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# **Dance Movement Therapy for Clients with**

Attention Deficit Hyperactivity Disorder: A Literature Review

Capstone Thesis

Lesley University

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Dance Movement Therapy

Elizabeth Kellogg

#### **Abstract**

The overall focus of this thesis study is to take a closer look at how dance movement therapy could beneficially impact people diagnosed with attention deficit hyperactivity disorder. The literature reviewed focuses on the history of dance movement therapy along with several methods of the therapeutic practice, the beginning stages of attention deficit hyperactivity disorder research as well as the current treatment methods, and the current work being done with dance movement therapy and clients with this diagnosis. Many of the symptoms considered within this diagnosis are supported by the structure of dance movement therapy, serving as a beneficial therapeutic tool.

*Keywords:* dance movement therapy, attention deficit hyperactivity disorder, treatment methods

#### Dance Movement Therapy for Clients with Attention Deficient Hyperactivity Disorder:

#### **A Literature Review**

#### Introduction

Before the codification of dance movement therapy, dance itself has always held a therapeutic nature for those open enough to allow themselves to move. Through self-expression and by giving the self the permission to freely move, people from all areas of life have found comfort in using dance as an outlet. Dance as a universal phenomenon has allowed the opportunity to further reveal what is really on the inside of the self to then bring forward into one's outward experience.

Throughout my second internship placement in my graduate career, I was given the opportunity to work with elementary age students diagnosed with attention deficit hyperactivity disorder. My prior internship experience as well as other related therapeutic practices did not include clients with this diagnosis, and I was initially hesitant to work closely with them while using dance movement therapy as a therapeutic method. Once observing and working with some of the students with this diagnosis, I was eager to look deeper into how dance movement therapy could assist and support the symptoms of attention deficit hyperactivity disorder.

#### **Literature Review**

In this thesis, I will focus on the history and the foundation of both dance movement therapy and attention deficit hyperactivity disorder along with how they work together. My overall intention is to shed light on the many layers of how dance movement therapy can positively affect people struggling with their attention deficit hyperactivity disorder diagnosis.

# **Dance Movement Therapy**

# Development of Dance Movement Therapy

When considering if dance movement therapy, or DMT, is a beneficial therapeutic method for clients with attention deficit disorder, it is important to consider where and when the method was developed. Throughout the late 1940's and 1950's, DMT pioneers began their explorations prior to the recognition of the profession itself. By 1966, the American Dance Therapy Association, or the ADTA, developed and allowed for a more formalized education of DMT to be communicated to the general public. Shortly after the ADTA formed, DMT as a profession began growing even more. Following the beginning pioneers, many others continued to make a firm impact on the dance movement therapists of today which then allowed for the formal practice of dance movement therapy itself.

#### Laban Movement Analysis

Laban Movement Analysis, or LMA, a method frequently used within DMT, was created by Rudolph Laban and was developed from his fascination with language intertwined within movement. In the 1950's, this notation process began to provide a formal and almost universal dance language that is easily accessible for dance movement therapists to utilize with their clients. LMA "is a method and language for describing, visualizing, interpreting, and documenting all varieties of human movement" (Laban/Bartenieff Institute of Movement Studies, n.d., para.

1). Within this method of language with the body comes four categories: body, effort, shape, and space.

The body aspect of LMA is used to describe one's body in motion, both in structure and in physicality. More specifically, this method breaks down the body to the movement of its individual parts, their connection to each other, their possible influence of and on each other, and

ideas surrounding one's body organization (Moore, 2014). The movement of one's individual body part directly influences that of another. When raising both fists in the air, energy from the knuckles draws a connection to the shoulder.

Effort when considering movement is most often used to describe the dynamics involved while in motion. Effort in LMA is the dynamics of movement while mainly understanding the small patterns developed individually while moving. These noted patterns draw a connection from the inner self to the outer self as well as the intention of the movement. This aspect of LMA has four categories: space, weight, time, and flow with each having their own opposites within themselves. The idea of space connected to effort can be direct or indirect which could be the difference between catching a glass before it hits the ground or gently brushing crumbs off the table. Weight is described as strong or light which relates to pushing a wheelbarrow full of wood or holding a piece of fine China. Time's polar ends are quick and sustained, relating to speed walking through a crowd to get to work on time and leisurely strolling through a park. The last category of flow can be bound or free: lifting heavy weights and swinging on a swing set. Each of these aspects of effort can be intertwined in different combinations to create movement patterns (Moore, 2014). When raising both fists in the air, the intention behind the movement is observed within effort; is this person reacting out of anger or celebration? The categories within effort allow for the witness to take note of this movement.

Shape in LMA is simply how the body alters its shape while in motion. Within shape comes its own qualities including shape flow, directional shape, and carving. The category of shape flow is the relationship of the body to itself while in motion. Directional shape is the body's connection to the environment while in motion. The idea of carving is like directional

shape but is more specifically noted when the body interacts with the volume of the environment while in motion (Moore, 2014).

The last category of LMA is the aspect of space, the movement connected to the environment with spatial patterns, pathways, and areas of specified tension. This quality in LMA applies to the kinesphere, or the specified area of which the body is moving as well as how the mover notices it. Spatial intention within space is the directions that the mover often returns to throughout their movement phrase (Moore, 2014).

#### Judith Kestenberg

Judith Kestenberg, a psychiatrist and psychoanalyst, made her own contributions to the DMT community by applying the application of theory itself to the practice of DMT. Kestenberg "expanded on LMA, adding subsystems of movement patterns to effort and shape patterns and correlating all movement characteristics with psychological phenomena, creating a developmentally and psychologically coherent profile" (Levy, 1988, p. 157). The system of observing movement that Kestenberg elaborated to create includes the involvement of the concept of "minute, subtle variations of body movement patterns, rhythms, and preferences with regard to their relevance to psycho-sexual stages of development, affects, defenses adaptive functioning, and self and object representations" (Levy, 1988, p. 157).

Penny Parker Lewis, an early dance movement therapist pioneer, was one of many who utilized this method within her own application of DMT. With the help of Kestenberg's theoretical framework, Lewis "believe[d] that through the observation of one's movement patterns, adaptive versus maladaptive behavior can be diagnosed, as can the developmental level of the patient and hence, [their] movement needs" (Levy, 1988, p. 158). Lewis felt that "the dance movement therapist... [uses their] body as a vessel to receive, contain, and metabolize the patient's split off

parts. Then in the mirroring that is created, the patient's somatic unconscious may receive an experience of wholeness" (Lewis, 1992, p. 314).

#### Marian Chace

Marian Chace, a dance movement therapy pioneer, worked mostly with psychiatric patients while being well known for her mentorship of other fellow dance movement therapists who collaborated to create the ADTA. Much like Rudolph Laban and many other dance movement therapists, Chace began as a technically trained dancer where she found an interest in performing and choreographing, leading her to begin teaching as well. Many of her students were less interested in the idea of performing and wanted to gain a better sense of how their body moves. This shift from 'dance to perform' to 'dance to express' was Chace's first consideration to dance while being more than an outlet of showcasing a codified dance technique.

Marian Chace: Early Development. Throughout the 1940's, Marian Chace's work in the dance community is the very early stages of what we see as DMT before the title was formulated. Chace worked at a school for children with emotional difficulties, providing training for the other staff in movement strategies to use with the students alongside of her own teachings. Much of the early exploitative work of DMT was practiced by Chace in a hospital setting where she used movement in her therapeutic work.

Marian Chace believed that "dance is communication, and this fulfills a basic human need" which influenced Chace's work with verbal and nonverbal patients through her DMT practices (Chaiklin & Schmais, 1970, Levy, 1988, p. 36). Many of the patients Chace worked with that were nonverbal found their movement practice as one of the only outlets of communicating their feelings to others.

Marian Chace: The Chace Technique. The methodology of the Chace technique "is a unique complete, and self-contained system of group therapy which utilizes dance movement as its predominant mode of interaction, communication, and expression" (Levy, 1988, p. 26). The Chace technique is a completed system of DMT because of its inclusion of a clear beginning, middle, and end; termed as the warm-up, the theme development, and the closure of led DMT groups.

Each aspect of the Chace technique holds its own intention for therapeutic intervention and overall focus. The main idea of the warm-up is for the client to gradually transition from their outer existence and experience to drawing more attention inward and to the other participants within the group. Chace would often begin with the practice of mirroring where clients would face each other in pairs and act as though they were a mirror image in movement of the other. This method would slowly encourage the expansion of movement and allow for the beginning stages of movement dialogue between DMT group participants.

When moving into the group development aspect of a DMT group, Marian Chace and the participants would notice nonverbal cues within movement. Considering these cues continues a similar movement method to the mirroring that the participants practiced during their warm-up, allowing for a heightened awareness of all participants. Considering the nonverbal cues as a group then allows for the participants to expand on their individual movements and on their movements as a whole group as well. Eventually, the group would be prompted to bring a vocal addition to their movement, if it deemed fit, as well as the invitation of imagery to support and inspire continued movement.

The closure of the Chace technique occurs where the group theme development began, in the formation of the equalizing circle with the accompaniment of community relational movement. At the very end of the DMT group practice would be the invitation of discussion and the sharing of anything that came up for the client's individually throughout their time together that day. Chace found a great importance in maintaining a closing aspect to her group technique, allowing for a 'full circle' ending to the established beginning and middle. Within the circle formation, Chace would find a way to acknowledge each of the individual participants of the group with "repetitive 'communal' movements that would provide the group with a feeling of connection, support, solidarity, and well-being... [while supporting] a gradual slowing down of the individual expressive process and [encourage] participants to shift their focus back to the group as a whole" (Levy, 1988, p. 31). This closing ritual supported the idea that the movement story, dialogue, and practice for the group session can come to an end, allowing for another new exploration to unfold within the following session.

Marian Chace: Contribution to dance movement therapy. Marian Chace acted as a DMT pioneer within individual therapy work but primarily made her impact on the community with her creation of her group session technique. Dance movement therapists often take to her codified format because of its simplicity but also for its overall "natural progression from the individual to the group, and from one stage [of the dance movement therapy group session] to the next" (Levy, 1988, p. 31). Chace's DMT contributions were the beginning stages of "the therapeutic movement relationship, the use of ongoing verbal narration as a form of reflection the group and individual process, the use of rhythmic movement as an organizing and clarifying force, and the use of dance as a cohesive group process—a form of group psychotherapy" (Levy, 1988, p. 31).

## Susan Loman: Attunement and Kinesthetic Empathy

Susan Loman, another dance movement therapist who used Kestenberg's methods within her own therapeutic practice, was trained under the direction of Penny Parker Lewis. Loman noted that Lewis "could synthesize and integrate such a wide range of complex theories... [while motivating] those around her to recognize their own strengths and potential" (Loman, 2004, p. 3).

Loman was able to make use of attunement and kinesthetic empathy when practicing DMT with children while considering their developmental patterns and gaining a better understanding of the parent-child relationship dynamic. Attunement is an aspect of DMT derived from the Kestenburg Movement Profile that relates to the idea of kinesthetic empathy or being able to feel empathy from the observational movement of someone else. Loman applied concepts of attunement and kinesthetic empathy when observing the "clashing" movement patterns between child and adult, and "to recognize maladaptive movement styles in the child as a result of these clashes" (Levy, 1988, p. 161). This application allows for Loman to "attune" to the movement patterns of the child as well as the parent and eventually allow for this attunement to transition within the parent-child relationship connection. This observation of movement patterns of the child and of the parent individually along with their movement patterns while interacting with each other gives further information on their experiences and how they influence each other.

# An Experimental Approach to Dance Movement Therapy: Erma Dosamantes-Alperson

Erma Dosamantes-Alperson, an active clinical psychologist and dance movement therapist throughout the 1970's, favored the term 'movement psychotherapy' instead "because she [felt that] the latter can be mistaken for the body therapists which do not incorporate the emotions" such as physical therapy (Levy, 1988, p. 174).

Within Erma Dosamantes-Alperson's work, the idea of the 'bodily-felt level of experiencing' was explored, as well as the lack there-of. Dosamantes-Alperson believed that this was an area of the self that most people steer clear of because of its uncomfortable nature. She defined this concept within three benchmarks: "poor perceptual contact with one's body and its environment, blocking the open expression of an urgent need, and repressing an unacceptable reaction" (Levy, 1988, p. 174). This exploration was a continual key concept in her work and served as a steppingstone for other related therapeutic areas.

Erma Dosamantes-Alperson: receptive mode and action mode. Erma Dosamantes-Alperson's approach as a dance movement therapist explored two experimental ways of moving, the receptive mode and the action mode. The receptive mode is to draw attention to the inward concepts of movement concerning internal events. While working with the receptive mode, clients are prompted to pay attention to the stimuli they notice internally, "allowing sensations, feelings, images, and thoughts to emerge and flow naturally" (Levy, 1988, p. 174).

Observing the movement patterns of clients experiencing the receptive mode can be more difficult since their movements are considerably more subtle such as a shift in their breathing. When practicing movement while paying close attention to one's inner dialogue, there can typically be a less noticeable bodily outward connection. These movements described within the receptive mode are considered "shadow movements or internal-intrapsychic movements" (Levy, 1988, p. 174).

Comparatively to the receptive mode, the action mode looks closely at external experiences. When moving in this way, clients can provide their approach and method of handling external experiences involving the environment, objects and people around them. While exploring the action mode, clients are prompted to move with their eyes open, "moving deliberately and

exploring the surrounding space" (Levy, 1988, p. 175). After describing the fundamentals of dance movement therapy, I will now speak on the symptoms and observed behavior of attention deficit hyperactivity disorder that lend themselves to the integration of DMT.

# **Attention Deficit Hyperactivity Disorder**

Barkley (2006, p. 3) stated that attention deficit hyperactivity disorder, or ADHD, "is the current diagnostic label for children presenting with significant problems with attention" along with impulsive and excessive tendencies. ADHD is measured as one of the most frequent reasons as to why children are recommended to seek additional support for behavioral difficulties from a professional therapeutic standpoint and "is the most common neurodevelopment disorder of childhood" (Rowland, 2002, p. 162). A diagnosis of ADHD "occur(s) in 3-5% of children (Chhabildas, 2001, p. 529). This diagnosis is seen to most closely hinder "school-age children with serious impairments in both academic performance and social functioning" (Klingberg, 2005, p. 177). While many "previously thought that children eventually outgrew ADHD, recent studies suggest that 30-60% of affected individuals continue to show significant symptoms of the disorder into adulthood" (Harpin, 2005, p. 2). To more closely understand this diagnosis, it is crucial to consider when and how symptoms were discovered and treated.

# Early Findings

Among the first authors to document findings associated with ADHD in children are George Still and Alfred Tredgold beginning in 1902 (Barkley, 2006). Still thought that children that he worked with in his practice that were displaying typical symptoms of ADHD showed a flawed sense of 'moral control' behaviorally. To Still, moral control is associated with the idea of having positive intent for the collective, involving a connection between one's environment

and their awareness of self. This idea of having a sense of moral control was "believed to develop gradually in children; therefore, younger children would find it difficult to resist the stimulus to act on impulse than would older children" (Barkley, 2006, p. 4). This concept, in order to be clarified between children, infers the comparison of children having this difficulty to children behaving "typically". This comparison also would have to consider the varying environments between children.

George Still concluded within his studies that ADHD most frequently shows symptoms before the age of eight, showing signs in the early stages of childhood. The children that Still worked with were considered to "[pose] an increased threat to the safety of other children because of their aggressive or violent behavior" (Barkley, 2006, p. 5). Still concluded that a history of alcohol abuse, criminal offenses, the diagnosis of depression and cases of suicide are usual in relatives of children with ADHD which was later supported by future studies. Even though many of the cases that Still worked with had similar backgrounds, many were documented to have a 'typical' upbringing lacking these situations. Aside from their family's difficulties, some children with ADHD were also recorded in Still's work to have "a history of significant brain damage or convulsions, while others [with the same diagnosis] did not" along with "associated tic disorders" (Barkley, 2006, p. 5).

From 1970 to 1979, further research on attention deficit hyperactivity disorder took place, exceeding two-thousand works published before reaching 1980 (Barkley, 2006). In the early 1970's, "the defining features of hyperactivity or hyperkinesis were broadened to include what investigators previously felt to be only associated characteristics, including impulsivity, short attention span, low frustration tolerance, distractibility and aggressiveness" (Barkley, 2006, p. 9).

## Wender's Theory of MBD

Minimal brain dysfunction or minimal brain damage are now outdated terms often used early on when considering attention deficit hyperactivity disorder. Arnold Wender created his own theory concerning MBD and described the children diagnosed with this disorder along six considerations: motor behavior, attentional and perceptual-cognitive functioning, learning, impulse control, interpersonal relations and emotion.

When considering motor behavior, the main concepts of focus were documented as poor motor coordination and hyperactivity. While diagnosing young children, "excessive speech, colic, and sleeping difficulties were thought to be related to the hyperactivity" quality of the motor behavioral attribute of MBD (Barkley, 2006, p. 10). The main difference in Wender's diagnosis of MBD within this first consideration is the idea that some of the children who were being evaluated for MBD were "hypoactive and listless while still demonstrating attention disturbances...[where] such cases might now be considered to have the predominantly inattentive type of attention deficit hyperactivity disorder" (Barkley, 2006, p. 10). The short attention span and poor concentration ideas connected to MBD were the most noticeable symptoms "in the domain of attention and perceptual-cognitive functioning...[where] distractibility and daydreaming were also included...as was poor organization of ideas or percepts" (Barkley, 2006, p. 10).

The third domain within Wender's theory of MBD was the idea of having learning difficulties where the majority of the children observed were performing poorly in their academic work. A high number of the observed children also had particular "difficulties with learning to read, with handwriting, and with reading comprehension and arithmetic" (Barkley, 2006, p. 10). Impulse control difficulties, considered to be Wedner's fourth characteristic of MBD, included

the idea of "low frustration tolerance [which he described to be] an inability to delay gratification, antisocial behavior, lack of planning, forethought, or judgement, and poor sphincter control" (Barkley, 2006, p. 10). When considering disorganization or reckless body movements and behaviors, Wender included these concepts under the title of dysfunction.

Interpersonal relations, Wender's fifth characteristic of MBD, is the "unresponsiveness of [the children observed] to social demands [was considered to be] the most serious" attributes to in review under the idea of interpersonal relations (Barkley, 2006, p. 10). "Extroversion, excessive independence, obstinance, stubbornness, negativism, disobedience, noncompliance, sassiness, and imperviousness to discipline" act as only some of the details within this characteristic (Barkley, 2006, p. 10). The last domain within Wender's theory of MBD is the idea of emotional difficulties where the concepts of "lability of mood, altered reactivity, increased anger, aggressiveness, and temper outbursts as well as dysphoria" are included (Barkley, 2006, p. 10-11). The dysphoria in the children that Wender observed were noted to have "difficulties of anhedonia, depression, low self-esteem and anxiety... [along with a] diminished sensitivity to both pain and punishment" (Barkley, 2006, p. 11). These attributes that Wender names are reminiscent of Still's interpretation of characteristics involved in level of moral control. Wender went on to add to his theory of MBD by considering his six named characteristics to additional falls under "three primary deficits [of] a decreased experience of pleasure and pain, a generally high and poorly modulated level of activation, and extroversion" (Barkley, 2006, p. 11).

#### Douglas's Model of Attention Deficits

Virginia Douglas created her own model concerning hyperactivity while looking at the symptoms of attention deficit hyperactivity disorder. Douglas split her findings into "four major

deficits [including] the investment, organization and maintenance of attention and effort, the inhibition of impulsive responding, the modulation of arousal levels to meet situational demands, and an unusually strong inclination to seek immediate reinforcement" after completing tasks (Barkley, 2006, p. 13). Douglas's defining characteristics of ADHD led to further research of the topic across the following fifteen years.

In the early 1990's, a new set of diagnostic criteria was introduced into the fourth edition of the "Diagnostic and Statistical Manual of Mental Disorders". The criteria included the "evidence of symptoms' pervasiveness across settings, as well as the demonstration or impairment in a major domain of life functioning" (Barkley, 2006, p. 35).

#### Presentation of Attention Deficit Hyperactivity Disorder in Children and Adults

In adults as well as in children, attention deficit hyperactivity disorder presents as "problems with attention such as being forgetful, losing things, and organizational problems...[but] as the demands for planning increase with age, these difficulties become increasingly prominent over the life cycle" (Weiss, 2004, p. 27). When working with clients of varying age while utilizing dance movement therapy, it is important to be aware of the different ways that this diagnosis presents itself from client to client. The hyperactivity component of ADHD appears less plainly in adults as it does in children because of their natural differences in behavior. Hyperactivity shows in children with their tendency to jump, run or climb where this concept can be more closely observed in adults as "being a workaholic, feeling uncomfortable sitting through meetings, being unwilling to wait in line, and speeding while driving" (Weiss, 2004, p. 28).

With age, many of the early symptoms that children with attention deficit hyperactivity disorder are documented to have decline with the potential opportunity of insight and maturity.

For many adults, there is an added difficulty of finding beneficial and productive coping mechanisms for some of their symptoms. An example of this would be someone diagnosed with ADHD that finds difficulty in functioning within environments of less structure. A quick resolution to this problem would be to bring more of a routine to their day by strictly planning their time. For them personally, this may help them greatly but, in some cases, they may try to insist that others in their environment follow their individualized created schedule. This created habit of planning time may allow for the development of having less flexibility and adaptability to a change in plans or other more spontaneous situations, hindering the integration of their newfound coping strategy.

One of the main ideas associated with considering the differences for attention deficit hyperactivity disorder in adults compared to that of children is the idea that adults that want treatment for their diagnosis seek treatment where children ultimately do not have the same choice. Adults are able to note what areas of their life may be affected by their diagnoses while children may have a greater difficulty in identifying the areas of which they may need assistance in understanding and coping. Adults also have a harder time with following through on "implementing behavioral treatments that use rewards and consequences" (Weiss, 2004, p. 28). With the simple concept of a reward system, children are more responsive to it because of their parents being the ones who administer the gratification while an adult would have to figure out their own methods for themselves.

Another important detail to consider when looking at the differences in the presentation of attention deficit hyperactivity disorder in adults and children is the time of day where they are more impaired by their diagnosis. Both adults and children find difficulty in environments like their home and their work or school but may have varying opportunities to cope depending on

their locations. Adults working from home have a greater chance of more freedom and mobility compared to a more concrete office occupation. The addition of responsibilities for adults also hinders the ways of which they can cope. Children can return home from their education and find a more easeful approach to their additional responsibilities.

# Attention Deficit Hyperactivity Disorder Treatment

The considerably most well-known treatment for an attention deficit hyperactivity disorder diagnosis is that of prescribed medication to assist with presenting symptoms. The American Academy of Pediatrics states that "stimulants are generally considered safe medications, with a few contraindications" and that the potential "side effects occur early in treatment and tend to be mild and short-lived" (Berger, 2008, p. 1). There is continued research being done for patients who "do not respond or only partially respond to pharmacologic treatments, experience intolerable side effects, and are responsive to medications but seek additional modalities to help alleviate their symptoms" (Zylowska, 2008, p. 1). Even though ADHD treatment has often included prescribed medication, many parents have their own opinions regarding this method, resulting in other alternative methods to be considered (Berger, 2008).

In addition to the use of medications, behavior and cognitive therapy are other often practiced methods to aid symptoms of attention deficit hyperactivity disorder. While considering the potential benefits of these therapies, "behavior therapy that requires self-monitoring and self-control in order to be effective is unlikely to succeed with impulsive individuals who cannot self-monitor, delay gratification, or stick to a plan" (Weiss, 2004, p. 35). Even the use of cognitive therapy comes with its own limitations when "[requiring] application of higher-level thinking... [interfering with] behaviors that are impulse-driven and [are not] cognitively processed until after the fact" (Weiss, 2004, p. 35).

In the early 1990's, attention deficit hyperactivity disorder treatment began to be integrated within a school setting for students struggling with the related symptoms. "School-based interventions, including academic, contingency management, and self-regulation interventions, [have been] accosted with moderate to large improvements in academic and behavioral functioning" for these diagnosed students (Pfiffner, 2015, p. 548). In-school provided therapeutic practice has become a "first-line treatment [strategy] for addressing the educational and behavioral needs of students with ADHD" (Pfiffner, 2015, p. 548).

#### Movement Symptoms

When considering the possible work of dance movement therapy for attention deficit hyperactivity disorder treatment, the varying symptoms relating to movement are more closely observed. "Children with ADHD have been found to have a variety of motor-related dysfunctions [including] output-related motor processing dysfunctions, such as motor-decision problems, motor-adjustment problems, and motor preparation problems" (Tseng, 2004, p. 381). Many of these movement related difficulties tend to interfere with one's reaction time where "the time taken to prepare a movement seems to be prolonged in children with ADHD" (Eliasson, 2004, p. 19). Along with the many other symptoms of ADHD, "approximately half of all children [with this diagnosis] may have motor difficulties" (Pitcher, 2003, p. 525).

While delayed movement is a prominent symptom for this diagnosis, the concept of 'overflow movements' or hyperactivity is even more-so observable. "'Overflow movements' [is] defined as unconscious or involuntary co-movements not specifically needed for the completion of a task" (Levin, 2016, p. 19). These movements are most often observed while performing simple goal-oriented activities. This idea of 'overflow movement' contributes to "problems with

sensorimotor skills, coordination, and movement control... [which contribute to a difficulty with] executive function[ing] and self-regulation" (Levin, 2016, p. 19).

## Dance Movement Therapy with Attention Deficit Hyperactivity Disorder

After reviewing the history and fundamentals of both dance movement therapy and attention deficit hyperactivity disorder, I aim to share how DMT serves as a feasible treatment option for symptoms of ADHD. The integration of dance movement therapy with clients diagnosed with attention deficit hyperactivity disorder assists in the "[improvement of] motor function and [the reduction of] the behavioral and emotional symptoms" involved with this diagnosis along with other noted symptoms of the disorder (Grönlund, 2005, p. 63).

#### Laban and Kestenberg: Written Movement Observations

Laban Movement Analysis as well as Kestenberg's elaboration of the movement notation technique allows for an effective way of documenting observed movement of DMT clients (Moore, 2014). Having a codified method of notating also allows for the dance movement therapists to have a more clearly defined way of describing the movement observed while being able to note when movement patterns occur and other distinctive movement concepts (Moore, 2014). When considering the movement involved within a diagnosis of attention deficit hyperactivity disorder, this codified method of observation would aid the overall witnessing processes involved within the dance movement therapy application in treatment. While supporting clients of all ages, this observational method would particularly allow for the parents, teachers and other support personnel of a child with ADHD to be able to recognize the movement patterns of the child in a more specific and detailed way. This codified technique for observing could also be used as an additional assessment tool when identifying whether someone shows movement symptoms of ADHD.

#### Marian Chace and Building Community

Complications with building and sustaining relationships is often a difficulty for children with ADHD. The sense of community, group member integration, consistency in structure, as well as the invitation of self-expression within DMT practices allows for those struggling with connection to exercise this growing skill.

The dance movement therapist, Marian Chace, brought the use of a circle within the dynamics of her DMT group sessions (Levy, 1988). In formal dance training classes as well as in a school classroom setting, the most frequent typical formation of the class is for the instructor to be at the head of the room while students place themselves in a space facing the direction of them. This creates the dynamic that the instructor is superior to the students under their direction as well as an unequal relationship between the students at the front of the room and the students at the back. The inclusion of the formation of the circle allows for the participants in DMT groups to be along the same plane as all other participants as well as the dance movement therapist, granting a more equalized relationship between client and therapist. The formation of the circle also allows for all participants to see each other throughout the duration of the group, supporting a more attentive environment of engaging participation (Levy, 1988). This integration of the circle further supports the growing skill of building and maintaining a sense of community for participants with ADHD.

Along with Chace's integration of a circle formation, other aspects of her DMT group codification that aids itself to clients with ADHD is her application of a clear and concise structure. People struggling with symptoms of ADHD can tend to find uncertainty and a lack of routine to be off-putting and difficult to maneuver. Chace's codified DMT group dynamic aids itself to the needed structure for someone with ADHD while leaving space for expansion and freedom

within the dynamic itself. Participants coming into a DMT group session following Chace's format can always expect a clear beginning, middle and end to their group in the form of a warm-up, the theme development, and the closure.

The use of mirroring, a movement technique that asks partners to move while facing each other in a unified dance, naturally switching turns as the leader and the follower allows for clients to further gain a sense of community and connection while feeling as though they are being 'seen' by their partner and possibly others when practiced in a group setting. The integration of this movement exploration within the Chace Technique further supports building a sense of community. Mirroring allows clients with a diagnosis of ADHD the opportunity to reinforce these skills, tap into their own inner and outer movements, as well as notice and try-on the movements of others. In addition, "mirroring [enhances the] emotional understanding and empathy for others... [involving the imitation] by the therapist of movements, emotions, or intentions implied by a client's movements" (McGarry, 2011, p. 178).

#### Susan Loman and the Practice of Attunement and Kinesthetic Empathy

For clients with ADHD, specifically children, their feelings can often show themselves more frequently than for others not diagnosed with this disorder that can often interfere and influence their everyday life. As a child, it is already difficult to recognize and manage one's own feelings while also attempting to understand the feelings of others. Susan Loman's use of attunement and kinesthetic empathy in her DMT practice would support and elaborate on the skill of understanding one's own emotions as well as the motions of others for clients with ADHD (Levy, 1988). These practices intertwined within DMT would further support the need for community for people with ADHD and allow for an in-depth understanding of empathy through movement.

Loman specifically used attunement and kinesthetic empathy when noticing the movement between child and parent which would additionally aid clients with ADHD (Levy, 1988). For many diagnoses, there can sometimes be a disconnect between a parent and their child diagnoses with a disorder that the parent does not have personally or does not have experience with. This lack of understanding can lead to complications in the parent-child relationship as well as the parent being able to effectively and productively support their child's needs. Utilizing attunement and kinesthetic empathy with parents and their child with an ADHD diagnosis while in a DMT setting allows for the parent to gain a better sense of their child's feelings, further unifying and supporting the needs of an ADHD client.

# Erma Dosamantes-Alperson

Self-regulation as well as self-awareness act as two leading difficulties within the diagnosis of ADHD. Dosamantes-Alperson's dance movement therapeutic approach with receptive and action mode allows for a better understanding of the inner-self experience (Levy, 1988). The receptive mode allows for movers to gain a better sense of their internalized experiences and emotions while the action mode focuses on these aspects but externally (Levy, 1988). Moving within the receptive mode as a client with ADHD would allow them to look deeper into their own feelings while communicating them to the dance movement therapist present. This would grant the dance movement access to these feelings for the client to continue to work through and take note of (Levy, 1988). While moving through the action mode while diagnosed with ADHD, the mover and the dance movement therapist would have the ability to notice how the client experiences their environment, objects and other people around them. These observations and realizations noted while moving through the receptive and action modes would shed light on the areas of

which clients with ADHD understand and lack an understanding in their own ways of functioning internally and externally, these findings would then aid their processing of self-regulation and self-awareness difficulties brought on by their ADHD diagnosis.

# Current DMT with ADHD Findings

Even with a lack of research about dance movement therapy with clients with attention deficit hyperactivity disorder, a few studies stand to support DMT work with ADHD on a broad scope. While considering the idea that attention deficit hyperactivity disorder is "one of the most common behavior disorders of childhood...mental health and school practitioners are increasingly faced with the challenge of assessing children and adolescents who might have ADHD" (Shilpa, 2015, p. 19). A study conducted by Shilpa (2015) tested the effectiveness of dance movement therapy on this very population with results favoring this practice as an effective form of therapy. "All parents [of the children involved in the study] agreed that their children were actively and happily participating in the [dance movement therapy groups]" while wanting to continue to send their children (Shilpa, 2015, p. 22).

This study also concluded that all of the children that participated gained a greater sense of confidence while their parents also shared that they would recommend this practice to others. "Among the parents, 80% strongly agreed that their child started to perform daily activities on their own, developed patience in which [they] waited for [their] turn in line and had improved social relationship[s] with peer group members" (Shilpa, 2015, p. 22). Additionally, "60% of the parents strongly agreed that the child improved in communication skills and the time provided for [dance movement therapy] was adequate" (Shilpa, 2015, p. 22). In addition to testing the effectiveness of dance movement therapy with clients with ADHD, the Shilpa (2015) study also drew the conclusion that "there was an improvement in the ADHD assessment scores done by

the teachers and parents for children, who were exposed to DMT", further proving the benefits of dance movement therapy with attention deficit hyperactivity disorder (Shilpa, 2015, p. 23).

#### **Discussion**

When reviewing the several dance movement therapy methods while comparing them to the symptoms found in clients with an attention deficit hyperactivity diagnosis, it is important to consider the potential benefits of putting them together. The structure of a dance movement therapy session or group directly supports and serves the need for just that, structure, for these clients. With the wandering minds of clients with attention deficit hyperactivity disorder, it is crucial for them to instill a sense of order into their everyday lives. Dance movement therapy offers a process that caters to this need while also allowing for a sense of freedom within the movement expression experience.

Alongside structure comes the additional invitation to move freely while presenting the concept of self-regulation. Many people struggling with this diagnosis have difficulty regulating and maintaining their needs which then results in dysregulation. Dance movement therapy offers an approach to take a closer look at when one's body needs to outwardly express its inner experience, allowing for participants to gain a better understanding of what their bodies may need and when.

By taking a closer look at the history and development of both dance movement therapy and attention deficit hyperactivity disorder throughout my thesis process, it is interesting to note the lack of research and documented treatment of bringing them together. The information provided was searched around phrases associated with the movement symptoms of ADHD rather than the diagnosis itself. So much of this diagnosis is surrounded by the movement of the body where it almost seems obvious to utilize this therapeutic method for clients handling symptoms.

When considering the many dynamics and qualities of dance movement therapy working along-side clients with this diagnosis, several opportunities for body awareness and body movement observation, as well as self-regulation come into play. Outside of my research, additional steps that could be taken would be a codified method of dance movement therapy specifically created to serve clients with the diagnosis of attention deficit hyperactivity disorder. The layers of dance movement therapy that exist currently could be beneficially altered and tailored more towards this population in order to serve these clients in an in-depth way.

I considered the research question of how dance movement therapy could productively benefit, and influence clients diagnosed with attention deficit hyperactivity disorder which is an area of focus that has only been lightly explored. I looked back on the development of dance movement therapy methods to gain a greater perspective of the potential aspects of different techniques to then use with these clients. To further understand this diagnosis, I looked at the early findings of the diagnosis itself as well as the presenting symptoms within varying age groups to then closely consider the individual treatment methods that would be most impactful to utilize. Through my research, I have learned how much more there is to examine when looking at the mending of dance movement therapy practices serving this population and look to develop my own methods when presenting this work moving forward. I hope that by taking a closer look at dance movement theory techniques alongside the symptoms of attention deficit hyperactivity disorder, that other clinicians, like myself, will consider this therapeutic process as a potential method when working with this population.

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In the judgment of the following signatory this thesis meets the academic standards that have been established for the above de-

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