

## Autism Spectrum Disorder: A Case of Misdiagnosis

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**Abstract** Children who exhibit autistic features, or who are diagnosed with Autism Spectrum Disorder, are not necessarily autistic. Some of these misdiagnosed children employ autistic defenses to protect themselves against abuse or neglect, keeping outsiders, even those close to them, at a safe distance. This article reviews current research to better understand how etiology and individual factors have an impact on a child's integration and understanding of relationships. The use of dance/movement therapy identified Lisa's interactive patterns and focused on providing her with a safe environment to experience relationships and to reach her maximum potential.

**Keywords** Attachment · Trauma · Autism · Dance · Parenting · Mother–child · Object relations · Spectrum disorder · Defenses · Therapy · Child development · Milestones · Diagnostic criteria · Autistic defence · Self regulation · Mind–body connection · Single subject design · Case-study · Special needs · Movement

The etiology of autism continues to be debated in the current literature on the disorder (Fombonne, 1999; Gupta, 2004). Prevailing trends identify causes ranging from biological pre-determinants to mercury exposure (Adams, Romdalvik, Ramanujam, & Legator, 2007; Currenti, 2010). This article focuses instead on an etiology of the symptoms of autism that stem from relational attachments and early developmental experiences (Oppenheim, Koren-Karie, Dolev, & Yirmiya, 2009). In the case discussed here, Lisa (not her real name) took a defensive stance by adopting autistic behaviors to better protect herself from early trauma. Her case is but one of

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many instances in which a traumatized child is misdiagnosed as autistic because of manifesting signs of behavioral problems.

Lisa, a six-and-a-half-year-old Asian girl, was diagnosed with Autism Spectrum Disorder by her local regional center when she was two-and-a-half. She was prescribed 0.5 mg of Dexedrine for inattention and 1.5 ml of Risperdal solution for her symptoms of sleeplessness and participated in 1 hr 30 min of dance/movement therapy per week. The initial concerns in therapy were Lisa's relational patterns with others and her self-injurious behaviors. She presented with a lack of interest in engaging with and relating to peers and adults in a positive manner. When placed in an unfamiliar or non-preferred location she immediately started hitting the walls with her legs and arms. She bit her wrists and also attempted to pull her hair. She would raise her arms into the air and shake repetitively, uttering screams and cries with no clear verbal language.

Lisa was born in Korea. Her mother was 28 years old and had a full term cesarean delivery. Her medical reports describe no history of alcohol or drug use during pregnancy. Lisa had a typical birth and development. As a baby, she had no difficulty with sleeping or eating patterns. Her parents moved to the U.S. with her when she was 5 months old in order to live near her paternal uncle. Korean was the primary language spoken at home. Her initial psychological reports state that she "uttered" *oma* (mother) before her twelfth month. Her health remained stable with no history of allergies or seizures, and she had intact hearing and vision. Lisa had minimal exposure to other children during her development, and she appeared to refrain from interactions with others, preferring to regularly play by herself. Lisa and her family lived together until her parents separated after 4 years of marriage.

According to her initial assessment, she presented with no tendencies towards aggressive behavior or tantrums. It was reported that she responded to, but did not initiate, affection from her family members. Her report specifies that her father had a history of quiet demeanor and withdrawn mannerisms and that he "minimally participated and seemed uninvolved," in Lisa's care. There was no reported history of developmental, psychological, or mental illness within the family. Lisa was described as shy, with characteristics similar to her father.

Days after Lisa's parents separated, her mother returned to Asia, her whereabouts still unknown. Her father became self-employed, working long hours, leaving Lisa's aunt and uncle as her sole caretakers.

A second psychological report indicated that Lisa's father became more neglectful and also physically and emotionally abusive. The report stated that he would use the young child as a "pawn" in order to get his brother, Lisa's uncle, to do things for him. He would also fight aggressively with her uncle in front of her. Lisa's father eventually left her and her aunt and uncle for unknown reasons. The uncle placed a restraining order against the father for their protection. Lisa was then described as exhibiting aggressive behaviors, such as crying, screaming, and hitting herself and others. Her uncle died of cancer after she turned 5 and Lisa was placed with her elderly aunt as her primary care-provider.

After losing her uncle, this psychological evaluation indicated that Lisa presented with high levels of distractibility, inattentiveness, and difficulties with transitions. She exhibited self-injurious behaviors. She would bite her forearms, scratch herself

and others, throw her entire body on the floor, and bang her hands and legs against the wall. She presented with stereotyped movements of rocking, spinning in circles, and stomping her feet on the ground as she paced. She gazed at her toys during this evaluation and carried a favorite stuffed animal with her. She was observed ignoring others and tending to stare at objects and lights in the room.

By examining Lisa's childhood trauma as a defensive stance, it was possible to see how her autistic-like behaviors stemmed from life events. Rather than perceiving relationships as engaging and safe, she interacted and related negatively to others. She defended herself by creating distance. Although aware of people and her surroundings, she purposely turned away from them in self-protection. Looking into Lisa's background and early abuse enabled this therapist to view her not as a collection of symptoms, but as a whole person in need of a healthy attachment.

Lisa's behavior sent out a puzzling message. Were her lack of verbal and social communication skills to be construed as a behavioral deficit? Or were her actions protective mechanisms? Lisa's family and community around her considered them disruptive and saw her "self-stimulatory" behaviors as fitting the criteria for a diagnosis of Autism Spectrum Disorder, even though several psychological and developmental reports extensively portrayed her traumatic history. Lisa's self-abusive, aggressive, and isolative behaviors appeared only after she experienced the abandonment, abuse, and neglect of her family members. Although her actions appeared to be attributable to autism, as observed in other children with similar behaviors, they were rather a means for her to integrate diverse learning experiences. Lisa's therapy revealed that her behaviors and symptomatology fit trauma parameters; she was not autistic but used autistic defenses (Tustin, 1990).

## **Differentiating the Diagnosis**

Autism Spectrum Disorder is a common diagnosis for children who present with impairments and abnormalities in development, social contexts, and communication and who seem to be disconnected from a wide range of activities and typical interests (American Psychiatric Association, 2000). Autism is set on a spectrum because children present with a range of symptoms and needs depending on their age, development, and presenting features (American Psychiatric Association, 2000). Autism is typically characterized by a lack of nonverbal communication skills, such as eye contact, facial expressions, body postures, and even gestures. Children diagnosed with autism often have marked difficulties in social contexts, such as making friends and relating to others (Volkmar & Pauls, 2003). Similarly, these children have severe deficits due to restricted and stereotyped behaviors (Volkmar & Pauls, 2003).

Children with autism have severe disturbances in sensory processing. Their language development is impaired, and they present with minimal to no language at all or unusual speech patterns, such as repetition (Volkmar & Pauls, 2003). They are fascinated by specific toys or more interested in the parts of toys than engaging in functional play. They experiment with visual perceptions of a toy by looking at it from the corner of their eye, flicking it, rocking it, and moving it repetitively. These

children have a marked impairment in the prefrontal cortex, and their visual and motor coordination are affected (Muller, Cauich, Rubio, Mizuno, & Courchesne, 2004). Studies on autism continue to search for commonalities among family prevalence rates, behavioral patterns, and presenting characteristics (Bolton & Rutter, 1990). However, a single causal factor has not been identified. Moreover, the range of characteristics in each diagnosed child varies, making understanding this pathology even more difficult.

Research on autism has largely examined developmental and biochemical causes of the disorder, rarely focusing on the psychosocial stressors that can influence a diagnosis. Yet environmental factors are critical in development and are important to consider when making a diagnosis (Rodier & Hyman, 1998).

A family's emotional and psychological deficits play a critical factor in a child's development. Autism may be related to a mother's exposure to environmental stimuli prior to the birth of her child (Koren-Karie, Oppenheim, Dolev, Sher, & Etzion-Carasso, 2002). The mother's predisposition, psychological health, and situational stressors also influence an infant's experiences (Glasson, Bower, Klerk, Chaney, & Hallmayer, 2004). Studies by Glasson et al. (2004) found that the advanced age of a mother, traumas such as bleeding during pregnancy, certain medications, and even birth order can increase the likelihood of having a child with autistic symptoms. Children who have experienced early trauma, such as neglect and physical and emotional abuse, present with characteristics meeting the criteria for autism (Nader, 2008). Children with early learning disabilities or medical complications such as seizures, ear infections, and birth defects, present with similar features of social withdrawal, repetitive behaviors, and limited speech (Ceci, 1986; Datta et al., 2005; Ellis, Schnoes, & Roberts, 2010).

In Lisa's case, we can see how the diagnosis of Autism Spectrum Disorder concealed her true deficits and traumatic experience. It is this author's hope to draw attention to these other children with similar features—those who are traumatized, experienced medical complications, or have learning disabilities—so that they may be understood for the experiences they have lived, rather than the symptoms they display, and treated more effectively.

## A Second Look at Autism

Early research on the origins of autism focused on abnormal parent–child interactions (Bettelheim, 1967). However, this approach has been abandoned in favor of one that examines behavioral changes and abnormalities presented by the child with autism (Tustin, 1990).

A primary autistic process has occurred when a child is left with a rigid form of relating recognized as “pathological autism.” The abnormal primary autism is a persistence of autism due to either a gross or partial lack of essential nurturing resulting from a severe deficiency in the “nurturing figures,” the child's impediments, or a combination of both (Tustin, 1995).

These kinds of early connections with the mother tend to provide insufficient framing of a child's ego development and can promote abnormal and premature functioning. A child will function in adaptation to the neglectful mother response and experience needs in a hypersensitive manner. Cognitive stimuli and the meaningfulness of experiences are important to consider in these instances. A child will have limited empathic relations and have no means to relate or experience others in the environment. The child will not understand or relate to another person's sadness, anger, frustration, or even excitement. This is the "theory of mind" hypothesis, confirming the child's lack of interest in the world (Volkmar & Pauls, 2003).

Viewing the child's behavior as a defensive stance reveals how repetitive behaviors to seek sameness serve as a means of protection. A child needs to understand, anticipate, and familiarize their world in order to avoid any unexpected frustrations.

Since as clinicians we know that long before a child reaches the age of five the patterns of interaction between him and his mother range vastly in diversity, from smooth-running and happy to being filled with friction and distress of every kind and degree, and are also apt to persist, the more we know about how they originate the better (Bowlby, 1989, p. 249).

There are many types of trauma, including sexual abuse, physical abuse, and emotional abuse. When an infant enters the world he or she is immediately thrust into the world of the senses and movement. This immediate adjustment period to external stimuli is known as the sensory motor phase of development, when an infant has to regulate and organize his or her surroundings to become united again with the mother, this time in an external environment. When a child has difficulty with this transition, a threat is posed to his or her development (Herman, 1997). The child must then compensate for the traumatic experience—an unconscious process—by using psychological defenses as a means of protection (Herman, 1997). If the child does not protect against harmful influences, he or she will have limited resources to cope with and function in the world. Separation (or abuse) only intensifies a child's states of distress and insecurity, and inhibits his or her effectiveness to communicate with others. These early disruptions impact a child's future relationships (Tustin, 1995). This is especially so when the trauma or loss directly involves the primary attachment figure, the mother. A child in these situations becomes increasingly overwhelmed and healthy development throughout childhood and into adulthood is affected (Pickover, 2002; Siegel, 1999).

Bettelheim (1967), whose thinking has been widely challenged, may nonetheless have correctly identified unsatisfactory experiences and non-responsiveness from a primary caregiver as possible causes of some autistic types of behaviors, such as when a child isolates himself or herself from the environment. In these cases, the child does not initiate interactions with others, because he or she experienced destructive and abusive situations and parenting in previous attempts.

Even though the child may have had some earlier positive interactions, he or she continues to enter into frustrating situations in which he or she cannot succeed in obtaining satisfaction and gratification from others. The child in these situations is

unable to satisfy parental needs. Parents, in turn, may become frustrated and view the child as having severe deficits and inabilities. These dynamics can undermine a child's psychological wellbeing and lead to isolation from the parents (Pickover, 2002; Siegel, 1999).

Lisa's fears of her environment molded her behavioral and symptomatic features. Lisa experienced a complete disregard for her developmental progress, and had limited nurturing from her parents. Since trauma was instrumental to the way she connected with others, she had minimal understanding of how to interact with the external world. Lisa presented features clearly defined in a traumatized child: she was self-injurious, hitting herself, banging her head against the floor, and throwing her body against the wall. Ziegler (2002) discussed the occurrences of self-abuse by children. He recognized that children often seek abusive situations since they relate and understand existence only within those parameters. If they are not abused in interactions with others, they will often abuse and inflict pain upon themselves. These children do not internally accept a world that provides anything other than the hurt they have experienced since birth.

In addition, an abused child can enter into hyper-aroused states, becoming overly aware of his or her surroundings, behaving with resistance. The child is then often viewed as defiant and aggressive as he or she takes on the process of fight or flight (Ziegler, 2002). Abused children have the ability to adapt to their surroundings by means of defenses, protecting themselves from experiencing further trauma.

Bearing this in mind with respect to Lisa's case, it became clear that she needed emotional and psychological support. The goal was to lift the "protective shell" she had built to secure herself from additional trauma. Lisa was able to work through her guardedness to communicate her early distress and traumatic experiences when they were given continued attention during therapy. As she responded to the catastrophic threat of her many stressors, therapy was necessary to repair her early experiences and provide a healthier, more stable environment for growth and nurturing.

## The Intervention

Lisa participated in 1 hr 30 min a week of dance/movement therapy, which integrated a therapeutic approach meeting Lisa's needs and incorporating playful interventions that addressed nonverbal communication.

Human beings are born expressing and communicating through movement (Ostrov, 1981). Dance/movement therapy focuses on the whole person, rather than the symptoms alone. It allows children to express their movements as controlled or uncontrolled in a place of acceptance and creativity. It provides a platform on which the challenges of early trauma and a diagnosis of autism can be transformed into positive experiences and growth.

The practice of dance/movement therapy is based on the premise that visible movement behavior of the individual is analogous to the intrapsychic dynamics. A related premise is that troubled life experiences, including

earlier memories of a preverbal nature, are held in the body, as a type of body memory, which may be accessed through body movement (Coulter & Loughlin, 1999, p. 60).

In one of Lisa's early therapy sessions, she built a barrier between herself and others, gathering shoes, blocks, and articles of clothing in a corner of the room. She built this barrier every time she was approached. She faced the corner of the room and held on tightly to a flower petal she brought with her. During this interaction, she displayed an ability to defend against the intrusiveness of others. She exhibited an emerging awareness of her own body in relation to the outside world.

Reviewing the videotape of this session, this author (Lisa's therapist) realized that Lisa's interactions did not adequately move through the three-dimensional planes which help coordinate our movement, development, and integration with others—the horizontal, vertical, and sagittal planes (Lewis & Loman, 1990). For example, from previous interactions we knew that adults would hang over Lisa, tickle her and play peek-a-boo games which interfered with Lisa's personal space. She would be held and moved around from one activity to another. These behaviors did not provide a safe environment in which Lisa could learn how to move from the horizontal to the sagittal planes. The relationship between movement and communication correlates significantly with growth and development (Lewis & Loman, 1990). The way an individual uses movement planes can be seen to parallel his or her psychosexual stages of development.

The horizontal plane is identified at the same place as the oral, symbiosis, and differentiation stage of development. This plane correlates to a mother's initial relationship with her child, rocking horizontally, side to side, for soothing and feeding. Lisa never experienced this place of mutual attunement, regulation, and shared existence with her mother.

The vertical plane corresponds to the anal and rapprochement phase of development (Amighi, Loman, Lewis, & Sossin, 1999). The vertical plane relates to a child's progression to vertical movement in walking and in developing ego strength. Even though Lisa could walk and stand upright, she would benefit from opportunities to increase her confidence, freedom of choice and the continued mastery of her developmental milestones.

Lastly, the sagittal plane develops during the urethral stage, when the child starts to have an understanding of object constancy. This plane of integrated movement can be seen, for example, when two people meet in a relationship of trust and intimacy. The sagittal plane, with its forward and backward motions, relates significantly to how Lisa had been traumatized, abused, and invaded. Violating others on the sagittal plane can be traumatic and harmful to emotional, physical, and developmental growth (Amighi et al., 1999). Had Lisa developed appropriately through these three dimensions, she would have benefited from healthy developmental attachments.

Viewing Lisa's relationships in light of the theory of planes suggested the metaphor of a fairy tale princess and her castle. In order to build a castle, bricks must be laid horizontally. The horizontal dimension fosters the creation of boundaries that in turn help create a "holding" environment. The walls are raised

into a vertical dimension. They help keep intruders out and give prominence to the structure, along with signaling strength and endurance. Finally, the castle needs a drawbridge, which can be raised and lowered to allow only the finest and safest suitors in to see the princess.

After the realization of this archetypal metaphor, the therapy process shifted. The therapist started each session by emphasizing movement from the horizontal through the vertical plane. Lisa began to experience the safety and process of trusting in relation to the therapist rather than defending herself from sagittal intrusions.

The following presents three sessions with Lisa, extrapolated from a nine month period, which correspond to the initial, middle, and transitional phases of therapy. Each phase also correlates to a particular plane introduced and expressed in therapy. For the purpose of clarity, consistency, and context, the personal pronoun “I” is used in place of “the therapist.”

### Initial Phase: The Horizontal Plane

In the beginning, Lisa avoided entering the therapy room. She avoided eye contact with me and threw herself on the ground. After having been given some time to transition, however, she developed a trust that allowed her to enter. I immediately made interventions regarding her particular needs. I asked Lisa’s caregiver to bring her to therapy on time and to help her transition into the room. The regular schedule and consistent process of transition enabled Lisa to anticipate, familiarize, and understand her surroundings. Considering what the original videotaped sessions revealed about Lisa’s movements, I decided to start all therapy sessions by building a castle and also to incorporate mirroring of Lisa’s body movements and nonverbal communications (Levy, 1995). Moreover, I identified the use of her transitional object, the petal.

When Lisa entered the room she was distraught; she slammed her hand on the door and paced back and forth saying, “No.” Her tone resembled the sound of her caregiver’s voice. She signed for me to open the door and made direct eye contact during her gestures of communication. I spoke to her in a soothing voice to prompt her that the therapy session would last 50 min and that we would stay in the same room every week. She quickly turned away and walked to the farthest corner of the room. Lisa looked at me and then immediately started building her parameters. She positioned herself in the right hand corner of the room and created a half circle shape with all the cushions, shoes, and blankets directly around her outer frame. She looked like she had a protective barrier around her as she sat inside her castle walls.

After observing Lisa build her castle, I went directly to the parallel corner of the left side of the room and positioned four large blocks around myself. I mirrored the frame, dimensions, and style of her castle, and we sat in our individual castles watching one another, as neighbors. Lisa made an initial glance towards my direction. She had a smirk on her face and looked quite comfortable for the first time in the session. I noticed that she was holding a brown, dried-up flower petal. Lisa had brought a petal to all her prior sessions. Her caregiver reported that it symbolized her memories of her deceased uncle. Her uncle used to hand her a

flower petal when they played together outside. He would pick a flower and hand a petal to Lisa; she in turn would touch it then pick it apart.

I expressed to Lisa what the petal represented to her. I looked at her as she turned it between her thumb and index finger and followed her rhythm while chanting, "We have this petal, and so we remember him." I inserted her uncle's name into the song to allow her to understand and recognize the connection between this object and her relationship to him. The song served as a playful interpretation of the purpose of the petal, it also provided understanding, acknowledgment, and acceptance of her experiences, her recent loss, and their connection to the petal.

Lisa stared at the petal, turned it in her hands, and then looked directly across the room at me and stopped turning it. I looked back at her and stopped singing. She glanced down and started turning the petal. I again started singing. This back and forth continued for about 10 min, Lisa slowly initiating when she wanted the singing and when she wanted it to stop. She started increasing her energy level, turning the petal faster. Her face became softer and smiling, and she began to move in a subtle bouncing rhythm to the singing. By the end of 10 min, the rhythm of the song had changed, and I added a drumbeat by tapping on the blocks that surrounded my castle. Lisa then stood up and, placing the petal inside her castle, walked away towards the door. Yet instead of leaving the room, she tapped her hand on the door, then on the ground and on the wall next to a mirror.

I asked her care-provider about her banging patterns, and she said this behavior started after Lisa's uncle died. I realized that this behavior was a way for her to communicate her feelings and thoughts nonverbally. I watched and continued to hum the song as I slowed down the rhythm. I then moved outside my own castle, stood on the side of Lisa's, and began mirroring her nonverbal gestures by tapping my hand on the wall. We moved around the entire room, banging and tapping on all the various surfaces. Using a technique called "amplification," I exaggerated her nonverbal movements to magnify her feelings. I used more force, rhythm, and sound to bring Lisa to acknowledge our tapping and to steer her attention towards my accompaniment. Now and then she would make direct eye contact, and we would tap simultaneously. At other times I followed her tapping directly in order to hear and feel her rhythm in my body and thus replicate her expressive quality. Lisa displayed an increased awareness and interest in playing and engaging with me.

The therapeutic alliance emerged when Lisa and I went on opposite sides of the mirror on the wall. She initiated tapping her hand on the wall, while looking at me through the mirror, confirming what she saw. I followed her movement, then moved towards the center of the mirror, beginning to tap the sides of my body, the left side then the right. I continued moving, singing, "We tap, tap, tap. We tap on our legs. We tap, tap, tap, together you and me." This song identified what was happening, brought unity to the movement, and recognized both our parallel play and separateness. Lisa smiled and stayed engaged throughout the entire sequence. This was the first sign of imitation that Lisa had shown with me. The interaction did not involve touching or intrusions into her personal space and so served as a beneficial way to create trust, to recognize self in relation to an other, and to serve as a means of empathic communication. After several tapping sequences Lisa moved away, went back into her castle, and then returned outwards into the room. I continued to

mirror these movements, also separating then reconnecting. This continued for the remainder of the session until I prompted her that it would end in 5 min. We slowly began to deconstruct the castle walls, clean up, and then we said goodbye.

Reviewing this session and its meaning gave me an overwhelming sense of progress. Lisa had imitated for the first time, and this came without force or demand. The transitional object, the petal, is especially relevant to her presenting behavioral fixation. Children with autism typically exhibit self-stimulatory, repetitive behaviors. Lisa's preoccupation with holding, tearing, and examining her petal was thus seen as such, an inappropriate behavior to be diminished. Yet it did not appear to be the kind of self-stimulatory behavior that defines autism. Rather, it represented a transferring of her internal feelings outwards onto her transitional object. Lisa began fixating on the petal only after her uncle passed away. Her identification with the petal, almost becoming symbiotic with it, served as a means to self-sooth.

A child may depend on a transitional object to feel reconnected to the primary caregiver and to be reminded that everything is connected, safe, and within his or her control. An insecure attachment or unhealthy development makes it difficult for a child to integrate external experiences with his or her internal world (Winnicott, 1971), making a transitional object necessary.

In the initial phase of therapy, Lisa carried the petal in her hands. It was dried and crinkled. She pinched it tightly between her index finger and thumb as she twirled it in a rapid motion. Before later engaging collaboratively with the object, Lisa had full control over the petal. Only she could tear, touch, or possess it. Lisa would not seek comfort when distressed and would even destroy the love object, the petal, so that she felt in control and protected from experiencing any unexpected loss or trauma.

The transitional object, within the frame of the clinical setting, consistently reflected Lisa's needs and internal conflicts. When Lisa was insecure or frustrated, she immediately reverted to the controlled experiences with the object. However, in sessions where she was confident, secure, and successful in engaging with me, she did not focus on this symbol. The use of the symbol in sessions with play themes and interpretations allowed for acceptance and exploration. I created a new response to Lisa's behaviors, a place unlike her internal world or her history of trauma and neglect. Once a more consistent level of trust formed between us, Lisa developed the ability to share the petal with me. Acting cautiously and giving her space, I joined her in exploring and existing with it. At times, I even asked to hold the petal, and Lisa gradually let me. In some sessions, Lisa was able to function without the presence of the flower petal. I used repetition, familiarity, play, and appropriate proximity to consistently mirror a positive attachment for her. I was able to see her for the first time, and in turn she was able to see and be with me.

#### Middle Phase: The Vertical Plane

After 3 months, the treatment sessions became more routine and familiar to Lisa. Each session started with her entering the room and creating her space in one of the corners. The session would then develop as I introduced new sensory activities for exploration. During this time Lisa was also introduced to her first symbolic play

activities. In one session, she entered the room and went into her castle. This time, however, she took my shoes, pillow, and all my blocks and placed them as additional walls surrounding hers. As she moved across the room, I watched and narrated her actions. I continued talking while Lisa began to laugh and look over at me. She would watch my reactions, laugh, and then stand up and take more items. She appeared to be playfully testing limits, and she decided not to give me what I wanted. I playfully challenged her and took items back. Having worked parallel over the past 3 months on a more horizontal plane, I gradually shifted to the vertical dimension of upright decision-making and communication. I did not intrude too far into her personal space and only made contact with the outside items of her castle. We moved from one side of the room to the other, each of us quickly stealing items from the other's pile, laughing as we built our separate castles.

To provide Lisa with continuous use of her transitional object, the flower petal, I placed a bag of petals in my office cabinet to be used during our work together. During this session, Lisa requested more flower petals by pointing up to the cabinet. I reached up and grabbed two, one for her and one for me. I then started chanting the petal song again. By this time in the therapy, Lisa had begun to accompany my singing with some humming and other sounds. When I stopped singing, she would make a sound for me to start again, rather than make eye contact.

We sat next to one another, our castle walls now merged, forming one larger barrier around the two of us. I then started following her lead as she tapped on the wall and I "echoed" her movements. I initiated tapping on our head, stomach, and legs with musical instruments, called shakers. Lisa was able to follow my movements. I then made contact, by initiating tapping our shakers together. As the two shakers met in the air, Lisa smiled at me, gesturing for more.

This interaction was the first phase of moving from the vertical plane into the more back and forth sagittal dimension. Since our engagement was based on the sequential stages of personal space in movement, the sagittal relationship in space was created by using a prop that was nonintrusive and appropriate for her level of comfort in our interaction. I was aware of Lisa's mutual feelings and purposeful engagement, which did not come from forcing her or expecting her to interact. In this safe interaction, her energy level increased and her laughter grew louder. This activity appeared enjoyable as we connected through our movement and music in a safe and collaborative manner.

Lisa then stopped abruptly and took both instruments away from me. I watched her movements and then made a verbal interpretation, saying that she had just taken away my toy. She smirked in response and continued to play by herself. She then looked at me and threw the shaker in my direction. She appeared to be asking me to play with her. I played her game and took it back, and then she grabbed it away again. Lisa appeared to enjoy this chase game. This was significant in view of her history and experiences of having things taken from her. Now, she had the resilience and courage to take something away from me.

Since I had already introduced symbolic play in the sessions, I felt the time was right to create a symbolic interaction with Lisa. Previously, Lisa had started to understand rocking and feeding the baby and would join me in these activities, even

initiating for me to hold and rock her like a baby. I took out a baby doll and placed her in front of Lisa.

The doll was used to relay the emotional connection that had been occurring between us. I pretended to have the baby doll take away Lisa's instruments and start interacting and playing with me. Lisa watched the doll and me and grabbed the shaker back. She showed curiosity, jealousy, problem solving ability, and understanding through the entire interaction. She remained engaged, continuing to show jealousy towards the doll. She watched as I rocked the baby, and then turned sad, placing her head under a pillow. I moved close to her and asked what was wrong, interpreting her unfolding feelings for her. I narrated what had happened in the past 10 min, then had the baby doll pretend to commiserate with Lisa over her feelings. Lisa made eye contact with the doll and touched its face, eyes, mouth, and hands. I moved it so as to touch Lisa's face, eyes, mouth, and hands. It appeared that she saw the doll as another person and connected to her. She seemed to have developed a relationship with me and with this new "person." She had been able to share in the emotion of playful excitement, sharing, and jealousy, and now in sympathy and love. Each level reached in the session lasted only briefly, and my interpretation was based on patterns of nonverbal sounds, gestures, and body language. Lisa's relationship to her space, or kinesphere, as she moved from the horizontal, to the vertical, and lastly, sagittal plane, allowed her to explore the baby doll and me in a mutual and trusting therapeutic relationship. She was able to identify self, other, and her environment.

After about 5 min, I told Lisa that the pretend play with the baby would have to end and that we would need to clean up and say goodbye. I asked if she needed a hug and commented on the wonderful time we had together. I reiterated all the activities we engaged in during the session and confirmed that the baby doll and the interaction were just pretend and that I was looking forward to playing with her next week. I thought it was important to express the difference between fantasy and reality, and I did not want to let her leave feeling sad or dis-regulated with the baby doll and/or with me. Lisa leaned forward for a hug, and I said goodbye.

The capacity to feel another person's experience can be described by many different words, such as empathy, sympathy, mirroring, and attunement. In its essence, the ability of the mind to perceive and then experience elements of another person's mind is a profoundly important dimension of human experience (Siegel, 1999). Echoing can increase meaning and amplify an individual's current state, leading to realization, acceptance, and overall acknowledgement. In dance/movement therapy, the aim is to mirror and echo in order to create a place of reflective awareness. For Lisa, this provided a space where she could start to examine herself with and within another (Winnicott, 1971).

Another technique I used in these sessions was to allow Lisa to take a leading role and to take control of her own actions. I did guide the session by providing objectives and direction as to what was to be done, but when Lisa began to act as a leader, she was able to move spontaneously, showing her individual needs. I then started to increase the affect, movement, or gestures to amplify Lisa's current state. Working with rhythm and movement, I further understood Lisa's emotional state. The movement and creative play provided information about her motivation and

drives (Levy, 1995). The rhythm and flow within her repertoire and preferences revealed Lisa's ways of being disconnected from her emotional and psychological feelings.

### Transitional Phase: The Sagittal Plane

Lisa entered the session at the beginning of her ninth month of therapy screaming, hysterically crying out and banging her body on the floor and walls and biting her hands. Her caregiver said she was angry because she did not, as usual, ride to the clinic in her deceased uncle's vehicle, which she loved so much. I immediately acknowledged this news and her frustration and asked her to come into the therapy room to talk. Lisa walked with me down the clinic hallway. Once in the room, she immediately threw herself on the ground near two long pillows and started screaming and crying again. She did not shed any tears, however, and appeared sad only through her verbalizations and facial affect. As she screamed out her uncle's name—more of a sound than a name—I turned to a box of dolls and took out a male stuffed doll that resembled him. I positioned it in front of her. She looked directly into the doll's eyes and sounded her uncle's name again. Tears ran down both her cheeks. She moved closer to the doll, put her finger to its lips, and made a brushing motion. Lisa called out her uncle's name two more times then, as the doll moved closer to her, she turned her back. I continued interpreting the situation, saying that she could talk to the doll and tell him how she was feeling. I tried to engage with her, and she placed her finger to the doll's lips again and repeated his name with a cry.

Lisa then looked up at me and placed the doll back in the box. She moved abruptly to the other side of the room and sat looking down. I made a verbal comment regarding how proud I was that she was able to express her feelings with the doll and that he could be taken out again if she needed him. As I walked towards her with a bottle of lotion, she made eye contact with me. I acknowledged that she had expressed a lot of sadness and anger and that I could help teach her new ways to self-soothe. I used the lotion and massage to help her with self-regulation and body awareness. Lisa communicated where she wanted the lotion, holding out one hand at a time, then one foot after the other. I provided positive reinforcement regarding coping strategies and the additional support she had to help through her traumas. Lisa began to smile, and when she finished using the lotion she engaged with me in movement and dance. She was able to follow my movements as we turned and sang together to the music. She even engaged in passing a large blue ball back and forth across the room, making eye contact and initiating for more. She appeared regulated with her interaction and showed more trust in our relationship. She continued this activity until ready to say goodbye. With only two verbal prompts she gathered her shoes and jacket and waved goodbye.

Lisa's behavior may be attributed to her frustrating experience of attempting to communicate with others without the appropriate language skills. During the sessions she consistently called out her uncle's name. He appeared to be fused with her own sense of self as she searched for intimacy and love then quickly reverted to aggression and isolation. Through her rage, she showed that she felt abandoned and

that she suffered from the loss of the two male figures in her life with whom she identified the most, her father and her uncle. Whenever she became frustrated, she immediately called out for them.

Dance/movement therapists utilize props during treatment sessions to provide a non-intrusive instrument for creativity and play (Levy, 1995). Lisa was able to use props to express her feelings and thoughts, which created an outlet for imagination and exploration.

Props serve as useful assessment tools: they evoke interest in the children, induce movement, divert attention from the inner stimuli of pain and discomfort to external stimuli (Mendelsohn, 1999).

Bringing the male doll into the room enabled Lisa to communicate and express her feelings of anger and sadness and, for the first time in therapy, to shed real tears. This structured intentional play provided her with a new association to the male figure representing her uncle. She was then able to manipulate and control the doll in the presence of another. The process moved her from anger and sadness to a more ambivalent, or normal engagement. Her resilience and self-determination to communicate to the male doll and then turn away and place the doll back in the box, represented her ability to separate and maintain a level of comfort in the session. She was then able to move forward in a new relationship with soothing and playful interactions. Her new relationship with me was non-intrusive, safe, and playful in a way that met her developmental and psychological states. Her feelings appeared to be new expressions for her, and she executed clearer communication than in previous sessions.

The expression of these emotions was an important turning point in therapy, which had become a place for Lisa to acknowledge her feelings and to be seen and understood without judgment or denial. Significantly, Lisa did not have her petal with her during the entire session and did not ask me for one. She was supported in expressing her unconscious needs and conflicts in a nonjudgmental, more tangible manner. As her therapist, I accepted her in the given moment and was able to meet her individual needs with the use of internal and external movements, separately, and together.

## Conclusion

Dance/movement therapy provides basic connections with a child by emphasizing trust through understanding of shared movements, the use of space, and timed activities. Revealing Lisa's anxiety and fears about life, treatment, and her disabilities in this safe environment, facilitated a therapeutic relationship and allowed her to continue her development (Espenak, 1989). Dance/movement therapy emphasizes the mind and body working together. Every internally experienced emotion is expressed externally through one's body. When Lisa showed signs of sadness or anger, for example, the muscles of her body tightened or loosened, depending on the body state response to these feelings and emotions.

Dance/movement therapy addresses how the body sends out these messages and relays information concerning thoughts, emotions, and feelings.

The therapeutic interventions used in this case emerged from the understanding of the theory of attachment as expressed in Lisa's movement patterns. Lisa's inability to communicate in a social relational manner reflected the early attachment deficits she experienced. The dynamic features of an attachment system are primary for human survival and adaptation. Attachment theory places great emphasis on the importance of early relationships for the outcome of an individual's connections and health throughout life. Attachment theorists base these types of relationships on the primary proximity and closeness of the infant and mother bond. A close relationship is formed when two individuals (mother and child), remain in connection with one another in order to better cope and adapt to each other and the world (Bowlby, 1989, p. 238).

A secure attachment is formed according to a parent's ability to relate and respond effectively to a child's emotional states, both positive and negative. Once these emotional levels are acknowledged and supported, memories are created, allowing the child to refer back to her experiences in her mind, thus connecting the present to the past and providing a sense of continuity (Winnicott, 1971). This integration of the child's experiences and new sensations enables him or her to remember, relive, and fantasize about his or her experiences. A child can self-regulate when he or she is able to identify a primary support in times of need. Lisa's inability to find safety during negative experiences, as well as a lack of positive experiences shared with her mother, naturally created a state of dis-regulation. In times of early distress and later as well, she had no model for the soothing process.

By describing Lisa's experience and presenting her case, this therapist hopes to raise clinicians' awareness about the problem of similarly misdiagnosed children. Although Lisa's behavior appeared to warrant a diagnosis of autism, a thorough treatment plan considering her developmental traumas enabled her to come out of her protective shell. She was able to communicate her story, change her patterns, and develop a growing interest in connecting with others. Lisa is one of many children whose diagnosis limits their chances of growing and being healthy. While scientific research continues on the genetic and environmental causes of autism, it is important to recognize that in some cases the etiology of autistic-like behaviors can be discovered in a child's early relational attachments and developmental history.

## References

- Adams, J. B., Romdalvik, J., Ramanujam, V. M., & Legator, M. S. (2007). Mercury, lead and zinc in baby teeth of children with autism versus controls. *Journal of Toxicology and Environmental Health*, 70(12), 1046–1051.
- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR)* (4th ed.). Washington, DC: Author.
- Amighi, J. K., Loman, S., Lewis, P., & Sossin, K. M. (1999). *The meaning of movement: Developmental and clinical perspectives of the kestenberg movement profile*. New York: Gordon and Breach Publishers, Brunner-Routledge.
- Bettelheim, B. (1967). *The empty fortress: Infantile autism and the birth of the self*. New York: The Free Press.

- Bolton, P., & Rutter, M. (1990). Genetic influences in autism. *International Review of Psychiatry*, 2(1), 67–80.
- Bowlby, J. (1989). The role of attachment in personality development and psychopathology. In S. Greenspan & G. H. Pollock (Eds.), *The course of life: Infancy* (Vol. 1, pp. 229–270). Madison, CT: International Universities Press.
- Ceci, S. J. (1986). *Handbook of cognitive, social and neuropsychological aspects of learning disabilities*. Hillsdale, NJ: Lawrence Erlbaum.
- Coulter, H., & Loughlin, E. (1999). Synergy of verbal and non-verbal therapies in the treatment of mother-infant relationships. *British Journal of Psychotherapy*, 16(1), 614–629.
- Currenti, S. A. (2010). Understanding and determining the etiology of autism. *Cellular and Molecular Neurobiology*, 30(2), 161–171.
- Datta, S., Premkumar, T., Chandy, S., Kumar, S., Kirubakaran, C., Gnanamuthu, C., et al. (2005). Behaviour problems in children and adolescents with seizure disorder: Associations and risk factors. *Seizure*, 14(3), 190–197.
- Ellis, C. R., Schnoes, C. J., & Roberts, H. J. (2010). Childhood habit behaviors and stereotypic movement disorders: Treatment and medication. *eMedicine*. Retrieved from <http://emedicine.medscape.com/article/914071-treatment>
- Espenak, L. (1989). Movement diagnosis tests and the inherent laws governing their use in treatment: An aid in detecting the lifestyle. *American Journal of Dance Therapy*, 11(2), 77–83.
- Fombonne, E. (1999). The epidemiology of autism: A review. *Psychological Medicine*, 4, 769–786.
- Glasson, E. J., Bower, C., Klerk, N., Chaney, G., & Hallmayer, J. F. (2004). Perinatal factors and the development of autism. *Archives of General Psychiatry*, 61, 618–627.
- Gupta, V. B. (2004). *Autistic spectrum disorders in children*. New York: Marcel Dekker.
- Herman, J. (1997). *Trauma and recovery: The aftermath of violence from domestic abuse to political terror*. New York: Basic Books.
- Koren-Karie, N., Oppenheim, D., Dolev, S., Sher, E., & Etzion-Carasso, A. (2002). Mother's insightfulness regarding their infants' internal experience: Relations with maternal sensitivity and infant attachment. *Developmental Psychology*, 38, 534–542.
- Levy, F. J. (Ed.). (1995). *Dance and other expressive art therapies: When words are not enough*. London: Routledge.
- Lewis, P., & Loman, S. (1990). *The Kestenberg movement profile: Its past, present applications and future directions*. Keene, NH: Antioch New England Graduate School.
- Mendelsohn, J. (1999). Dance/movement therapy with hospitalized children. *American Journal of Dance Therapy*, 21(1), 65–80.
- Muller, R., Cauch, C., Rubio, M. A., Mizuno, A., & Courchesne, E. (2004). Abnormal activity patterns in premotor cortex during sequence learning in autistic patients. *Biological Psychiatry*, 56, 323–332.
- Nader, K. (2008). *Understanding and assessing trauma in children and adolescents: Measures, methods, and youth in context*. New York: Routledge.
- Oppenheim, D., Koren-Karie, N., Dolev, S., & Yirmiya, N. (2009). Maternal insightfulness and resolution of the diagnosis are associated with secure attachment in preschoolers with autism spectrum disorders. *Child Development*, 80(2), 519–527.
- Ostrov, K. S. (1981). A movement approach to the study of infant/caregiver communication during infant psychotherapy. *American Journal of Dance Therapy*, 4(1), 25–41.
- Pickover, S. (2002). Breaking the cycle: A clinical example of disrupting an insecure attachment system. *Journal of Mental Health Counseling*, 24(4), 358–366.
- Rodier, P. M., & Hyman, S. L. (1998). Early environmental factors in autism. *Mental Retardation and Developmental Disabilities Research Reviews*, 4(2), 121–128.
- Siegel, D. J. (1999). *The developing mind: How relationships and the brain interact to shape who we are*. New York: The Guilford Press.
- Tustin, F. (1990). *The protective shell in children and adults*. London: Karnac.
- Tustin, F. (1995). *Autism and childhood psychosis*. London: Karnac.
- Winkmar, F., & Pauls, D. (2003). Autism. *Lancet*, 362, 1133–1141.
- Winnicott, D. W. (1971). *Playing and reality*. London: Tavistock/Routledge.
- Ziegler, D. (2002). *Traumatic experience and the brain: A handbook for understanding and treating those traumatized as children*. Phoenix, AZ: Acacia Publishing.

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