

12-14-2018

Making Meaning of Repetitious Movement Patterns: A Heuristic Inquiry

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MAKING MEANING OF REPETITIOUS MOVEMENT PATTERNS:
A HEURISTIC INQUIRY

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Thesis submitted to the faculty of Columbia College Chicago

in partial fulfillment of the requirements for

Master of Arts

in

Dance/Movement Therapy & Counseling

Department of Creative Arts Therapies

14 December 2018

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Abstract

The purpose of this research study was to explore how I, an emerging dance/movement therapist, understand and embody my own and my clients' repetitious movement patterns. Through a heuristic inquiry, I explored how my body knowledge/body prejudice informs my observations and assessments of repetitious movement patterns exhibited in others. I also investigated how I may use my findings to create unbiased dance/movement therapy interventions. I collected data in the form of journal responses following individual dance/movement therapy sessions where I observed repetitious movements in children at my internship site, a medical unit at a children's hospital. Secondly, I collected movement data in the form of video recordings of improvisational movement that explored my repetitious movement pattern preferences. To aid me in this data collection process, I requested the support of a certified movement analyst who served as a movement collaborator. Lastly, I collected art data, created through repetitive motions of the hands, wrists, and arms, in response to my kinesthetic experience of repetitious movement patterns. To analyze the data, I utilized Forinash's qualitative data analysis on each set of data separately. A resonance panel served as a source of validation by acting as consultants to help me clarify my preliminary findings. The research findings indicate that repetitious movement patterns exist in everybody, and body knowledge/body prejudice plays a role in one's observations, assessments, meaning making of repetitious movement patterns, and development of interventions. Acknowledging this broader prevalence of repetitious movement patterns, the research shows that increasing awareness of one's own body knowledge of repetitious movement patterns helps mitigate body prejudice. Through the analysis, I discovered personal propensities toward inner-outer awareness, stabilize to mobilize, flow, growing and shrinking, space and cognition, and time and intuition.

Acknowledgements

I would like to extend my gratitude to Laura Downey, Susan Imus, and Jessica Young for their continual support, guidance, and encouragement from beginning, to middle, to end. Thank you to my movement consultant for offering meticulous observations and engaging in dialogue throughout the movement data collection and analysis stages. I would also like to thank my resonance panel for guiding me through the end of the data analysis process, as without them, I may still be sitting in a mound of thoughts and ideas. Thank you to my research partner, Aliza Roth, for her constant words of encouragement and willingness to offer a listening ear.

Most importantly, I would like to extend a tremendous thank you to my parents Dave and Nicole Ringenberg for their unwavering support as I ventured into the world of dance/movement therapy. I owe my mom an extra thank you for assisting me in the editing process. Thank you to my sister Claire for always helping me keep things in perspective and encouraging me to see the bigger picture. Last, but certainly not least, thank you to Ruby and Tucker for (literally) being by my side as I read, typed, edited, danced, and painted my way through each step of the thesis process.

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Chapter One: Introduction

Motivation for The Study

Over the past few years, I have continually found myself drawn towards observing individuals engage in patterned, repetitive, and rhythmic-based movements. Purpura et al. (2017) defined *repetitious movement patterns* (see Appendix A) as rhythmic or *arrhythmic movements* (see Appendix A) that occur repeatedly. These movements can occur unconsciously or consciously and with or without an identifiable purpose (Purpura et al., 2017). I have purposefully observed individuals, those whom I knew very well and others whom I did not know at all, exhibiting repetitive movement behaviors while performing daily routines. I grew more and more interested in understanding the purpose, reasoning, and implications of these movement patterns. As I advanced my education and experiences in therapeutic approaches, my interest grew even deeper. I began self-reflecting on whether I exhibited this behavior of repetitive movement patterns and how this may inform personal biases, which in turn affects how I interpret observations of others and myself. This curiosity blossomed from a mere interest in the movement of others to a desire to understand the purpose of the movement, and ultimately, to discover how my experiences, thoughts, and behavior patterns influence how I observe, assess, and intervene when it comes to repetitious movements in others.

As an expressive arts and movement coach, I worked twice a week with a boy with Down Syndrome. Given the opportunity to work with him consistently over a two-year period, I observed many of his mannerisms and movement patterns. One such pattern was that he continually engaged in toe walking. I noted that he walked in a quick and light manner on the tips of his toes. For alignment and functionality purposes, his parents asked that I assist him in shifting this movement pattern to enable him to walk with the inclusion of his heels and the soles

of his feet. I was interested in working with him to assist in changing this behavior, but I was equally as interested in understanding the purpose behind the toe walking. Was it sensory stimulation, a physical challenge, or serving no particular purpose? With these observations, questions, and a desire to help, I wanted to know the purpose behind repetitious movement patterns.

My interest developed even deeper as I worked through a movement and expressive art lens, once a week for a year and a half, with an adolescent male diagnosed with autism spectrum disorder. I observed him continually brush a piece of hair across his eyelids in a repetitive and stroking manner. This movement appeared socially abnormal and thus his parents asked me to help him change this habitual movement pattern. Through discussions with the adolescent, I learned that he liked the feeling of his hair across his eyelids, as it offered a soothing sensation and increased his comfort level when feeling anxious. From him, I learned that movement patterns might serve a purpose for the individual engaging in them; however, the pattern may not be socially acceptable or deemed normative. This led me to wonder about the acceptability of engaging in repetitious movements if they are safe, self-soothing, reduce anxiety, and have a positive effect on the individual.

Finally, while interning as a dance/movement therapist on a general pediatric unit of a large medical hospital, I came to the conclusion that repetitious movement patterns seem to live within all of us. While participating in an individual *dance/movement therapy* (see Appendix A) session with a school-aged boy, I observed him move his arms in a repetitive, circular pathway and swipe his legs back and forth in a swinging manner for about fifteen minutes. Through these observations, it occurred to me that repetitious movements do not solely exist in individuals diagnosed with intellectual and developmental disabilities or mental health disorders. I began

wondering where else repetitious movement patterns show up in everyday life, but may not seem so obvious. Ultimately, this led to my growing curiosity about my own unconscious repetitious movement patterns. Furthermore, I wondered how my movement pattern preferences impact my observations, assessments, interventions, and meaning making of repetitive movements observed in other individuals.

Purpose of the Research

The purpose of this research was to broaden my knowledge of how I understand and embody repetitious movement patterns in myself and others, learn about my own repetitious movement pattern preferences, discover how my body knowledge/body prejudice impacts my observations and assessments of others, and develop ways in which to leverage this knowledge to create unbiased interventions in the future. According to Moore and Yamamoto (2012), *body knowledge* (see Appendix A) is a person's developed understanding of his or her movement behavior. Personal experiences allow an individual to categorize, abstract, and generalize different movements, which make up one's body knowledge (Moore & Yamamoto, 2012). *Body prejudice* (see Appendix A) refers to placing a meaning, whether negative or positive, upon a certain type of movement (Moore & Yamamoto, 2012). Recognizing and acknowledging my body knowledge/body prejudice should allow me to make less biased interventions when working with repetitious movement patterns of clients in the future. I also entered into the research with the hypothesis that repetitious movement patterns exist in everybody. By striving to prove that all humans exhibit repetitious movement patterns, whether small or big, gestural or postural, and socially acceptable or not, an aim of the research was to broaden the field's perspective of repetitious movement patterns.

Theoretical Framework

Freely drawing from multiple counseling theoretical orientations, one underlies them all: multicultural counseling. I view the clients I work with from a sociocultural context, and I strive to fully understand how this informs the people and movers they are today. The multicultural paradigm offers a more comprehensive understanding of the complexity of human development as well as increased sensitivity to gender and cultural biases (Ivey, D'Andrea, & Ivey, 2012). It recognizes that all counseling theories exist within a cultural context and is itself an integrative approach that consists of an array of therapeutic techniques (Ivey, D'Andrea, & Ivey, 2012). By conducting research on repetitious movement patterns, I gained information about my own sociocultural influences and how these factors impact me on both a body and a movement level. This information will prove useful as I develop my career as a dance/movement therapist and counselor, fields where I will proactively and willingly interact with individuals from differing cultural-racial identities than my own.

I also resonate with a humanistic approach to therapy, as it emphasizes the therapeutic relationship, empowering the client, and building empathy. I find that I am able to empathize and work within the therapeutic relationship by utilizing attending skills and other microskills developed within the humanistic theoretical framework. Nonverbal attending skills include eye contact, body language, vocal tone, speech rate, physical space, and time (Ivey, D'Andrea, & Ivey, 2012). These nonverbal cues are necessary for the therapist to pick up on and utilize to build trust between client and therapist. In general, microskills are communication skills that help the therapist to effectively and intentionally interact with the client (Ivey, D'Andrea, & Ivey, 2012). From a multicultural perspective, it is important for me to recognize that how I

employ attending skills and other microskills may differ from culture to culture and person to person.

Alma Hawkins' and Marian Chace's theoretical approaches to dance/movement therapy beautifully correlate and intertwine with a humanistic theoretical framework. According to Levy (2015), Hawkins valued facilitating as opposed to directing movement within the therapy session. By being a guide to the creative process, she allowed the individual to increase awareness around thoughts and feelings (Levy, 2015). As an emerging dance/movement therapist, I have similar goals when I enter the room with a client. I strive to suspend judgment, be with the client's experiences, and create space for anything that presents itself.

Chace's theory is grounded in the idea that dance is a form of communication and fulfills a basic human need (Chaiklin & Schmais, 1979). She observed and responded to idiosyncratic movements and gestures that served as a form of self-expression from within the clients (Levy, 2005). Chace valued the development of the *therapeutic movement relationship* (see Appendix A) and developing *kinesthetic empathy* (see Appendix A) towards the clients. The therapeutic movement relationship is about "allowing oneself to implicitly feel the clients' emotional experiences, follow their lead, and bring one's full self into the relationship," which is "experienced as a sense of togetherness, joining with another person in their dance" (Young, 2017, p. 109). At the heart of the therapeutic movement relationship is kinesthetic empathy. Kinesthetic empathy is the process of embodying another's emotional experience (Behar-Horenstein & Ganet-Siegel, 1999) and occurs through a movement dialogue between therapist and client (Chaiklin & Schmais, 1993). Kinesthetic empathy may be achieved through *mirroring* (see Appendix A), the act of reflecting another individual's movement to show acceptance and openness to their movements, feelings, and thoughts (Fischman, 2016) and *attunement* (see

Appendix A), “the ability of the therapist to attend to both the internal body sensations as well as the client’s movement” (Downey, 2016, p. 71). Similarly, I respond through attunement and mirroring of small movements to further relate to the client, embody their movement, and increase kinesthetic empathy.

Overall, my approach to dance/movement therapy is eclectic, drawing upon both counseling and dance/movement therapy theoretical approaches. By integrating multiple approaches, all supported by a foundation of multicultural perspective, I create a safe and open space for the client. Ultimately, my goal is to develop the therapeutic relationship and facilitate positive growth as determined by the client. My theoretical frameworks of multicultural counseling theory and humanistic counseling combined with my dance/movement therapy theoretical approach informed by Chace and Hawkins influenced the research questions and the steps I took to conduct the research. At the heart of the research question lays the desire to understand how my approach to dance/movement therapy may be more inclusive and person-centered. Similarly, I approached the research in a manner that is multi-culturally informed.

Conclusion

My previous work with children who presented with repetitious movement patterns, my desire to explore my own repetitive movements, and my theoretical frameworks all informed the research process. My desire to understand my own and my client’s repetitive movement patterns came from a place of wanting to expand my multicultural perspective and wanting to become a more inclusive therapist for my clients. By researching my body knowledge/body prejudice in relation to repetitious movement patterns, I set out to expand my multicultural awareness. Furthermore, the research was conducted with the recognition that my repetitious movement pattern preferences impact how I develop and facilitate the therapeutic relationship. This in turn

affects my clinical decisions, including observations, assessments, meaning making, and interventions when working with clients. Who I am, my experiences, what I value as a therapist, and my theoretical approaches all influence who I am as a dance/movement therapist and consequently the research I conducted.

Chapter Two: Literature Review

Introduction

To support the exploration of repetitious movement patterns and the role of personal bias in assessing such patterns, four key areas within the literature were reviewed: repetitious movement patterns, rhythm, Kestenberg Movement Profile, and body knowledge/body prejudice. The literature review begins with a broad overview of repetitious movement patterns and the various terminologies surrounding the topic. For the purpose of this research and thesis, repetitious movement patterns are defined as the repetition of the same movement multiple times in a rhythmic or arrhythmic pattern, which may or may not serve a known purpose for the individual.

Repetitious Movement Patterns

There are various terms and definitions referenced when defining the concept of repetitious movement patterns. Some of these definitions align, some overlap, and others are very different. This ambiguity stems from the fact that there are a multitude of perspectives regarding the functionality, purpose, impact, and acceptability of movement patterns that are repetitive in nature. Some interpretations deviate in terms of whether a repetitive movement is positive or negative. Repetitious movement patterns play a significant role in psychomotor development in the development of voluntary movements (Purpura et al., 2017). Some repetitiveness in motor movements is necessary for typical development, while some is considered abnormal and suggests atypical development (Purpura et al., 2017). The literature presented three types of repetitive movement patterns as most relevant to inform observation and meaning making processes. Specifically, these include *stereotypies* (see Appendix A), *restricted*

repetitive patterns of behaviors (see Appendix A), and *body-focused repetitive behaviors* (see Appendix A).

Stereotypies. Stereotypies, also known as self-stimulatory behaviors, refer to repetitive movements and sounds created by an individual in an attempt to meet a physical or psychological need that may be unknown to the observer (Morrison, 2014). The act of engaging in and creating these repetitious sounds and movements is often referred to as *stimming*. Individuals of all ages, cognitive abilities, and emotional states can display stereotypies. There are two subcategories of stereotypies, namely primary and secondary, which help clarify prevalence and function (Shearer, n.d.).

Primary stereotypies are more common and show up in roughly 65% of neurotypical infants' movements (Shearer, n.d.). About 50% of children under the age of 15 show primary stereotypies such as rocking, thumb sucking, or nail biting (Shearer, n.d.). These behaviors also present themselves through adulthood. Repetitive behaviors such as tapping a foot, tapping fingers, fiddling with a pen, folding the paper from a straw, twirling hair, and regularly cracking knuckles are considered primary stereotypical behaviors (Hirshberg, 2013; Shearer, n.d.; Wang, 2012). Often times, people do not even recognize when *stimming* through repetitive movement occurs (Hirshberg, 2013). Secondary stereotypies are more complex, and they look like hand flapping or arm waving (Shearer, n.d.). These self-stimulatory behaviors are less common, only appearing in about 4% of typically developing children. Secondary stereotypies are more severe, complex, and potentially dangerous compared to primary stereotypies (Shearer, n.d.).

There are many reasons for self-stimming behaviors. An individual may self-stimulate to block out excess sensory input, provide extra sensory input, or reduce the sensation of pain (Wang, 2012). Additionally, *stimming* may be used as a form of expression, as positive and

negative emotions may be a trigger (Wang, 2012). Stereotypies that show up in children can also be connected to sleep behavior (Shearer, n.d.). For example, a child may self-soothe by gently rocking back and forth in bed in an attempt to fall asleep. Additionally, times of transition and change in routine may lead to self-stimulating behaviors as well (Shearer, n.d.). For example, the transition from summer to fall and going back to school may cause an increase in stimming for a child (Hirshberg, 2013). In this situation and in many situations, the stereotypic movement is used as a form of coping with a change in environment.

Self-stimulatory behaviors can also have negative implications. According to the American Psychiatric Association (2014), stereotypies are often associated with autism spectrum disorder, stereotypic movement disorder, tic disorders, obsessive-compulsive disorder, attention deficit hyperactivity disorder (ADHD), and other neurodevelopmental disorders. In general, stereotypies are often viewed as indicators of motor abnormalities and impairment in cognitive functioning (American Psychology Association, 2014). These repetitive movements can get in the way of learning and social interaction (Wang, 2012). For example, the child with autism may become fixated on repeating a behavior; the child with ADHD may need to release pent up energy through repetitive behaviors; the individual with Tourette's may involuntarily perform a movement repeatedly; the child with sensory processing disorder may bang his or her head to meet sensory needs and calm the nervous system. Lund (2016) and Wang (2012) agree that a self-soothing repetitive behavior that is problematic is one that leads to an inability to socially integrate. Many stereotypies and the associated diagnosis may make it challenging for an individual to function in day-to-day life and integrate into the social context of society.

Restricted repetitive patterns of behaviors. According to the American Psychiatric Association (2014), restricted, repetitive patterns of behavior refer to repetitive motor

movements, using objects to create a pattern, repetitive speech, insistence on sameness, ritualized patterns of routine, greeting rituals, fixated interests, and hyper or hypo-activity to sensory input. Typically, these repetitive behaviors occur at a high frequency and last throughout an individual's lifetime (Matson, Dempsey, & Fodland, 2009). In addition, these behaviors often present themselves through the body in a manner that may be disruptive to everyday life.

Some typical restricted repetitive behaviors include body banging, flapping, stiffening, running/jumping, and exploring/pacing (Walter, 2016). Body banging consists of banging the body on an object or on another body part (Walter, 2016). Flapping involves movement of the hands, wrists, and arms in a back and forth or up and down motion at least three times in a row (Walter, 2016). Stiffening refers to posturing the hands and fingers into a fist or a spreading shape (Walter, 2016). Running/jumping is when an individual runs or jumps around the room, disengaging from a previous activity or interaction (Walter, 2016). Exploring/pacing serves a similar purpose to running/jumping, as it involves diverting one's attention, but the individual moves at a slower pace (Walter, 2016).

Restricted repetitive patterns of behavior are specifically associated with a diagnosis of autism spectrum disorder (American Psychiatric Association, 2014). Autism spectrum disorder, according to the American Psychiatric Association (2014), encompasses Asperger's disorder, childhood disintegrative disorder, Rett syndrome, and pervasive developmental disorder not otherwise specified. According to Waltzer's (2016) research, children with autism and pervasive developmental disorder not otherwise specified displayed with higher prevalence rates of restricted repetitive behaviors than children not on the spectrum and typically developing. High amounts of restricted repetitive behaviors have also been associated with younger age, lower verbal IQ scores, greater social deficits, and greater communication impairments (Waltzer,

2016). Similar to stereotypes, restricted repetitive patterns of behavior may make it challenging for an individual to function effectively in society.

Body-focused repetitive behaviors. Behaviors that fall under this category are more body-based in nature and involve an action upon the body itself. These body-focused repetitive behaviors include: skin picking, skin biting, nail biting, hair pulling, thumb sucking, and lip biting (Miltenberger & Spieler, 2016). Body-focused repetitive behaviors have the potential of being dangerous: they can be life threatening, leave scars, and cause tissue damage (Miltenberger & Spieler, 2016). For example, skin picking can lead to infections and the need for antibiotics (Odlaug & Grant, 2008). Additionally, hair pulling can lead to follicle damage as well as gastrointestinal problems if consumed (Rapp, Dozier, Carr, Patel, & Enloe, 2000; Woods et al., 2006).

Body-focused repetitive behaviors occur in typically developing individuals and individuals with intellectual and developmental disabilities (Long, Miltenberger, & Rapp, 1998). Treatment can assist in mitigating and managing the behaviors. In order to create a treatment plan for an individual with body-focused repetitive behaviors, determining the function of the behavior and identifying the conditions or situation that the behavior occurs within is imperative (Miltenberger & Spieler, 2016). A functional assessment helps address the triggers and consequences of the behavior as well as any potential social reinforcement (Miltenberger & Spieler, 2016).

Regarding social functioning and integration, body-focused repetitive behaviors can lead to social issues and lowered levels of self-esteem (Long, Miltenberger, & Rapp, 1998; Snorrason & Woods, 2014). Similar to restricted repetitive patterns of behavior, body-focused repetitive behaviors may have maladaptive implications, including physical harm. However, by better

understanding the causes of the movement, one can create more suitable interventions to positively change the behavior and treat the individual (Miltenberger & Spieler, 2016).

From the literature, it is apparent that many terms, including but not limited to stereotypies, self-stimulatory behaviors, stimming, restricted repetitive patterns of behavior, and body-focused repetitive behaviors exist to describe the concept of repetitious movement patterns. The research indicates that repetitious movement patterns can live within all humans at varying levels, with varying degrees of intensity, and for multiple reasons. Additionally, the research suggests that those who engage in repetitious movement patterns demonstrate a range from typical to atypical physical and mental development and functioning as well as positive and negative associated behavior. Repetitious movement patterns relate to the concept of rhythm, as the development of rhythm requires the creation of repetitive movements or actions. Rhythm, similar to repetitious movement patterns, serves various functions and purposes in an individual's life.

Rhythm

Repetitive movements are rhythmic in nature, just as rhythm is inherently patterned and repetitive (Brous, 2014). Rhythm lives everywhere and is pertinent to the research, as it suggests a movement pattern that creates a repetitive and rhythmic action that impacts the human body and mind. People set their own pace through which they walk through life and they move amongst a greater rhythm of life (Signell, 1990). Signell (1990) beautifully articulated the ease and joy an individual experiences in moving in accordance with one's own rhythms.

From the very beginning of life, how good it feels to move at our own individual pace and in accordance with the wider rhythms around us, and how alienating to our personhood to be restricted in our movement or speeded up, discordant with our

surroundings. Finding our own natural rhythm is a crucial experience of the early Self: being attuned to Nature, its rhythms, and attuned to one's own inner nature. (p. 55)

This literature review focuses on five areas of rhythm that best support the research, as they inform the data analysis process. These include rhythm and the brain, rhythm in everyday activities, rhythm and dance/movement therapy, rhythm and attunement, and rhythm and intervention.

Rhythm and the brain. Rhythm is inherent to one's biological being as reflected in the brain as well as involuntary and voluntary movements. Specifically, the hypothalamus controls voluntary and involuntary rhythmic movement (Kestenberg Amighi, Loman, & Sossin, 2018). It is a region of the brain that coordinates the autonomic nervous system and unconscious regulation of the rhythmicity of organs, zones, body systems, and secretion of hormones (Kestenberg Amighi, Loman, & Sossin, 2018). Rhythm impacts the autonomic nervous system, a control system that unconsciously regulates bodily functions, as it influences its response to organize and regulate physiological, emotional, and behavioral occurrences (Berrol, 1992). The autonomic nervous system also controls the fight or flight response (Goodill & Graham-Pole, 2005), which is a part of the trauma response. Repetitive and rhythmic activities can be used to help regulate trauma in the body, as it helps bring the mind down from a high anxiety state to a calmer and more cognitive state, creating a sense of safety (MacKinnon, 2012). Rhythm can serve as an integrating and powerful source that helps release tension within the self (Capello, 2016). Ultimately, it can be used to create a sense of calmness, stimulate a memory, energize, or regulate the mover (Tortora, 2016). The necessity of rhythm is not only reflected through brain processes, such as the autonomic nervous system and the trauma response, but it aids in meeting one's biological needs.

Rhythm in everyday activities. Rhythm is a necessary and integral aspect of the human experience, as it lives within all of us. More specifically, it is integral to human development and aids in getting biological needs met. While in the womb, fetal movements that are rhythmic in nature occur (Kestenberg Amighi, Loman, & Sossin, 2018). Communication occurs through the rhythmic patterns between fetus and biological mother. It is heard in the beat of a heart; it is sensed through the flow of blood through the body; and, it is seen through one's breath (Capello, 2016). Rhythm exists in everyday movements. Drumming, yoga, Tai Chi, Qi Gong, walking, running, and jumping on a trampoline are all repetitive and rhythmic activities (Perry & Hambrick, 2008). These movements are characterized by the rhythmic alternation between *bound flow* (see Appendix A) and *free flow* (see Appendix A) (Kestenberg Amighi, Loman, & Sossin, 2018). They involve repeating movements within the body to create a rhythm. This action of creating rhythm through the body is further developed and utilized in dance/movement therapy.

Rhythm in dance/movement therapy. Many dance/movement therapists utilize rhythm in their practices. One of Marian Chace's four major classifications within her methodology is group rhythmic activity. Rhythm can be explicitly utilized to facilitate emotional expression, organize the body and thoughts, and support group cohesion, which is instrumental to the work of dance/movement therapists. By engaging in rhythmic action in a group setting, individuals are supported in their thoughts and feelings (Levy, 2005). Chace believed that rhythm offers a safe container in which individuals are encouraged to express themselves while maintaining some sense of control (Levy, 2005). It can both serve to organize expression of thoughts and feelings as well as harness intense behaviors such as hyperactivity or hypoactivity (Levy, 2005). Rhythm creates a structure for all that may come up, emotionally and physically, for the client.

Trudi Schoop also utilized rhythm and repetition in her approach to dance/movement therapy. Schoop broke emotions down into rhythms to increase one's understanding of their feelings and how they express their emotions (Levy, 2005). By breaking the emotion down into muscular actions, Schoop believed that the clients could externalize, control, and gain mastery over the emotion (Levy, 2005). Through rhythmic release, the individuals are left the skills to access emotions, as opposed to repress them, and self-express (Levy, 2005). Oftentimes, rhythmic expression is suppressed or invalidated, but Schoop actually encouraged its manifestation. Self-expression through rhythmic release leads to self-control, deeper understanding of the physical self through trust of the body, and flexibility and strength in coping (Levy, 2005).

Schoop also encouraged awareness of rhythmic actions and repetitious movements that occur in one's everyday life (Levy, 2005). For example, she encouraged clients to notice the pace in which they walked, the rhythms in which they clapped their hands, and the stroking manner in which they brushed their hair to name a few (Levy, 2005). By sensitizing individuals to rhythmic action, Schoop was able to facilitate the development of group rhythmic action. She elicited the group's rhythm by encouraging the individuals to begin with their own pulses (Schoop & Mitchell, 1974). The individual beats eventually molded together, creating one group rhythm, which was often supported by a musician (Schoop & Mitchell, 1974). Similar to Chace, Schoop emphasized the importance of individual needs within the group context by bringing awareness to individual rhythms within the larger group rhythm (Levy, 2005). The development of a group rhythm occurs through attunement and leads to increased empathy for the self and others (Levy, 2005).

Rhythm and attunement. Kestenberg (1975) described attunement as the “synchronization in rhythms” between two individuals, such as mother and child (p. 161). As attunement on body and rhythmic levels occurs, empathy for the other builds (Loman, 1992). Needs and feelings may be reflected in changes in muscular tension, known as tension-flow (Kestenberg, 1975). In other words, the feelings, desires, and needs of one person are shared through attunement. As one mirrors and embodies another’s movement, kinesthetic empathy occurs, allowing for simultaneous experiencing of muscular tensions felt in the body (Loman, 1992). According to Levy (2005), a child feels comforted when the caregiver attunes to his or her movement rhythms, and kinesthetic empathy develops between the two individuals.

Loman (1992) described two types of attunement: visual and touch. Visual attunement occurs by observing rhythms of tension in a person’s body and then matching that rhythm (Loman, 1992). One may reflect the rhythmic action of a kick by matching the muscular tension, rhythmicity, and speed. Matching the specific body part used to create the rhythm is unimportant. For example, the therapist may reflect the kicking action by flicking the hand and wrist with similar muscular tension, rhythmicity, and speed to establish attunement and empathy with the client. Touch attunement is similar in that it involves reflecting rhythmicity in the body. By connecting through touch, the duo is quite literally able to sense the changes in pressure or rhythm (Loman, 1992). Small changes in muscular contractions are sensed and responded to through the individual’s movements (Loman, 1992).

Rhythm and intervention. A shift in one’s rhythm can be disorienting, informative, restrictive, and alienating depending on one’s relationship with it. Rhythm is utilized to treat individuals diagnosed with autism spectrum disorder to reduce self-harm (Orr, Myles, & Carlson, 1998). For example, playing a drum in a rhythmic pattern has proven helpful to

individuals with autism spectrum disorder, as it creates a soothing atmosphere and leads to increased communication (DrumConnection, 2014). Art can be utilized in a rhythmic action as well: the stroking of a paintbrush in a smooth, rounded rhythm may elicit a relaxing sensation and discharge of energy within the individual (Hinz, 2009). Rhythm, through movement, has proven useful when working towards pediatric pain reduction (Bradt, 2002). Individuals recovering from stroke, diagnosed with Alzheimer's disease, and diagnosed with schizophrenia may benefit from rhythm (Lusebrink, 2004). The function of rhythm with these individuals is to increase integration of cognitive processes, increase memory function, and improve life satisfaction (Hinz, 2009). In other words, the rhythmic kinesthetic experience can be used as a reconstructive activity.

From the literature, it is apparent that rhythm is inherent in every individual, which is evidenced through internal awareness to bodily functions and external awareness to daily activities. This concept also encompasses methods of expression and treatment interventions. Furthermore, rhythm can be viewed and analyzed from a developmental perspective through specific lenses.

Kestenberg Movement Profile

The Kestenberg Movement Profile (KMP) can serve as a framework through which to view and analyze repetitive movements. The KMP is an observational movement analysis tool that can be used to describe, assess, and analyze movement patterns (Koch & Sossin, 2014). The KMP postulates that one's movement patterns hold meaning and have psychological correlations (Koch & Sossin, 2014). It connects movement patterns to psychological needs, development, feelings, defense mechanisms, learning styles, affect, temperament, and relations (Koch & Sossin, 2014). Developmental movement patterns begin in the fetus and continue throughout the

life cycle (Loman & Sossin, 2016). Early detection of specific developmental deficits and psychological conflicts is made possible through the use of the KMP system (Sossin & Loman, 1992). Additionally, interventions regarding an individual's movement patterns can be implemented to possibly resolve any deficits (Sossin & Loman, 1992). Dance/movement therapists can use this information to create treatment plans and better meet the goals of the individual (Sossin & Loman, 1992). *Tension flow rhythms* (see Appendix A) address the developmental rhythms that exist in people.

Tension flow rhythms are patterns of change in tension and relaxation that occur at regular or irregular intervals (Loman, 1998). The tension flow rhythms help to meet a need, which can be developmental, psychological, or both (Koch & Sossin, 2014). The tension flow rhythms an individual utilizes and shows preferences towards reflect their needs, developmental stage, and environmental influences (Kestenberg Amighi, Loman, & Sossin, 2018). Each tension flow rhythm is associated with specific modes of drive discharge and need satisfaction (Loman, 1998). They can also serve to express pleasure and displeasure or anywhere in between (Loman, 1998). Ultimately, tension flow rhythms allow for an increased understanding of development and personality.

The rhythmic patterns correspond to developmental phases, including oral, anal, urethral, inner genital, and outer genital (Kestenberg, 1975). Two sub-phases exist, including indulging and fighting. The indulging sub-phase is based on the tension flow rhythms that are accommodating and mobilizing (Kestenberg Amighi, Loman, & Sossin, 2018). On the other hand, the fighting sub-phase is based on rhythms that are assertive and differentiating (Kestenberg Amighi, Loman, & Sossin, 2018). The indulging rhythms include sucking, twisting, running/driftng, swaying, and jumping. The fighting rhythms include snapping/biting,

straining/releasing, stopping/starting, surging/birthing, and spurting/ramming. See Appendix B for a visual representation of the freeing and binding rhythmic pattern in each tension flow rhythm.

Sucking rhythm. The sucking rhythm is visualized as a smooth and rocking motion that involves the development and release of tension at short intervals (Loman, 1998). This rhythm expresses the need to self-soothe, attune, and nurture (Koch & Sossin, 2014; Loman, 1998). It ultimately begins to develop in utero as the infant becomes accustomed to hearing and feeling the mother's heartbeat (Kestenberg Amighi, Loman, & Sossin, 2018). The sucking rhythm serves a nourishing purpose as a form of soothing and emotional regulation.

Snapping/biting rhythm. The snapping/biting rhythm is characterized by sharp transitions of tension and release of the muscles (Loman, 1998). Similar to the sucking rhythm, the snapping/biting rhythm is the alternating between free and bound flow but with sharp transitions (Kestenberg Amighi, Loman, & Sossin, 2018). This rhythm looks like the tapping of a foot, chewing of food, and clapping hands (Loman, 1998). Through the use of the snapping/biting rhythm, the periphery of the body and boundaries between self and other become more defined (Kestenberg Amighi, Loman, & Sossin, 2018). Later in life, this rhythm signifies the ability to differentiate, concentrate, take in new knowledge, and be critical (Kestenberg Amighi, Loman, & Sossin, 2018).

Twisting rhythm. The twisting rhythm begins at the waist, pelvis or anal sphincter and radiates through the rest of the body, initiating play (Loman, 1998). The twisting rhythm sets the basis for adaptability, as the individual may move away from the base and then return when needed (Kestenberg Amighi, Loman, & Sossin, 2018). It correlates to creativity and can present itself through smearing paint on a piece of paper and creating a mess (Loman, 1998). This

indulging rhythm also resembles the ability to improvise, change, evaluate, and be humorous (Kestenberg Amighi, Loman, & Sossin, 2018).

Straining/releasing rhythm. The strain/release rhythm involves sustaining of muscle tension at a high and even intensity level (Loman, 1998). This rhythm manifests itself as a child works to maintain stability and safety while pulling oneself up to standing (Loman, 1998). Finding one's verticality, asserting the self, and saying no are all related to the strain/release rhythm (Loman, 1998). Children that continually push might be looking for someone to contain their strength and provide limits (Loman, 1998). Individuals with an abundance of strain/release rhythm often prefer being in control, neat, and organized (Kestenberg Amighi, Loman, & Sossin, 2018).

Running/drifting rhythm. The running/drifting rhythm is characterized by gradual changes in tension at a low intensity (Loman, 1998). This phase is marked by free-flow, fluidity, smooth transition, and wandering with no direction or intent (Loman, 1998). As a child, one aimlessly wanders, bulging forward through space and moving in a fluid manner when displaying this tension flow rhythm (Kestenberg Amighi, Loman, & Sossin, 2018). Later in life, the individual who displays running/drifting is likely agreeable and less confrontational (Kestenberg Amighi, Loman, & Sossin, 2018).

Starting/stopping rhythm. The starting/stopping rhythm involves sharp or abrupt transitions in muscle tension (Loman, 1998). This rhythm allows children to learn how to stop, without falling, while running (Loman, 1998). Urgency, irritability, and impatience are qualities that typically underlie the starting/stopping rhythm (Loman, 1998). One may continually be on the go and rushing through each moment; American culture specifically values this tension flow rhythm (Kestenberg Amighi, Loman, & Sossin, 2018).

Swaying rhythm. This rhythm is illustrated by the rise and fall of muscular tension and release at a gradual pace and low intensity (Loman, 1998). It involves smooth transitions and a lack of urgency overall (Kestenberg Amighi, Loman, & Sossin, 2018). This rhythm signifies an easygoing nature and a nurturing personality (Kestenberg Amighi, Loman, & Sossin, 2018). Furthermore, individuals who display the swaying rhythm often mediate between individuals with differing viewpoints and unite people (Kestenberg Amighi, Loman, & Sossin, 2018).

Surging/birthing rhythm. The surging/birthing tension flow rhythm gradually builds to high intensity levels (Kestenberg Amighi, Loman, & Sossin, 2018). This rhythm is the foundation of the act of giving birth (Kestenberg Amighi, Loman, & Sossin, 2018). Engaging in long processes, such as creating a piece of art or writing a novel require the ability to sustain focus and attention over long periods of time. The surging/birthing rhythm allows for sustaining and persisting (Kestenberg Amighi, Loman, & Sossin, 2018).

Jumping rhythm. The jumping rhythm is defined as an abrupt rise and fall in one's muscle tension (Loman, 1998). It involves smooth transitions and often reaches high intensities (Loman, 1998). This rhythm is used to express joy and excitement (Koch & Sossin, 2014). Movements that are characterized by the jumping rhythm are percussive and abrupt (Loman, 1998). This rhythm is seen in quick mood swings and changes in temperament (Kestenberg Amighi, Loman, & Sossin, 2018). Typically, individuals with a preference for the jumping rhythm are outgoing and energetic (Kestenberg Amighi, Loman, & Sossin, 2018).

Spurting/ramming rhythm. The spurting/ramming rhythm involves the abrupt rise and fall of muscle tension at a high intensity and with sharp transitions (Loman, 1998). This rhythm can often appear aggressive and pushy (Loman, 1998); or it may appear as decisive, purposeful, and focused (Kestenberg Amighi, Loman, & Sossin, 2018). The individual with

spurting/ramming rhythm is often competitive, highly oriented and goal-oriented (Kestenberg Amighi, Loman, & Sossin, 2018).

Tension flow rhythms are particularly relevant to the research, as they are the rhythmic alternation between bound and free flow and serve as a framework through which to view repetitious movements. With observation of movement, specifically repetitious movements, comes meaning making on behalf of both the mover and observer. Meaning making and biases occur through body knowledge/body prejudice.

Body Knowledge/Body Prejudice

With body awareness comes inherent prejudices, biases, meaning making, and interpretation of observable movement in others. By expanding one's movement repertoire, the therapist opens their body to new movement possibilities and the mind to new understandings of that movement. This ultimately leads to increased awareness of body knowledge and body prejudice.

Body knowledge is a person's developed understanding of his or her movement behavior (Moore & Yamamoto, 2012). Personal experiences allow an individual to categorize, abstract, and generalize different movements, which makes up one's body knowledge (Moore & Yamamoto, 2012). In other words, body knowledge is the movements an individual knows and embodies on a regular basis. The movement patterns that live in one's body knowledge are familiar and likely comfortable to the individual. With body knowledge comes body prejudice.

Body prejudice refers to placing a meaning, whether negative or positive, upon a certain type of movement (Moore & Yamamoto, 2012). As the individual associates an opinion, meaning, or judgment on a movement, body prejudice occurs. Body prejudice often happens without awareness. By increasing one's awareness to their body prejudice, individuals may be

more likely to step back, reevaluate, and be more open to movement patterns that are less familiar and less comfortable in the body. Certain techniques may be utilized to increase awareness of one's body prejudice; one approach is known as *SMIFTing* (see Appendix A).

SMIFTing refers to the process of introspection of one's sensations, memories, images, feelings, and thoughts (Imus, 2018; Siegel & Bryson, 2011). Reflecting on these elements is one way of increasing one's body awareness, specifically body knowledge and body prejudice. SMIFTing is utilized to help one recognize how these five factors influence one another and to help individuals gain further insight as to how and why they make the decisions they make (Siegel & Bryson, 2011). By SMIFTing, therapists may gain further insight into how their body knowledge/body prejudice plays a role in their observations, assessments, interventions, and meaning making of repetitious movement patterns.

The concept of body knowledge/body prejudice is critical to the study. As the literature indicates, developing an understanding of one's own body awareness and being familiar with approaches that facilitate gaining this self-awareness may broaden the therapist's perspective and potentially mitigate biases in clinical decision making.

Conclusion

The literature demonstrates that there is a wide variety of ways to observe, analyze, and intervene when looking at repetitious movement patterns. Additionally, there is a spectrum of whether these movement patterns signify developmental delay and are detrimental to one's mental health, or allow for meeting and expressing biological and psychological needs through self-expression and self-regulation. With this variety in possibilities comes difficulty in understanding how to intervene. Proper assessment of each individual is of utmost importance. The research investigates how attuning to the movement patterns of clients and increasing

cognizance of one's own repetitious movement pattern biases might lead to more informed and empathic clinical decision making.

The purpose of this research was to broaden my knowledge of how I understand and embody repetitious movement patterns in myself and others, learn about my own repetitious movement pattern preferences, discover how my body knowledge/body prejudice impacts my observations and assessments of others, and develop ways in which to leverage this knowledge to create unbiased interventions in the future. This study builds upon existing research in the field and offers a deeper understanding of how repetitious movement patterns support healthy development, expression, and communication within every person, not only individuals diagnosed with autism spectrum disorder, stereotypic movement disorder, tic disorders, obsessive-compulsive disorder, or other neurodevelopmental disorders. Additionally, this research aims to provide further insight into how bias, specifically body prejudice, impacts one's understanding of repetitious movement patterns in the self and in others, and informs one's observations, assessments, interventions, and meaning making of these patterns. The research will ideally challenge how the fields of dance/movement therapy, psychology, occupational therapy, physical therapy, and disability studies view and work with individuals that present with repetitious movement patterns.

The research answered the following questions: As an emerging dance/movement therapist, how do I understand and embody repetitious movement patterns when working with others? The secondary questions included: What are my repetitious movement pattern preferences? How does my body knowledge/body prejudice inform my observations, assessments, and meaning making of repetitious movement patterns in other individuals? How do I use this understanding to create unbiased dance/movement therapy (DMT) interventions?

As an emerging dance/movement therapist, this awareness is significant; it will provide me with the knowledge to differentiate between the client and self, to allow their movement patterns to manifest without the influence of my own, and to recognize when *countertransference* (see Appendix A) and *somatic countertransference* (see Appendix A) may be occurring. By investigating my own repetitious movement pattern preferences, I learned more about my body knowledge and how my body knows or prefers to move through space. By engaging in the journaling process based upon SMIFT, I learned more about my conscious and unconscious body prejudice. Having learned more about my own body prejudice, I will incorporate this knowledge as I approach work to separate my opinions and preferences from the analysis and diagnosis of the client. This will ideally lead to unbiased clinical decisions and movement interventions when working with individuals who engage in repetitious movement patterns.

Chapter Three: Methods

Methodology

The methodology for this qualitative study was a heuristic inquiry. According to Moustakas (1990), a heuristic inquiry is about understanding a phenomenon for oneself. This study specifically explores the phenomenon of repetitious movement patterns. Heuristics maintains the essence of the individual within the experience (Moustakas, 1990), and I maintained the essence of myself within the study by specifically examining how I embody repetitious movement patterns. A heuristic inquiry also corresponds with my transformative research paradigm. According to Creswell (2013), a transformative research paradigm leads to transformation, which was and continues to be my goal as an emerging dance/movement therapist. I am constantly striving to grow in a culturally competent manner, and exploring how my body knowledge/body prejudice plays a role in my observations, assessment, meaning making, and interventions of repetitious movement patterns supports this goal.

Participants and Procedure

I am the sole participant in this study, as this is a self-study. I am a 26-year-old Caucasian woman who grew up in a middle-upper class household. I am an able-bodied person and have full range of human movement potential. I have received higher education and am a graduate student at Columbia College Chicago.

Working through Moustakas's six stages of heuristic inquiry, I moved through the initial engagement, immersion into the topic and question, incubation, illumination, explication, and creative synthesis (Moustakas, 1990). The initial engagement stage occurred before I even determined my thesis topic. According to Moustakas (1990), the initial engagement involves identifying a strong interest in something that holds personal or social significance in the eyes of

the researcher. Arriving at the overarching topic of repetitious movement patterns and specifically body knowledge/body prejudice in relation to this phenomenon took several months. It was through reading literature on repetitious movement, and engaging in conversations with various friends, mentors, and professors that my theory became clear. I believed that repetitious movement patterns exist in everybody, and it is through bias that this perspective is often overlooked.

Data collection methods. As I embarked into the immersion stage, I began collecting data. Moustakas (1990) acknowledges that during this stage, one essentially lives, eats, and breathes the research questions. I collected data over the span of five months. The data collection methods included semi-structured journaling, improvisational movement explorations, and improvisational art responses. I collected data in the form of personal journal responses following individual dance/movement therapy sessions where I observed repetitious movements in children on a general pediatrics medical unit. I collected movement data in the form of video recordings of improvisational movement that explored my personal repetitious movement pattern preferences. To capture a visual of my repetitious movement pattern preferences on paper, I created art that was comprised of repetitive lines and shapes through repetitive motions of my hands, wrists, and arms. Each form of data was collected separately from the other and analyzed independently.

Journal data. The first set of data was gathered in the form of semi-structured journal responses, which were written following dance/movement therapy (DMT) sessions with clients where repetitious movement patterns were observed within their movement. Five journal entries following five individual DMT sessions with five different children in a large medical hospital setting were collected. Journal responses were written at the end of the day at the medical

hospital. Data collection occurred over a three-month period as I encountered clients in individual DMT sessions that presented with repetitious movement patterns. These children ranged from 3 to 17 years of age and were not diagnosed with conditions where repetitious movement patterns are expected or common. Each DMT session was focused on meeting the individual's needs and goals and lasted 30 to 60 minutes. During each session, I observed and assessed their movement, and intervened based upon their presenting treatment goals. Following the sessions, if I observed repetitious movement patterns in their repertoire, I engaged in *embodied writing* (see Appendix A) about my personal experience of the movement patterns presented during the session. Embodied writing is the process of incorporating the body and writing from the inside out (Cruz & Berrol, 2012). It is subjective and speaks to the lived experience of the individual (Cruz & Berrol, 2012). Research on the somatic experience, such as repetitious movement patterns, is strongly supported through embodied writing. It involves vivid descriptions of one's somatic experience and speaks to the subjective experience of the individual (Cruz & Berrol, 2012). As a part of my embodied writing process, I engaged in introspection of my sensations, memories, images, feelings, and thoughts that arose in the sessions and in response to the observed repetitious movement pattern(s); this detailed process of introspection is known as SMIFTing (Imus, 2018). SMIFTing is utilized to help individuals recognize how these five factors influence one another, providing insight into their decision-making process (Siegel & Bryson, 2011). By SMIFTing, I gained insight into how my body knowledge/body prejudice plays a role in my observations, assessments, interventions, and meaning making of the repetitious movement patterns I observed.

Movement data. The second data collection method involved taking video recordings of myself improvising with the intention of exploring my personal repetitious movement pattern

preferences. This data collection process occurred simultaneously, over the same five weeks, as the art data was collected. The movement explorations occurred over a 5-week period, and I collected one per week, which resulted in five sets of movement data. Data was not collected on the same day and time each week due to various commitments and obligations. I collected the first two sets of data in my apartment in Chicago and the last three sets of data in my apartment in St. Louis. Each improvisational exploration occurred within a 25 to 35-minute period. I gave myself 10-15 minutes to introduce myself to the prompt of noticing and exploring repetitive patterns of movement that existed in my body in the moment and settle into the experience. I allowed myself 15-20 minutes to explore and experience the repetitive movements. This length of time also gave me the opportunity to be flexible with exiting the experiential. I brought the movement to a close, as I felt compelled and comfortable to do so. Following each improvisation session, I watched the recording and edited the data to a minimum of 4 minutes and a maximum of 5 minutes. I edited the videos to highlight the repetitious movement patterns as they began to develop and then dissipate. This process allowed me to enter the exploration of repetition without feeling confined and limited by time.

To aid me in the data collection process, I requested the support and guidance of a Kestenberg Movement Profile analyst, who served as a movement collaborator. This individual currently practices as a movement analyst, utilizing the Kestenberg Movement Profile system, in the field of dance/movement therapy. I invited the movement consultant to assist me in data collection through an emailed letter (see Appendix C), and I requested completion of an agreement form (see Appendix D) upon accepting my invitation to participate in my thesis process. The movement collaborator was in no way a participant in this study; rather, she served as a consultant. Upon sending the 5 videos of 4-5 minute edited movement data to the

collaborator, she developed and completed a Movement Assessment Coding Sheet (see Appendix E) on each set of data. Once the data was collected, the movement consultant and I engaged in a 90-minute phone conversation about her observations and assessments. This process enabled me to step away from the movement data and gain an objective and knowledgeable perspective of my repetitious movement pattern preferences.

Art data. Lastly, I collected data through art making, which occurred simultaneously, over the same five weeks as the movement data collection. I gathered data once per week, and the day and time varied each week depending on prior commitments and obligations. Each art making session lasted 50 to 90 minutes in length. The first three data collection sessions took place in my apartment in Chicago and the last two took place in my apartment in St. Louis. I gave myself 10-15 minutes to settle into the prompt, 30-60 minutes to engage in the art making process, and 10-15 minutes to guide myself out of the experiential.

I prompted myself to create visual art utilizing the *Kinesthetic component* (see Appendix A) of the *Expressive Therapies Continuum* (see Appendix A), which emphasizes movement and rhythm of the body as a part of the art making process (Hinz, 2009). More specifically, I created art through repetitive motions of my hands, wrists, and arms, which resulted in art that was made up of repetitive lines, patterns, and shapes. I also allowed myself to choose a medium at the time of each session. Over the five data collections, I utilized acrylic paints, markers, colored pencils, and oil pastels. The act of art making, with these prompts in mind, offered insight into my aesthetic preferences. By engaging in kinesthetic action to create art, I engaged in rhythmic and repetitive movement, resulting in a visual representation of my repetitious movement preferences. This creative process enabled me to capture a visual of my repetitive movements on paper, which lead to an opportunity for deeper understanding of how I engage in repetitive

movements and my repetitious movement pattern preferences. Each art making experience was unique and different than the previous; however, themes emerged.

Data analysis methods. Within the immersion stage, data was interpreted and analyzed utilizing Forinash's Qualitative Data Analysis. Forinash details a six-step process for analyzing data (Cruz & Berrol, 2012). First, I reviewed each set of data separately, and then organized each set into loose categories. Second, I reviewed the loosely categorized sets of data, marking significant and meaningful pieces that spoke to me. Third, I organized the contents of each data set into themes and fourth, I checked back within myself to see if they truly resonated. Fifth, I brought all of the data together to create a description of the studied phenomenon of repetitious movement patterns; specifically, I looked for generalizations, powerful information, new perspectives, enlightenment, and relationships. The final step of Forinash's data analysis involves presenting the findings in relation to the literature and research questions (Cruz & Berrol, 2012), which I am doing in the form of a traditional thesis.

Journal data. I organized the journal responses in relation to the age of the patient I worked with, starting from youngest to oldest. I began by reading and re-reading the journals from beginning to end to gain more familiarity with their content. As I read, I underlined and highlighted key points that stood out to me and concepts that appeared to repeat from one journal response to the next. This process helped me identify multiple categories, and I categorized the data into the following sections: age, gender, notes, observations, SMIFT response, interventions, tension flow rhythms, and *posture-gesture mergers* (see Appendix A). A posture-gesture merger refers to a movement phrase that maintains a consistent effort quality and shape change (Davies, 2006). By including the category of posture-gesture mergers, I was able to see how a repetitious movement pattern developed within the phrasing. By delineating and charting

the data into these eight categories, I was able to organize random data points into useable information. From the categorized sets of data, I highlighted and underlined themes that appeared. This process allowed me to analyze the individual journal responses as a collective group to compare and contrast presenting themes between data sets. I was thus able to view my findings from an objective and analytical perspective.

Movement data. The movement data was organized in chronological order from first movement exploration to last. The movement data consisted of video recordings of my movement improvisation as well as movement assessment coding sheets. Upon receiving the coding sheets, I analyzed the data by initially reading through them multiple times. From there, I created loose categories, primarily based upon the Kestenberg Movement Profile, including *inner-outer awareness* (see Appendix A), *body attitude* (see Appendix A), tension flow rhythms, *tension flow attributes* (see Appendix A), *pre-efforts* (see Appendix A), *efforts* (see Appendix A), *shape flow* (see Appendix A), *shaping in directions* (see Appendix A), and *shaping in planes* (see Appendix A). Continuing to follow Forinash's steps to data analysis, I reviewed the loosely categorized sets of data and highlighted meaningful pieces that stood out to me. This guided me towards identifying and clarifying the presenting themes. Once notating the themes, I engaged in a one-hour discussion with the movement consultant about my findings and together we further clarified the themes. Following our verbal discussion, I reviewed the notes and incorporated the input to further narrow the themes, which led me to my results.

Art data. The art data was also organized in chronological order from my first piece of art to my last. I then reviewed the data by looking at each piece and writing down all the words that came to mind to describe the visual appearance. I found myself initially drawn towards four categories: looping actions, line and form, medium, and layers/texture. To organize these

categories, I created separate charts for each and notated significant and meaningful pieces that spoke to me from each work of art. The charting process allowed me to recognize the presenting themes. I also utilized the chart of Media Properties and Experience (see Appendix F) within the Expressive Therapies Continuum as a tool to aid me in the data analysis when specifically analyzing media. Utilized by art therapists, this chart classifies and processes human interaction with art media and art experiences (Hinz, 2009). The creation of multiple charts based upon themes allowed me to compare and contrast between pieces of art data to better understand and interpret the results. Steps two through six of Moustakas's process are captured in the data collection and data analysis stages of the research.

Validation Strategies

My validation strategies included triangulation, offering rich, thick description, and utilizing a resonance panel. According to Creswell (2013), triangulation refers to the process of drawing from multiple sources of data to corroborate evidence. By utilizing triangulation, my three forms of data—movement, art, and journals—served to strengthen the validity of my findings. I also offered rich, thick description of my research process, experiences, and findings, which Creswell (2013) states allows for transferability. By writing detailed descriptions, the research allows the reader to transfer the information to different scenarios and settings (Creswell, 2013). Furthermore, I utilized a resonance panel, which consisted of individuals who acted as consultants to help me clarify my preliminary findings and identify overlooked areas. A resonance panel, also known as an external audit, is when the researcher invites external consultants to “examine whether or not the findings, interpretations, and conclusions are supported by the data” (Creswell, p. 252, 2013). Through an emailed letter, I specifically invited individuals that were board certified dance/movement therapists, had knowledge of repetitious

movement patterns, and had an interest in body knowledge/body prejudice (see Appendix G). I also requested completion of an agreement form (see Appendix H) by those who accepted the invitation to participate. The panel members served as consultants, not participants in this study.

Ethical Considerations

In accordance with research ethics, I adhered to guidelines surrounding respect for individuals by maintaining confidentiality. While journaling about my body knowledge/body prejudice in response to sessions with clients that demonstrated repetitious movement patterns, I maintained confidentiality by protecting their personal health information and cultural identifiers. Also, I did not name the hospital where I interned to further ensure the protection of clients' identities.

Furthermore, I minimized harm to myself, the sole participant of this research study, by engaging in self-care practices, going to therapy, being in regular contact with my thesis advisor, and consulting with my research partner. As I engaged in the creative process through movement, art making, and journaling, I opened myself up to vulnerability; therefore, it was important to have safeguards established ahead of time. To protect myself from inadvertent harm psychologically, spiritually, and emotionally, I continued to utilize my self-care practices on a daily basis.

In order to keep the data collection and analysis materials safe and confidential, I took multiple precautions. I kept my video recordings and electronic journal safe on my password-protected laptop. Secondly, my artwork and written journals remained safe by being kept in a thesis-specific binder in my locked apartment. Lastly, for the movement consultant and resonance panel, I provided confidentiality agreements that explained the nature of their commitment as well as the extent and limits of their confidentiality.

Chapter Four: Results

This research study attempted to answer the following primary question: As an emerging dance/movement therapist, how do I understand and embody repetitious movement patterns in others and myself? The secondary research questions included: what are my repetitious movement pattern preferences; how does my body knowledge/body prejudice inform my observations, assessments, and meaning making of repetitious movement patterns in other individuals; and, how do I use this understanding to create unbiased dance/movement therapy (DMT) interventions?

The results led to many self-discoveries of my movement preferences and biases as related to repetitious movement patterns, and provided insight on how to incorporate this learning to support unbiased interventions. Multiple themes arose through the journal data: a tendency to observe repetitious movement patterns as tension flow rhythms, a preference for indulging rhythms, a tendency to engage in inner-outer awareness, the onset of hesitancy when countertransference occurs, and persistence during hesitancy as key to the intervention-making process. From the movement data, the themes of surging/birthing tension flow rhythm, stabilizing before mobilizing, and inner-outer awareness emerged as movement pattern preferences when exploring repetitious movements. In addition, the themes of looping, precision in line and form, taking up space, fluidity, and layering surfaced when creating art that required repetitive movements of the hands and wrists. All of these self-discoveries highlight the strong repetitious movement pattern preferences that I embody. These results inform how my body knowledge/body prejudice influences my clinical decision making, including observations, assessments, and interventions when working with individuals that present with repetitious movement patterns.

Journal Data

Many themes emerged through the analysis of the journal data. I engaged in the journal writing process in response to dance/movement therapy sessions where I worked with children that displayed repetitious movement patterns in a medical hospital setting. Through the SMIFT journal responses, I wrote about my sensations, memories, images, feelings, and thoughts. From these journal responses, I learned more about how my body knowledge/body prejudice influences my observations, assessments, and interventions related to repetitious movement.

Observing. My observation process typically began the moment I entered the room with a client. I noticed where they were positioned, how they were moving, and how they were interacting with me. As movement began, I observed not only with my eyes but also through my bodily-felt sensations. I discovered that as I observe, mirror, and embody a client's movements, I quickly notice tension flow rhythms. As depicted in Table 1 below, with the observation and *embodiment* (see Appendix A) of a particular tension flow rhythm, my personal experiences and subjective response of the movement came to the forefront. My body knowledge informed my body prejudice, and my past experiences influenced how I observed the presenting repetitious movement pattern(s).

Table 1

Observing Tension Flow Rhythms

| Observations | Client 1 | Client 2 | Client 3 | Client 4 | Client 5 |
|--------------------------|---|---------------------------|--------------------------------|---------------------------------|---|
| Tension Flow Rhythms | Jumping | Swaying | Sucking | Sucking, surging/birthing | Twisting, strain/release |
| My Subjective Experience | Sudden, abrupt, exhausting, challenging | Relaxing, calming, sleepy | Trance-like, soothing, calming | Anxiety provoking, then calming | Tension-building, urge to release tension |

Tension flow rhythms. On many occasions, I immediately saw the repetitious movement pattern as a tension flow rhythm. I observed the flow of an individual's movement as binding and freeing in various patterns. I saw the rhythms exude from one or two body parts, resulting in a gesture; or, I saw the entire body moving, creating a rhythmic postural movement. For example, following a session with a client I wrote, "almost immediately upon entering, I observed the client rocking in his seat, creating a sucking rhythm." Viewing repetitious movement patterns as tension flow rhythms aided me in my process of understanding, interpreting, and making meaning out of what I was observing. Having a framework, the Kestenberg Movement Profile, helped to inform and organize my observations. Ultimately, the results suggest an underlying comfort and preference for viewing through the perspective of tension flow rhythms. In other words, my aesthetic preference is tension flow rhythms, through which I attune.

Preference for indulging. With my observations came inherent body knowledge/body prejudice. Through my journal responses, I discovered that I have a preference for observing, moving with, and developing indulging, as opposed to fighting, tension flow rhythms. In my journals, I often spoke of swaying and sucking as self-soothing, relaxing, and calming. For example, I wrote that as I mirrored the client's sucking rhythm, which is an indulging rhythm, "I sensed in my body a heaviness, which then shifted to softening and warming sensations." In contrast, while participating in the strain/release rhythm, a fighting rhythm, "I sensed a strong urge to let the built-up tension release." As a part of my body knowledge, I gained insight into my movement preferences: I experience and view repetitious movement patterns in relation to tension flow rhythms. Furthermore, my body prejudice or meaning making of these movements is that indulging tension flow rhythms are preferable to me, allow for relaxation, and create ease

within my body. This body prejudice is important to be aware of as it may influence how I observe, assess, and intervene in dance/movement therapy sessions.

Assessing. In reflecting upon my SMIFT journals, I discovered that the first step in my assessment process is consistently mirroring the client and embodying their movement. As I mirrored the client's movement, I found that sensations, memories, images, feelings, and thoughts arose quickly and continually. I specifically noted that sensations, memories, and thoughts were most prominent in my journals and had a bigger influence on my assessments and interventions of the repetitious movement patterns. My SMIFT responses indicate that while in therapy sessions, I have a strong ability to navigate between the environment and internal thoughts, feelings, and sensations. However, my ability to oscillate between internal and external awareness also created some confusion and hesitancy in regards to fully assessing and intervening in the moment. Table 2 briefly outlines the sensations, memories, images, feelings, and thoughts that came up for me in each session.

Table 2

SMIFT Responses

| Assessment | Client 1 | Client 2 | Client 3 | Client 4 | Client 5 |
|------------|--|---|--|---|--|
| Sensations | Warmth, fluttering, vibratory | Warmth, fluttering, tightness in sternum, washing over the body | Tightness in sternum | Heaviness lead to warmth and softening | Bound to free flow, wringing, tension building, release of tension |
| Memories | | Personal experiences with anxiety when I would rock myself to self-regulate | Memories of giving up or shutting down in moments of challenge | Personal experience of anxiety | My own experience of building tension/stress to release |
| Images | Kids playing on a playground, specifically playing jump rope | Rocking back and forth | The ocean, swimming | | Waking up, yawning, packing kernels popping |
| Feelings | Uncertainty, playful | Uncertainty, hesitation, nervous energy, calming | Uncertainty, hesitation, doubt, urgency | Sympathy, hopeful | Empathy, feelings of doubt |
| Thoughts | Wondering if she is exhausted | Wondering if this is helpful for client | Wondering if he was zoning out and falling into a sleep-like state, questioning myself | Desire to serve as a motivational force | Desire to do more and help more, questioning how to intervene |

Inner-outer awareness. As I engaged in the SMIFT writing process, I discovered that I am constantly present in my body and aware of my own experience while attuning to the client. An inner-outer awareness of the presenting repetitious movement pattern(s) is essential to my process. I am equally aware of how I am sensing, feeling, and thinking in the moment, as I am conscious to the experience of the client. When experiencing repetitious movement patterns in the sessions, I predominantly had sensations of warmth, fluttering, and tightness. This typically alluded to a heightened awareness that something was happening for the client and/or myself.

As I continued to mirror the client's movement and my sensing experience developed, I often found myself wondering, questioning, and hesitating to fully assess and then intervene. In other words, I was aware that the client was having a movement experience, but I began to wonder if I was influencing that experience or if it was entirely his/her own. Although my inner-outer awareness should ideally lead to less biased decision-making in the therapeutic process, I am curious about whether my assessments were based upon my ability to attune to the client or if countertransference was an influencing factor.

Countertransference. With the sensations of warmth, fluttering, and tightness often came a memory of a personal experience. This led me to wonder if countertransference was occurring during the sessions. Countertransference refers to the feelings and thoughts the therapist has towards a client (Ivey, D'Andrea, & Bradford Ivey, 2012). More specifically, it is when a therapist projects past thoughts and feelings onto the client (Ivey, D'Andrea, & Bradford Ivey, 2012). Many of the clients I worked with displayed bodily signals of anxiety and stress while in the hospital setting. They often spoke to their experience of anxiety as well. My mind typically shifted toward my own experiences with anxiety and the tools I instill to self-regulate. For example, following one session, I wrote:

I wondered if this movement pattern was assisting in easing anxiety or bringing the client deeper into her anxiety. I was reminded of personal experiences with anxiety when I would rock myself to self-regulate. I also remember this rocking sensation as occasionally causing my anxiety to worsen. From my personal movement experiences, I knew that this movement pattern could be either soothing or triggering.

While moving with the client, I wondered if intervening based upon my experience with this repetitious movement pattern was beneficial or detrimental to the growth of the client. I am

easily able to attune to what I would need in this experience, but differentiating and deciphering what the client needs in the moment is more challenging.

Persistence. As I continued to move, mirror, embody, attune to, and assess the client in the moment, hesitancy and uncertainty often arose. However, through the journal data, I discovered that persistence and an ability to move through the presenting repetitious movements is key to my process. Instead of allowing my own uncertainty to dictate the progression of the session and the interventions, I continued to mirror and kinesthetically attune to the client. This allowed for the interventions to present themselves. For example, following a session, I wrote,

I realized in the moment that my body knowledge/body prejudice was impacting my interpretation of the client's movement. My perception of him getting lost in the movement could not have been any farther from the truth. Well, yes, he was getting lost in it, but in a positive and beneficial way. He ultimately found his intrinsic motivation through the creative process.

Through many of my SMIFT journal responses, I discovered that body knowledge/body prejudice undoubtedly surfaced in the sessions. However, it was how I utilized or did not utilize that information that was impactful in my intervention-making process. Often times by remaining with the repetitive movement and continuing to be with the client by kinesthetically empathizing with them, the interventions presented themselves and the process unfolded accordingly.

Movement Data

The improvisational movement data was created in response to the question: What are my repetitious movement pattern preferences? My movement explorations consisted of improvisational dancing as opposed to everyday movement. Through the movement exploration

and the guidance of the movement consultant, we came to many conclusions. Overall, I presented with a wide movement repertoire; however, many themes emerged. The presenting themes included inner-outer awareness, stabilize to mobilize, and surging/birthing tension flow rhythm. By engaging in dialogue with the movement consultant, I gained a greater understanding of my movement preferences from a Kestenberg Movement Profile perspective. Table 3 identifies the presenting themes by detailing the most prominent elements in each category within each video.

Table 3

Movement Profile Themes

| KMP | Video 1 | Video 2 | Video 3 | Video 4 | Video 5 |
|--|------------------------------------|----------------------------------|------------------------------------|---|-------------------------------------|
| Tension Flow Attributes: Weight | Low intensity and high intensity | Low intensity and high intensity | High intensity and low intensity | Low intensity and high intensity | Graduality and abruptness (outlier) |
| Pre-Efforts: Weight | Gentleness | Vehemence/ Straining | Hesitation (outlier) | Vehemence/ Straining | Gentleness |
| Effort: Time | Acceleration | Deceleration and acceleration | Deceleration | Deceleration and acceleration | Acceleration |
| Bipolar Shape Flow: Horizontal | | Widening and narrowing | Widening and narrowing | Widening and narrowing | Narrowing |
| Unipolar Shape Flow: Vertical | Lengthening up and shortening down | Lengthening up | Lengthening up and shortening down | Bulging forward (outlier), lengthening up | Lengthening up and shortening down |
| Shaping in Directions: Vertical | Down | Down | Down and up | Down and up | Down |
| Shaping in Planes: Horizontal and Vertical | Enclosing | Ascending | Enclosing and spreading | Spreading and ascending | Ascending and descending |

Inner-outer awareness. Throughout each of the videos, there was a strong essence of inner-outer awareness present. This was seen through the use of soft focus and occasional

closed-eyes. The movement consultant's impression of my movement explorations was that I not only moved on the outside, but on the inside as well. This invited internal focus as well as awareness of my surroundings. Through my movement, my use of focus, and my ability to return to the self, it is apparent that I moved with an attentiveness and responsiveness to both internal and external stimuli.

Gentleness and vehemence/straining. Inner-outer awareness is demonstrated through the use of pre-efforts. Pre-efforts are the pre-cursors to efforts and, among other things, reflect the process of learning something new (Kestenberg, 1979). Pre-efforts have an inner-outer orientation, as learning requires both an inner concentration and outer awareness (Kestenberg, 1979). From the movement assessment coding sheets, it is apparent that I have access to all pre-efforts and a generally wide movement repertoire. With that being said, gentleness and vehemence/straining, the weight pre-efforts were most prominent in the movement data. As I moved with vehemence/straining, I had more internal awareness and attuned to what was happening within me. For example, in Videos 2 and 3, when my gaze shifted downward and inward, my arms gestured with strength and intensity in towards the body. Gentleness emerged as I moved into more external awareness and increased attention to my surroundings. For example, in Videos 1 and 5, my arms moved through space at a low intensity, moving with softness, by circling and extending with ease overhead. As I engaged in this larger and gentler movement, I was inclined to be more aware of my surroundings as evidenced by an opening of my upper body to the environment and a scanning of my gaze outward through space. Overall, when moving with repetitious movements, I moved rhythmically between sensing within myself and sensing the environment around me.

Shortening down and lengthening up. My internal awareness was supported by my preference for shortening down through unipolar shape flow; similarly, my outer awareness was supported by my preference for lengthening up in unipolar shape flow. Unipolar shape flow refers to asymmetrical growing and shrinking in one direction (Kestenberg Amighi, Loman, & Sossin, 2018). As I shortened down, my gaze softened, my movement quieted, I decelerated in time, and I dove deeper into my internal awareness. According to the movement consultant, my unipolar shape flow of lengthening up and shortening down often appeared in response to internal stimuli, as opposed to external stimuli. Although the impulse to move came from within, as I lengthened up, I took in my surroundings and noticed the environment around me. For example, in Videos 2, 3, and 5, a theme of shortening down through the torso and sternum to lengthen up through the spine and extend out through the arms emerged. As I lengthened through the body and reached away from the body through the arms and hands, my gaze moved with me, increasing my external awareness. The data supports that I have a preference for lengthening and shortening in a repetitive manner, which supports my tendency to transition between internal and external awareness.

Stabilize to mobilize. A theme of stabilizing or anchoring the lower body to mobilize the upper body emerged in many of the movement explorations. This was seen through a vertical body attitude, a consistent stable base, and my use of *reach space* (see Appendix A). A repetitious cycle of moving away and coming back to the self occurred on an emotional and mental level, as seen in the before-mentioned theme of inner-outer awareness; and, this concept re-emerged on a physical level through stability-mobility.

Vertical body attitude and stable base. In general, my body attitude involved a vertical stance with my upper body narrowing and my lower body widening to create a stable base. In

most of the videos, my upper-body made a *pin shape* (see Appendix A) with my arms resting by my sides and legs hip-width apart. However, in one video, I sat crossed-legged and in another I lied supine, planting my feet on the floor hip-width distance apart. In each of these positions, the lower body provided a triangular base of support for my upper body movement. From these positions, I repeatedly moved away from and back towards a stabilizing position. In Videos 1, 2, 3, and 5, when moving off and away from this stable, triangular base, my torso, head, arms, and hands extended, reaching away from the lower body anchor. Through the data analysis, it is clear that I prefer to find stability prior to moving and improvising through space.

Reach space. The theme of reach space developed, supporting my preferences for inner-outer awareness and stabilizing prior to mobilizing. As I engaged in a repetitious movement pattern, my movement built in relationship to reach space; it often grew from near to mid to far reach space. The videos often began with more inner awareness and near reach space, and then grew, moving into far reach space and increased outer awareness. The movement phrases came to an end by moving from far, to mid, to near reach space, and stillness. This also relates to the theme of stabilize to mobilize. As I found my stabilizing base, my upper body narrowed and maintained a near reach space. As I began to mobilize off my stable base, I gradually transitioned from near to mid to far reach space. This gradual process allowed me the opportunity to find my anchor as I moved out and away from my physical self and sense of self.

Surging/birthing. When looking at tension flow rhythms, the surging/birthing rhythm is a present theme in each piece of movement data. When assessing the movement videos, the movement consultant looked at five lines of rhythm in each video, which totaled 25 lines. Although there were many mixed tension flow rhythms present in my movement, I demonstrated a high number of surging/birthing rhythms compared to most people. It appears that each

movement exploration was an experience in and of itself: through the surging/birthing tension flow rhythm, *phrasing* (see Appendix A) occurred. In all of the videos, the movement began with an inner preparation, followed by initiation of movement, the main action, follow-through, and finally recuperation. The movement consultant consistently noted gradual acceleration and intensification in my movement. Once building through acceleration and intensity to the main action, the movement gradually decelerated to eventual stillness. As I moved through the surging/birthing tension flow rhythm, my breath supported my movement, ebbing and flowing in relation to the time and intensity level. Overall, intensity and time worked together through phrasing to develop my surging/birthing tension flow rhythm.

Intensity. Through the movement improvisations, I demonstrated a primary preference for low intensity and a secondary preference for high intensity tension flow attributes. Tension flow attributes reflect an individual's core temperament and quality of emotions (Kestenberg Amighi, Loman, & Sossin, 2018). Having a wide range of intensity levels is likely reflected not only in my movement, but in my personality as well. In most videos, my intensity level increased and decreased in relation to the presence of the surging/birthing tension flow rhythm. The movement typically moved through the phrasing by beginning at a low intensity, gradually building up to a high intensity, and then coming to a close with low intensity again. For example, in Video 5, I began moving with free flow at a low intensity. My movement appeared easy in the body and carried a relaxed nature, as I allowed my breath to initiate the gentle bounce of my pelvis and torso. As the movement progressed, bound flow at a low intensity entered into my hands and through gestural movements. The intensity level progressively increased the alternation between bound and free flow, developing a striking and intense movement pattern. A cyclical and repetitious experience of intensity level occurred in not just this video, but also

many of my movement explorations. This suggests a preference for intensity in tension flow attributes.

Time. Through the analysis of the movement data, I discovered that use of time is my most preferred effort element. Throughout each movement video, one can see my timing fluctuate between even time, acceleration, and deceleration. In most videos, the movement consultant and I noticed that my movement began at a slow and even pace, and as the movement progressed, it accelerated. After arriving at the main action of a phrase, my movement would transition into stillness through gradual deceleration. For example, in Video 1, I began in a seated position, rocking forward and backward with even time. As my movement progressed, it accelerated, shifting into a circular motion and involving the reaching of an arm overhead. The circling motion then began to decelerate, as the limbs moved into near reach space, and the improvisation ended in a gentle rocking side-to-side with even time. An arc from even time, acceleration, deceleration, to even time occurred through the surging/birthing tension flow rhythm.

Growing and shrinking. A quality of growing and shrinking in movement underlies the themes of inner-outer awareness, stabilize to mobilize, and surging/birthing. In my movement, growing and shrinking was seen predominantly in the vertical and horizontal planes and dimensions through bipolar shape flow, unipolar shape flow, shaping in directions, and shaping in planes.

Bipolar and unipolar shape flow. Through bipolar shape flow, the symmetrical expanding and contracting of the body (Kestenberg Amighi, Loman, & Sossin, 2018), I widened and narrowed along the horizontal dimension quite frequently. For example, in Videos 2, 3 and 5, my hands widened with bound flow, opening to create space and then moved back towards

center. Through unipolar shape flow, the asymmetrical growing and shrinking of the body (Kestenberg Amighi, Loman, & Sossin, 2018), I showed a preference for lengthening up and shortening down along the vertical dimension. For example, in Videos 2, 3, and 5, I am repeatedly seen shortening down through the spine to lengthen back up again. Overall, when engaged in repetitious movements, I have a tendency to grow and shrink symmetrically along the horizontal dimension and asymmetrically along the vertical dimension.

Shaping in directions and planes. A preference for downward and upward movement along the vertical dimension was also present in how I shape in directions. For example, in Video 2, I lengthened my arms down by my sides, ascended them up towards the sky in an arcing manner, and finally released them back down by my sides with increasing pressure. I demonstrated a preference for open shapes, which correlates to my preference for growing. When shaping in planes, I preferred ascending along the vertical and spreading along the horizontal. In the explorations, I created many open shapes that moved upwards and sideways. The vertical and horizontal planes were highly present in my movement data. This information is significant because it shows the lack of use of the sagittal plane and dimension in my repetitious movements and a strong preference for moving along the horizontal and vertical in a growing and shrinking pattern.

Art Data

Through the data analysis of the artwork, multiple themes emerged. The artwork was created through kinesthetic action, as specified by the Creative Arts Continuum (Hinz, 2009). By engaging in art making that emerged from my kinesthetic experience, the themes of repetitious looping, line and form through space, fluid medium, and layering came to the forefront. The resonance panel assisted in identifying these themes and viewing the art data from

a dance/movement therapy perspective. Repetition of movement was seen through the looping patterns that occurred through *core-distal* (see Appendix A) patterning, the layering of the art media to create texture on the paper, and the repeating of lines, shapes, and forms through space.

Repetitious looping. Repetitious looping manifested itself through the presence of tension flow rhythms, clear starting and ending points, movement from core to distal, and flow. In each piece of artwork, tension flow rhythms are present, as I noticed the alternating between bound and free flow. As Table 4 depicts, each piece of art data presents mixtures of bound and free flow within them. In most of the artwork, bound flow is present at the central or starting points, as the energy streams inward towards these points. While, free flow emerges as the energy of the lines move distally, away from center, and out through space across the page. In other words, tension congregates at the starting points and then releases, leaping freely across the page. In Art Data 2 (see Figure 1), repetitive shapes are created through curved lines that shoot out from a central point, arc away, and return to the same central point. Another example of looping is seen in Art Data 3 (see Figure 2) where shapes repeat by growing from small to big in a looping manner. In general, a looping theme unfolds through the presence of binding and freeing flow in various rhythms, same starting/ending points, and movement from core to distal. These results indicate that as I engaged in repetitious movements of the hands, wrists, and arms to create art, a looping pattern emerges through various rhythms.

Table 4

Looping Action in Art

| Looping Action | Art Data 1 | Art Data 2 | Art Data 3 | Art Data 4 | Art Data 5 |
|----------------------|--|---|---|---|--|
| Tension Flow Rhythms | Jumping | Surging/birthing | Jumping, swaying, snapping/biting, strain/release, sucking, run/drift | Swaying, surging/birthing | Snapping/biting |
| Effort: Flow | Resembles jumping tension flow rhythm, bound at bottom of curve and free at top of curve | Movement of lines is bound at central points and free flowing when widening | Some clusters of lines and forms appear bound, while others appear free | Movement of lines is more bound at central points and strong emphasis on free flowing when expanding distally | Bound at center points and free when bursting away from center |
| Starting and Ending | Starts small, expands and grows, moves to end point | Central starting points, lines grow and expand away from center, return to center to end, pattern repeats | Central starting point, lines expand away from center, return to center to end, pattern repeats | Central starting point, lines expand away, return to center to end, pattern repeats | Clear central start, extends outward, dissipates, does not come back |
| Core-Distal Movement | Lines move vertically to move horizontally across the page | Lines widen unevenly from central to distal on the page | Multiple central starting points, each moving outward and away from center | Curved lines move three-dimensionally away from center, out distally, and return again | Radiating from the center, starburst; spokes in all directions |



Figure 1. Art Data 2



Figure 2. Art Data 3.

Line and form through space. I was also drawn to the movement of the lines and forms presented in each piece of art data. With the assistance of the resonance panel, I discovered a strong preference for space in the artwork. The use of space as a Laban effort quality and from the perspective of the Expressive Therapies Continuum gave me a deeper understanding of how the lines and forms move to take up space across the page. The presenting themes of direct use of space, curved forms, precise line quality, and filling the space are detailed in Table 5 below.

In most of the artwork, the lines move with clarity and directness through space. The directness in effort correlates to the precision present in the line and form quality. Although the pathways are often rounded and curved, the movements of the lines appear clear and pinpointed in their trajectory. For example, in Art Data 3, the lines create repeating shapes with direct use of space and precision in line and form. Furthermore, in most of the art data, the lines move in curved pathways across the page, spreading and expanding through space. For example, Art Data 1 (see Figure 3) consists of steep, elongated, curved lines that move up and down in a swooping motion. As the lines swoop vertically, they spread horizontally to take up the entire page. This theme of filling the space is also present in most of the artwork. As I created art

based upon repetitive movements, I showed a preference for direct use of space, curved lines and rounded forms, clear and precise pathways, and covering the space.

Table 5

Line and Form through Space

| Line and Form | Art Data 1 | Art Data 2 | Art Data 3 | Art Data 4 | Art Data 5 |
|--------------------------|--|---|---|---|---|
| Effort: Space | Direct | Direct | Direct | Indirect | Direct |
| Use of Space | Fill entire page and appears less placed | Fills the space and appears precisely planned | Fills the space and appears semi-planned | Encompasses entire page and appears less placed | Appears placed and planned |
| Lines and Forms | Long lines and short curved edges | Curved lines and rounded shapes | Still forms, rounded and angular forms | Evenly sized forms created through rounded and smooth lines | Forms of strong marks extending outward |
| Quality of Line and Form | Semi-clear in line pathway | Clear, precise, detailed | Clear intention of pathways, execution appears careful and unsteady | Clarity in movement and flow of lines | Less precision and clarity of form |



Figure 3. Art Data 1

Fluid medium. Upon reviewing the five pieces of art data, I noticed that the media used varied. Thus, I organized the data utilizing the Expressive Therapies Continuum: Media Properties and Experience. This aided me in understanding my medium preferences and the resulting implications. Media that is structured and requires more pressure is known as restrictive (Hinz, 2009). In contrast, media that contains less structure is known as fluid (Hinz, 2009). Each piece of art data was created with a different medium; I utilized acrylic paints, markers, colored pencils, and oil pastels. The watercolor, acrylic paint, and oil pastels are fluid; the colored pencils are more resistive; and, the markers fall somewhere in the middle (Hinz, 2009). For example, the acrylic paint, utilized in Art Data 1 and Art Data 5 (see Figure 4) allowed for freedom and fluidity of movement. While the oil pastels utilized in Art Data 4 (see Figure 5) created fluidity, flexibility, and spreading of color across the page. These results suggest that I have a preference for fluid medium and thus probably fluid movements when creating art through repetitious movements of the arm and wrist.



Figure 4. Art Data 5



Figure 5. Art Data 4

Layering. Many layers make up each piece of artwork, whether it is the layering of repetitive lines to create multiple forms or the layering of the media on top of itself to create texture. No preference for light or strong use of weight emerged in the artwork, as the pieces fluctuated in their use of weight. However, a theme of creating texture and thickness by layering the media was present and speaks to how I engage in repetition. Repetition is visible through the layering, and it appears smooth, fluid, and direct in many of the pieces. Art Data 4 displays repetitive lines that swoop and smudge across the page, creating rounded wave-like shapes and texture. In Art Data 5, a repeated smearing and spreading of spots on the page from medial to distal occurs. Overall, the results suggest that I have a preference of engaging in repetitious movement through layering or building on top of what already exists (see Table 6).

Table 6

Layer and Texture

| Layers | Art 1 | Art 2 | Art 3 | Art 4 | Art 5 |
|---------|---|----------------------|---|---|--|
| Weight | Light, intensity and shading of paint is consistently light in pressure | Weightless | Light, gentle and soft strokes, creating light colors | Strong, thickness in the fluidity, stability and grounding in the strong weight | Begins with strong weight and dissipates into light weight |
| Texture | Smooth, thick and textured layers, jumping off the page | Smooth, light layers | Smooth and light, no layering | Thick, textured layers | Spotchy and blotchy, thickness |

Conclusion

The data collection of journal entries, art, and movement aided me in answering the primary question: as an emerging dance/movement therapist, how do I understand and embody repetitious movement patterns in others and myself; as well as the secondary questions: what are my repetitious movement pattern preferences; how does my body knowledge/body prejudice inform my observations, assessment and meaning making of repetitious movement patterns; and, how do I use this understanding to create unbiased dance/movement therapy (DMT) interventions?

The data suggests that I embody and understand repetitious movement patterns through tension flow rhythms, inner-outer awareness, and stabilize to mobilize. Additionally, the results indicate that my repetitious movement pattern preferences are influenced by the following movement qualities: a surging/birthing tension flow rhythm, looping, and layering. Lastly, my body knowledge/body prejudice—specifically my preferences for indulging tension flow rhythms, precision and clarity, taking up space, and fluidity in movement—influences how I observe, assess, and make meaning of repetitious movement patterns in a therapy session. To

intervene, I rely heavily on the following: my inner-outer awareness as I mirror and embody the client's movement, my ability to persist even when faced with hesitation and unknown countertransference, and my ability to attune and empathize. All of these self-discoveries ultimately speak to how I embody repetitious movement patterns, and how my body knowledge/body prejudice influences my observations and assessments when working with others that present with repetitious movement patterns. These results answered the research questions, and Chapter 5 focuses on and discusses what arose as primary themes—inner-outer awareness, stabilize to mobilize, flow, growing and shrinking, space and cognition, and time and intuition.

Chapter Five: Discussion

The purpose of this research was to deepen my awareness of how I understand and embody repetitious movement patterns, learn about my own repetitious movement pattern preferences, discover how my body knowledge/body prejudice impacts my observations and assessments of others, and develop ways in which to leverage this knowledge to create unbiased interventions in the future. The research and related data analysis provided invaluable insights to each of these elements of the stated objective of this research. To organize the analyses in a manner that most effectively informs these areas of interest, I categorized the results into the following overarching themes: inner-outer awareness, stabilize to mobilize, flow, growing and shrinking, space and cognition, and time and intuition.

Inner-Outer Awareness

Inner-outer awareness is a common theme that emerged in each set of data—journal responses, art, and movement. This theme not only appeared in the data analysis, but it is an underlying concept to my thesis in terms of exploring my movement biases and understanding how they potentially impact my therapeutic approach. Inner awareness is achieved through introspection: becoming aware of one's personal experience, thoughts, feelings, and sensations (Farrell & McClelland, 2017). Outer awareness refers to being conscious of the environment around you. Thus, inner-outer awareness is the relationship between the two and the ability to navigate between them. It relates to the practice of mindfulness, which Siegel defined as the ongoing communication with the inner-outer oscillating wheel of awareness (2010). The theme of inner-outer awareness developed through my SMIFT journal responses and the presence of core-distal connectivity in both of my movement and art data analyses.

SMIFT. The process of writing about my SMIFT experience facilitated recognition of my inner sensations, memories, images, feelings, and thoughts that surfaced during sessions with clients who presented with repetitious movement patterns. This SMIFT approach encouraged me to reflect on my internal experience in relation to the external experience of being in a therapy session. The ability to attune to myself as well as others is significant, as it ensures minimizing the potentially harmful effects of countertransference and somatic countertransference, as well as utilizing these occurrences to meet the needs of the client.

Somatic countertransference is when the therapist's body is activated in a therapy session (Margarian, 2015). It goes beyond traditional countertransference, as it involves physical sensations, not just thoughts, feelings, and images (Margarian, 2015). Somatic countertransference, body awareness, and the sensory experience have a great impact on the therapeutic process and relationship; they are something to be valued and utilized in therapy, as opposed to ignored and shamed (Vulcan, 2013). The therapist can utilize somatic countertransference to better understand, gather information, and assess a client's experience, which can then be used to make interventions (Dosmantes-Beaudry, 2007). Downey (2016) states "countertransference also seems to play a critical role in empathic reflection" (p. 35). By engaging in empathic reflection or kinesthetic empathy, transference can occur and lead to the client's experience of acceptance and empathy (Fischman, 2016). It is important that I continue to practice inner-outer awareness and attuning to myself, so that I may harness any potential somatic countertransference into a productive resource for myself as a dance/movement therapist.

Increasing my inner-awareness by consistently engaging in the SMIFT process during and following a therapy session with a client who presents with repetitious movement patterns, I

have the potential to increase my understanding of when countertransference or somatic countertransference may be happening. With this knowledge, I can more effectively manage such responses to empathize with the clients and minimize the imposition of my own biases on the overall assessments, analyses, and interventions.

Core-distal connectivity. The theme of inner-outer awareness appeared repeatedly through my movement preference for core-distal patterning, which was seen in my movement and art data analyses. Core-distal connectivity refers to the body being “organized by a pattern of connectivity that begins in the center core of the body and radiates out through the torso to the proximal joints, the mid-limbs and all the way to the distal ends of the extremities” (Hackney, 2002, p. 68). I expressed this patterning in the movement data through unipolar shape flow and reach space. I noticed that I shortened down into myself through unipolar shape flow as I moved into my core to internally focus. Then, I often lengthened up through unipolar shape flow and extended my upper body and arms into far-reach space, out through my distal ends to connect to the environment and those around me. Inner-outer awareness was also seen in my art data in relation to the themes of repetitious looping and moving from a central to distal point. The input provided by the resonance panel helped to determine that this looping action from a central to distal point resembled moving from an internal place to an external place. Overall, I have a tendency to rhythmically transition between core and distal patterning as I engage in repetitious movement patterns.

Core-distal connectivity relates to connecting with the self and then connecting with other (Hackney, 2002). As Hackney (2002) simply articulates:

We exercise our whole body moving into and away from center. In this way we begin to know where we are—what is ‘me’ and what is ‘not me.’ And we also learn to follow our own rhythm of coming into self and going out to the world. (p. 68)

By connecting to the core on a physical level, a person finds acceptance and advocates for the self on a psychological and social level (Hackney, 2002). Beginning with the core instills confidence in people so that they can extend into relationship with the world (Hackney, 2002). It is through knowing whom I am that I am then able to help and support others. Core-distal connectivity also allows for receptivity and expressivity (Hackney, 2002). In other words, I may take in and receive, and I may express and give. As I partake in the therapeutic process with clients in the future, this newfound knowledge will inform my work. Before, during and after a session, I will have the capacity to continually return to my core self in moments of hesitation and uncertainty, connecting to my inner awareness. From this place of self-assurance, I will then be able to extend out to my clients to be with their experiences and empathize. Resourcing my own body, awareness, and experiences supports me in attuning to my clients more effectively. As an emerging dance/movement therapist, I will leverage this body knowledge to develop and enhance the therapeutic relationship.

Inner-outer awareness, as supported by SMIFT and core-distal connectivity, has had and will continue to play a role in my approach to dance/movement therapy. When repetitious movement patterns appear in my clients’ movements, I will draw from my own experiences to empathize and relate. Inner-outer awareness may aid me in building a therapeutic relationship, as it encourages an oscillation between the client and myself while engaged in mirroring and embodiment of the presenting repetitious movement pattern. Furthermore, my ability to connect internally and externally has and will continue to positively impact my clinical decision-making.

In sessions, I will continually return to myself—grounding and stabilizing into my sense of self in the present moment—to inform how I observe, assess, and intervene. This will allow me to mobilize into action when working with clients that present with repetitious movement patterns.

Stabilize to Mobilize

The theme of stabilizing or grounding prior to mobilizing through space manifested itself through my preferences for a stable, wide base, a mobile upper-body, progressive near to far use of reach space, movement from core to distal, and grounding prior to intervening. My body knowledge of stabilize to mobilize inherently comes with some biases. It has the potential to be an advantage and a disadvantage to me as a budding dance/movement therapist, which is why increasing my awareness around the topic is important.

Stability-mobility is one of the principles of Bartenieff Fundamentals. Stability and mobility work in tandem to create effective movement (Hackney, 2002). By finding a connection to the core for stability, the body may activate to move a body part or multiple body parts (Hackney, 2002). In other words, integrating stability into one's movement repertoire will allow for greater ability for mobility. "A sense of grounding provides security and a feeling of freedom to move because there is support" (Hackney, 2002, p. 46). This occurs on a psychological level as well: I feel more capable of interacting with clients and making interventions when I feel strongly about the foundation for those clinical decisions.

The theme of stabilize to mobilize appeared in my movement, art, and journal data. For example, in three out of the five videos, I demonstrated a preference for shaping along the horizontal plane for stability, as I stood with my legs spread apart to anchor my lower body. I mobilized by lengthening upwards through space and falling off center, moving from near to far reach space. This theme was also seen in my art data, as I created artwork that moved from a

central to a distal point, which then almost always returned to that central point. The lines in the artwork move in curved pathways and with directness, similar to how my arms moved through space in my movement explorations, away from the stable base of the starting point, and returning again. Lastly, this theme was observed in my journal data through my hesitancy to intervene if I did not feel grounded in my reasoning for intervening. I discovered that I mobilize when I have a foundation from which to move.

With this body knowledge that I prefer stabilizing to then mobilize, I have the ability to return to the self and ground myself when countertransference or somatic countertransference occurs. When I feel that I am getting lost in the session, a client's repetitious movements, and/or the client's story, I may need to return to a point of stability, both on a physical and emotional level. Finding the physical point of stability, I may connect to my inner awareness prior to mobilizing outward and experiencing outer awareness. As an emerging dance/movement therapist, I may draw upon my preference for stability-mobility as a strength to better meet the needs of the clients.

With this preference of stabilizing prior to mobilizing, I may unknowingly instill this body prejudice onto my clients. This awareness is important, so that I may hopefully become more cognizant of when my body prejudice is influencing how I am assessing and intervening. There may be times that moving with more mobility or finding a longer amount of time for stability is most beneficial to the client. I must recognize this in the moment and intervene accordingly, disengaging from my body prejudice.

When it comes to intervening, I prefer to be grounded in my observations and assessments prior to mobilizing and making a decision about how to intervene. This preference for stability-mobility can be positive at times, as it ensures that I am concretized in my

observations, assessments, and intentions prior to implementing an intervention. However, this trait may also lead to over-thinking and/or constraining the therapeutic process. It may be better to move forward even when I am hesitating and uncertain about how exactly to do so. I will practice my improvisational skills, risk-taking, and challenging myself to mobilize even when I do not feel fully stable. This skill of being able to mobilize without being fully stabilized first will assist me in moving through my hesitation and uncertainty, enhance my creative process, and enhance my therapeutic process.

Overall, stability-mobility presents itself in my repetitious movement patterns, and with this knowledge, I may consider applying it proactively and thoughtfully. This body knowledge is a strength, as it can be leveraged as a tool to ground myself, leading to confidence and security in my clinical decisions. This newfound awareness of my body prejudice towards stability-mobility will hopefully lead to a more open perspective and un-biased, more effective, real-time interventions in the future.

Flow

Flow is the “initiator of action” (Bartenieff, 2002). Flow refers to the process of going and the quality of continuousness (Bartenieff, 2002). Each set of research data indicated some level of flow; therefore, it became a predominant theme. Through my movement data, I embodied flow; through my art data, I created flow; through my journals, I observed flow. Through these different mediums, clear and specific preferences within the category of flow emerged, informing a body knowledge and identifying a body prejudice. These are manifested through indulging tension flow rhythms, a fluid medium, and the surging/birthing tension flow rhythm.

Indulging tension flow rhythms. Indulging tension flow rhythms have an accommodating and mobilizing quality (Kestenberg Amighi, Loman, & Sossin, 2018). I discovered that I have a preference for observing, moving with, and developing indulging, as opposed to fighting, tension flow rhythms when working with clients that present with repetitious movement patterns. My preference for smooth, luxuriating, and indulging repetitious movement patterns was seen in both my journal and art data. In my journal data, I demonstrated a bias towards engaging in indulging tension flow rhythms with clients; and in my art data, I mainly created art through the use of fluid media. For example, I often spoke of swaying and sucking as self-soothing, relaxing, and calming for me in my journal responses. When working with a client and observing fighting rhythms, I may have an automatic inclination to respond with an indulging rhythm intervention. Additionally, if I am feeling anxious due to either countertransference or uncertainty of how to intervene, my response is often to revert to an indulging rhythm. Although I find the indulging rhythms self-soothing, the session should not be about serving my needs, rather the needs of the client in that moment. My preference for indulging tension flow rhythms may not resonate with my client, and if I intervene based upon this body prejudice, I may hinder the development of the therapeutic relationship and not meet their needs. Ultimately, I have a more positive perspective on indulging tension flow rhythms; it is important for me to be aware of this bias, as it may impact how I assess and intervene when working with clients.

Fluid medium. Media has the ability to evoke emotion, structure, and creativity (Hinz, 2009). Through my media selections in my art data, I showed a preference for fluid media. According to Hinz (2009), media that contains less structure, allows for free flow, and moves quickly across the page is known as fluid. Fluid media also allows the artist to have an affective and emotional experience (Hinz, 2009). When I engaged in repetitious movements of my hands and wrists, I enjoyed indulging in the experience and connecting to my feeling self, which was demonstrated in my tendency to utilize fluid media. Similar to tension flow rhythms, it is

significant to be aware of this preference for fluidity and flow in repetitious movements, as this will impact how I assess and intervene. Although I connect easily to flow and fluidity, my client may not have the same body knowledge. Additionally, if I allow my body prejudice to impact my assessment of the client's free flowing movement, I may not be open to seeing any potential negative response to such experience. Furthermore, I may assume that encouraging use of fluid movement is offering freedom in the art making experience when the client may perceive it as loose boundaries and an overwhelming experience. Identifying this bias and recognizing when my body prejudice towards fluidity impacts my judgment in a session will allow me the opportunity to expand my perspective and lead to unbiased observations, assessments, and interventions in the clinical decision-making process.

Surging/birthing tension flow rhythm. Although not an indulging rhythm, through my movement and art data, it became clear that I engage in repetitious movement patterns utilizing the surging/birthing tension flow rhythm. This preference also speaks to my personality and how I am as a therapist. The tension flow rhythm of surging/birthing signifies an ability to be with people and/or may be representative of big life events (Kestenberg Amighi, Loman, & Sossin, 2018). It is possible that this rhythm came to the forefront, as I am embarking on completing my degree, writing a thesis, and venturing into a new career. Or, this rhythm may be an overarching preference of mine and indicative of whom I am as a person and future therapist. Through this rhythm, one takes time, sees the task through, and allows it to come to a close (Kestenberg Amighi, Loman, & Sossin, 2018). Surging/birthing is also often present in individuals who pursue healing work, and it requires a patient and calm temperament (Kestenberg Amighi, Loman, & Sossin, 2018). According to the movement consultant, my surging/birthing tendency may serve as a foundation for me to sustain a variety of other tension flow rhythms and create

space, so I may be fully with clients and their experiences while in a session. I may utilize this rhythm to my advantage to maintain longevity and persistence even when faced with uncertainty about how to move forward to intervene.

My body knowledge/body prejudice of flow was seen through indulging tension flow rhythms, a fluid medium, and the surging/birthing tension flow rhythm. My whole being embodies, creates, and observes flow in everyday life. Binding and freeing through flow allows me to grow and shrink in my movement. I grow, freeing my flow and opening myself to the environment; I shrink, binding my flow and moving into inner-awareness.

Growing and Shrinking

I engage in repetitious movements that take on a growing and shrinking quality, especially within the horizontal and vertical dimensions and planes, and perhaps at the expense of the sagittal. My repetitious movements, as depicted through the video footage of my movement explorations, grow and shrink along the horizontal dimension through bipolar shape flow and the horizontal plane through shaping in planes. Through unipolar shape flow, shaping in planes, and shaping in directions, my preference for movement on the vertical dimension and plane emerged.

From the movement data, specifically through bipolar shape flow, I showed a preference for widening and narrowing repeatedly along the horizontal dimension. On a physical level, I grew and shrank through widening and narrowing. On a psycho-social-emotional level, I moved between inner and outer awareness as well as welcoming others and separating from them. Widening indicates a preference for taking in, trusting the environment, being generous, and creating a structure for feelings (Kestenberg Amighi, Loman, & Sossin, 2018). It also allows for openness and finding comfort in giving (Kestenberg Amighi, Loman, & Sossin, 2018). As an

emerging dance/movement therapist, this trait may prove useful as I work with others through an open, trusting, and giving approach. Through narrowing along the horizontal dimension, I created clear body boundaries, separating myself from other and the environment. More specifically, it allows an individual to return to the self and draw from inner resources (Kestenberg Amighi, Loman, & Sossin, 2018). This ability to separate and draw inward may be useful, especially when I feel the possibility of countertransference presenting itself in a session.

When shaping in planes, I tend to spread along the horizontal plane as well. This preference positively corresponds to my preference for bipolar widening. Analysis of the movement data revealed that as I engage in repetitious movement patterns, I create many open and expansive shapes. This may suggest an opening of myself to new experiences and people. Shaping in planes develops a structure for complex relationships and meanings; and spreading specifically allows for open viewpoints and broad perspectives (Kestenberg Amighi, Loman, & Sossin, 2018). With that being said, a preference for spreading that is not balanced by enclosing, may be too giving-oriented and signify not taking in enough for myself to replenish, nourish, and recuperate. This discovery resonates as it speaks to my desire to be fully present for my clients. It also serves as a reminder to continue returning to the self, setting boundaries, and practicing self-care.

Through unipolar shape flow, my preference for movement along the vertical dimension and plane emerged. Unipolar shape flow is the asymmetrical growing and shrinking in one direction (Kestenberg Amighi, Loman, & Sossin, 2018). It offers a foundation for mobility and typically indicates a response to stimuli in the environment (Kestenberg Amighi, Loman, & Sossin, 2018). With that being said, the movement consultant observed that my use of unipolar shape flow was often in response to internal stimuli, which then led to connection to the external

environment. There is an internal and external attraction and repulsion response, which relates to inner-outer awareness. As I shorten down, I shrink into myself and explore my internal awareness. When I lengthen upward or vertically, I connect with the environment outside of myself. My preferences in unipolar shape flow once again demonstrate how I move fluidly and repeatedly with flow in a growing and shrinking manner.

When shaping in planes, I also showed a preference for ascending vertically. As previously mentioned, shaping in planes is indicative of how an individual engages in relationships. Ascending on the vertical plane, similar to spreading on the horizontal plane, creates open shapes and corresponds to my preference for unipolar lengthening up. When ascending into the vertical, an individual often aspires to achieve or accomplish something worthwhile (Kestenberg Amighi, Loman, & Sossin, 2018). Individuals with a great amount of ascending movements are likely to inspire others (Kestenberg Amighi, Loman, & Sossin, 2018), and this may serve as a useful trait as an emerging dance/movement therapist. However, ascending may lead to setting too high expectations and unachievable goals for my clients or myself (Kestenberg Amighi, Loman, & Sossin, 2018). By increasing my understanding of my repetitious movement patterns, I discovered a love for ascending, aspiring, and achieving. I must remain cognizant of this body knowledge and accompanying body prejudice, so that I encourage future clients to set realistic expectations for themselves.

When shaping in directions, I moved upward and downward along the vertical dimension in repeated patterns. Unipolar lengthening up supports directionally shaping up and unipolar shortening down supports directionally shaping down (Kestenberg Amighi, Loman, & Sossin, 2018). These movement preferences, as presented through my repetitive movements, support the theme of growing and shrinking. Through repetitious movement, I shaped directionally up and

down, creating both open and closed shapes. My pre-effort preferences for gentleness and vehemence/straining match with the actions of moving up and down. As I move up with gentleness, I seek explanations and look to others. As I move down with vehemence/straining, I look for clarity within myself. This body knowledge of up and down leads to increased awareness of how I prefer to move and how it may impact my clients. For example, when in a session, I may look inward prior to outwardly implementing an intervention. Or, I may facilitate the act of introspection, going down deep with a client, and bringing them back up, out of the experience to discuss. Here again, the act of moving down and up not only supports the movement theme of growing and shrinking but the psycho-social-emotional themes of inner-outer awareness and stabilizing before mobilizing.

Moving along the sagittal plane and dimension are lacking in my movement repertoire, as seen in the data presented relative to my improvisational explorations of repetitious movement patterns. Rather, my repetitive movements appear to move side-to-side along the horizontal dimension, up and down along the vertical dimension, or in some combination of the two in the planes. My journal data analysis indicated hesitancy to intervene. The sagittal plane is about moving forward, both directionally and mentally (Moore, 2009). By encouraging myself to engage in repetitious movements along the sagittal plane, I may increase my propensity to intervene, allowing me to make decisions better suited for the client. Furthermore, by expanding my movement repertoire to include the sagittal plane, I will be less likely to instill my own body knowledge/body prejudice of moving along the vertical and horizontal onto my clients in the future and mitigate the implications as presented above. Both elements are key to my success in making non-biased interventions when working with repetitious movement patterns.

Space and Cognition

As I set out to create art that draws from the Kinesthetic component of the Expressive Therapies Continuum, I embodied repetitious movement patterns of the hands and wrists. The results, presented in the drawings and paintings, were repetitive lines and forms moving through space. As I analyzed the art data, I came to realize that the Cognitive component of the Expressive Therapies Continuum was highly present in my artwork. Through the precision and clarity in the quality of lines and forms as well as the use of space, the Cognitive component rather than the Kinesthetic component emerged.

Fine details and shapes that appear carefully placed with precision are usually indicative of the Cognitive component (Hinz, 2009). If my artwork had consisted of poor line quality, then the Kinesthetic component would have been present (Hinz, 2009). However, my artwork appeared visually clear, concise, and placed. The Cognitive component may lead to rationalizing, intellectualizing, and problem solving (Hinz, 2009). This may be beneficial to me, as I have the ability to think through challenges and create solutions through planning and preparation. However, it may also lead to overanalyzing the repetitious movement patterns and lead to anxiety when I am unable to plan for the unexpected or when exerting a lot of energy searching for clarity and answers in an ambiguous situation. This further speaks to my confidence level and hesitation in intervening in a clinical setting. As an emerging dance/movement therapist, it may be beneficial for me to continue engaging in creative process through kinesthetic and sensory experiences.

The concept of cognition was present in my movement and art data, as revealed through my use of space. The effort element of space correlates to the Jungian personality type of the thinking self (Moore, 2009). The concept of thinking has to do with rational judgment around an

idea that is based upon analysis (Moore, 2009). Although not a strong theme in my movement data, this theme presented itself and is worth noting. I showed a preference for predominately moving with directness and clear intention through space. My artwork also reflected a similar pattern, as the lines are seen moving with directness across the pages. Here again, my repetitious movement patterns, as seen in the videos and on paper, indicate a strong preference for thoughtful analysis and assessment in my decision-making process.

The theme of cognition as a dominant factor in my art data is informative to me as an emerging dance/movement therapist, as it gives insight into how I embody repetitious movement patterns and how this may influence my interventions. Firstly, when I embody repetitious movement patterns, I am likely not as kinesthetically embodied, as I believe I am; rather, I may be engaged in a more analytical process than I realize. Secondly, I have a strong preference to prepare in advance for a session and problem solve when obstacles arise. Moving forward, it may be useful to expand my movement repertoire by playing with my use of weight to tap into my sensing self as well as exploring with creating lines with more freedom and ease. According to Jungian theory, the motion factor of weight is affined with the sensing self (Moore, 2009). By engaging in the use of weight, individuals connect to the physical, kinesthetic, and sensory environment around them (Moore, 2009). By exploring within my own use of weight, I may find more balance between the cognitive and kinesthetic.

Furthermore, this theme of cognition was not as present in my movement data, but highly present in my art data. This may suggest that creating artwork led me to be more thought-based, as it represents a creative process that is less familiar to me. The form of expression may have had me more inclined to be highly in touch with my cognition and thoughts. Nonetheless, understanding the Cognitive component as it relates to my repetitious movement patterns, even

through various art media, is important for me to consider as I continue to understand my biases and how to manage them to be more effective in my therapeutic approaches.

Time and Intuition

As I ventured out into the unknown of my thesis, I was in search of making meaning out of what I was seeing in the client's repetitious movement patterns. However, as I progressed through the phases of writing a thesis, specifically collecting and analyzing the data to inform my conclusions, I found that the importance is not about making meaning of the movement for myself. Rather, the therapeutic process is about guiding individuals to discover what the meaning or purpose of these movements is for them. Allowing the meaning of the movement to emerge for individuals is key to my intervention process in therapy.

With that being said, the "how do I do that?" becomes the imperative question. From the journal responses, I discovered that I experience a lot of hesitancy in assessing and even more so in intervening. I question my abilities and grow uncertain about the experience of the client. This behavior, relative to timing, potentially comes from depending on my own memories and meaning associated with a specific repetitious movement pattern demonstrated by a client. Recognizing that these feelings and thoughts are my own as opposed to my clients will allow me to more effectively manage my timing and let the experience and process unfold for the client. This can result in more objective and effective interventions, allowing the client to progress. I should proactively, and with an informed self-awareness, manage my sense of timing when observing, assessing, and specifically intervening.

According Laban, timing is related to Jung's personality trait of intuition (Moore, 2009). Laban draws upon Bergson's concept that intuition is the response to living in time and experiencing time from within the self (Moore, 2009). Intuition involves the ability to perceive

and have insight in a moment's notice (Moore, 2009). Laban believed that the effort of time, acceleration and deceleration, either occurs in response to internal stimuli or is an intuitive response to timing (Moore, 2009). With attention to not imposing a personal meaning onto a client's repetitious movement patterns, I will strive to allow my sense of timing guide me. This can help support my intuition, so that I will be able to better meet the needs of the clients.

My preference for the effort motion factor of time appeared through my journal responses and movement data. In my journal responses, I noted a hesitation in time and deceleration to intervene when working with clients that presented with repetitious movement patterns. Through the movement data, I learned that I am strongly attuned to time and may be able to capitalize on this to become in touch with my intuition and intervene accordingly. Therefore, understanding what impacts my timing, such as self-awareness of my own biases relative to repetitious movement patterns, is important to the effectiveness of my therapeutic approach.

Research Limitations

As this research was a self-study, which relied on my personal experiences, its applications are inherently limited. Secondly, the fact that I worked with three different sets of data gives rise to some limitations. Since data collection happened simultaneously and in an overlapping manner between the three different data sets, the research is limited in terms of maintaining clear division of data collection. Did the one type of data collection influence another given the fluid nature of executing them? For example, did my experience engaging in one improvisational movement exploration impact my approach in subsequently creating a drawing? In addition, the data collections, within each of the three unique types of data, were executed one after the other, giving rise to potential limitations within each data set. Did the chronological order cause one piece of data to be influenced by the previous data collection? For

example, did my experience from creating one piece of art influence how I went about creating the second piece of art? Lastly, since the data collection took place over an extended period of time, it is likely that it was influenced by my personal frame of mind and most recent experiences relative to that point in time. Although I strived to collect data to specifically answer the research questions, personal material unrelated to the research topic may have become entangled in the creation of the artwork, journals, and movement, which can all be forms of self-expression. Although I made efforts to minimize the research limitations, including the involvement of a resonance panel and movement consultant as validation strategies, some exist due to the nature and process of my heuristic inquiry.

Summary

This heuristic study answered the primary question: How do I, as an emerging dance/movement therapist, embody and understand repetitious movement patterns in others and myself? The secondary questions were also answered and included: what are my repetitious movement pattern preferences; how does my body knowledge/body prejudice inform my observations, assessments, and meaning making of repetitious movement patterns in other individuals; how do I use this understanding to create unbiased dance/movement therapy (DMT) interventions? The research and data analysis provided invaluable insights to each of these questions. Through the analysis, I discovered propensities toward inner-outer awareness, stability-mobility, flow, growing and shrinking, space and cognition, and time and intuition. These elements influence not only how I experience repetitious movement patterns, but how I observe, embody, and assess in relation to them when working with clients. As I mature as a dance/movement therapist, I will utilize this body knowledge/body prejudice to inform my interventions in response to observed repetitious movement patterns.

The themes of inner-outer awareness, stability-mobility, flow, and growing and shrinking all intertwine. The concept of inner-outer awareness is at the crux of who I am as a dance/movement therapist and how I make clinical decisions. Inner-outer is an overarching theme that is supported by the binding and freeing of flow and results in stability-mobility. I access inner awareness through shrinking into my core with bound flow, stabilizing the physical and emotional aspects of myself. As I move out into the world through outer awareness, I mobilize, grow, and free my flow. When in a session, I may look inward prior to outwardly implementing an intervention. Or, I may facilitate the act of introspection, going down deep with a client and bringing them back up, out of the experience to discuss. In other words, I prefer to go down and in prior to moving up and out. As I shrink and stabilize, I turn within myself and draw from inner resources. As I grow and mobilize, I take in, trust the environment around me, and create a structure to hold the experiences and emotions of the client. See Figure 6 below for a visual representation of my experience of the correlation between inner-outer awareness, stability-mobility, growing and shrinking, and binding and freeing flow. It is through knowing myself and supporting my own experience that I can move outward to help others. Resourcing my own body, awareness, and experiences supports me in attuning to my clients more effectively.

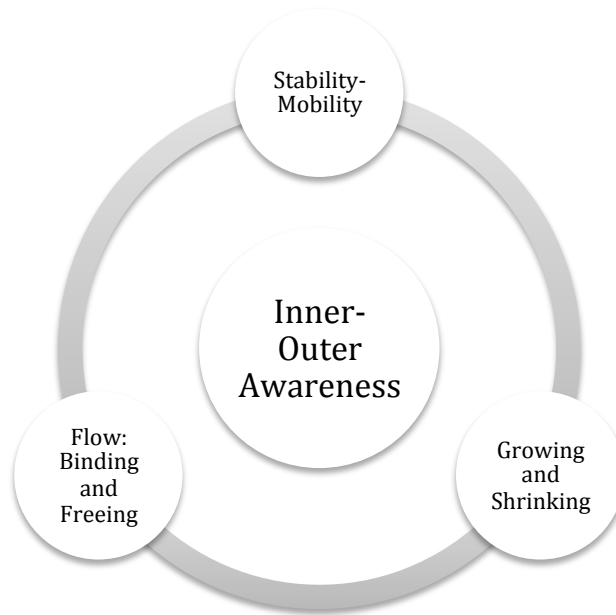


Figure 6. The Wheel of Inner-Outer Awareness

Through the research analysis, I came to some conclusions about how I make clinical decisions, and how I may make less biased interventions in the future when working with individuals that present with repetitious movement patterns. See Figure 7 for a visual representation of my step-by-step clinical decision-making process when presented with clients that demonstrate repetitious movement patterns.

As I make observations, I mirror and embody the client's movement, demonstrating kinesthetic empathy and attunement for the individual's experience. This informs my assessment process and often leads to an increased inner-awareness of my own experience, which is presented through sensations, memories, images, feelings, and thoughts. This in turn often leads to countertransference and somatic countertransference. From the data, it was clear that countertransference led to hesitation to intervene. In future sessions, I challenge myself to capitalize on countertransference to attune to my clients and better understand their experiences.

It is with the knowledge of whom I am that I then have the capacity to mobilize outwardly to develop the therapeutic relationship and intervene.

When hesitation in the clinical decision-making process ensues, my thinking self and cognition often hijack my therapeutic process. This leads to overanalyzing my observations, assessments, meaning making, and interventions when working with clients. My preference for the effort element of flow will continue to serve me during these moments of uncertainty within the development of the therapeutic relationship and evolving therapeutic process. Flow serves as a self-regulation tool, helping manage my internal sensations, memories, images, feelings, and thoughts. When faced with uncertainty, indecision, countertransference, and somatic countertransference, I use flow as a tool to help move me through the situation and persist. It is through flow that I oscillate between binding and freeing, inner and outer awareness, stabilizing and mobilizing, and shrinking and growing.

Drawing from my strength of actively and continually engaging in inner-outer awareness, I will strive to draw inwardly to connect to my intuition. Pulling from my intuition and the correlating effort element of time will help to mitigate hesitation as well as aid me in working through countertransference, facilitating my ability to make interventions when presented with repetitious movement patterns in clients. Whether internally or externally stimulated, I will draw upon my strength of practicing inner-outer awareness to attune to my intuition, as it informs how and when to intervene.

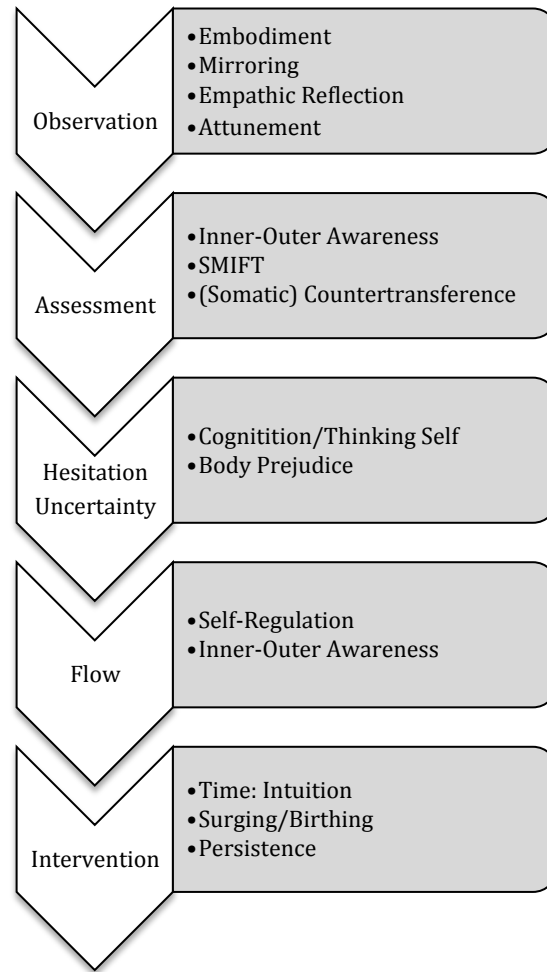


Figure 7. Clinical Decision Making

Implications and Future Research

Informed by this heuristic study, I believe that these results could have far reaching implications on the field of dance/movement therapy, particularly in the area of repetitious movement patterns and how related biases and perceptions may impact observations, assessments, and interventions. Dance/movement therapy is based on the concept of the mind/body connection and repetitious movement patterns can represent a natural expression of that connection. Although my results have their limitations, they provide the platform for a strong argument that expanding research and understanding of both repetitious movement

patterns and body knowledge/body prejudice could significantly enhance the value and effectiveness of dance/movement therapy interventions. The reason for this is that stigma and biases exist relative to repetitious movement patterns, as they are primarily associated with autism spectrum disorder, stereotypic movement disorder, tic disorders, obsessive-compulsive disorder, and other neurological development disorders. However, as evidenced in the data collection, repetitious movement patterns are prevalent in individuals, such as my clients and myself, who have not been diagnosed with such disorders. Acknowledging this broader prevalence of repetitious movement patterns, the research demonstrates that increasing awareness of one's own body knowledge of repetitious movement patterns helps mitigate body prejudice. This in turn impacts the observations, assessments, and interventions implemented by a dance/movement therapist. Some of the existing research acknowledges this concept that repetitious movement patterns exist in all of us, and this study reinforces and builds upon this important concept. The research challenges how the mental health field views repetitious movement patterns and reinforces that a broader perspective can further advance the effectiveness of the field of dance/movement therapy.

For future research, I am interested in exploring many additional questions in relation to an individual's body knowledge/body prejudice in response to repetitious movement patterns. How do repetitious movement patterns influence the therapeutic movement relationship? How does body knowledge/body prejudice of repetitious movement patterns impact the therapeutic movement relationship? How does knowing one's movement profile and increasing body awareness in relation to socio-cultural, attachment and relational narratives impact an individual's movement and self-expression? How does increasing self-awareness of personal body knowledge/body prejudice improve a therapist's clinical work? If repetitious movement

patterns lead to transference, countertransference, and somatic countertransference, how can they be utilized as a tool within the therapeutic process to meet the needs of the client? How can a clinician work through and mitigate countertransference in response to repetitious movement patterns to meet the needs of the client? How can a clinician assist a client in working through transference that arises while engaged in repetitious movement patterns?

“It doesn’t matter how well you know yourself.

What matters is how you relate to what you know.” – Buddha

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Appendices

Appendix A. Definition of Terms

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Appendix A

Definition of Terms

Arrhythmic Movement Patterns

Arrhythmic movement patterns refer to the rhythmic movement of an individual as being impaired, underdeveloped, or inhibited (Capello, 2016).

Attunement

Attunement is the “synchronization in rhythms” between two individuals (Kestenberg, 1975, p. 161). It is “the ability of the therapist to attend to both the internal body sensations as well as the client’s movement” (Downey, 2016, p. 71).

Body Attitude

Body attitude refers to characteristic movement qualities of a person, which includes body alignment and movement styles (Kestenberg Amighi, Loman, & Lewis, 2018)

Body-focused Repetitive Behaviors

These behaviors are body based in nature and involve an action upon the body itself. Body-focused repetitive behaviors occur in typically developing individuals and individuals with intellectual and developmental disabilities (Long, Miltenberger, & Rapp, 1998).

Body Knowledge

Body knowledge is a person’s developed understanding of his or her movement behavior (Moore & Yamamoto, 2012). Personal experiences allow an individual to categorize, abstract, and generalize different movements, which makes up one’s body knowledge (Moore & Yamamoto, 2012).

Body Prejudice

Body prejudice refers to placing a meaning, whether negative or positive, upon a certain type of movement (Moore & Yamamoto, 2012).

Bound Flow

“Flow is the effort exerted to control movement” and the “fighting attitude is expressed as bound flow, in which the motion is restrained and easy to stop” (Moore, 2014, p. 66).

Core-Distal Connectivity

“The whole body can be organized by a pattern of connectivity that begins in the center core of the body and radiates out through the torso to the proximal joints, the mid-limbs and all the way to the distal ends of the extremities” (Hackney, 2002, p. 68).

Countertransference

The feelings and thoughts a therapist has towards a client (Ivey, D’Andrea, & Ivey, 2012).

Dance/Movement Therapy (DMT)

Dance/movement therapy is the psychotherapeutic use of movement to further the emotional, cognitive, physical, and social integration of the individual to improve overall health and wellbeing of the individual (ADTA, 2016).

Efforts

Effort refers to the use of motion factors to cope with space, weight and time (Bartenieff, 2002) as well as to express changes in attitude towards space, weight and time (Laban, 1960). The six effort qualities include indirect and direct, lightness and strength, and deceleration and acceleration (Kestenberg Amighi, Loman, Lewis, 2018). Laban also includes the motion factor flow and the effort qualities of freeing and binding (Laban, 1960).

Embodied Writing

Embodied writing is the process of incorporating the body and writing from the inside out. Embodied writing is subjective and speaks to the lived experience of the individual (Cruz & Berrol, 2012).

Embodiment

“The moment to moment process by which human beings allow awareness to enhance the flow of thoughts, feelings, sensations, and energies through our bodily selves” (Aposhyan, 2004, p. 52).

Expressive Therapies Continuum

A tool utilized by art therapists to classify and process human interaction with art media and art experiences. The continuum begins at the preverbal level, including kinesthetic and sensory experiences (Hinz, 2009).

Free Flow

“Flow is the effort exerted to control movement” and the “indulging attitude is expressed as free flow, in which the action is relaxed, on-going, and difficult to stop” (Moore, 2014, p. 66).

Inner-outer Awareness

The ability to navigate between being conscious of the self’s internal thoughts, feelings, and sensations and the environment, including others around you.

Kinesthetic Component

A component of the Expressive Therapies Continuum that emphasizes movement and rhythm of the body as a part of the art making process (Hinz, 2009)

Kinesthetic Empathy

Kinesthetic empathy is the process of embodying another's emotional experience (Behar-Horenstein & Ganet-Siegel, 1999) as well as sensing and experiencing in one's own body the same muscular tensions of another individual (Loman, 1992). It occurs through a movement dialogue between therapist and client (Chaiklin & Schmais, 1993).

Mirroring

The process of reflecting another individual's movement, showing acceptance and openness to their movements, feelings, and thoughts (Fischman, 2016).

Phrasing

According to Hackney (2002), movement occurs in phrases, or "perceivable units which are in some sense meaningful" (p. 47). "A movement phrase generally contains an inner preparation (intent), the moment of the initiation (beginning of movement in the body), the main action (exertion), a follow-through, and recuperation" (Hackney, 2002, p. 47).

Pin Shape

A basic shape form that is long and linear (Konie et al., 2011).

Posture-Gesture Merger

A posture-gesture merger refers to a movement that maintains a consistent effort quality and shape change. These movements are phrases in the ongoing movement of the body that accompany speech (Davies, 2006).

Pre-Efforts

Pre-efforts are the developmental precursors to efforts (Kestenberg Amighi, Loman, & Lewis, 2018). They occur when learning how to move in a new way and thus involve inner concentration and outer awareness (Kestenberg Amighi, Loman, & Lewis, 2018).

Reach Space

Reach space is the space used by an individual when reaching out beyond the self (Kestenberg Amighi, Loman, & Lewis, 2014).

Repetitious Movement Patterns

Repetitious movement patterns are rhythmic or arrhythmic movements that occur repeatedly. These movements can occur unconsciously or consciously and with or without an identifiable purpose (Purpura et al., 2017).

Restricted Repetitive Patterns of Behaviors

According to the American Psychiatric Association (2014), restricted repetitive patterns of behavior refer to stereotyped or repetitive motor movements, using objects to create a pattern, repetitive speech, insistence on sameness, ritualized patterns of routine, greeting rituals, fixated interests, and hyper or hypo-activity to sensory input.

Shape Flow

Shape flow refers to the growing and shrinking of bodily dimensions (Kestenberg Amighi, Loman, & Lewis, 2018).

Shaping in Directions

Shaping in directions refers to one-dimensional or directional movement, which moves sideways or across, up or down, forward or backward along a dimension (Kestenberg Amighi, Loman, & Lewis, 2018).

Shaping in Planes

When shaping in planes, individuals move and carve through space two-dimensionally, traversing a plane (Kestenberg & Sossin, 1979).

SMIFT

The acronym SMIFT refers to sensations, memories, images, feelings, and thoughts (Imus, 2018). This acronym helps people recognize that these five factors influence one another and help individuals gain further insight as to how and why they make the decisions they make (Siegel & Bryson, 2011).

Somatic Countertransference

When the body of the therapist is activated in the therapy session, going beyond the traditional notion of countertransference as thoughts, feeling and images. Including physical sensations, the body of the therapist is made to feel something that may relate to the client's mental state (Margarian, 2015).

Stereotypies

Stereotypies are repetitive movements that people perform without any apparent goal (Morrison, 2014).

Tension Flow Attributes

Refers to qualities of tension flow used by an individual (Kestenberg Amighi, Loman, & Lewis, 2018). Describe changes in intensity factors along three dimensions: even or adjusting, high or low intensity, and abrupt or gradual (Loman, 1992). They resemble preferences for aggressive or indulging patterns of arousal and quiescence (Loman, 1992).

Tension Flow Rhythms

Tension flow rhythms are patterns of change in tension and relaxation that occur at regular or irregular intervals (Loman, 1998). The rhythmic patterns correspond to developmental phases, including oral, anal, urethral, inner-genital, and outer genital (Kestenberg, 1975).

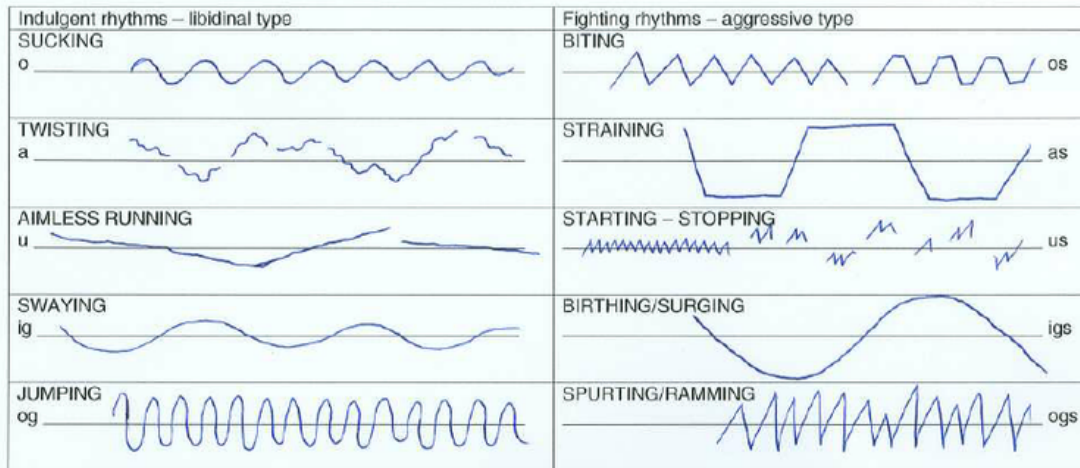
Therapeutic Movement Relationship

The therapeutic movement relationship is about “allowing oneself to implicitly feel the clients’ emotional experiences, follow their lead, and bring one’s full self into the relationship,” which is “experienced as a sense of togetherness, joining with another person in their dance” (Young, 2017, p. 109).

Appendix B

Kestenberg Movement Profile: Tension Flow Rhythms

KMP-Rhythms Overview



Overview of the Kestenberg rhythms. Adapted from *The meaning of movement: Development and clinical perspectives of the Kestenberg movement profile* by J. Kestenberg Amighi et al. Copyright 1999 by Brunner-Routledge.

Appendix C

Movement Consultant Invitation

Dear _____,

My name is Elise Ringenberg, and I am a third-year dance/movement therapy and counseling graduate student at Columbia College Chicago. I received your contact information from Susan Imus as a potential movement consultant for my Master's thesis.

My thesis explores how my body knowledge/body prejudice informs my observations, assessment, interventions, and meaning making of repetitious movement patterns observed in individuals. I am curious about my personal repetitious movement patterns and how they influence my decision making as an emerging dance/movement therapist.

I am writing to see if you may be interested in participating in my thesis process as a movement consultant in the data collection phase of my research. I am seeking feedback in your area of expertise, as a dance/movement therapist with a background in Kestenberg Movement Profile. I am requesting that the movement consultant review 5 sets of movement data, each lasting no longer than 5 minutes, and complete a mini-assessment on each set of data. The assessments will be utilized, as forms of data, to help me better understand my personal repetitious movement pattern preferences.

I value the unique contribution that you may make to my study and am excited about the possibility of your participation in it. I am happy to discuss compensation for your services if this opportunity interests you. Please do not hesitate to reach out if you have any further questions, would like additional information, and/or would like to set up a phone call to discuss in more detail. Many thanks for your time and consideration.

Sincerely,
Elise Marie Ringenberg

Appendix D

Movement Consultant Agreement

I, _____ agree to fulfill the role of "movement consultant" for Elise Ringenberg's heuristic inquiry to serve as a part of her data collection.

I am expected to view 5 sets of movement data, each lasting no longer than 5 minutes and complete a Movement Assessment Coding Sheet (MACS) on each set of data. I will be available for a follow-up discussion about the findings via phone or video chat. I understand the purpose and nature of this study and will provide honest feedback through the movement assessment. I grant permission for the information generated from these assessments and discussion to be used in the process of completing a M.A. degree, including a thesis and any other future publication.

I agree to review the movement data, complete the 5 MACS, and send the completed MACS to Elise by _____. I agree to engage in a phone call for 30-90 minutes following receipt of the MACS to further discuss.

Elise Ringenberg will compensate the movement consultant the agreed upon amount of _____ by _____. Elise Ringenberg agrees to be available and on time for the scheduled phone call on the agreed upon day and time. Elise Ringenberg will invite feedback on the interpretations of the movement consultant's findings following the data collection process.

Movement Consultant

Researcher

Date

Date

Appendix E

Movement Assessment Coding Sheet

Movement Analyst:
Mover: Elise Marie Ringenberg

Date:
Session #:

| Tension Flow Rhythms | | | |
|----------------------|--|-------------------|--|
| Sucking | | Snapping/Biting | |
| Twisting | | Strain/Release | |
| Running/Drifting | | Starting/Stopping | |
| Swaying | | Surging/Birthing | |
| Jumping | | Spurting/Ramming | |
| NOTES: | | | |

| Tension Flow Attributes | | | |
|-------------------------|--|----------------|--|
| Flow Adjustment | | Even Flow | |
| Low Intensity | | High Intensity | |
| Graduality | | Abruptness | |
| NOTES: | | | |

| Pre-Efforts | | | |
|---------------|--|---------------------|--|
| Flexibility | | Channeling | |
| Gentleness | | Vehemence/Straining | |
| Hesitation | | Suddenness | |
| NOTES: | | | |

| Efforts | | | |
|---------------|--|--------------|--|
| Indirect | | Direct | |
| Lightness | | Strength | |
| Deceleration | | Acceleration | |
| NOTES: | | | |

| Bipolar Shape Flow | | | |
|--------------------|--|------------|--|
| Widening | | Narrowing | |
| Lengthening | | Shortening | |
| Bulging | | Hollowing | |
| NOTES: | | | |

| Unipolar Shape Flow | | | |
|---------------------|--|------------------|--|
| Lateral Widening | | Medial Narrowing | |
| Lengthening Up | | Lengthening Down | |
| Shortening Up | | Shortening Down | |

| | | | |
|-------------------|--|--------------------|--|
| Bulging Forward | | Bulging Backward | |
| Hollowing Forward | | Hollowing Backward | |
| NOTES: | | | |

| Shaping in Directions | | | |
|------------------------------|--|----------|--|
| Sideways | | Across | |
| Up | | Down | |
| Forward | | Backward | |
| NOTES: | | | |

| Shaping in Planes | | | |
|--------------------------|--|------------|--|
| Spreading | | Enclosing | |
| Ascending | | Descending | |
| Advancing | | Retreating | |
| NOTES: | | | |

Appendix F

Media Properties and Experience

| | |
|---|--------------------------------|
| Fluid<-----> | Resistive |
| Media | Media |
| <i>Watercolor on Wet Paper</i> | <i>Stone/Wood Sculpture</i> |
| <i>Finger-Paint on Finger-Paint Paper</i> | <i>Clay/Plasticine</i> |
| <i>Other Paints on Dry Paper</i> | <i>Colored Pencils/Pencils</i> |
| | <i>Collage</i> |
| <i>Chalk Pastels</i> | <i>Crayons</i> |
| <i>Oil Pastels</i> | <i>Soft Water-Based Clay</i> |
| | <i>Markers</i> |
| Affective<-----> | Cognitive |
| Experience | Experience |

Media properties and experience. Adapted from *Drawing from within: Using art to treat eating disorder* by L. D. Hinz. Copyright 2006 by Jessica Kingsley Publishers.

Appendix G

Resonance Panel Member Invitation

Dear _____,

My name is Elise Ringenberg and I am a third-year dance/movement therapy and counseling graduate student at Columbia College Chicago. I am currently working on my Master's thesis, which explores how my body knowledge/body prejudice informs my observations, embodiment, and meaning making of repetitious movement patterns observed in others and myself.

I am writing to request your guidance in the data analyzing process. Through the resonance panel, I am seeking comprehensive feedback in your area of expertise: (areas to be determined upon further investigation of the topic). In this way I hope to answer the questions: *As a dance/movement therapy student, how do I understand and embody repetitious movement patterns? What are my repetitious movement pattern preferences? How does my body knowledge/body prejudice inform my observations and meaning making of repetitious movement patterns? How do I use this understanding to create unbiased dance/movement therapy interventions?*

This resonance panel will serve as a validity check after the data analysis process, aiding in the explication phase of my heuristic inquiry. Through interacting with members on the resonance panel, I hope to bring forth further awareness and clarification of my study's findings and themes. Aside from helping me to identify and process specific themes, I am hoping that you will help to validate my findings. I plan to analyze the data through identifying themes and sequential theme analysis. I hope that you can guide me through the analysis and meaning making process through a one and a half to two hour-long virtual meeting through a conference call with other resonance panel members.

Thank you for your interest in my thesis research on meaning making of repetitious movement patterns. I value the unique contribution that you may make to my study and am excited about the possibility of your participation in it. Please contact me if you have any further questions or would like any additional information about my thesis. Thank you for your time.

Sincerely,
Elise Marie Ringenberg

Appendix H

Resonance Panel Member Agreement

I, _____ agree to participate in an individual and/or group resonance panel meeting regarding Elise Ringenberg's study, which explores how her body knowledge/body prejudice informs her observations, embodiment, and meaning making of repetitious movement patterns observed in others and herself. I understand the purpose and nature of this study, and I will constructively provide honest feedback. I grant permission for the information generated from the resonance panel to be used in the process of completing a M.A. degree, including a thesis and any future publication.

I agree to virtually meet through a video conference call on the following date _____ for an initial resonance panel of one and a half to two hours. I agree to be available for an additional one to two hours resonance panel video conference call if necessary. Elise Ringenberg agrees to be available and on time for the scheduled conference call on the agreed upon day and time as well as any subsequent conferences calls.

Limits to Confidentiality: I understand that my name and other demographic information that might identify me will not be disclosed in the thesis. I also agree to keep the identity of other panel members confidential.

Resonance Panel Member

Researcher

Date

Date