The Art and Science of *Dance/Movement Therapy*

Life Is Dance

EDITED BY
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Routledge
Taylor & Francis Group
New York London

Routledge
Taylor & Francis Group
711 Third Avenue
New York, NY 10017

Routledge
Taylor & Francis Group
27 Chuch Road, Hove,
East Sussex, BN32FA

Routledge is an imprint of Taylor & Francis Group, an Informa business

International Standard Book Number: 978-0-415-99657-0 (Hardback) 978-0-415-99656-3 (Paperback)

Library of Congress Cataloging-in-Publication Data

Vida es danza. English.
The art and science of dance/movement therapy : life is dance / [edited by] Sharon Chaiklin, Hilda Wengrower.
p. ; cm.
Includes bibliographical references and index.
ISBN 978-0-415-99657-0 (hardback : alk. paper) -- ISBN 978-0-415-99656-3 (pbk. : alk. paper)
1. Dance therapy. 2. Movement therapy. I. Chaiklin, Sharon, 1934- II. Wengrower, Hilda. III. Title.
[DNLM: 1. Dance Therapy. WM 450.5.D2 V648a 2009a]

RC489.D3V5313 2009
616.89'1655--dc22 2009010967

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To my dear friend Anne Wilson Wangh,
who dances her life with energy and generosity

To my family, always with me ….

Hilda

With love to Harry, Seth, Mariane, Martha, Nina
(and Matthew), Levi, Samuel, Zeke, Gabriel and
David and our dear friends who have always
been there for us. You know who you are.

Sharon

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Foreword

MIRIAM ROSKIN BERGER

A unique intellectual experience awaits you as you read this book. it is a volume that will be welcomed warmly by the global dance therapy community. This is the e nglish edition of a collection originally published in Spanish. That work was developed because there is almost no dance therapy in literature in the Spanish-speaking world even though dance therapy is rapidly growing in countries where Spanish is the mother tongue.

o ne of the distinctive things about this collection is that the authors are from several different countries—America, Australia, Spain, Argentina, and israel. This brings an important cross-cultural perspective to this work. For many years, dance therapy was almost exclusively an American phenomenon, but we are now seeing that innovative methods and theory in the field are coming from all around the globe, and there are strong cross currents of influence.

Another unique attribute of this collection is that each of the included chapters has great depth. These chapters bring the reader the latest and the best that is available in dance therapy. This material goes beyond the usual survey that is presented in edited works. The authors are all experts and leaders in their particular area, and they have been able to comprehensively share their ideas with clarity. As a result, this work will be of great value to advanced clinicians and researchers, as well as to allied professionals.

The work's comprehensive stance is reflected in the organization and topics of the collection: basic concepts, theory into practice with a wide range of populations, methods of assessment, and research. The discipline of dance therapy, therefore, has been examined from all sides and within many dimensions.

Perhaps the strongest attribute of this book is reflected in its title, the *Art and Science* of dance/movement therapy. Art and science have

several intersecting points; perhaps the most apparent is the exploration of patterns—patterns in time, in space, in movement. And the discovery and creation of patterns generates the understanding of meaning in both art and science. All of the authors express, in their own way, this dual focus of our profession, a most crucial focus, and one that ensures the continuing richness of dance therapy. We are indebted to the editors and their contributors for reflecting this richness in their book.

Miriam Roskin Berger, ADTR, LCAT
Chair, ADTA International Panel
Past President, ADTA
Former Director, Program in Dance Education, New York University

Preface

VALENTÍN BARENBLIT

Mental health, as a field of knowledge, is developing today as a complex combination of theories and techniques and a host of multidisciplinary experiences. Thus, a new epistemological vision is being introduced, one that is organized as an interdisciplinary terrain. A dynamics of dialectical interactions is being established that, over the last decades, has promoted the development of processes of transformation in which psychiatry as a total and hegemonic discipline is being replaced by visions that promote the compatibility and extension of different disciplines and theories regarding mental health and mental illness.

These developments promote the implementation of different types of expertise that complement each other strategically to enhance prevention, treatment, and rehabilitation in the mental health field. This having been said, it is also true that this complex interdisciplinary structure allows and upholds conceptual confrontations that might make the dynamics of producing new knowledge and corresponding actions more difficult. At the same time, stimulating factors enrich and promote the articulation of the professional resources and bring about effective transformations in the definition of the politics and application of plans and programs for mental health care.

From this perspective, the interdisciplinary team is actually the essential resource to study, research, and offer answers pertaining to treatment that are rational and effective to the problems of mental health and mental illness.

Within this conceptual framework, and from an ideological and a practical perspective of the mental health of the community, Dance/Movement Therapy (DMT) as seen within the diverse contents of this book conveys a consistent message supported by excellent theoretical and technical references. it strongly promotes the insertion of the DMT professional into

interdisciplinary teams within the various networks of health care and mental health.

The text in this book is structured in relation to the premises presented in this preface, vigorously advanced by the creative and applied clinical, academic, and research activity carried out over many years by Sharon Chaiklin and Hilda Wengrower and the several authors. in my view, this book is a highly valuable contribution to the bibliography in this profession and will also be a quality reference for universities and schools of DMT as well as for health care and mental health care systems and services.

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President of iPsi (Center for Care, Teaching, Research and Psychoanalytical Training), Barcelona, Spain
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Barcelona

Acknowledgments

The sharing of knowledge has been our primary purpose and motivation in creating this book. Many helped make this possible. We first wish to acknowledge the generosity of each author who gave of his or her time and knowledge so that dance and movement therapy might be better understood and used in aiding those with particular needs. To each of them we will always be grateful.

As co-editors we were able to complement each other's work so that the difficulty of the task was actually pleasurable. Several others encouraged us throughout the process and we would like to name just a few: Yael Barkai; israel Hadany for his generosity in providing his art work; Marta Moldvai and Anna Moore, our editors, for their helpfulness; and Maria Sideri for her index translation. The support of family was so important, particularly our husbands, who have always both nourished and endured our endeavors. Harry Chaiklin was available to offer to read and frequently act as savior through his computer skills, while Silvio Gutkowski similarly was a consultant for ideas and smoothed out the rough times through his humor, all of which was invaluable to both of us and for which we are very appreciative.

We thank our mentors, colleagues, patients, and students, who have all been the source of our learning. The gift of their knowledge and the experiences of their lives add to the richness of the cumulative sharing that makes dance/movement therapy so special.

Hilda Wengrower
Sharon Chaiklin

CHAPTER 9

Dance/Movement Psychotherapy in Early Childhood Treatment*

SUZI TORTORA

Contents

* Parts of this chapter were adapted with permission from Tortora, S. (2006). *The dancing dialogue: Using the communicative power of movement with young children*. Baltimore, MD: Paul H. Brookes Publ.

> i want to go in. … i want to go in, i want to go in. … i want to go in. is the door opened yet? is the door open yet? is Suzi inside? is Suzi inside? i want to go in. i want to go in. i want to go in.

Through the closed door of my studio office i hear the rapid, punctuated yet "singsong" voice of my new patient, Timothy, age 6, diagnosed with pervasive developmental disorder, not otherwise specified (PDD.No S). As i open the door, i am met by a small thin boy with sparkling blue eyes. He looks at me fleetingly as his glance shifts to scan the interior of the room behind me. His head rocks side to side as his body appears to be stepping forward and backward at almost the same time. His arms are intertwined, as he grasps his hands with a quick short pulsing rhythm, tightly woven together at the wrists. The force of this rhythmic hold causes Timothy to almost jump, up and down. is this a dance of welcome or hesitation, i immediately wonder? Watch the movements, follow his actions, and soon i will know, i remind myself. e verything will be revealed if i stay attuned to the quality of his actions.

Pause, forward, pause, tighten the grasp, look around, prance a step or two—Timothy enters the room on his own. Forward, then a step back. "Dancing? Hi Suzi. Dancing." is this a question or a statement, i wonder? i notice my body is very alert, ready to respond to his words or his actions. i'm not sure where he will take me as we begin our dancing dialogue, but i notice an awakened sensation in my every limb; my thoughts are filled with questions and my emotional reaction is one of excitement, with a hint of concern. i am intrigued, yet sensing i must proceed with caution. i note these reactions and wonder how they may relate to how Timothy is feeling at this moment.

Thus begin Timothy's dance movement psychotherapy sessions. During weekly visits, i, as Timothy's dance therapist, will use my observations and experiential sense of Timothy as tools to gain insight into how Timothy experiences and expresses himself in his surroundings. Through a very eclectic yet specific method i will get to know Timothy on his own terms, creating a safe "holding environment" (Winnicott, 1982) that will enable him to express himself while developing his ability to cope in his emotional, social, and communicative world. Because this method is very physically oriented, Timothy will also make many advances on a physical and cognitive level. This chapter will provide an overview of the method that i have created, using case studies to demonstrate how it is used both in private practice and in medical and hospital settings.

Basic Methods

This program utilizes nonverbal movement observation, dance, music, and play for the assessment, intervention, and educational programming of children and their families. it is a multisensory approach based on the principles of Laban Movement Analysis (LMA), the discipline of authentic movement, dance movement therapy practice, early childhood development research, play, creativity, mindfulness mediation, and hypnosis. The term *ways of seeing* was chosen to describe this program to emphasize that there are many ways to look, to assess, to receive information about self and other. in this method, the therapist is asked to become aware through observation and interaction of how nonverbal and multisensory-based experiences may be influencing an individual's experience. These individuals include oneself, children, and other family members involved in the child's intervention or educational program. o bserving personal experiences as the therapist or parent is as essential a component of the treatment as the observations of the designated patient. Ways of seeing emphasizes that observation of nonverbal and personal "felt-sense" experiences are key techniques that facilitate the understanding of self and others.

A basic principle is that every individual creates a nonverbal movement style or profile composed of a unique combination of movement qualities that are observable to the trained eye. These movement styles reveal aspects of the mover's experience with his or her surroundings. The therapist and parent are encouraged to look beyond their initial impression of a child's behavior and ask, "if this action is a communication, what might this child be saying?" in turn, the therapist and parent are asked to pay attention to their own reactions and responses to the child's behaviors—through a particular self-observation system that will be discussed later in this chapter—to become aware of how these personal internal and external behaviors may be contributing to the interaction, known as the dancing dialogue.

it is relationship based, with the strength of the emotional bond being paramount, supporting all other areas of development. Parental involvement is encouraged both within the sessions and in separate individual sessions. This treatment is helpful with a wide range of children, including those with autism, pervasive developmental disorder (PDD), developmental delays, communication and language disorders, sensory integration disorder, attention deficient hyperactivity disorder (ADHD), Tourette's Syndrome, issues associated with dysfunctional relational skills, adoption, trauma, and parent–child attachment issues. This program has

also been adapted to work in integrative-medicine hospital settings, with a particular protocol to support painful medical procedures. e ach of these applications of the program will be discussed in this chapter through discussion and case study presentation.

A Dance/Movement Psychotherapy Theoretical Approach

The term psychotherapy is added to the dance movement therapy description to highlight that the foundation of this program is psychotherapeutic. The primary focus of this form of treatment is psychological. The first task is to create a socially, emotionally, and neurologically safe environment that enables the child to express feelings, issues, concerns, and past and current experiences that are affecting optimum psychological functioning. Dance movement psychotherapy utilizes the mediums of music and dance as modalities to support mental and emotional growth. Because body movement is a salient element of the treatment, this form of therapy also supports growth and integration of motoric, perceptual-motor, verbal processing, and social skills, cognition, and communication. The multifunctional aspects of this treatment modality frequently cause observers to mislabel it as a form of physical therapy or occupational therapy.

Psychotherapy is emphasized to distinguish dance/movement therapy from other body-based therapies that are frequently used with children. These methods are typically skill-based, setting goals that specifically target functional skills such as improved hand grasp, muscle strengthening, muscle relaxation, or improved coordination. Although such improvements will also be evident in a dance movement psychotherapy treatment, the primary focus is emotional expression, building relationships, and improving social skills. The body, movement, and dance serve as added tools within the psychological therapy process used to support the unfolding of the child's social and emotional current and historical experience. u sing such nonverbal means of expression enables preverbal, unconscious, or traumatic experiences to be revealed.

Core Principles of the Program

The core principles of this program state:

- e very individual creates a nonverbal movement style based on multisensory experiences composed of a unique combination of movement qualities.
- These qualities are the child's expressive/communicative style regardless of how conventional or atypical that style may be.
- Skill and developmental levels are looked at within the context of the quality of the child's nonverbal behaviors.

- e ven severe movement limitations have a qualitative element to them; it may be in the level of tension in their musculature, the position the body habitually takes, or the frequency of eye contact.
- How these qualities are expressed create a sensation, an attitude, a response from the "mover" to those in the environment.
- i n return, the observer of these behaviors has a reaction, based on his or her own experiences.
- it is this action–reaction that influences the developing social/emotional relationship, and impacts therapeutic and educational interventions.

Based on authentic movement practice (Adler, 1987, 2002), therapists are asked to monitor personal multisensory and nonverbal reactions through a specific self-observation process involving objectively mapping the details of the mover's actions (witnessing); becoming aware of and reflecting upon their own sensorially based reactions (kinesthetic seeing); and becoming aware of and reflecting upon their emotional reactions derived from experiencing these interactions, which include actually "trying on" the mover's actions (kinesthetic empathy). i n this way of working, therapists take a very active role during engagement with the child.

Becoming aware and attuned to one's own multisensory reactions and responses has two functions. First, it enables therapists to become more open to the possible multisensory ways children may be experiencing their surroundings. Young children initially explore, discover, and express themselves in their world primarily thorough their multisensory and nonverbal experiences. Second, the therapists' self-monitoring of multisensory and nonverbal reactions enable them to become aware of the role they are playing in the developing relationship on a more subtle experiential level. Though nonverbal actions and reactions occur simultaneously with verbal and cognitive processing during communications and engagements with others, we tend to not register these reactions and modes of expression. Much of the detail of sensorial and nonverbal communication is unconsciously recorded. it is essential to emphasize that therapists must be careful to view their observations as their own, not assume they represent the child's experience, for one cannot truly know another's experience. The self-observation process expands the therapists' attentiveness to this way of seeing, providing an added perspective in which to support the growing relationship and the intervention.

The opening vignette exemplifies how i used this self-observation process to attune to Timothy. i carefully describe his actions and my first thoughts as i hear him outside my office door, and he enters the room (witnessing). i pay close attention to alert sensations of my body (kinesthetic seeing) as i take in his questioning; and i notice my emotional

excitement, laced with caution, as i begin to engage with him more deeply (kinesthetic empathy).

Sense of Body

The next core concept is the principle that infants enter the world with a sense of body, from which they initially perceive their surroundings and that they use to express themselves. Building upon Stern's(1985) experientially based sense of a core self, sense of body relates to the infant's experience of its own body, interpersonal relationships, and the emergence of individuality. it functions from the notion that physical experience and emotional, cognitive, and perceptual experiences are linked (Piaget,1962, 1970; Piaget & inhelder, 1970). it was developed based on the tenet that an infant's earliest experiences occur through the body. These experiences are initially registered on a somatic, kinesthetic, sensorial level (Gaensbauer, 2002, 2004). Body-oriented experiences shape how the infant begins to make sense of its surroundings and how it begins to develop as a feeling, acting, moving, communicating, cognizant being in the world.

Through body sensing, which includes sensing one's own body as well as the body of others, the infant first begins the dance of relating (Stern, 1977, 1985, 2004). The body and this interactional dance of relating are continually intertwined, informing and developing one another. Therefore, the therapist regularly thinks about how the child's way of experiencing the world from a very physical level is affecting how that child receives, reacts, and responds to experiences. i developed this view based on a thorough investigation of early childhood research and theories, which will be briefly discussed later. How i use this concept of a sense of body is exemplified in my processing notes as i review an activity Timothy and i created during a later session.

i am intrigued by the way in which Timothy intertwines his arms and pulls them toward himself, clutching his fingers and creating a tight upper body container. From this tense posture his fingers suddenly extend and flex with an intermittent jagged grasp, quickly ending again in a tight clutch. i choose a piece of music with a steady beat to capture and sustain the momentary pulsing beat he creates with his hands. This excites Timothy, evidenced by the way in which he pulls his arms in, creating an even firmer pulsing gesture that seems to dissipate into a fixed hold. *Witnessing*: How interesting. His actions match his verbal expressions—he quickly jumps from thought to thought and seems to get stuck, perseverating on an idea, losing the spontaneous turn-taking exchange of conversation. *Kinesthetic seeing*: As i try on this gesture i note how i become consumed by the sensation of my arms and hands, acting as a rigid shield from the outside world.

i place my hands over his, matching his sporadic beat for a few measures. Holding his hands, i add a more rhythmic emphasis to the pulse to suggest the beat of the music while also taking steps with my feet. He steps with me two steps before he is overcome by a surge of tension that stops us. Timothy beams his bright blue-eyed smile as he looks directly up at me. *Kinesthetic empathy*: i feel a surge of excitement well inside me. We have taken our first dancing duet steps. His enthusiasm is palpable too. *Witnessing*: The start-and-stop manner of his gesture seems to be compulsive rather than purposeful, much like his language use. So i must continue to add movements that create fluidity and continuity—this will enable him to physically and emotionally feel sustained social engagement.

This rhythmic dance grows over the next 6 months as Timothy continuously steps to the beat while holding my hands, dancing around the whole room. We begin to also dance to waltz music, further developing his kinesthetic experience of flow and fluidity. His idiosyncratic arm- and hand-tightening gesture occurs less and less, and his conversation begins to become more connected; i am able to see how each thought is linking to the next thought in creative and associative ways, and his ability to respond to a question or comment begins to emerge.

Core Principles and Strategies That Guide a Session

The therapist asks three questions as each session unfolds:

1. How does the child's way of relating and moving color that child's experience?
2. What does it feel like to experience the world through that child's particular structuring of his or her movements?
3. How can i structure an environment that enables the child to experience his or her own way of relating and functioning while simultaneously enabling the child, through that experience, to explore new ways of interacting with the environment?

The answers to these questions are found by experiencing the child's movement style during the session noting the *feeling tone, energy level* and *overall essence in the air.* The feeling tone refers to the child's emotional mood. e valuating the actual body and movement actions the child performs in relation to the amount of concentration the presenting activity demands assesses the energy level. The child's energy level may be categorized as high, neutral or calm, low, or lethargic. The essence in the air refers to the overall feelings and emotions that are present and palpable in the room when the child—and other significant caregivers who attend sessions—enter and engage in interactive activities during the session. These elements are assessed keeping in mind that they are largely based on the therapist's

subjective interpretations influenced by the therapist's own projections, misunderstandings, or an inability to perceive some aspect of the child at any particular moment. The self-observation procedure (discussed above) is specifically designed to reveal how such subjective reactions may be influencing the therapist's observations, perceptions and actions.

Creating experiential therapeutic activities to engage the social and emotional dialogue occur through a four-part procedure:

1. Match—feel the quality of the nonverbal cues through attunement or mirroring
2. Dialogue—create a dialogue through the use of these movements
3. e xplore and expand—explore, expand, and develop these movements
4. Nonverbal to verbal—move the communication from nonverbal to verbal exchange—if communicative skills are available

Attunement and mirroring are the two essential methods used to try on a child's movements. During attunement, the therapist matches a particular quality of the child's movement without completely depicting the entire shape, form, or rhythmic aspect of the action in exact synchrony or simultaneity with the child. A characteristic of the action is portrayed but may not occur with the same body part, spatial attention, or intensity. in mirroring, the therapist embodies the exact shape, form, and movement qualities of the child's actions, creating a mirror image of the mover. This qualitative matching includes depicting and connecting to the emotional expressivity of the child's movements. Because exactly mirroring movements is very difficult, i have developed three categories of mirroring to more accurately represent what happens during the mirroring process: *mirroring modified, mirroring exaggerated,* and *mirroring diminished*. in mirroring modified, the overall style of the movement is still intact but some aspect may be modified slightly. During mirroring exaggerated, the therapist enlarges the child's movement qualities while the overall sense and style of movement remains intact. in mirroring diminished, the therapist reduces some aspect of the child's movement qualities, but the overall sense and style of the movement is still present.

Assessment of Movement Qualities Using Laban Movement Analysis

Five elements of the LMA system are used to analyze the nonverbal qualities of the child's movements (Bartenieff & Lewis, 1980; Laban, 1976). These five elements are effort, body, space, shape, and phrasing. Briefly described here the qualitative elements of a movement refer to the specific descriptive components of a physical action. These qualitative elements provide

information about how (effort) an action is performed; what (body) body parts execute the action; and where (space) the action occurs in reference to others and the surrounding spatial environment. The shape of the movement describes the forms the mover's body makes in space. it reflects how the mover creates changing body shapes in relation to one's self and others in the surroundings. Phrasing refers to how the movements are clustered together over a period of time, creating a flow, pulse, rhythm, and melody, as the actions start, continue, pause, and stop. Phrasing marks the unfolding flow of the movement sequence. These details color the child's experiences and impact nonverbal expressions. it is these qualitative elements that construct a nonverbal language of movement.

Dynamic Processes

During sessions, a dynamic process occurs through the use of the body, movement, and dance-based activities. The term dynamic is used here from a systems theory perspective to emphasize that the nature of the session and the changes and growth in the sessions can occur simultaneously, rather than in a hierarchical manner. Four dynamic processes govern a session:

- Dynamic Process i: e stablishing r apport—e ach session strives to enhance the child's social/ emotional and communicative development and attachment.
- Dynamic Process ii: e xpressing Feelings—e ach session fosters the expression and exploration of feelings, emotions, traumas, and conscious and unconscious past and current events.
- Dynamic Process iii: Building Skills—The body, movement, and dance aspects of the session enable the enhancement and development of physical, cognitive, and coping skills in tandem with the inherently psychologically based social, emotional, and communicative focus of a dance movement therapy session.
- Dynamic Process iV: Healing Dance—Through each session the child is able to explore the intrinsically healing and joyful experiences of dance, movement, and multisensory discovery.

Intervention Tools

There are a wide variety of ways the body, movement, and dance activities are used in a session. in the service of brevity, the reasoning behind the most common and basic dance movement therapy activities are simply outlined here.

- *Movement*—observe the actual actions the mover chooses to use (which may be a conscious or unconscious choice). Specifically noting how a movement is performed can reveal a great deal of information about that person.
- *Dance*—emphasizes lyricism. Looking at movement and interaction as a dance shifts the therapist's vision into seeing how movements link together.
- *Drama and Storytelling Dance-Play*—The use of movement, pantomime, and dramatic expression are very useful tools with toddlers and older children, facilitating imagination and enabling the symbolic exploration of feelings.
- *Exercise and Yoga*—these specific organized movement forms can be used to add structured movement exploration to improvisational aspects of session.
- *Relaxation and Visualizations*—These experiences, often involving breath work, enable the child to gain better body awareness, calmness, and modulation and organization of the body.
- *Space*—The placement of self, other, and objects; the types of spatial pathways; and how the whole room or parts of the room are used can greatly inform and influence the progress in the session.
- *Body*—This is the primary tool the dance therapist uses to encourage the child's self expression. The therapist and parent (if present) use their bodies to mirror and attune to the child. u sing the body as a therapeutic tool provides a spontaneous interactive structure. There are endless possibilities for qualitative variation through changes in facial affect, muscle tone, physical shape, the use of touch, breath, and sound.
- *Sensorially Rich Environment*—All props—such as scarves, balls, textures, streamers, pillows, mats, blankets—are open-ended, fostering the child's own imagery and use.
- *Music and Rhythm*—There is an extensive use of a wide variety of music and rhythmic styles that can be used to affect the environment. r hythms can be developed with and without music. These elements can change the overall mood of the room or the participating individuals. it can create a sense of calm and relaxation; stimulate expression and memory; or mobilize, energize, and regulate the mover.

Interfacing with Child Development

A strong component of this program utilized early childhood development research. i have concentrated specifically on research that focuses on infant memory, the acquisition of language, early brain development,

multisensory experience, and the development of attachment through detailed nonverbal analysis of parent–infant dyads. This research has provided insight into what exactly might be happening through the nonverbal activities used during dance movement psychotherapy sessions that support children's improved relating skills and heightened ability to express their inner feelings.

Attachment theory has greatly informed much of the program. Bowlby (1969), considered the father of attachment theory, states that the mother's role is to create a safe haven, a solid base of support from which the infant is able to receive pleasure, understanding, and comfort through her accurate reading and responding to her baby's cues. From this solid base the infant is able to explore the world and feel able to return to (mother) in times of danger. Actually, the primary factor in creating a solid and secure attachment involves the parent's ability, sensitivity, accurate reading, and appropriate and consistent response to baby's cues and signals (Ainsworth, 1978; e geland & e rickson, 1999). This greatly supports the extensive use of analyzing the individual nonverbal qualities of the child's personal movement repertoire. This is used to gain insight into the child's experience and expression of self, the parent–child relationship, and how the child interacts with others in the environment.

The role of nonverbal interaction and the use of nonverbal activities to support interaction are further supported by the work of Hofer (1981). Hofer's (Tortora, 2004b) extensive infancy attachment research with animal models has studied how the maternal figure's behaviors and actions shape and regulate the physiological, neurophysiological and psychological functioning of her babies. His work concludes that regulators of physiology are embedded in the relationship with mother. The quality of the mother–infant relationship affects the infant's physiology, neurophysiology, and psychology.

The exchange between mother and infant unfolds during each interaction and is co-constructed at the nonverbal level involving self-regulation and interaction or co-regulation (Beebe & Lachmann, 2002). Self-regulation as described by Beebe notes how each person's ability to relate to another person is affected by his or her own behaviors and state of internal regulation. interactive or co-regulation refers to how each member of the interaction is affected by the behavior of the other member of the interaction. The work of Porges (2004) furthers these ideas. Porges, in his studies of neurological regulation within an infant, has concluded that it is a developmental process that is contingent on social–emotional interactions. He has developed the term "neuroceptive" to emphasize the sense of safety that is established through nonverbal and vocal cues, which is necessary on a neurological level, to support an infant's social engagement.

Those researchers who have studied the development of communication and its role in the development of a strong relationship also acknowledge that

nonverbal experience plays a significant role between infant and caregiver in the transformation and organization of experience into language (Bucci, 1993; Appelman, 2000). Bucci has categorized two perception-action levels of representation—a continuous subsymbolic mode and a nonverbal presymbolic categorical mode. She states that nonverbal experiences are considered subsymbolic experiences that are registered in multiple nonverbal modalities—sensory, kinesthetic, somatic—and become organized into nonverbal perceptual images. The presymbolic nonverbal modes occur before symbolization, and enable the infant to categorize events, objects, and experiences into groups of discrete prototypic images. These perceptual images become nonverbal symbols that are autonomous of language (Appelman, 2000). They are the basis from which nonverbal experiences connect to linguistic expression.

A key element of nonverbal interactions that support the development of a secure bond, noted by many of these researchers, is the importance of the infant to be able to communicate with flexibility and spontaneity. Spontaneous dynamic nonverbal interactions between caregiver and infant create mental representations that organize the experience for the infant (Bowlby, 1969). Flexibility within the relationship and in the young child's ability to navigate independently in its surroundings becomes an essential component of healthy functioning. As stated by Thelen and Smith (1994), an infant who is able to respond and explore novelty and variation within the environment demonstrates a greater range of capabilities and flexibility.

These concepts are used to create a therapeutic milieu that feels secure and safe, to understand the role of the primary relationship between significant caregivers and the child, to constantly keep in mind the role each participant plays in the interactive nonverbal dancing dialogue, and the significant use of nonverbal exchange as a primary means of developing communication and relationship. e ach session is created by following the child's lead. Activities are created spontaneously by staying attuned to the child's cues and nonverbal directives. Significant caregivers often take an active role in the treatment session.

The Use of the Nonverbal and Its Role in Supporting Preverbal or Traumatic Experiences

The use of nonverbal, movement, and body-based activities also enables experiences that are early, preverbal, nonsymbolic, kinesthetic, or unconscious to naturally unfold during the treatment process. This aspect of dance movement psychotherapy is especially significant, for it provides an avenue into experiences that are typically difficult to unearth because they have occurred early in life or may be traumatic in nature.

Gaensbauer (2004) has extensively studied infancy memory with a particular emphasis on traumatic events that occur during the early years. He states that during infancy the baby perceives and links emotional and somatic experiences, developing a preverbal and sensory-based memory system. e arly experiences form memories that are registered and organized through somatic, sensory, kinesthetic, and nonverbal modalities. From these experiences perceptual images are created and represented through "perceptual-cognitive-affective-sensory-motor schemata" that translate these experiences into observable personal actions. This process links emotional and somatic experiences, developing a preverbal and sensory-based memory system.

This knowledge has greatly informed the Ways of Seeing method. The therapist must constantly keep in mind how previous experiences may be influencing patients' behaviors, observable in their personal nonverbal movement style, the activities they choose to do, how they relate to others, and the storylines that develop during the therapeutic dance-play. The therapist must also be mindful of how current experiences may affect the individual's continued development and will be revealed in similar ways. Nonverbal, kinesthetic, and felt-sense memories occur throughout life. These experiences greatly impact and can alter how an individual develops a personal body image and a sense of self. Focusing on early and felt-sense kinesthetic memory has been especially influential in the development of the program in a medical setting working with pediatric cancer care.

Medical Dance/Movement Therapy for Pediatric Oncology

Medical dance therapy defined by Goodill (2003, p. 17) as "the application of dance movement therapy services for people with primary medical illness, their caregivers and family members" has been developing as a specialization of the field since the 1970s. i have developed a dance movement psychotherapy program for pediatric patients at a metropolitan cancer care hospital since 2003. This program is offered through the department of i ntegrative Medicine Services. Treatment is provided on both the inpatient and outpatient units of the hospital. These services include individual sessions at the patient's bedside and group sessions in the playroom. The patients who have received dance movement therapy range in age from several weeks to 32 years old. Many of these sessions, especially with the very young children (birth to 5 years) also include family members who are often present with the child. The goals of these sessions include

1. Pain relief/management and comfort
2. Strengthen body awareness and body/self image in relation to the changes in the patient's body due to treatments

3. Develop relaxation techniques
4. Decrease anxiety in relation to treatment procedures and hospitalization
5. Create an environment that supports emotional self-expression about the patient's experience of his or her illness, through symbolic imagery and improvisation using movement, dance, and music
6. e njoy the fun, pleasurable, and healing aspects of actively using one's body through creative dance expression
7. Provide emotional support, information and movement activities with family members that provide them with additional ways to engage their child

Four-Question Protocol in Medical Settings

The three-question protocol stated earlier is slightly modified in the medical setting to support the patient to consider how the illness and medical treatments may be impacting his or her pre-existing sense of self and ways of relating. The therapist has the added task of trying to detect who the patient "is" underneath this layer of illness, and how the onset of the illness may be influencing the current presenting behaviors. The ultimate goal is to help patients feel as comfortable within themselves as much as possible, portraying their familiar or natural self.

1. How does the patient's unique way of relating and moving reflect his or her experience of his or her illness?
2. How does the patient's experience of this illness color his or her unique way of relating and moving?
3. What does it feel like to experience the world through that patient's particular expressive movement repertoire?
4. How can a therapeutic environment be structured to enable the patient to experience his or her nonverbal expression as a communicative tool, while simultaneously enabling the patient to use that experience to explore new ways of coping with this illness?

These questions are easily illustrated through the following vignette. Due to the confidential nature of this work, the cases provided from the hospital represent a composite of individual dance therapy sessions.

Francesca

i enter the room of Francesca, a 3-year-old girl, who is hooked up to several tubes through a port on her chest. i have danced previously with this normally bright-eyed, spirited girl, but today she is quite still. Her father tells me she has not moved for 24 hours. Francesca entered the hospital yesterday for a quick outpatient procedure but had to be

admitted due to an abnormality in her blood. They want to observe her and do more tests. She was despondent when i first suggested we dance. i note her sadness, and wonder if i sense a tinge of anger as she looks away. i put on a tango song that has a compelling, medium tempo beat and a mysterious beckoning melody, and sit across from her. Francesca cannot help but begin to bounce her leg to the rhythm. Staying aware of my own kinesthetic empathic reactions, i sense her action as an act of defiance, as i attune to her beat, clapping my hands in tempo with her leg. i create the quick flick of her leg with a short clip to my clap. She increases her motion. i increase the strength of my clap, as a way to further acknowledge her feelings. But, as often happens with such attunement, we can't help but begin to relate. The anger melts as our dancing dialogue becomes more and more playful. Suddenly Francesca jumps up and down on her bed to the rhythmic beat of a tango song, holding the tubes connected to her body up high as an arching bridge to go under and around. A nurse enters and is swept into the dance, circling around as she waves her arms in the air. Francesca's papa is thrilled and joins in too. We end our session with a calming waltz, all holding hands and swaying to the undulating beat. As i leave i overhear Francesca asking, "Papa can you play a game with me?"

Adding a Multisensory Approach to Medical Dance Movement Psychotherapy

As dance movement therapists, our primary tool for intervention is the body—which is a multisensory organism. Combining my years of experience using the body as a tool for expression and change with my training as an early childhood development specialist, a natural progression of my work has developed specifically related to caring for patients whose principal issues are medical. This approach builds upon the basic principles of dance movement therapy and incorporates the important role that multisensory experience plays in early childhood development. This treatment takes into consideration how multisensory experience impacts how individuals receive and take in information, express themselves, and store these events through memories that are registered on multiple levels, including nonverbal, felt-sense, kinesthetic modalities.

Adding a multisensory focus to medically related illness is essential for the invasive and painful treatment methods. The life-threatening nature of a cancer diagnosis is a potentially trauma-forming event in the pediatric patient's life. Despite the tenderness and kindness of the medical professionals caring for these patients, they experience a constant barrage of assaults on their bodies as treatment requires both internal and external

probing, poking, and surgical investigations that can include the removal of body parts and the ingestion of unpleasant-tasting medicines. o ften there are tubes attached to the children's bodies through medical ports that are inserted most commonly in their upper torso; or intravenous infusions (i V line) in which medicine is administered through a needle inserted in a vein, usually in the arm, wrist area, or hand.

These treatments frequently impede full body movement. Physically, the children go through periods of feeling weak, nauseated, or lethargic. e motionally, their reactions cover the whole spectrum, including increased attachment to significant family members, withdrawal, fearfulness, discomfort, shyness, depression, defiance, and anger. These conditions may compromise normal developmental progressions on all levels—physical, emotional, social, communicative, and cognitive. These medical experiences are occurring during a stage in their lives when their body image and sense of self is naturally forming. it has the potential of greatly informing how they construct these aspects and perceptions of their inner self.

The multisensory approach promotes an increased awareness of self and one's body. it enables patients to gain a sense of control over their bodies and the medical experiences. This is essential because the invasive and unpredictable nature of the medical treatments and the illness can leave the patients feeling like much of what happened to them is not in their control. u sing this multisensory approach during the time the patient is feeling ill or during painful medical treatments can bring great relief, by shifting the focus of awareness away from the specific painful or unpleasant body experience. The patient develops emotional and physical coping strategies. This work provides ways to express feelings that are felt but difficult to verbalize.

Multisensory Approach to Pain Management

Applying this multisensory approach to pain management has been especially successful in helping both the young patients and their families cope with particularly painful medical treatments. The specific protocol i have developed for these conditions is based on all the principles of Ways of Seeing, with the addition of techniques from the practices of hypnosis (o lness, 1996), meditation (k abat-Zinn, 1990) and pain management (Gorfinkle, 1998). From these fields, i have incorporated the concepts that concentrated breathing techniques, guided imagery, and focused attention can be used to hold a child's focus, redirecting it away from pain. Here the young child's natural propensity for fantasy and imaginary play are also especially useful. Based on the Piagetian notion that young children first learn about and experience the world through multisensory means, this treatment uses all seven senses (taste, touch, sound, olfactory, vision, proprioceptive, and vestibular) to create an environment that stimulates,

redirects and relaxes the child on a physical and visceral level. This supports even the youngest child's management of pain. The importance of the primary attachment with significant family members parents especially comes in to play during this treatment; parents and significant caregivers (often grandparents) are welcomed and significant members of the treatment protocol.

Multisensory Tools Used during Painful Medical Procedures

The specific tools used for this multisensory technique include the following:

1. Touch—massage, rhythmic rocking
2. Breath awareness
3. Creating stories (toddlers)
4. r ecorded music—relaxing, rhythmic
5. Musical instruments—drum, ocean drum, rainstick, tone bar
6. Vocalizing through pain
7. u se of the therapist's voice—including vocalizations, tone, choice of words—soothing, undulating, hypnotic, empathic, matching child's distress vocalizations or monotone repetitive vocalizations
8. Physical props that are sensorial such as tactile—scarves, stuffed animals, small plastic animal figures, blankets, other objects from home; visual—light sticks, softened lighting in room, visuals on TV or computer screen
9. Medical: o xygen, heated or cold pads, cool drinks
10. Participation/assistance of parents, including teaching them the techniques

Composite Case Examples

The following descriptions will best exemplify how these tools are used for pain management. Again, the cases provided here represent a composite of individual dance therapy sessions.

Ernest (age 24 months)

e rnest was having difficulty managing the pain induced by a particular treatment. This treatment protocol involves a 50-minute period during which medicine is typically administered through a medical port in the upper chest. The treatment is known to be painful for most children, with the degree of pain often likened to labor pains. The administration of several pain medications has been the typical method for pain relief, however, it does not fully alleviate the pain. it has been very difficult for e rnest's mother to watch her son enduring such pain, leaving her feeling helpless. During the most painful moments that can last

for 20 to 30 minutes on a difficult day, e rnest will cry, scream, fling his limbs, roll up into a ball, kick, and hold his breath. The breath holding is especially problematic, for it diminishes e rnest's oxygen level, requiring further medical intervention.

i enter the session and begin to engage e rnest in playing with my colorful sheer scarves. We billow them up and down with our arms, and kick them with his feet, to support the active mobilization of his limbs. it can be helpful to keep the body moving and engaged. We play with images of the wind as we take deep breaths to blow the scarves, and our arms soar like bird wings as we spread our arms wide. We stomp through the ocean waves as e rnest vigorously kicks the deep blue scarf. i place my hands against his feet to stimulate stronger kicking from time to time. o ther times we slow our actions down, breathing gently as we float on the top of the ocean waves, and then soar up into the sky as birds free in flight. As these activities stimulate his imagination and his mind, we are also creating impressions both mental and sensorial that we can call upon later on when the pain sets in. i put on ocean wave music with a lyrical orchestra accompaniment in the background. Mom participates in all aspects of the play. At some point, e rnest's actions become less vigorous and he begins to withdraw, pulling his legs into him. This happens suddenly. He becomes quiet and motions that he wants Mom to hold him on her lap in the chair. While he is on Mom's lap, i instruct Mom to rock e rnest in a small, pulsing, yet monotone manner. e rnest begins to moan. i mirror the moaning sound but modify it by extending the length of the tone, keeping it continuous, while taking deep breaths. e rnest matches his cry to my tone, and Mom follows as well. We are rocking and toning together to the music, providing auditory, vestibular, and tactile input. e rnest settles into the rhythm, but then feels a jolt of pain, indicating it is in his legs as he flings them wildly. i offer my hands to push against and he readily responds. We create a strong pulsing push, and soon he relaxes again, returning to the verbal toning as Mom begins to rock his whole body again. This time, e rnest closes his eyes and seems to settle more deeply. This is observable in his whole body, as it molds more deeply into Mom's form, hugging her close. He appears to be in a meditative state, as e rnest is absorbing and concentrating on all the sensory stimulation—almost asleep, but not. This is confirmed by the event that follows. A nurse comes in to ask Mom if she would like the second application of the pain medication that they typically do around this time in the treatment. Mom declined this second narcotic, feeling e rnest is "riding the pain" well. This momentary conversation causes Mom to stop the rocking. e rnest opens his eyes and begins to stir and whine. This immediate reaction to the momentary pausing

of one of the sensory stimulations tells us he is deeply connecting to each element. it is the whole that gets created by each sensory element that enables him to stay comfortable and pain free, creating a complete sensory environment that consumes his focus and blocks the pain. He and Mom continue in this state for the rest of the session, as i rock beside them, alternating the vocal toning with verbal affirmations i whisper to Mom, to say to e rnest, "Take a breath in and out and go to sleep… breath in and out and rest …you are relaxed and safe in Mommy's arms. …" Both mother and child drift off to a place of calm and comfort. The medical treatment ends in this serene state. They feel peaceful and connected to each other. Later that day Mom reports that e rnest was able to jump back into his active self with far more ease and energy than previous treatments. They are empowered by their success in battling the pain and approach the consecutive treatment feeling they now have the tools to work through the experience. o ur multisensory activities become their ritual, which they practice each night and employ each treatment session.

Zabaar (age 5)

Zabaar is from a foreign country and has few e nglish words. He has been working hard to manage his pain with the same treatment that e rnest receives, but he is having trouble. He is a friendly boy who generally appears strong. He is very dismayed by his inability to overcome the pain that comes upon him by surprise. Deep in troubled thought, when we begin our session he is very quiet. i take out the ocean drum, a large drum that has small metal beads that are contained yet visible inside the drum. The beads roll along the drum cloth as one tips and tilts it, fast or slow or in between, creating the sound of the ocean waves, tumbling gently or powerfully, depending on how it is played.

Zabaar hits the drum and the beads shake. He seems to feel powerful from this crashing sound and begins to play it very vigorously. He experiments with different sounds. At some point we begin to blow on the surface of the ocean drum, tipping the beads inside of it as he blows. it is mesmerizing. Zabaar is able to blow with vigor and consistency. He seems to connect deeply into himself. When the pain sets in he lays his head down on his mom's lap. Mom rubs his back in a circular motion, and at times his head as well, circling cool oxygen (from a tube) above his head.

A multisensory dance continues to evolve as Mom and i work silently but together, providing auditory, vestibular, and tactile input. i add more sound layers to fill the room. i roll the ocean drum over his head, then diagonally to his side above his head, then in front of him,

too. He seems to tune into the sound. Then i add quiet lullaby recorded music, and add my vocal tones to match his occasional whimpering. A resonance is heard through the room. i massage his feet, continuing to provide him resistance to push against when he moves his feet and kicks. i hold his feet at times, creating a heel-coccyx rocking full body action. As we massage his body, Mom and i keep our own breath flowing as a stimulus for him to follow.

Afterward, i contemplate the session. Witnessing my experience i write in my notes:

This layering of sensory input seems to be very key; as well as how the additional multisensory inputs all work in the same soothing fluid rhythm—we are truly creating a full sensory environment. This soothing, multisensory stimulation is countering, or distracting Zabaar from the painful sensory input of the medical treatment.

Conclusion

The Ways of Seeing dance movement psychotherapy approach has been developed through the integration of many fields of study specifically focusing on research and theories that support the primacy of movement and nonverbal communication in early childhood development. Built upon the notion that our bodies tell stories that speak of our experiences (Tortora, 2004), these experiences start to accumulate from the beginning of life, as each infant enters the world with a developing sense of body. This principle emphasizes that bodily sensations, reactions, expressions, and experiences of all children come from their keen physical receptivity to sensations—these are their earliest experiences of self—these body experiences define and continually inform them about who they are. From this understanding, intervention focuses on: (1) how a child's sense of body impacts his or her experience; (2) how the child's nonverbal style influences the "whole child," looking at the development of all aspects of self, emotionally, socially, intellectually, physically, and communicatively; (3) how to transform and elaborate on a child's existing sense of body as reflected in his or her nonverbal style, to support the development of more complex and functionally adaptive styles of behaving and relating that will incorporate all aspects of self; and (4) how an understanding of the role of multisensory experience can be used to support a young child through pain due to medical illness. Nonverbal observation, music, dance, movement, body awareness, and play are the key intervention tools of this dance therapy method that trained psychotherapists can use to best support growth and change in young children.

References

Adler, J. (1987, Winter). Who is witness? *Contact Quarterly XII*, 1, 20–29.

Adler, J. (2002). *Offering from the conscious body: The discipline of authentic movement*. r ochester, VT: inner Traditions.

Ainsworth, M. D. S. (1978). *Patterns of attachment: A psychological study of the Strange Situation*. Hillsdale, NJ: e rlbaum.

Appelman, e . (2000). Attachment experiences transformed into language. *American Journal of Orthopsychiatry,* 70, 2, 192–202.

Bartenieff, i., & Lewis, D. (1980). *Body movement: Coping with the environment.* New York: Gordon and Breach.

Beebe, B., & Lachmann, F. (2002). *Infant research and adult treatment: Co-constructing Interactions.* Hillsdale, NJ: Analytic.

Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.

Bucci, W. (1993). The development of emotional meaning in free association. in J. Gedo & A. Wilson (e ds.), *Hierarchical conceptions in psychoanalysis* (pp. 3–47), New York: Guilford Press.

e geland, B., & e rickson, M. F. (1999). Findings from the parent–child project and implications for early intervention. *Zero to Three: Bulletin of National Center for Clinical Infant Programs*, 20, 2, 3–16.

Gaensbauer, T. J. (2002). r epresentations of trauma in infancy: Clinical and theoretical implications for the understanding of early memory. *Infant Mental Health Journal*, 23, 3, 259–277.

Gaensbauer, T. J. (2004). Telling their stories: r epresentation and reenactment of traumatic experiences occurring in the fi st year of life. *Zero to Three*, 24, 5, 25–31.

Gorfi kle, k . (1998). *Soothing your child's pain: From teething and tummy aches to acute illnesses and injuries—How to understand the causes and ease the hurt*. Lincolnwood, iL: Contemporary Books.

Hofer, M. A. (1981). *The roots of human behavior: An introduction to the psychobiology of early development*. San Francisco: W.H. Freeman.

k abat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York: Bantam Doubleday Dell.

Laban, r . (1976). *The language of movement*. Boston: Plays, inc.

o lness, k . (1996). *Hypnosis and hypnotherapy with children,* 3rd ed. New York: Gilford.

Piaget. J. (1962). *Play, dreams and imitation in childhood*. New York: Norton.

Piaget, J. (1970). *Science of education and the psychology of the child.* New York: Penguin Books.

Piaget. J., & inhelder, B. (1969). *The psychology of the child.* New York: Basic Books.

Porges, S. (2004, May). Neuroception: A subconscious system for detecting threats and safety. *Zero to Three,* 24 (5), 19–24.

Stern, D. (1977). *The first relationship: Infant and mother.* Cambridge: Harvard u niversity Press.

Stern, D. (1985). *The interpersonal world of the infant*. New York: Basic Books.

Stern, D. (2004). *The present moment in psychotherapy and everyday life*. New York: Norton.

Thelen, e ., & Smith, L. (1994). *A dynamic systems approach to the development of cognition and action*. Cambridge, MA: MiT Press.

Tortora, S. (2004a). o ur moving bodies tell stories, which speak of our experiences. *Zero to Three*, 24 (5), 4–12.

Tortora, S. (2004b). Studying the infant's multisensory environment: A bridge between biology and psychology: An interview with Myron Hofer. *Zero to Three*, 24 (5), 13–18.

Winnicott, D. W. (1982). *Playing and reality.* New York: Tavistock.