**Somatic Movement Dance Education: Making Meaning through Dance**

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**Introduction**

*Somatics* is an umbrella term for the field of mind-body integration practices (Eddy, 1992; ISMETA, 2015). Because cognitive experiences (including attention, perception, problem-solving, and decision making) are “embodied,” Somatics finds its scientific complement in the neuro-phenomenological theory of embodied cognition (Batson & Wilson, 2014; Varela, Thompson, & Rosch, 1991). Embodied cognition theories hold that the coupling of the sensate moving being with the environment gives rise to thinking, meaning, and personal agency (Gallagher, 2014; Robbins & Aydede, 2012; L. Shapiro, 2011). This understanding of sensing, moving, and meaning making is espoused in Somatics practices and uniquely facilitated in Somatics’ pedagogical environments.

In recent years, Somatics has become an integral part of dance education and training in the West, where it is known as Somatic Movement Dance Education, or SMDE (Eddy, 2004, 2006, 2016; Fortin, 1995; Mangione, 1993; Nettl-Foil, 2016; Reed & Whatley, 2016; Tarlow-Morgan, Selver-Kassell, Lipman, & Brehm, 2016). It is widely held that dance gives rise to meaning, well-being, and quality of life (Batson & Wilson, 2014; Bond, 2014; Eddy, 2007; Fortin & Siedentop, 1995; Fraleigh, 2004; Halprin, 2000; J. L. Hanna, 2006; Henley, 2014; Sheets-Johnstone, 1999). However, the intentions and outcomes of traditional forms of dance training differ in significant ways from those of SMDE (Batson & Wilson, 2014; S. B. Shaprio 1998).

Somatic movement is a unique mode of practice that might extend some of the benefits of traditional dance training, particularly in terms of bodily sensation and perception (Enghauser, 2007; Nelson, 2008). Training in Somatics can also afford a sense of individual autonomy, allowing dancers to exercise more choices in dance making (Eddy, Williamson, & Weber, 2014; Fortin, Vieira, & Tremblay, 2009; Long, 2002; Williamson, 2009). In Somatics, philosophy and pedagogy are entwined (Eddy, 1992; Eddy et al., 2014; Green, 2002; Williamson, 2009); discussion of foundational philosophies in SMDE pedagogies (namely, feminist and phenomenological) addresses how Somatics practice can facilitates development of perception, attention, and individual authority.

This chapter poses the following questions:

• How do embodied cognitive processes support creativity in dance making?

• What cognitive psychological theories underpin the use of somatic practices in creativity?

• What distinguishes the pedagogical environment of SMDE from traditional dance education?

• How does the SMDE environment promote autonomous, creative dance making capacities?

My approach to these questions examines SMDE within the discourses of dance studies and cognitive psychology. While acknowledging current theories of embodied cognition, where perception is viewed as an intersubjective process (Gallagher, 2014), this chapter highlights the individual, subjective aspects of perception, attention, and internal authority, or autonomy, which are the primary focus of Somatics pedagogies (Williamson, 2009). I propose that deepening one’s abilities to engage with these cognitive processes in SMDE’s unique pedagogical environment, described later in the chapter, can facilitate greater creativity in dance-making, or choreographic, practices.

The chapter begins with introduction to the field of Somatics, including its incorporation in dance education. I examine the benefits of somatic practices in dance education and discuss contemporary theories of cognition that illuminate meaning-making processes inherent in dance and Somatics. I acknowledge Somatics’ epistemological base in existential phenomenology to connect somatic practices with theories of embodied cognition. I attribute SMDE’s focus on individual development of refined sensory perception and sustained awareness to its foundation within this phenomenological framework—as Sondra Fraleigh (1996) notes, “a philosophy either implicit or actually stated in all somatic designs” (p. 18). Next, the chapter turns to SMDE’s broad incorporation of feminist epistemologies and pedagogies (Burnidge, 2012; Eddy et al., 2014; Williamson, 2009), reflecting the field’s assumption of the developmental importance of internal, subjective authority and autonomy. Finally, I introduce selected psychological theories of creativity that support my overarching argument that somatic practices, through their focus on deepening attention and strengthening internal authority, may facilitate greater creativity in movement generation and choreography.

**Somatics: A Brief Overview**

Derived from the Greek *somatikos,* for “of the body,” the word *somatic* references the living body. The term was first used by Thomas Hanna (1970) to describe mind/body integration as experienced from the first-person perspective, and came to name the field of study related to the *soma* (body)as experienced through this perspective (Eddy, 2009). Somatic work is founded on the belief that *soma* is a fluid entity that responds plastically to both internal and external stimuli (T. Hanna, 1979). Perception of inner, felt-sensation is at the core of all somatic modalities practiced today under the umbrella term *Somatics* (Brodie & Lobel, 2006; Eddy, 2002, 2009). The terms *somatic* and *Somatics* are used discriminately by both practitioners and theorists, and there is some divergence in their application. In this chapter, I use *somatic* as an adjective according to its dictionary meaning: “relating to the body” (*Oxford Dictionary*, 2016). I use the capitalized form, *Somatics*, when referring to the field of mind-body integration practices identified above.

Somatics modalities cross a spectrum of codified to semi-structured to open-framework practices, including blended and hybrid approaches (Enghauser, 2007; Weber, 2009), and generally share basic principles of kinesiology and movement re-education, as well as goals toward greater well-being, awareness, expressivity, and efficiency in movement (Brodie & Lobel, 2004). All approaches share underlying ideologies that define them as Somatics, such as a global focus on principles over techniques of movement (re)education (Brodie & Lobel, 2012; Johnson, 1986), and an emphasis on individual agency rather than a ‘set’ of movement patterns. Indeed, there is such an overlap in founding principles that many people incorporate multiple modalities within their Somatic Movement Education (SME) and SMDE practices.

The professional field of SME began in the late 1960s (Eddy, 2009), centered largely in Australia, Europe, and the United States, and has grown in popularity and credibility with dance educators and those working in psychology and physiology. In recognition of the need for professionalism and integrity among practitioners and educators, a professional association was founded in 1988 by Jim Spira, PhD: The International Somatic Movement Education and Therapy Association (ISMETA). Its mission is to grow the field of somatic movement education and therapy. In an effort to identify the shared scope of practice underlying the broad spectrum of Somatics disciplines, ISMETA (2015) names the following pan-modality educational objectives:

* focus on the body both as an objective physical process and as a subjective process of lived consciousness;
* refine perceptual, kinesthetic, proprioceptive, and enteroceptive sensitivity that supports homeostasis and self-regulation;
* recognize habitual patterns of perceptual, postural, and movement interaction with the environment;
* improve movement coordination that supports structural, functional, and expressive integration;
* experience an embodied sense of vitality and create both meaning for and enjoyment of life. (n.p.)

**Somatic Movement Dance Education (SMDE)**

After five decades of dialogue between somatic education and Western concert dance, SMDE—which combines dance education and SME—has become an integral part of formal dance training and performance, both technical and creative, particularly in higher education and professional-training settings, but also increasingly in pre-professional training schemes and the private sector. Though initially SMDE was perceived as more passive and therapeutic, advances in both SMDE and general dance education have led to more cohesion between the two (Batson & Wilson, 2014). As Somatics has grown and become more systematized through initiatives such as ISMETA, the field has gained presence in higher education, not only in somatic psychology and physical education programs, but especially in dance education programs internationally (Eddy, 2009; Long, 2002).

Moreover, the research profile of Somatics has advanced since the field entered academia, including critiques (notably, Ginot, 2010) of the “unscientific” claims made for somatics practices. Ginot’s seems a short-sighted claim, however. When she argues that Somatics “needs to affirm its value in accordance with society’s belief in the objective truth of science” (p. 13-14), she glazes over the fact that Somatics’ grounding in phenomenological philosophies places it primarily within post-positivist paradigms. Furthermore, her qualms about the generalizability of individual accounts and case studies (which can be considered a subset of scientific reliability) ignore existing empirical studies that evidence the benefits of somatics within positivist frameworks dating back to the 1930s (Fairweather & Sidaway, 1993; Gamboian, Chatfield, & Woolacott, 2000; Krasnow, Chatfield, Barr, Jensen, & Dufek, 1997; Studd, 1983; Sweigard, 1939).

Most published research to date has focused on advocacy, i.e. reasons to include SME in dance programs (Eddy, 2007; Kleinman, 1990; Linden, 1994), dance courses (Arnold, 2005; Batson, 1990, 2009; Batson & Schwartz, 2007; Brodie & Lobel, 2012; Debenham & Debenham, 2008; Fortin & Siedentop, 1995; Fortin, Vieira, & Tremblay, 2009), and in particular how to introduce concepts from somatics into dance technique classes (Brodie & Lobel, 2004; Eddy, 2006; Enghauser, 2007; Fortin & Siedentop, 1995; Long, 2002; Weber, 2009). Former dancers and current professors of kinesiology and dance Julie Brodie and Elin Lobel (2012) point to SMDE’s pervasive implicit role within the dance classroom today:

Many dance teachers and performers draw upon and reference somatic theory. … The somatic lexicon has become so intertwined with contemporary modern dance that for some, it has become the basis of the technique itself. (p. 5)

However, as stated, while there is overlap, the aims of traditional forms of dance training differ from those of SMDE (Batson & Wilson, 2014; Burnidge, 2012; Fortin, 1998; Shapiro, 1998). The following section offers a comparison.

**Traditional Dance Training & SMDE Training**

 Though only recently gaining momentum in academia, numerous researchers have championed Somatics as a valuable addition to dance education (Batson, 1990; Batson & Schwartz, 2007; Brodie & Lobel, 2004; Burnidge, 2012; Eddy, 2009; Enghauser, 2007; Fortin, 1995, 1998). Somatic practices aim to facilitate a deep sense of embodiment and autonomy in dancers, in both connecting with self and exercising greater choices in dance making (Fortin et al., 2009; Williamson, 2009). SMDE’s impact on dancers’ agency, well-being, and aesthetic integrity is well-reported (Bond, 2013; Brodie & Lobel, 2004; Dyer, 2009; Eddy, 2009b; Fraleigh, 2004; Sheets-Johnstone, 2013; Weber, 2009), and I acknowledge the relevance of these findings to quality of life discourse. Further contributing to quality of life, SMDE has been shown to enhance students’ self-understanding and relationships with others (Rouhiainen, 2008).

More traditional dance training, for example, “the many forms of mid-twentieth-century western contemporary dance…largely destined for display” (Batson, 2014, p. xv), might not offer adequate opportunities for consciously developing awareness and understanding of dancers’ embodiment. As Glenna Batson (1990) noted almost three decades ago:

In the act of learning something new, we [dancers] can strive so hard to learn the sequences, timing, phrasing, etc. that we forget to sense our bodies… We frequently even stop breathing; we lose our awareness, our sense of ourselves, as we (ironically) try to “make sense” of the movements. We give our full attention to movement, repeating steps at the expense of attending to the way we might accomplish them. Rather, we could be sensing our bodies exquisitely as we move, which would organize our motor system and in turn aid in our learning. (p. 29)

Rebecca Enghauser (2007) echoes this perspective, stating, “The structure of a traditional dance class does not currently offer sufficient opportunities for students to develop a sensitized relationship with their body” (p. 33). In contrast, SMDE emphasizes this through slowing down to “body temporality” (Williamson, 2009, p. 31), training dancers “to heighten both sensory and motor awareness to facilitate a student-client’s own self-organization, self-healing, or self-knowing” (Eddy, 2009, p. 8).

Through bodily sensing, somatic modalities offer pathways for enhanced kinesthetic understanding and re-patterning of movement along neuromuscular pathways. However, as noted above, even though Somatics has infiltrated the current dance technique training climate, historical perspectives and culturally-ingrained training traditions persist in dance education (Lakes, 2005). Such methods can be critiqued for treating the dancer’s body as a tool or object rather than the dancer as a sentient, whole being. The learning of codified, proscriptive movement patterns; the traditional hierarchy of teacher over pupil, where the teacher offers feedback on “correct” ways of moving; and the common setup of a room with mirrors, encouraging students to objectify their own bodies through an external gaze, are a few examples of how traditional dance training differs from somatic approaches. These key pedagogical differences’ impact on dancers’ perception and attention will be discussed later in this chapter.

Somatic methods incorporate strategies, in both structure and form, for addressing the lack of opportunities identified by Enghauser (2007) for students to develop a sensitized relationship with their bodies. For example, including rest periods in dance education (a practice shared by many somatic techniques) can aid in memory retention, motor recall, and performance (Batson, 2009, p. 2). According to Martha Eddy, focusing on the feeling of movement rather than its outward appearance allows students to “perform so that the embodiment of a truly integrated statement is expressed” (as cited in Fortin & Siedentop, 1995, p. 6).

Moreover, dancers with Somatics training are able to move in healthier, more balanced, and more efficient ways, and thus may suffer fewer injuries (Batson & Schwartz, 2007; Brodie & Lobel, 2004). Brodie and Lobel (2004) highlight that, “shifting the focus from product (skill acquisition) to process (what is actually happening in the body) can promote optimal functioning and help prevent injury” (p. 80). The field of dance education is showing interest in SME as a stress management technique (Adams, Caldwell, Atkins, & Quinn, 2012). In short, Somatics offers benefits to dancers in education programs; as Martha Myers famously said, “It is time to teach dance principles rather than dance steps” (as cited in Fortin & Siedentop, 1995, p. 6).

Having proposed that SMDE offers quality of life benefits beyond those provided by traditional dance training, a further question arises: *How* does the SMDE learning environment facilitate these benefits? Research from neurocognition sheds some light.

**Neurocognition and Meaning Making in Dance**

Both traditional dance training and SMDE acknowledge that dance is an inherently multimodal activity, one that engages kinesthesia and cognition in tandem. Beyond preparing dancers as athletes or communicative artists, or training bodies as artistic instruments, SMDE’s primary focus is re-integrating mind and body, and as such is innately opposed to a Cartesian hierarchy of mental over physical. The field of *embodied cognition*, which holds that cognitive acts extend beyond the confines of the brain, helps to elaborate how SMDE can contribute to creativity in choreography.

**Embodied Cognition**

Like Somatics, the theory of embodied cognition calls into question Cartesian dualism, a hallmark of empirical cognitive psychology. To operate under this hierarchical assumption is to ignore the brain as an integrated dynamic system that responds to the moment-by-moment embodied dynamics of our lives. Cognitive scientist Raymond Gibbs (2005) highlights:

Understanding embodied experience is not simply a matter of physiology or kinesiology (i.e., the body as object), but demands recognition of how people dynamically move in the physical world (i.e., the body experienced from a first-person, phenomenological perspective). The mind (its images, thoughts, representations) is created from ideas that are closely related to brain representations of the body and to the body’s continued activities in the real world. (pp. 9-10)

A relatively recent stance in cognitive science, previously the brain was viewed mostly as a computational system, with processing happening in neural networks, and the body being an “output mechanism” with little effect on cognitive processing.

Batson and Wilson (2014) trace cognitive science through three historical periods: computationalist (1950s-1970s); connectionist—joining neural networks and dynamic systems theory (1980s-1990s); and situated cognition—embodied, embedded, or distributed (1970s-present). Even though the first two models are still widely recognized, since the 1970s cognitive scientists, as represented by Gibbs above, have increasingly theorized that cognition is situated, or contextual—of mind, but also of body and beyond. Since this realization, cognitive science has aligned with existential phenomenology (Gallagher, 2014). Neuro-phenomenologist Francisco Varela argues that mind is inseparable from subjective experience—its biological embodiment and its situated context in the world. Varela (1991) coined the term *embodied cognition* to include both the biological and contextual body in cognitive processes (p. 42).

A central premise of phenomenology is that meaning’s ground is “lived experience” (Husserl, 1970/1990). Existentialism posits that self-responsibility creates meaning in life, and existential phenomenologists add that the ability to make meaning (or make sense) derives from bodily interaction with world (Fraleigh, 1987). French philosopher and developmental psychologist Maurice Merleau-Ponty (1962) asserted that movement doesn’t “designate” thoughts but rather, *is* thinking (p. 182). These ideas will be elaborated later.

Dancer-philosopher Maxine Sheets-Johnstone (1981) has long critiqued cognitive science’s predilection to view the brain as a computational information-processing system by arguing for the centrality of our animate form in human thought, stating,

Perception is interlaced with movement to the point where it is impossible to separate out where perception begins and movement ends or where movement begins and perception ends; the one informs the other. (p. 402)

Sheets-Johnstone (1999) aligns with existential phenomenology, which,

goes back into actual experience, to the things themselves—or more precisely, to us ourselves—thereby showing first how movement is the generative source of our primal sense of aliveness and of our primal capacity for sense-making. (p. 132)

The idea that movement is central to cognition is revolutionary in cognitive science, and in scientific thinking more generally.

As identified above, the term used to distinguish this integrative perspective from the dualistic empiricism of traditional cognitive science is usually *situated cognition,* which includes the subsets of *embodied cognition* or *distributed cognition*. The link between embodied cognition and dance, as an integrated form of meaning-making through movement, becomes evident immediately. While Sheets-Johnstone (2011) critiques the term “embodied cognition” as a tautology, I suggest that this semantic redundancy is needed to distinguish the current trend in cognitive science from previous dominant ideologies in which cognition was viewed as separate from, and superior to, body.

Further, Sheets-Johnstone’s overarching philosophy that, “Mind is indeed a function of body” (p. 464) reflects prominent ideas in embodied cognition. For example, her claim that bodies affect perception through the “natural kinetic/proprioceptive capacities of animate creatures” (p. 455), and that animate beings “straightaway know kinesthetically and/or proprioceptively” (p. 464) the options available to them in an environment, has parallels (even though she critiques them) with Varela, Thompson and Rosch’s (1991) enactive approach, where cognition depends on an organism’s perceptual and bodily capacities, and meaning-making is based on how an organism moves through the world.

As Batson and Wilson (2014) encapsulate, “Movement deposes the brain from a privileged position of being the chief executive officer toward foregrounding movement as vital in co-creating thought and action” (p. 44). In somatic practices, creation of meaning is thought to occur at a place of integration and equalisation of movement and mind. Somatics and embodied cognition share a relative de-prioritisation of brain vis à vis body; meaning is created through rich interactions *between* brain and body in synergy. Bodily experience is not merely a product of or an input to cognition; rather, it is the foundation of meaning-making and consciousness in general. But what elements of cognition does SMDE affect, exactly? And what elements of a SMDE learning environment facilitate these effects?

**Developing Attention and Perception in SMDE**

In SMDE, philosophy and pedagogy are intertwined (Eddy, 1992; Williamson, 2009). Cognitive processes such as planning, problem-solving, and decision making are “enacted” through the body, often through non- and/or pre-verbal stimuli (Adler, 2002; Stromstead, 2001). As discussed above, embodied cognition theories lend weight to the idea that the coupling of sensate moving body with environmental context gives rise to thinking and meaning (Robbins & Aydede, 2012; L. Shapiro, 2011). Honing sensory awareness or sensitivity to intricate bodily relationships is foundational in training SMDE practitioners as well as a quality they seek to elicit from clients and students (Johnson, 2000). Such awareness is evoked through a nuanced practice of attention, an embodied cognitive act. As Batson and Wilson (2014) state:

The [SMDE] learning environment usually affords the space and time to awaken embodied consciousness, focus attention, observe and hone sensory awareness and reflect on thoughts, feelings and action. Learners attend to sensory information arising from: (1) their own movement and thoughts (improvised or prescriptive); (2) teacher-led verbally guided lessons in sensory awareness/attunement (through movement or stillness); (3) kinesthetic inter-subjectivity (the multi-layered experience of group learning contexts); and/or (4) the sensate qualities embedded within the environmental context. (p. 129)

Somatics educator and scholar Don Hanlon Johnson (2000) suggests that this fine-tuned sensory perception is the change-agent in SME, stating, “the education of [the participant] in more intricate levels of sensitivity provides the basis for healing” (p. 486). This makes rational sense, since without awareness of one’s physical state, an autonomous choice to change (or retain) a state cannot be made; without fine-tuned sense perception, self-regulation would be imprecise if not impossible. Batson and Wilson (2014) claim that SME trains attention and assert, “Attending to sensory data is not simply a matter of noticing…the learning lies in noticing and registering *distinctions* and *differences* in the bodily status quo” (p. 130, emphasis original). As discussed, the body is active in cognition, so training in a well-focused awareness of one’s physicality, and the ensuing ability to change it, allows for potential shifts in consciousness and opportunities for learning, growth, and development. Through Somatics, automatic habits and lack of awareness can be shifted into consciousness awareness (T. Hanna, 1970; Juhan, 1987; Reeve, 2011).

In dance, somatic approaches emphasize sensory and perceptual processes underlying movement skills (Enghauser, 2007). As such, SMDE is a unique form of thinking that supports nuanced awareness of physicality in the movement moment, the fine-tuning of movement choices, and ultimately, skill in dancing and dance-making (Batson, 1990; Batson, Quin, & Wilson, 2012; Fortin, 1993, 1995). Habitual movement patterns developed over years of dance study or lifestyle can limit movement potential and mask individual limitations and strengths (Behnke, 1997), even leading to dysfunction or injury (Brodie & Lobel, 2004; Clippenger, 2007; T. Hanna, 1970). Alternatively, the deepening of embodied perception and skilled movement in SMDE may aid dancers in avoiding harmful patterning.

**Attention and Perception: Philosophical Pedagogical Support**

In SMDE, pedagogy draws on and/or is consonant with particular philosophical principles (for a full discussion, see Williamson, 2016); its emphasis on personal experience in sensing, perceiving, and developing attention to bodily states stems from phenomenology and existentialism (Eddy, 2009; Fraleigh 1987, 1996; Williamson, 2016). As Eddy (2009) notes, even prior to the formalization of first-generation Somatics modalities in the early twentieth century, experiential learning, sensory research, and general somatic inquiry were “buoyed by [the] growth of existentialism and phenomenology” in academic and scholarly culture (p. 6). As introduced above, phenomenology prioritizes individual, subjective experience as a basis for meaning making. Phenomenology holds that consciousness is consciousness *of* something, and therefore relies heavily on the present nature, or immediacy, of *intention*—what we ascribe importance to (Fraleigh, 1987); intention is what directs us towards meanings (Husserl, 1970/1990; McIntyre & Smith, 1989). Intentional sensory awareness is heightened in somatic practices, as they bring consciousness to the subjective lived experience of one’s own (and others’) body states and bodily relationships (Johnson, 2000).

As noted, existential philosophers view meaning making as a self-responsible process, occurring when one’s physical body interacts with their environment—a philosophy that parallels Gibbs’ (2005) theory of situated cognition, introduced earlier, which posits that cognitive processes extend beyond mind and body into the environment(see Robbins & Aydede, 2012; L. Shapiro, 2011).In her descriptive aesthetics, dance philosopher Sondra Fraleigh (1987) cites the contribution of 20th century French philosophers to the blended genre of existential phenomenology:

Maurice Merleau-Ponty and Jean-Paul Sartre introduced Edmund Husserl’s phenomenological method (as a systematic study of the contents of consciousness) into existential philosophy through their concerns for explaining “bodily being” and their attendant attempts to elucidate “perception.” Thus, the concept of the lived body was technically developed through their joining of existential concerns with the phenomenological method. (p. 3)

SMDE’s underpinnings in existential phenomenology shaped its pedagogical aims through its phenomenological roots. Emphasizing individual, subjective experiences rather than external authority, the processual nature of perception instead of a pre-ordained movement product, and periods of restful integration, SMDE supports meaning making. Through attending to a deeper engagement with our own movement, we make *sense* of our environment and experiences. Through use of these pedagogical tools, dancers may achieve a more fine-tuned perceptual experience of their bodies and movement than they experience in a traditional dance education setting. As discussed next, such refinement may have implications for creativity in movement generation.

**Authority and Autonomy in SMDE**

**SMDE and Dance Technique – Some Distinctions**

Obviously, dance education trains dancers to be aware of their physicality, as Enghauser (2007) highlights; however, Somatics offers a generally slower, more nuanced attention to embodiment and movement compared to conventional dance training’s focus on the outer perspectives of teacher-as-authority, feedback from mirrors, and the shape and form of the *product* of their movement (Dyer, 2009; Green, 1999, 2001, 2002). Elements such as co-creation, shared authority (addressed in the next section), duration, sustained internal attention, and non-proscriptive movement are difficult to achieve fully in a setting where inner, felt experience is not the main goal. As Detta Howe (2016) identifies, in SMDE, “Each lesson allows space and time to rest, breathe and notice, and usually takes place in silence; none of the above you generally associate with the conventional dance class” (n.p.).

It is important to note that fine tuning of sensory perception, attention, and autonomy require in-depth practice before they can be applied with consistency and ease outside of the dance education context. I acknowledge, too, that dancers’ awareness of the external perspective of their movement also requires development in a performing art that is typically perceived and received externally by audiences. However, for dancers to develop a more attuned awareness, a more sensitized perception, greater well-being, optimal functioning, and so on, 21st century dance educators are increasingly articulating the importance of supplementing objectification of dance students’ bodies with education that prioritizes individual agency and the development of each dancer’s internal authority or authorship. Agency and internal authority are closely associated with cognitive processes of choice, decision making, and subsequently problem solving and creativity. They are another way in which SMDE pedagogy, through its grounding in philosophical frameworks, can facilitate greater creativity in dancers.

**Authority and Autonomy: Pedagogical Support**

SMDE pedagogy is also backed by feminist principles (Burnidge, 2012; Eddy, 2002; Eddy et al., 2014). Feminist pedagogies seek to disturb and re-balance inequalities of power and question traditional epistemologies (Bond, 2017; hooks, 1994; S. B. Shapiro, 1998; Stinson, 1993); in feminist pedagogies and in SMDE, power resides in the individual as an authority in their own meaning-making processes—a subject who is active in that creation of meaning, rather than an object who didactically receives knowledge from an external expert (or who is subjected to the oppressive forces of society). In the 1990s, a germinal decade of feminist pedagogical thinking, Carolyn Shrewsbury (1997) stated, “Feminist pedagogy begins with a vision of what education might be like but frequently is not. This is a vision of the classroom as a liberatory environment in which we, teacher-student and student-teacher, act as subjects, not objects” (p. 166).

Emphasis on subjecthood can support a collaborative learning environment. This shift is apparent in dance classroom pedagogies that acknowledge students as teachers, perhaps influenced by the incorporation (implicit or explicit) of Somatics (Bacon, 2010; Bannerman, 2010; Burnidge, 2012; Dyer, 2009). Huddy and Stevens (2014) state that such changes “demand dance teachers to reconsider some of the traditional teaching methodology handed down by generations of dedicated teachers that may no longer be relevant in today’s dance environment” (p. 2). Traditional teaching has been called the “sage on the stage” model of imparting knowledge (King, 1993) in a hierarchical or “subjecting” relationship of master to student (Foucault, 1977; Green, 2002). While there are different “waves” or schools of feminism, they share the same goals of questioning oppressive power hierarchies, especially related to gender, and seeking social change through communal efforts to recognize and resist hegemonies. Arguably, SMDE is feminist to its core.

Theorists have described the features of feminist pedagogy. Shrewsbury’s (1997) categories include empowerment, community, and leadership, all of which are applied to ameliorating inequalities of relationship and power. She states, “Our classrooms need not always reflect an equality of power, but they must reflect movements in that direction” (p. 168). She views classrooms as communities of learners where students develop agency and leadership. Diana Gustafson (1999) offers five premises of feminist pedagogy: (1) body as epistemological site, (2) body as political signifier, (3) explicit construction of knowledge—i.e. analyzing why and how we know and value what we do, (4) the reconstructing of self (or, in Somatics, “repatterning”), both personally and politically, and (5) discovering commonalities while supporting diversity.

These feminist pedagogical values are foundational to SMDE pedagogy (Burnidge, 2012; Eddy et al., 2014), which seeks to empower the individual to step outside of dominant cultural narratives of body subjugation and external authority and step into a sense of self-leadership and bodily autonomy (Eddy, 2002; Eddy et al., 2014; Fortin, 1995, 1998; Green, 1999, 2001, 2002, 2013). Further, a sense of internal authority—both mentally and physically—can become a kind of political positionality within a community of learners. In existential phenomenological terms, feminism’s and Somatics’ reverence for body as a source of knowledge indicates a shared valuing of both individual autonomy (or what Burnidge [2012] terms “empowerment”) and intersubjective mutuality. Development of internal autonomy and authority is crucial in choice making and hence an important component of dance making and creativity. The feminist principle of explicit knowledge construction, combined with valuing subjective experience, means that somatic study invites transparency about one’s geo-socio-cultural biases (Fraleigh, 2004). Johnson (1995) explains:

My body—its sensibilities, movement styles, reaction patterns, and health—is not simply an individual reality governed by its own biophysical laws and idiosyncratic effects of my personal history. I am also a result of the ideologies within which I move. (p. 65)

Awareness of personal biases allows a dancer to choose to participate or resist them. As Howe (2016) states,

When a student…is given the opportunity to feel their body in motion, to get to know themselves through trusting in the unknown, I propose that thinking changes, learning and ownership take place…informed by a history of life and movement but not confined by its rules. (n.p.)

Applying awareness of bias and choosing to resist convergent options (in thinking or movement) to seek the novel or divergent requires a developed sense of internal authority and the fortitude to stand up to the status quo. This perspective, again, is grounded in feminist pedagogical principles that acknowledge the subjective nature of meaning-making. In SMDE, strengthening the individual through their own internal authority to resist both habitual movement patterns and the aesthetics of their zeitgeist—a form of radical autonomy (Louppe, 2010), may foster enhanced creativity in choreographic choices as dancer-choreographers shed the “rules” and physical formations of existing techniques in favor of their own, individual creative movement.

**Cognition: Creativity in Dance Choreography**

So far, I have endeavored to demonstrate that SMDE is a unique form of embodied thinking with a variety of benefits to dancers. In particular, somatic movement education, through its pedagogical grounding in phenomenological, existential, and feminist philosophies, affords a deep sense of embodiment and autonomy (Fortin et al., 2009). SMDE’s impact on dancers’ health, well-being, and artistic or aesthetic integrity is well reported (Brodie & Lobel, 2004; Dyer, 2009; Eddy, 2009a; Fraleigh, 2004; Sheets-Johnstone, 2013; Weber, 2009). Beyond these, however, I propose that gains in attention, perception, and internal authority have implications for creativity, a premise supported internationally by dance education advocacy organizations (Ausdance, 2012; NDEO, 2016). Through integration of these higher-order mental processes, dancers can gain greater access to autonomous choice making.

Within the field of creativity research, as it sits in cognitive psychology, creativity has been defined across domains as the creation of something both novel and useful (Amabile, 1996; Campbell, 1960; Koestler, 1964), for example, in problem solving, communication, and entertaining oneself and others (Franken, 1982/2006). Acknowledging that there is an extensive literature on creativity across multiple disciplines, here I will delimit discussion to one example, an enduringly popular theory on how one might produce something both novel and useful regardless of the domain of production: Campbell’s (1960) theory of blind variation and selective retention (BVSR), a theory of combinatorial thinking later extended by other researchers, notably Simonton (2011). BVSR is widely valued within psychological discourses, as most creativity testing assesses divergent thinking, while most people in a shared culture tend to give the same first-response answer. In order to come up with something novel, convergent solutions have to be overridden through a process of *variation*.

In BVSR, one goes through a process of creating variations on the solution to a problem—or in dance, discovering ways to enact an intention in a fresh, engaging way—and then chooses the most useful. The usefulness criterion of creativity, in particular, requires more attention in relation to dance. As noted by Eddy (2009), “the growing body of research on creativity does not adequately address dance” (p. 22). Applying BVSR to dance, if a choreographer develops greater sensory awareness, and thus more options to choose from, it seems likely that this will increase the novelty and usefulness of their movement generation and their ability to selectively retain the most appropriate, or fitting, response. As Howe (2016) notes,

When the movement is small and slow [as in SMDE], sensory distinctions can be made between movements and allow for mapping of the brain to be rewritten...slower movement leads to more subtle observation and map differentiation, so that more change is possible. (n.p.)

Furthermore, if Somatics practice develops a choreographer’s sense of autonomy and self-authority, it might be easier for them to confidently choose divergently and override cultural pressures to adhere to societal norms; this could mean eschewing what is traditionally “right” or technically “correct” in favor of movement patterns that best fit the task at hand and the individuals performing them. Further, dance artists who override their habitual movement patterns in favor of those that are more beneficial to quality of life—choosing, say, less-injurious approaches, might foster a longer performing or choreographic career.

**Conclusion**

Dance education holds many benefits for the dancer-student, and somatic movement dance education (SMDE) can deepen and extend these benefits. Dance is a unique form of cognition in which movement makes meaning. SMDE supplements traditional dance technique to potentially strengthen higher-order cognitive processes of attention and perception, while reinforcing individual autonomy, internal authority, and agency—all of which are central to cognitive choice-making processes. Benefits of SMDE are holistic: physical, mental, affective, social, aesthetic, spiritual. These benefits can include, through a complex web of cognitive processes, the ability to choose more novel movement. If choreographic creativity sits at the intersection of novel and useful, then the quest for novelty is supported in SMDE through refinement of sensation and perception, while usefulness might be found in an individual’s trust in their self-authority (whether solo or as part of a group). Both find their grounding in SMDE through pedagogies that draw on existential phenomenology and feminism, enacted and embodied in the unique Somatics learning environment.

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