialectical Behavior Therapy (Linehan, 1993). Each of these addresses emotional responses that involve changes in experiential, behavioural, and neurobiological response systems (Gross, 2014).

Damasio describes spontaneous, unconscious physical sensations or changes that occur in response to the environment, as somatic markers. They arise as visceral sensations, increased heart rate, sweaty palms, tensed muscles, flushing, temperature changes, gut level feelings and others (Damasio, 1994, 1999, 2010). The term "somatic marker" describes an observable response in the body that is a uniquely useful tool to a clinical practice, and is directly tied to somatic awareness (Röhricht, 2009). This chapter is not based on Damasio's ideas, but on direct clinical experience integrating emotionally-based bodywork and psychodynamic counseling. However, the language of somatic marker hypothesis aptly describes the felt, experiential, somatic awareness that is the focus of this chapter.

Somatic awareness aids the therapist in reading unconsciously generated somatic signals in both the patient's body and the therapist's body. A therapist who has developed her

somatic awareness has tools to teach patients to learn to recognize their own somatic markers as a means of better meeting their needs, to have more and better choices regarding habitual behaviours, to regulate their emotions (Ratener, 2014; Dunn et al., 2013), and to intentionally affect their emotional state by changing their posture (Carney, Cuddy, & Yap, 2010).

## 2. WHAT IS SOMATIC AWARENESS?

Somatic awareness is proprioceptive and refers to the felt experience of the body. For this chapter, it is specifically related to muscle tension and relaxation, body posture, and emotional feelings. Each of these addresses responses that involve changes in experiential, behavioural, and neurobiological response systems (Gross, 2014). Heightened somatic awareness provides a vehicle for understanding what is being felt. A simple process that entails noticing the sensation of muscle tension, allowing the tension to be as it is, rather than resisting it, and maintaining awareness of the tension, can facilitate the muscle to relax, opening the "gateway to the emotions" (Mayland, 1985/2005), where our mental processes are clearly embodied (Mauss et al., 2004).

### 3. SOMATIC AWARENESS AND THE UNCONSCIOUS

A human being unconsciously perceives 11 million bits of information every second and at most 40 of those bits can be perceived and made use of consciously (Norretranders, 1998). Clearly it is inefficient to pay attention to millions of little details that are a part of our everyday environment, and some of this information is filtered out through selective attention (Wilson, 2002). As Damasio wrote, the somatic marker "allows you to choose from among fewer alternatives" (Damasio, 1994). However, it does not account for the vast discrepancy between the 11 million bits perceived unconsciously and the paltry 40 bits perceived by the conscious mind. Deep, emotional, intuitive feelings register in the body as gut-level feelings. These feelings are cognitive processes that operate faster than we realize and are very different from the step-by-step thinking upon which we rely (de Becker, 1997). Fairly recently, the biochemicals of emotion have been isolated and the locations of their receptors have been mapped by biochemists including Candace Pert, Michael Ruff and Ed Blalock (Gerhardt, 2004). Their research has confirmed that "feelings come first", and that reason and rational thought are initiated by emotion and, in fact, depend on it (Gerhardt, 2004). Understanding that reason follows emotion, and that the body responds to input with visceral, emotional signals, underscores the importance of increasing somatic awareness. Our bodies, our felt experiences, hold vital information that is not accessible to our thinking, rational minds. Once the information is accessed, it can be understood rationally, but rational thought alone will not take you there. The information is stored unconsciously in the body.

## 4. HOW IS SOMATIC AWARENESS RELEVANT TO CLINICAL PRACTICE?

Somatic markers serve to bring unconscious processes to consciousness, providing the possibility of successfully navigating current conflicts and also of addressing early unresolved conflicts. They provide guideposts for the core features of emotion regulation (Ratener, 2014). Awareness of somatic markers enables the therapist to gain insight into herself as well as the patient. For example, the therapist may recognize physical signals in her body as early indicators of emotional triggers and counter-transference. A tangible early indicator provides the therapist with an opportunity to notice sooner what initiated the counter-transference. This can facilitate the therapy and help the therapist manage counter-transference more quickly. Conversely, it is maladaptive for the therapist to deny that she is experiencing emotion and suppress it. When she distances herself from awareness of her own emotions she becomes less able to recognize and respond to her counter-transference and emotional triggers. Physiological arousal associated with suppression and cognitive disengagement can lead to misdirection and burnout (Maroney & Gross 2014).

Therapists who learn this technique can then guide their patients in understanding signals in their own bodies. For example, a patient with borderline tendencies may learn to identify physical sensations that occur just before flying into a rage, and over time may learn to recognize the somatic marker that precedes the rage in time to remember that he has choices, and always feels worse after raging. The patient can learn to distinguish between the dual-processing modes of automatic or unconscious processing, and controlled or conscious processing to self-regulate his emotions (Barrett, Ochsner, & Gross, 2007). Further, the therapist can help the patient to work with posture to intentionally affect his emotional state (Carney et al., 2010).

More intimate than body language, the somatic marker makes apparent deeper, less conscious shifts as they occur in the patient through observable changes in his body. Tears are a familiar observable response to a somatic marker that informs the therapist the client may be experiencing distress. A softening of the breath may indicate a sense of understanding in the patient. A movement of retreat in the chest may indicate a feeling of resignation. Somatic markers call attention to a negative outcome, or become a beacon of incentive if the somatic marker is positive (Damasio, 1994). The therapist can't know for certain what a particular somatic marker means for a patient, but can learn to recognize the difference between responses to negative markers and positive ones. The somatic marker provides an index of change and is a starting point to explore the patient's awareness.

### 5. CLINICAL APPLICATIONS

Before working with somatic markers in a patient, a therapist must develop a kinesthetic or "felt" awareness of her own body, which requires practice and commitment and presents the greatest challenge to incorporating somatic awareness in clinical practice. Only then can the physical signals evident in the patient, such as muscle tension or relaxation, a quick intake of breath, or a change in his posture, have meaning for her. She understands that physical signals observed in the patient are the patient's responses to somatic markers. Signals such as these provide the therapist with valuable information that the patient may be entirely unaware of. A therapist familiar with her own somatic markers may notice the patient slightly lift his shoulders, and consider what this tension could mean. Perhaps she knows her shoulders raise a little when she feels dismissed, and can consider this while observing the patient. This is merely a starting point to explore what the patient could be experiencing. The tension involved in elevating the shoulders, for example, often is related to a feeling of vulnerability, a need for self-protection. In an emotionally tense situation, muscles correspondingly tighten. A person with a well-developed somatic sense will notice the muscle tension, pay close attention to what it might mean and make greater use of the information in the body's response. This is illustrated in the following two stories:

• A counselor greeted a new client at the door, expecting to escort the client directly up the stairs to her home office. When the client boldly walked past the counselor into the main part of the home, picked up items in the counselor's living room, commented on them and asked where they came from, the counselor froze. Later she reported that her chest and throat had tightened and she remembered feeling critical of herself for her response. Her self-talk included internal statements such as, "What is wrong with me that I am feeling this way? There is nothing wrong with what he's doing. I hope he can't tell that I don't know how to handle this!" The counselor desperately grasped at what she thought her reaction to this situation should have been. Later, she said, "I didn't know what to do!" If this counselor had taken a moment to notice the tension in her throat and chest, instead of judging it as the wrong response, she could have trusted the response and wondered what it was telling her. This would have helped her to consider, "My throat and chest just tightened up. Something is going on with me. I wonder what it is?". She might then have been able to recognize that she felt intruded upon. This could have made it possible for the counselor to say, "My office is upstairs. Let's go".

• During a therapy session a patient made a statement clearly seeking the therapist's approval. The therapist remained silent and noticed the patient's torso slightly collapse. She asked the patient what he felt in his body at that moment and he said that he felt awful, and spread his fingers across his breastbone. "Right here", he said. Under the therapist's guidance, and staying with the feeling in his body, he realized that every time he sought approval, he felt this same sensation. Eventually he was able to identify it as betrayal – his betrayal of himself, as he looked to others for his sense of adequacy.

The patient later noticed another somatic marker that he described as an "edge", that occurred immediately prior to saying something with the hope of gaining approval. He recognized it as an early warning that he was about to betray himself. The "edge" served as a guide for him to make a better choice, and perhaps withhold the approval-seeking statement.

A somatic marker can serve as a catalyst during therapy for the emergence of something held deep within the psyche. It can indicate the underlayment of certain behaviours, fears and insecurities (Fogel, 2009). During treatment, when a patient is guided to "allow" rather than to "resist" a detectable somatic marker, and to stay attentive to it, a number of things can happen. The patient might feel the emotion behind the tension. An image may appear in the patient's mind or he may have a memory. The patient may describe the physical sensation of the somatic marker as having form, texture, or substance. The key is for the patient to stay present, notice the sensation, and stay with it without an agenda. Then, the meaning behind the tension is sometimes revealed. As with other aspects of deep work, this process can be dream-like for the patient and the awareness he gains may not be linear or make apparent sense. Often, afterwards, the pieces fit together and the new awareness can be understood rationally. Although the end result makes sense logically, in many instances the information gleaned from this process could not be uncovered by thinking it through. Some examples of this process:

- A patient checked in with her body and identified a sensation in her abdomen. As she stayed with the sensation, she reported having an image of a drill. She stayed with the sensation awhile, and said, "It's like something is drilling to get out". Momentarily she realized that her own words, which she had always judged and curtailed, were "drilling" to get out of her; she wanted to speak and express herself and hadn't allowed it.
- A patient noticed a sensation that spread across his ribcage. "It feels like a wall", he reported. Upon staying with it, he told me, "It's protective. It's like a blanket and it feels safe". As the process unfolded he pointed out, "The wall feels comforting but at the same time, there's some fear in there". A few moments later his face crumpled and he started to cry. "I'm so afraid", he said, "that by protecting myself I've made a real mess of my life".
- One patient while staying present with a somatic sensation mentioned an image of a window. The therapist asked whether there was a person in the image, and the patient identified that there was someone sweeping. She then noticed a glittering archway going up and out of the window. Suddenly she realized how much it seemed to her as a child that what was important to her was swept out the window as though it had no value at all.

In each of these instances the patient experienced deeper understanding of a lifelong struggle and a subsequent opening to new possibilities. For example, for the man who described the "wall" sensation across his ribcage, awareness of his simultaneous feelings of safety and fear in the "wall" pieced together for him his struggle between understanding his need to wall himself off in response to sadistic parents and feeling self-hatred because he continued to wall off from others and himself. The sensation provided awareness of this struggle and made it possible for him to begin considering objectively whether to wall himself off in certain situations.

The somatic therapist can distinguish performance from authenticity by paying close attention to visible shifts in the patient's body that reveal whether he speaks from conceptual self-awareness or embodied self-awareness (Fogel, 2009). When the patient expresses himself from the sensory-motor aliveness of the True Self (Winnicott, 1960), his body responds with

unconscious but observable tension or ease. When he speaks from the False Self of conceptual self-awareness (Winnicott, 1960; Fogel 2009), the patient's body does not respond. The response in his body as he speaks reveals the emergence of something hidden, something tied to his unconscious. Lack of somatic response indicates inability or unwillingness in the moment to delve more deeply.

Questions that can be useful in introducing somatic awareness to therapy (for both patient and therapist) include:

- What does your body feel like to you at this moment?
- Can you tell you have a body? How can you tell?
- What do you notice? What stands out?
- Can you feel the weight of your body?
- What surfaces can you feel your body contacting?
- What is it like for you to pay attention to your body in this way?
- Can you feel your breath? What are the qualities of your breath is it constrained? Shallow? Free and easy? Expansive? Something else?
- Does it seem that your body is telling you something?
- Find a place of tension in your body and stay with the feeling of it. Don't try to relax the tension or to amplify it allow it to be as it is. Then, see if there is something associated with it such as an emotion or an image or a memory.
- Can you find a feeling of emotion in your body? What does it feel like? Can you tell what emotion it is? Does it have a shape or size, or an association?

### 6. ADDICTION AND DISSOCIATION

The following discussion on how to integrate somatic awareness in a clinical practice to facilitate treatment of two specific personality disorders, addiction and dissociation, introduces methods that can be modified and applied to treatment of numerous other disorders as well as to less severe social and emotional dysfunctional states.

#### 6.1. Addiction

Somatic markers play a role in recovery from drug addiction and alcoholism by guiding the addict toward making a choice he knows he will feel good about later, and away from a choice that he knows he will regret (Damasio, 1994). Craving and compulsion are specific somatic markers that drive the practicing addict and alcoholic towards destructive behaviour, with the promise of a positive payoff, such as euphoria, or diminished pain or anxiety. Disruption of certain links in the brain can generate unrestrained cravings in an addict (Fogel, 2009). There is a tendency in an addict to "forget" about the negative consequences of substance abuse, such as physical pain of a hangover or withdrawal symptoms, for example, and emotional pain of shame or regret and possibly the horror of being responsible for an accident, causing injury or death (Bechara, Damasio, & Damasio, 2000; Fogel, 2009). Increased attention to somatic markers and embodied self-awareness can help remind the addict of the unpleasant results of drug and alcohol abuse (Damasio, 1999; Fogel, 2009). Including somatic self-awareness in addiction recovery treatment has been proven to be therapeutically beneficial (Fogel, 2009).

A recovering addict can learn to recognize the physical signal of compulsion as a red flag that indicates danger ahead, and can regulate his choices based on this. This is accomplished during treatment by discussing the patient's experience of the physical compulsion to use the drug. Possible questions to begin this discussion include, "What did you feel in your body when you felt compelled to take a drink?" or, "Do you remember what happened in your body just before you took the drug?" or, "What happened in your body just before the part of you that was saying, 'Don't do it', disappeared?" The associated physical feelings are unique to the patient and can range from numbing out to excitement, dread or betrayal, a moment of physical clenching, and others. He may experience excitement or anticipation, but these are likely to be accompanied by a background feeling (Damasio, 1994,

1999) such as disappointment. It can also be useful to discuss the somatic experience that occurs every time the addict chooses to *not* use. He may report relief, elation, a feeling of solidity or self-reliance. Noticing and comparing various possible outcomes and accompanying physical sensations provide a tangible reference point for making choices regarding his addiction. Recognizing this signal early on can help the patient to make the choice he knows will serve him best in the long run, that is, the choice that will ultimately, physically, feel the best. When the addict successfully avoids the compulsion to indulge his addiction, the physical sensation of his feeling of accomplishment and success can become an incentive for him to behave similarly (Damasio, 1994), when his compulsion to use reoccurs.

#### 6.2. Dissociation

Somatic work is proven to facilitate therapy with dissociative patients (Fogel, 2009). In more extreme cases such as dissociative identity disorder, somatic elements in treatment support eventual integration. Embodied self-awareness promotes the ability to function in the subjective emotional present (Winnicott, 1960; Fogel, 2009). It can help the patient to feel somatic markers of safety, to directly experience that he can feel his body without precipitating danger, and that traumatic events of the past are no longer happening. The ability to bear feeling present in his body is healing for a dissociative patient. Because early childhood sexual abuse is the quintessence of DID and to some extent other dissociative disorders, somatic treatment can be extremely helpful. It can accelerate the therapy, but accelerating the patient's emotional experience can also re-traumatize the patient. For this reason, somatic work with dissociative patients must be undertaken with great care.

In my workshops, I often start a basic body awareness exercise with the question, "Can you tell, without looking, that you have a body?" During a program for early childhood educators, one young teacher raised her hand and said, "I couldn't tell I have a body! Does that mean something is wrong with me?" I suggested we speak after the workshop, and when she approached me, she explained, "My parents were very strict. In my family, what I felt didn't matter. I simply had to do what I was told." My impression of her was not that she had a serious dissociative disorder, but the way I addressed her body awareness may provide some ideas for how to bring this to a clinical practice with dissociative patients. First I asked her, "Can you tell me if you are sitting or standing?" "I know I am sitting", she said. "I know that I came over and sat down next to you". Note that she didn't tell me she could feel her body sitting in the chair, but rather what she knew rationally. Next, I asked her, "Can you tell whether there are shoes on your feet?" "I know I am wearing shoes", she told me. "I know that I got up this morning and put my shoes on". I observed her body for a few moments and then asked, "Can you tell me whether your feet are touching or apart?" She sat for a moment, and then her face lit up. "I can feel that my feet are touching!" she said.

If I were to continue to work with this woman in my practice, her ability to feel her feet touching would be the starting point for our work. I would build on that known awareness and explore with her whether she could feel other surfaces her body was touching – the chair she was sitting in, places where one part of her body contacted another part, such as a hand resting in her lap, the tightness or looseness of her clothing.

When asked what his body feels like to him, a person with a dissociative disorder is likely to respond similarly to the young educator mentioned earlier. He may well report that he can't feel his body. When asked about whether he can feel his hands or his feet, he is likely to say, "No." If he *can* feel his feet, he may experience them as very far away from his head or upper body.

A dissociative patient can benefit from being encouraged to feel his body, and then to dissociate to the point of not feeling it, and then to feel it again. Learning that he can direct whether he stays present in his body or dissociates, can be empowering and give him a sense of agency over his experience of his body. Ultimately, with a dissociative patient, the healing is in the experience of his body as his ally.

#### 7. CONCLUSION

The drive to feel good about ourselves and our choices is hardwired into our central nervous systems (Keltner, 2009). Paying attention to somatic markers in clinical practice is an effective way for the therapist to gain self-awareness, particularly in identifying counter-transference, and for gaining insight into the patient's unconscious signals. Somatic markers serve as doorways to the unconscious and as accessible signals that provide practical guidance. They offer the therapist and patient tangible guidance that helps them relate to themselves and others with greater ease. Somatic awareness helps the patient to live his treatment.

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#### **KEY TERMS & DEFINITIONS**

**Body language:** nonverbal communication, often unconscious, including body posture, gestures, facial expressions and eye movements.

**Information bit:** the basic unit of information in computing and digital communications.

**Somatic:** of the body, bodily, physical.

**Somatic awareness:** felt perception of the body including kinesthetic, sensate and proprioceptive perception.

**Proprioception:** perception governed by proprioceptors, as awareness of the position of one's body.

**Somatic marker:** spontaneous, unconsciously generated physical sensation or change that occurs in response to the environment, and directs attention on a possible outcome.

**Somatic-marker hypothesis (SMH):** a hypothesis formulated by Antonio Damasio that proposes a mechanism by which emotional processes can guide or bias decision-making and other behaviour.

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**Biographical sketch:** Caroline Goodell, Founder and Director of the Institute for Body Awareness, is the creator of Somatic Awareness in Clinical Practice, Body-Mind Parenting, and Bring Your Body to Work. Caroline graduated from Cornish College of the Arts in Seattle with a Bachelor of Fine Arts degree in Performing Arts. She is a certified Rosen Method practitioner, a Washington State Certified Counselor and a Licensed Massage Practitioner. Caroline was on the faculty of Ashmead College, Seattle, WA, from 1990 - 1994 as a kinesiology instructor, and taught a workshop titled Body Awareness and Psychotherapy to graduate psychology students at Antioch University in Seattle annually for over ten years. Caroline teaches programs in the United States and Europe, is currently writing a book on Body-Mind Parenting and is a Master's candidate in Research Psychology.