

REFERENCE:

Tantia, J.F. (2019). Toward a Somatically-informed Paradigm in Embodied Research. *International Body Psychotherapy Journal*, 18(2-3). 134-145.

Toward a Somatically Informed Paradigm in Embodied Research**Jennifer Frank Tantia**

The field of Somatics has existed for more than eighty years without the complement of substantial research to accompany it. As it began to evolve into mental health treatment, the experiential orientation of somatic psychotherapy attracted those more interested in the art of the practice than the practice of scientific research that could support treatment outcomes. This has created a weakness in the field and has arrested the development of somatic psychotherapy as an evidence-based treatment for emotional health. This article will offer an overview of the extant literature on embodied research and make a case for the need for somatically informed embodied research. It will describe general ways in which somatic psychotherapy and dance/movement therapy clinical practice can be repurposed to create somatically informed research methods. Finally, it will project how embodied research methods may be useful to studying complex issues in social phenomena as well as the intricacies of treatment resistant medical and emotional illness.

Key words: embodiment, embodied research methods, embodied inquiry, mental health, psychophysiological health

Over the last twenty-five years, an extensive collection of work on embodied research has emerged from fields outside of somatic psychotherapy. Disciplines such as philosophy (Abram 1996, Lakoff and Johnson, 1999; Varela, Thompson & Rosch, 2016), neuroscience (Damasio, 1999; Porges 2009; Scaer, 2007) anthropology (Csordas, 1993, 2008) nursing (Gavin and Todres, 2009; Mason, 2014), education (Kiefer and Trump, 2014), sociology (Perry & Medina, 2015), social psychology (Meier et al., 2012) and health psychology (MacLachlan, 2004) have explored the murky waters of what is labeled “embodiment”. Some have evaluated embodied experience from phenomenological methods (Finlay, 2011; Todres, 2004, 2007; van Manen, 2015; West, 2011), grounded theory (Rennie, 2006), and arts-based research (Levy, 2009, 2017; Spatz, 2015). Still others have explored embodiment more specifically from a feminist perspective (Ellingson, 2012; Vacchelli, 2018), or queer theory (Thanem and Knights, 2019).

These researchers have each laid a conceptual framework for embodiment (according to their respective fields), examining it from decision-making, (Bechara, et al, 1994: Hervey, 2007) to identifying the intricacies of personal oppression (Ellingson, 2012; 2017). However, many of them have stopped at a crucial part of the embodiment process. They explain how we *think* about

embodiment but miss the very essence of the experience itself; the sensorial experience of the present moment that may offer deep insight into personal (and potentially universal) human truths.

The embodied psychotherapy community has long been shy when it comes to producing research studies, and only a handful of therapists have advocated for more research in the field (Caldwell and Johnson, 2012; Cruz and Feder, 2013; Hervey, 2000, 2012; Koch & Fuchs, 2011; Ladas, 2005; Mehling et al., 2012; Payne, et al., 2016; Tantia and Kawano, 2016; Young, 2012). When discussing the difficulty of solidifying a research base for body psychotherapy and dance/movement therapy, Michalak et al., (2019) suggested that a "...huge diversity in theories and methods ranging from ideas about the treatment of specific disorders to applying specific methods for a wide range of human problems" (p. 53). The authors concluded that the variety has led to a shortage of randomized controlled trials - something that is crucial to the integrity of a field's body of knowledge. Another perceived problem that this author has heard first hand from the body psychotherapy and dance/movement therapy communities, is that clinical research in these fields is inappropriate since it could compromise the sensitivity and individualized process involved in conducting embodied research. Developing a protocol, for example, could possibly "dehumanize" the process that is so unique to somatic psychotherapy healing.

However, there may be a way to collect and analyse data without compromising the integrity of the treatment setting. Without trying, somatic psychotherapists already utilise methods to gather information from their clients that are akin to what researchers do while gathering data for a study (Caldwell & Johnson 2012, 2015; Johnson, 2014). For example, while in sessions with clients, they are listening to what clients are saying (collecting data), organizing the information in terms of the clients' patterns (data analysis) and revising their interventions accordingly (revising the research question). In Gestalt therapy, Fritz Perls (Perls, Hefferline & Goodman, 1995) called his interventions "experiments," offering interventions with open curiosity and adapting them in present time to best understand and work with a client's needs.

What is special about somatic psychotherapists, however, is that we not only listen to what the client is saying, we also listen and look for *how* they are describing what they are saying; for example, we notice pauses in the narrative, changes in eye gaze, gestures, deepening of the breath, or other indicators that are often missing in traditional "talk therapy" but are crucial from a somatic lens. To the somatic psychotherapist, this may seem like second nature, but it is the uniqueness of noticing and inquiring into the nonverbal that may be the heart of what makes somatic psychotherapy different- and researchable.

In the same way that attention to embodiment makes somatic psychotherapy different from talk styles of therapy, it may also be the missing piece in current embodied research methods. If somatic psychotherapy practice could be translated into research methods, it may not only evoke more interest from practitioners to engage in research, but embodied methods may also have the potential to change the face of the traditional research paradigms that do not attend to the actual experience of the body alongside the client/participant narrative.

The problem with embodiment in research

Embodied research methods that stem from embodied epistemology are necessary, not only for the identity of the field, but for its survival. Young (2012), a somatic psychotherapist and prominent writer and researcher in the field, critiques its lack of research:

We have got to become a lot more objective – of ourselves – and about ourselves – and that does not necessarily mean de-humanisation [sic]. We have got to find ways (resources with which) to do the research, which probably means the current Somatic Psychology PhD programs and students initially. (p. 79)

Young's conjecture is true- we do have to find ways to do the research, but most of the graduate programs in somatic psychotherapy and dance/movement therapy are strongly focused on practice, and few doctoral programs in the US that focus on research; two in dance/movement therapy, and one doctoral program in somatic studies. The disproportion of practitioners to researchers in the field makes the cultivation of research an overwhelming task.

Perhaps an even larger problem facing the development of embodied research in somatic psychology is that the current research methods do not fit the elements and nuances that emerge within a somatic psychotherapy process. Traditional psychotherapy treatment ("talk therapy"), relies on explicit communication, so it naturally follows that methods for studying clinical research would rely on explicit means to collect and analyze data (i.e., measurements and comparisons, or words from interviews). From an embodied epistemology, however, there is a mismatch when the researcher tries to fit embodied (often implicit) experiential data into a traditional (explicit) way to study it.

Too often students and researchers in somatic psychotherapy find themselves collecting and analyzing embodied data with traditional research methods. It is not surprising that somatic psychotherapists may feel intimidated, not only by the unintuitive process of conducting research (Caldwell and Johnson 2012, 2015) but the constant mismatch of applying explicit methods to implicit, (embodied) data. Instead of attempting to fit a somatic experience into an explicit paradigm, new methods and approaches are needed to better suit somatic experience.

A paradigm shift in psychotherapy

The awareness and attention to embodied experience in the psychotherapeutic process has been called a paradigm shift in traditional talk psychotherapy (Bruschweiler-Stern, et al., 2010; Schore 2009, 2011), with the emphasis that traditional focus on explicit, verbal communication in the psychotherapeutic process is not enough. According to Schore, psychotherapists must move from “conscious verbal language to unconscious affective nonverbal communications” (2009, slide 26). Schore also seems to correlate “unconscious communication” with nonverbal communication that, unless attended to, is not otherwise available. He lists factors such as “visual-facial, auditory-prosodic, and tactile-gestural emotional communications” (Schore, 2009, slide 27). The shift to the implicit supports what somatic psychotherapists have known and practiced for decades; that embodied experience is a valuable healing element in the psychotherapeutic process (Barratt, 2010; Heller, 2012; Marlock, Weiss, Young, & Soth, 2015; Payne, 2017; Payne, Koch, Tania & Fuchs, 2019; Porges & Dana, 2018; Rothschild, 2000; Tania, 2016; Young, 2012).

Most psychological research in “implicit relational knowing” (BCPSG, 2010) focuses on developmental interactions between mother and child. In a somatic psychotherapy setting that is largely practiced with adults, there are parallel interpersonal experiences between the adult therapist and adult client. Therefore, there may be implicit data available, that can be collected and analyzed for a study that has yet to be formally explicated in research. Embodied studies between or among adults who have access to memory, verbal description and interpretation of embodied experience is a wealth of knowledge yet untapped in current embodied research.

Embodied forms of inquiry

As far back as fifty years ago, a study was conducted on embodied experience in clinical research. Researchers found that patients who brought attention to the felt sense (an amalgam of sensations and emotions in the body) experienced a reduction in psychiatric symptoms that lasted longer than traditional “talk therapy”. (Rogers, Gendlin, Keisler, & Truax, 1967). This idea developed into what is known as Focusing today (Gendlin, 1981). Focusing has since emerged as probably the strongest base for exploring embodied experience in psychotherapy.

Embodiment is more than the sum of its parts; in fact, it cannot exist as only physical, mental, or emotional, but is a present moment experience that is an amalgam of aesthetic experience. As Blackstone (2007) states, “The internal space of the body is not just filled with physical organs; it is filled with the self-existent qualities of being, and with energy and consciousness” (p. 70). Embodiment can be both a state of awareness and a process to be

cultivated. Mindfulness, which constitutes a large part of embodied psychotherapy practices, (Weiss, 2009) might be thought of as attention *to* the body. However, when one brings attention to their body, there is an enlivened response to that attention (Tantia 2012), or attention *with* the body. When one inquires deeper (for example, through Gendlin’s Focusing), they create a feedback loop of *attention to* and *attention with* the body in present time, which cultivates a deeper state of embodiment. This process of embodiment can reveal further information than could not be known by simply “talking about” an experience. Finally, embodiment can be developed from the client’s awareness of their own experience, or from the therapist’s awareness of their client’s posture, gesture, prosody, rhythm of breath or movement, (Tantia, 2016, 2019). Even a client’s proximity to the therapist can play a role in developing embodied experience¹.

In order to respond to the need to study embodied experience in research in a way that recognizes and values the qualia of embodiment as a rich source of information, new ways of inquiry – namely embodied research methods – are needed. Embodied forms of inquiry bring implicit information to the foreground of awareness, allowing the researcher to recognize and collect data that are inaccessible through traditional research methods. Similarly to the ways in which somatic psychotherapy elicits embodied experience in the clinical setting, embodied methods can elicit embodied experience in the research setting.

Clinically-friendly embodied methods

Embodied data are points of unconscious information that are revealed through attention to the body. Beginning with the ingenuity of Gendlin’s philosophy of the implicit (1981), bringing attention to one’s embodied experience can make a significant difference in the ways in which embodied data are collected and analyzed. In lieu of “talking about” one’s experience, one example of embodied data are found through ways of observing and sensing inside the body – a familiar if not integral to somatic psychotherapy treatment. Sensations of shapes, weight, texture, color or movement within the viscera and limbs are some of the ways in which embodied data emerge from embodied inquiry (Tantia, Cruz and Kawano, 2017). The amalgam of feeling sensations might manifest in words such as “buzzing, twitching, swirly, heavy” or even a combination of such that might not make logical sense at the outset, but eventually creates meaning for the participant. Data like these are often described in trauma treatment (Levine, 2010; Ogden &

¹ For a more detailed description of the ways in which somatic psychotherapists and dance/movement therapists facilitate embodied awareness, please see Tantia, 2019.

Fisher, 2015; Porges, 2009; Rothschild, 2000; van der Kolk, 2015).

Another example of clinical practice as a process of embodied elicitation is from Authentic Movement, a form of dance/movement therapy created by Mary Whitehouse that can also be a source of data collection (Payne, 2017; Tantia, 2012). Akin to a moving meditation, the participant closes their eyes and waits for an impulse from their body to move (Adler, 2007). Often the participant sees visions, feels textures in ways not familiar to them, and finds themselves in the midst of a dream-like experience (Stromsted, 2015). Authentic Movement has been studied in terms of how it affects the embodied experience of the Witness (Payne, 2017) or, for the purposes of this article, the researcher/therapist, who sits still with eyes open. Following the movement, the mover and witness speak their experiences as if they are happening in the present moment, or immediately write or draw to capture the nature of the experience. These types of embodied data may reveal more closely the direct experience of phenomena, or perhaps information that cannot be revealed by recalling and interpreting an event from the past in a linear fashion. This data, along with the witness's experience can also be collected and analyzed as embodied data.

The whole conjecture that is argued here originated out of a need to create a new method of data collection for a doctoral dissertation on clinical intuition (Tantia, 2013). After several failed attempts at asking seasoned somatic psychotherapists by phone how they experience intuition in their bodies, I realized that I needed to interview in person, and use a different way of asking questions. Borrowing from elements of Focusing in conjunction with movement observation, I developed the Body-focused Interview (Tantia, 2014a) out of the need to explicate the kind of language from the body that was necessary to describe the complexities and nonverbal nuances that are found when observing a person trying to characterize an experience that was difficult to describe. By collecting both verbal descriptions of participant's sensorial experiences and recording their movements, I was able to postulate an original conjecture about how intuition happens, and how it arrives from unconsciousness to consciousness through the body (Tantia, 2014b).

Below are examples from the study with my inserted nonverbal descriptions, noted from viewing the video recordings of the interviews (in Tantia, 2014b, p. 220):

(RK): When I feel into it (looks right, eyes partly closed), right now (head turns to right), it seems (right hand gestures out, palm toward head and up, mid-level) more like something that happened here (right hand raises up to the right side of his head and moves toward and away from head, palm toward head), like in my right temple area (shaking hand next to right side of head, then suspends hand next to head...long pause in words and suspension of movement).

(LM): It kinda came in through my head (both hands raise to right side of her head, palm toward her head), but it wasn't mental. I can't describe it. Like, it was like hearing a thought (right hand waves with palm toward right of right head, then rests on her chest), but then it just landed here (cupping right hand in front of solar plexus) and there was a solidity, and it was like, "Oh!"

This example is offered here as a way to introduce to the reader how it might be possible to collect embodied data. In the original study I used a descriptive phenomenological analysis (Giorgi, 2009), in order to capture as close to the experience as possible. For a more detailed account of the study, please see Tantia, (2014b).

Years later, I became curious about whether others had also found ways to collect and analyze embodied experience in the way that I had; eliciting data that included the aesthetic language of one's internal sense of their body, and/or including posture and gestures around the body. I wanted to know whether others had also created methods for this to meet the needs of their own research. I put out a CFP for an edited book on embodied research methods, hoping to gather studies that have specific ways of collecting and analyzing embodied data. To my astonishment and delight I received fifty proposals from many different disciplines and many countries who had courageously diverted from the prescribed research route and created their own methods. From systems of analysis, embodied interview styles and creative research methods, I collected and collated these original methods into two textbooks that are forthcoming (Tantia, in press).

The present moment embodied experiences are valuable data that can be collected and analysed in a research study. Body memory, which is alive in the present time (Fuchs, 2012), can also be collected, with awareness of its limitations (Changaris, in press). Embodied data, collected through the researcher's reflexivity, (Johnson, 2014) observation of the participant's nonverbal descriptions, (Tantia, 2014a) or through participant's self-report (Anderson, 2002, and in press; Freedman & Mehling, in press) are but a few ways in which embodied experience can be collected in a research study. It is my hope that the forthcoming texts will act as scaffolding for clinicians and embodiment researchers to see the many ways in which embodied data can be collected and analysed for a study.

Discussion

Embodied methods are ways to bring implicit knowledge into conscious awareness so that an experience can be more fully understood. The very process through which somatic psychotherapists encourage present-moment embodied awareness from clients can be ways to create and collect embodied data for empirical research. Felt images in embodied data collection may include body memories that arise in the present-moment, or new sensations that arise from

current experience. Specific to somatic psychotherapy, they can manifest in qualia of temperature, tension, shape, weight, texture, color, movement (Tantia, in press) or even interactive images of the participant (Tantia, 2014b).

By using an embodied approach that gathers descriptive data, somatic psychotherapy treatment offers ways to bring implicit knowledge into conscious awareness so that an experience can be translated into a form suitable for research inquiry. A participant may be asked to “sense” their bodies in response to a question, bringing attention to embodied data that are comprehensive of physical, and emotional, cognitive (Tantia, 2014a, 2014b; Tantia and Kawano, 2016; Westland, 2009).

This article makes a case for a path toward conducting embodied research by articulating the value of somatically-informed psychotherapy practice as a parallel to the process of data collection in an embodied research method. It also introduces the development of forthcoming embodied research methods that appropriately describe and capture the implicit data that are produced in somatic psychotherapy. Although a discussion about recording analysis was not offered, there are some current somatically-informed systems for recording and analyzing data that are both published (Birklein & Sossin, 2006; Grossman. & Cohen 2017; Mehling, et al., 2012, 2018; Tantia, 2014a, 2014b) and forthcoming (Tantia, in press). There is much to further explore in this topic, and this author hopes that this article sparks inspiration and conversation toward a fuller body of somatic psychotherapy research.

Conclusion

Embodied research methods are imperative for testing and building better theories for how somatic psychotherapy promotes an individual’s overall development while remediating symptoms of specific conditions that include both intrapersonal as well as interpersonal difficulties. Embodied research methods can offer data that are not traditionally accessible through current research methods and may provide a gateway toward further discovery about human experience that is felt, rather than only thought.

Creating new methods that address embodied data that arise during somatic psychotherapy sessions is crucial not only for the field of embodied psychotherapies but may be useful for other fields who have already begun to address the value of embodied research. By developing new embodied research methods, current philosophy and research in embodied phenomena can further develop a new paradigm. Embodied experience of (Zahavi, 2010) oppression (Johnson, 2009, 2015, 2018; Johnson and Caldwell, 2010) gender and sexual diversity (Caldwell and Leighton, 2018;

Thanem and Knights, 2019) ability diversity (Ellingson, 2006, 2017), and even more elusive phenomena such as embodied safety, (Mair, 2018) clinical intuition (Marks-Tarlow, 2012; Tantia, 2014b), medically unexplained symptoms (Payne, 2019) and addiction (Payne et al., 2017) could be researched more fully by applying embodied research methods. Finally, embodied research methods may also elucidate difficult to treat conditions such as chronic fatigue, Irritable Bowel Syndrome, vasovagal syncope, pain disorders like fibromyalgia, reflex sympathetic dystrophy syndrome, and rheumatoid arthritis, as well as other symptoms that may be comorbid with some other complex trauma or existentially conditioned response to stress. The attention to these phenomena is needed to meet the new national and international human threats that we are challenged by today. It is with hope that the newly emerging literature in embodied awareness and research becomes a new standard for collecting and analyzing particular data that cannot be found through current methods alone.

Article Note: This article is derived from a 15-minute introduction to embodied research methods presented as part of a research panel at the United States Association for Body Psychotherapy conference at Pacifica Graduate Institute on November 2, 2018.

References

- Abram (1996) *The spell of the sensuous*. New York: Vintage Books.
- Adler, J. (2007). From seeing to knowing. In P. Pallaro (Ed.), *Authentic movement: Moving the body, moving the self, being moved* (pp. 260–269). London: Jessica Kingsley.
- Anderson, R. (2002, Autumn/Winter). Embodied writing: Presenting the body in somatic research, Part I. *Somatics*, 40-44.
- Barratt, B. B. (2010). *The Emergence of Somatic Psychology and Bodymind Therapy* (Critical Theory and Practice in Psychology and the Human Sciences). United Kingdom: Pallgrave Macmillan
- Bechara, A., Damasio, A. R., Damasio, H., Anderson, S. W. (1994). Insensitivity to future consequences following damage to human prefrontal cortex. *Cognition*, 50(1–3), 7–15
- Birklein, S., Sossin, M.K. (2006). *Nonverbal Indices of Stress in Parent-Child Dyads. Implications for individual and interpersonal affect regulation and intergenerational transmission*. In: *Advances in Dance -Movement Therapy*. Eds: Koch, S., Bräuninger, I.

- Logos. Berlin.
- Blackstone, J. (2007). *The empathic ground: Intersubjectivity and nonduality in the psychotherapeutic process*. New York: State University Press.
- Bruschweiler-Stern, N., Harrison, A. M., Lyons-Ruth, K., Morgan, A. C., Nahum, J. P., Sander, L. W., & Tronick, E. Z. (2010). *Change in psychotherapy: A unifying paradigm* (Boston Change Process Study Group). New York, NY: Norton.
- Caldwell, C. and Johnson, R. (2015). Research 101 for body psychotherapists. *International Body Psychotherapy Journal*, 14(2), 47-57.
- Caldwell, C. and Johnson, R. (2012). Cultivating a somatically-informed research mind. In C. Young (Ed.) *About the science of body psychotherapy* (pp.27-35). Galashiels, UK: Body Psychotherapy Publications.
- Changaris, M. [in press]. Embodied research design: A transformational paradigm in scientific discovery. In J. F. Tantia (Ed.), *The art and science of embodied research design; concepts, methods and cases*. London: Routledge.
- Cruz, R. F. and Feder, B. (2013). *Feder's the art and science of evaluation in the arts therapies*. Springfield, Il: Charles C. Thomas.
- Csordas, T.J. (1993). Somatic modes of attention. *Cultural Anthropology* 8(2), pp. 135-156.
- Csordas, T. J. (2008). Intersubjectivity and intercorporeality. *Subjectivity*, 22(1), 110-121.
- Damasio, (1999). *The feeling of what happens: Body and emotion in the making of consciousness*. New York: Harcourt.
- Ellingson, L. (2006). Embodied Knowledge: Writing researchers' bodies into qualitative health research. *Qualitative Health Research*, 16(2). 298-310. DOI:10.1177/1049732305281944
- Ellingson, L. (2012). Interview as embodied communication. In J.F. Gubrium, J. A. Holstein, A. B. Marvasti and K. D. McKinney, (Eds.). *The Sage Handbook of Interview Research: The complexity of the craft, 2nd Ed.* Thousand Oaks, CA: Sage Publishing. pp.525-540.
- Ellingson L. (2017) *Embodiment in qualitative research*. London: Routledge.
- Finlay, L. (2011). *Phenomenology for therapists: Resaerching the lived world*. Chichester, UK: Wiley-Blackwell.
- Freedman, A. & Mehling, W. [in press]. Methods for measuring embodiment, an instrument: The Multidimensional Assessment of Interoceptive Awareness (MAIA). In J.F. Tantia, (Ed.), *The art and science of embodied research design: concepts, methods and cases*. London: Routledge.

- Fuchs, T. (2012). The phenomenology of body memory. In S. Koch, T. Fuchs, M. Summa and C. Muller, (Eds.), *Body memory, metaphor and movement*. Amsterdam: John Benjamins, pp. 9-22.
- Gavin, K. & Todres, L. (2009). Embodying Nursing Openheartedness: An Existential Perspective. *Holistic Nursing*, 27(20), 141-149.
- Gendlin, E. (1981). *Focusing*. New York: Bantam.
- Giorgi, A. (2009). *The descriptive phenomenological psychological method*. Pittsburgh, PA: Duquense University Press.
- Grossman, S. & Cohen, A (2017). Contributions to a Gestalt Quantitative Research Tradition: Establishing the Gestalt Mental Status Exam. *Gestalt Journal of Australia & New Zealand*, 13(2): 29-44.
- Hanna, T. (1979). *The body of life*. New York, NY: Knopf.
- Hervey, L. W. (2000). *Artistic inquiry in dance/movement therapy: Creative research alternatives*. Springfield, IL: Charles C. Thomas.
- Hervey, L. W. (2007). Embodied ethical decision-making.
- Hervey, L.W. (2012). Embodied artistic inquiry. In Robyn Flaum Cruz & Cynthia F. Berrol (Eds.), *Dance/movement therapists in action: A working guide to research options* (pp. 205-232). Springfield, IL: Charles C. Thomas.
- Johnson, R. (2009). Oppression embodied: Exploring the intersections of somatic psychology, trauma, and oppression. *International Journal of Body Psychotherapy*, 8(1), 19-31.
- Johnson, R. (2014). Somatic psychotherapy and research: Walking the common ground. *Body, Movement and Dance in Psychotherapy: An International Journal for Theory, Research and Practice*, 9(2), 82-92.
- Johnson, R. (2015). Grasping and transforming the embodied experience of oppression. *International Body Psychotherapy Journal*, 14(1), 82-94.
- Johnson, R. (2018). *Embodied social justice*. London: Routledge.
- Johnson, R. and Caldwell, C. (2010). *Oppression embodied*. Conference Proceedings from the 6th Annual United States Association of Body Psychotherapy Conference, October 2010.
- Kiefer, M., and Trumpp, N.M, (2014). Embodiment theory and education: The foundations of cognition in perception and action. *Trends in Neuroscience and Education* 1 (1), 15-20.
- Koch, S., & Fuchs, T. (2011). Embodied arts therapies. *The Arts in Psychotherapy*, 38, 276-280.
- Ladas, A. (2005). Body psychotherapy research: An introduction. *The USA Body Psychotherapy*

Journal, 4(2). 8-10.

Lakoff G. and Johnson M. (1999) *Philosophy in the flesh: The embodied mind and its challenges in western thought*. New York: Basic Books.

Levine, P. (2010). *In an unspoken voice: How the body releases trauma and restores goodness*.

Leavy, P. (2009). *Method meets art: Arts-based research practice*. New York Guilford Press.

Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed-methods, arts-based, and community-based participatory research approaches*. New York: Guilford Press.

Mac Lachlan, M. (2004). *Embodiment: Clinical, critical and cultural perspectives on health and illness*. Open University Press.

Mair, H. (2019). Safety in psychotherapy: The body matters. In H. Payne, S. Koch, J. Tania, T. Fuchs (Eds). *The Routledge International Handbook of Embodied Perspectives in Psychotherapy*. London: Routledge. Pp.370-378.

Marks-Tarlow, T. (2012). *Clinical intuition in psychotherapy: The neurobiology of embodied response*. New York: Norton.

Marlock, G., Weiss, H., Young, C. & Soth, M. (2015). *The handbook of Body Psychotherapy and Somatic Psychology*. Berkeley, CA: North Atlantic Books.

Mason, D.M., (2014). Holism and embodiment in nursing: using Goethean science to join 2 perspectives on patient care. *Holist Nursing Practices*, 28(1), 55-64.

Mehling, W. E., Price, C., Daubenmier, J. J., Acree, M., Bartmess, E., & Stewart, A. (2012). The Multidimensional Assessment of Interoceptive Awareness (MAIA). *PLoS One*, 7(11), e48230.

Mehling, W. E., Chesney, M. A., Metzler, T. J., Goldstein, L. A., Maguen, S., Geronimo, C., . . . Neylan, T. C. (2018). A 12-week integrative exercise program improves self-reported mindfulness and interoceptive awareness in war veterans with posttraumatic stress symptoms. *Journal of Clinical Psychology*, 74(4), 554-565.

Meier, B., Schnall, S., Schwarz, N., Bargh, J.A., (2012). Embodiment in Social Psychology. *Frontiers in Cognitive Science* <https://doi.org/10.1111/j.1756-8765.2012.01212.x>

Michalak, J., Lyons, N., Heidenreich, T. (2019). The evidence for basic assumptions of dance movement therapy and body psychotherapy related to findings from embodied research. In H. Payne, S. Koch, J. Tania, & T. Fuchs (Eds). *The Routledge International Handbook of Embodied Perspectives in Psychotherapy*, 53-65. London: Routledge.

- Ogden, P. & Fisher, J. (2015). *Sensorimotor Psychotherapy*. New York: Norton.
- Payne, H., Warnecke, T., Karkou, V. & Westland (2016). A comparative analysis of body psychotherapy and dance movement psychotherapy from a European perspective. *Body, Movement and Dance in Psychotherapy*, 11(2-3), 144-166.
- Payne, H. (2017). The Psycho-neurology of Embodiment with Examples from Authentic Movement and Laban Movement Analysis. *American Journal of Dance Therapy* 39(2),163-178.
- Payne, H. (2019). The body mind approach and people affected by medically unexplained symptoms. In H. Payne, S. Koch, J. Tantia, T. Fuchs (Eds). *The Routledge International Handbook of Embodied Perspectives in Psychotherapy*, 66-77. London: Routledge. 195-203.
- Perls, F., Hefferline, R., & Goodman, P (1995). *Gestalt therapy: Excitement and growth in the human personality*.
- Perry, M., Medina, C.L., (2015). *Methodologies of embodiment: Inscribing bodies in qualitative research* Routledge. (ISBN-13: 978-0415816915, 155 pages, USD 135.23)
- Porges, S.W. (2009). The polyvagal theory: New insights into adaptive reactions of the autonomic nervous system. *Cleveland Clinic Journal of Medicine*, 76, 86-90.
- Porges, S. & Dana, D. (2018). *Clinical applications of the Polyvagal Theory*. New York; Norton.
- Rennie, D. L., (2006). Embodied categorizing in the grounded theory method: Methodological Hermeneutics in action. *Theory and Psychology*, 16(4), 483-503.
- Rogers, C. (1967). (Ed.), With collaboration by Gendlin, E., Keisler, E. T., and Truax, C. B. *The therapeutic relationship and its impact: A study of psychotherapy with schizophrenics*. Milwaukee, WI: University of Wisconsin Press.
- Rothschild, B. (2000). *The body remembers: Psychophysiology of trauma and trauma treatment*. New York; Norton.
- Scaer, R. (2007). *The body bears the burden: Trauma dissociation and disease*. Hawthorne Press.
- Schore, A. N. (2009, August 8). *The paradigm shift: the right brain and the relational unconscious*. Invited plenary address, 2009 Convention of the American Psychological Association, Toronto, Canada.
- Schore, A.N. (2011). The right brain implicit self lies at the core of psychoanalysis. *Psychoanalytic Dialogues*, 21(1), 75-100. DOI: 10.1080/10481885.2011.545329

- Spatz, B. (2015) *What a body can do: Technique as knowledge, practice as research*. Routledge. (ISBN-13: 978-1138854109. 280 pages, USD 35.99)
- Stromsted, T. (2015). Authentic Movement & The Evolution of Soul's Body® Work. *Journal of Dance and Somatic Practices: Authentic Movement: Defining the Field*, 7(2) 339-357.
- Tantia, J.F. (2012). Mindfulness and Dance/movement Therapy for Treating Trauma, in L. Rappaport, (Ed.), *Mindfulness and the Arts Therapies*, London: Jessica Kingsley Publications.
- Tantia, J.F. (2013). Body-Focused inquiry: A descriptive methodology for exploring embodied clinical intuition. (Doctoral dissertation) UMI: 1430510485
- Tantia, J.F. (2014a). Body-focused interviewing: Corporeal experience in phenomenological inquiry, In *SAGE Research Methods Cases*. SAGE Publications Ltd., London: United Kingdom. DOI: <http://dx.doi.org/10.4135/978144627305013519226>
- Tantia, J.F. (2014b). Is Intuition Embodied? A phenomenological study of clinical intuition in somatic psychotherapy practice. *Body, Movement and Dance in Psychotherapy* 9(4),211-223. doi: 10.1080/17432979.2014.931888
- Tantia J. F. and Kawano, T. (2016). Moving the data: Embodied approaches for data collection and analysis in dance/movement therapy research. In R. Cruz and C. Berroll, (Eds). *Dance/movement therapists in action: A working guide to research options* (3rd Ed). pp. 171-199. Charles C. Tomas Publishing.
- Tantia, J. F. (2016) The interface between somatic psychotherapy and dance/movement therapy: a critical analysis, *Body, Movement and Dance in Psychotherapy*, 11(2-3), 181-196. DOI: 10.1080/17432979.2015.1109549
- Tantia, J.F., Cruz, R.F., Kawano, T. (2017). (Eds.) *Embodied Research Methods for Dance/movement Therapists*. Proceedings from the 52nd Annual Conference of the American Dance Therapy Association. San Antonio, TX.
- Tantia, J.F. (2019). Having a body and moving your body: Distinguishing somatic psychotherapy from dance/movement therapy. In H. Payne, S. Koch, J. Tantia, & T. Fuchs (Eds). *The Routledge International Handbook of Embodied Perspectives in Psychotherapy*, 66-77. London: Routledge.
- Tantia, J.F. [in press]. Embodied Data. In J.F. Tantia (Ed.) *The art and science of embodied research design: concepts, methods and cases*. London: Routledge.
- Tantia, J.F. [in press]. *The art and science of embodied research design: concepts, methods and*

- cases*. London: Routledge.
- Todres, L. (2004). The meaning of understanding and the open body: Some implications for qualitative research. *Existential Analysis*, 15, (1), 38-54.
- Todres, L. (2007). *Embodied Enquiry: Phenomenological Touchstones for research psychotherapy and spirituality*. (2nd Ed, published by Palgrave Macmillan, ISBN-13: 978-0230302303. USD 33.24).
- Thanem, T. & Knights, D. (2019). *Embodied research methods*. London: Sage.
- van Manen, M. (2015) *Researching lived experience: Human science for an action sensitive pedagogy*. London: Routledge
- Varela, F., Thompson, E.& Rosch, E. (2016). *The embodied mind: Cognitive science and human experience*. Cambridge, MIT press.
- van der Kolk, B. (2015). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York: Penguin.
- Weiss, H. (2009) The use of mindfulness in psychodynamic and body-oriented psychotherapy, *Body, Movement and Dance in Psychotherapy*, 4(1), 5-16.
DOI: 10.1080/17432970801976305
- West, W. (2011). Using the tacit dimension in qualitative research in counseling psychology. *Counseling Psychology Review*, 26(4), 41-46.
- Westland (2009) Considerations of verbal and non-verbal communication in body psychotherapy. *Body, Movement and Dance in Psychotherapy*, 4(2), 121-134. DOI: 10.1080/17432970902857289
- Young, C (2012). A Series of Essays on the Science of Body Psychotherapy Today, Part II: The current situation. In C. Young, (Ed.), *About the science of body psychotherapy*, 65-86.
- Zahavi, D. (2010) Empathy, embodiment and personal understanding. *Inquiry: An Interdisciplinary Journal of Philosophy*, 53(3), 285–306.

Jennifer Frank Tantia, PhD, MS, BC-DMT, LCAT is a somatic psychologist and dance/movement therapist in the Times Square section of Manhattan, specializing in trauma and medically unexplained symptoms. She has introduced somatic psychology to several universities in the US, and guest lectures internationally. Dr. Tantia has recently served as a grant adjudicator for the NEA Research Artworks commission, as well as formerly serving as board member and chair of research for the United States Association for Body Psychotherapy. She currently serves on the

board of the American Dance Therapy Association as chair of Research and Practice and is an associate editor of the international journal, *Body, Movement and Dance in Psychotherapy*. She has authored several publications in both dance/movement therapy and somatic psychology, and recently co-edited *The Routledge International Handbook of Embodied Perspectives in Psychotherapy*. Her edited volume, *The Art and Science of Embodied Research Design* will be published by Routledge in Fall, 2020.