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# Impact of biodanza on children's movement, music integration, and communication in kindergarten

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## ABSTRACT

This study examined the introduction of biodanza to a kindergarten for five-year-olds. It sought to understand the contribution of biodanza, of movement, music, and encounters, to the development of children's movement in space, the combination of movement and music, and communication between children. The research question was, What is the contribution of biodanza in the kindergarten to the movement of children in space, and what is the contribution of the combination of movement and music to the communication between children? This was a qualitative study. The data were collected in Israel in the years 2017-2019. The findings show that the introduction of biodanza in the kindergarten enabled a process that encouraged children's expression and initiative and provided varied opportunities for development and free playful and non-playful activities, with emphasis on social-emotional relationships, cognitive nurturing, and developmentally appropriate creativity. After an extended biodanza experience, the children demonstrated confidence in their movement, in approaching other children, and in expressing themselves through movement, creativity, and discourse. The findings show that kindergarten children should be given opportunities for process-oriented biodanza, to develop through movement and encounters. Children should be offered challenging exercises with developmental potential in movement and encounter with others.

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## Introduction

Early childhood experiences form the infrastructure for children's development (Early Childhood OECD (2021); Phillips, McCartney, and Scarr 1987; Vygotsky, Luria, and Van der Veer 1994; Zilka 2021). Early childhood is considered a period in which children establish their development and understanding in various areas. In early childhood, children learn at a faster pace than at any other time in their lives and develop cognitive, social, and emotional skills that form the foundation for their achievements in childhood and adulthood. They explore their environment and learn to express their feelings. Many of them still have difficulty regulating behavior, are easily distracted, have difficulty concentrating, and experience outbursts of anger, sadness, and wrath. They are increasingly independent in eating and dressing, but they still need much mediation in

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expressing emotions and in many other areas (Early Childhood OECD (2021); Phillips, McCartney, and Scarr 1987; Vygotsky, Luria, and Van der Veer 1994).

Researchers (Greaves, Stueck, and Svence 2016; Stueck et al., 2013) found that biodanza has led children to a significant improvement in emotional regulation, behavioral regulation, and pro-social behavior compared to a control group that did not experience biodanza. Researchers found significant differences in social competence between groups after children in one group experienced biodanza. Researchers (López-Rodríguez et al. 2017) found that biodanza had a positive effect on stress reduction in young adults.

This study examined the introduction of biodanza to a kindergarten for five-year-olds to understand its contribution (movement, music, and encounters) to the development of children's movement in space, the combination of movement and music, and communication between children.

### ***Biodanza in the kindergarten***

Biodanza (Stueck 2011; Stueck and Villegas 2012; Toro 2010) stands for dance of life (bio = life, danza = movement, dance). The seven strengths of biodanza are: vivencias, music, movement, caress, regression and transcendentalism, expansion of consciousness, and the group. Biodanza is based on encounters with others that awaken the person and awaken affectivity, pleasure, vitality, joy of life, health, and quality of life. Biodanza founder, Rolando Toro Araneda, teacher, educator, anthropologist, scientist, poet, and intellectual, sought a way to create affective communication between human beings. He found that the integration between music, movement, and encounters creates a sense of affectivity, connection, closeness, understanding, and listening, and is likely to allow for a better communication process.

Biodanza provides a space for an experiential activity through movement, music, and encounters. The movement aims to free the body axes, stabilize the body, exercise the joints, and carry out motion in space. Performing the elements exercises – earth (basic movements, stability), fire (vital movements), water (flow, overcoming obstacles), air (lightness, freedom, imagination) – regulates the body, stimulates vitality and creativity, flexibility, joint flexibility, and coordination. Dancing can be done individually, in pairs, and in groups.

Biodanza encourages affective emotional integration, which takes place on three levels (Stueck 2011; Stueck and Villegas 2012; Toro 2010):

- (1) Personal integration of thoughts, feelings, and behavior of an individual, through unity of body and mind.
- (2) Interpersonal integration with the other.
- (3) Integration of man as part of the whole and of nature.

### ***Vivencia***

*Vivencia* from the root *vivir*, in Spanish 'to live' (Stueck and Villegas 2012; Toro 2010), refers to an intense experience of 'here and now' that can produce in a person emotional and kinesthetic effects with great strength. Vivencia is the main methodology of biodanza. The five lines of vivencia are vitality, creativity, affectivity, sexuality and pleasure,

and transcendence. Vivencia may affect a person along all or some of the five vivencia lines. Toro (2010) described the characteristics of vivencia. These are *subjectivity*, stemming from the identity of each person, as each person experiences it uniquely, at different intensities; *power*, experienced differently by each person; *awareness* of what the person is experiencing, which can appear during the vivencia or at a later phase; and *temporality*, as vivencia appears here and now, and each vivencia has its own unique character.

### *Affectivity*

Rolando Toro, who founded the system by extending the principle of biocentric education, said that education is affectivity, a process of affectivity. Affectivity is defined as the ability to make connections with life, with others, and with the environment, and to make a connection between personal and universal identity. Affectivity that connects creates an affinity with life, provides meaning to life, caring and empathy for human beings and everything that lives, grows, and is inanimate. It feeds the perception of beauty, imagination, and understanding.

### *Creativity*

Lev Vygotsky, Maria Montessori, Howard Gardner, and other researchers emphasized the importance of developing creativity in early childhood. Creativity is defined (Beetelstone 1998) as a generic human trait, with unique personal manifestations, and a skill required for personal, human, emotional, and social development. Early childhood is perceived as a significant period in the development and nurturing of creativity in the conceptual, emotional, social, physical, and symbolic realms. Preschool children have creative potential, curiosity, and a passion for inquiry. Therefore, originality, imagination, abilities, and the expression of impulses and desires must be allowed and nurtured. It is customary to explain the connection between creativity and emotional processes based on traits and factors such as self-confidence, motivation, curiosity, imagination, sense of challenge, pleasure, perseverance, observation, and sensitivity. To stimulate, develop, and foster creativity, children need to be given a creative environment, creative activities, and access to creative adults who allow the child freedom to create.

### *Stimulating vitality, strengthening identity and self-esteem*

The desire to live, initiate, and act. From an existential point of view, vitality is motivation to live, the urge to live, and the availability of energy for action. Our body is an expression of health, harmony, and beauty, and it is treated as a vibrant structure, full of expression. The body is form and feeling; the body is both matter and form. The body is distinct, alive, and expressive; it has identity and vitality (Bostic, Rubio, and Hood 2000; Rosenberg 1965). The body expresses the history of the individual, the inner is reflected in the outer, the body language is a mirror of the trapped inner element that wants and does not want to be revealed. Biodanza opens a door for a person to release the trapped inner body, to reach harmony between the inner and the outer parts (from Unit 2 of Biodanza). Children must be allowed to arouse the vital urge to act, to move, to be, to cope with life. The opposite of the vital impulse is a lack of motivation to live. The term ‘identity’ (Rosenberg 1965) describes a person’s perception of oneself as an individual in a social context. Personal identity is formed throughout a person’s life. In the process of identity formation, people have

many possibilities and many directions for development. There is a close connection between the perception of personal identity and the perception of the other. The ability to perceive cohesion and diversity in oneself is part of seeing cohesion and diversity in others.

### ***Movement and encounters***

The American Dance Therapy Association (ADTA) defines the use of movement and dance as a process that promotes a person's emotional, physical, social, and cognitive integration. Dance allows people to express themselves, to connect with another, and to connect with nature. Movement can promote interaction, communication, and expression, including an interaction between the dancing person's motor expression and emotional content, and an interaction between the mental aspect and the physical aspect created while moving. Movement and dance allow for personal growth through body-mind interactions. The person's body, posture, and motor expression reflect emotions and patterns, both interpersonal and cultural. The body and the mind maintain a system of interactions with each other, forming a complex. Because the body and the mind interact with each other, a change in movement may affect the mind. The movement may be a conscious and unconscious expression of the dancer. Movement and dance may lead to human development in various areas, such as (Bradt, Shim, and Goodill 2015; Conceicao et al. 2016; Karkou and Meekums 2017; Koch et al. 2019; Loman and Sossin 2009; Meekums, Karkou, and Nelson 2015; Neto, Menezes, and Carvalho 2014; Ren and Xia 2013):

- Developing patterns of coping with emotions and difficulties
- Developing patterns of internal communication (of individuals with themselves) and communication with others
- Detecting emotional conflicts anchored in the body
- Developing integration between body and mind
- Developing the ability to regulate the expression of feelings and emotions
- Developing communication and social skills

Authentic natural movement allows people to look inward into their psychic world. Natural movement refers to movement that emerges from inside the person, from one's feelings and impulses. It is a situation in which the person is in a state of mindfulness, paying attention to everything that happens. The person is alert to feelings, emotions, and thoughts without judgment and self-criticism.

The movement reflects the person's level of integration. Three levels of integration are expressed in movement (from Biodanza Unit 11):

- (1) Motor integration. The person shows coordination and timing, and movement flows.
- (2) Emotional-sensory integration. Emotions arise in a person with movement and the person is alert to them.
- (3) Vivencial integration. The body fully surrenders to the experience of movement.

Stueck (2021) found that the movement in biodanza provides positive experiences, helps increase feelings of vitality and happiness, helping improve mental and physical wellbeing. The movement in the vivencia space contributes to the development of social relationships, helping reduce the feeling of loneliness and improving social support. The movement allows the dancers to connect with their body and their feelings, helping improve self-awareness and the ability to express emotions. Moreover, the movement and emotional expression may help reduce tensions and pressures, enhancing mental and physical health. The movement contributes to the development of a healthy and autonomous identity, and it is used as a means of self-expression, connecting with others, and strengthening social ties. Similar findings were reported by studies that examined the benefits of movement (Georgios et al. 2018; Ritchie and Gaulter 2018). It was found that movement helps dancers develop deeper relationships with themselves and with others. Researchers (Georgios et al. 2018; Ritchie and Gaulter 2018) noted the many benefits of movement as a means for the personal and social development of the dancers, for social communication, and for improving the psychomotor, cognitive, creative, and social skills of the dancers. This helps improve their quality of life and sense of belonging, and consolidates their social relationships – both the desire to be socially involved and their sense of security.

### *Music and encounters*

When choosing music (from Biodanza Unit 21), one should carefully consider the moods that arise in listening to various musical passages. Moods can be clearly absorbed in music (Gillespie and Glider 2010; Miller 1989). Music is a communication channel for arousing emotions, as a reflection of the conscious and unconscious layers in the person's mental structure, feelings, emotions, and content from the person's inner world, and the behaviors that characterize individuals and their interpersonal relationships. Music creates similar sensory effects on humans. Therefore, vivencia may create a sense of group cohesion and help people connect with those around them. When dancing to the sounds of music with others, in a group, people share enjoyment and friendship. It is no coincidence that many songs are about love and friendship. Music is used as a tool for communication. When people experience a piece jointly, the sounds of music encourage contact between them. It is not necessarily physical contact, but it can be eye contact or a smile. Such contact is essential to our lives, and once it has been established between people, they share an emotional experience, feel enjoyment, and are full of energy and appreciation for themselves and others (Anderson 2012; Bolduc et al. 2020; Degé and Schwarzer 2011; Edwards 2013; Gillespie and Glider 2010).

The present study examined the introduction of biodanza to a kindergarten for 5-year-olds, in an attempt to understand the contribution of biodanza, of movement, music, and encounters to children's movement in space, the contribution of the combination of movement and music to the communication between children. The research question was: What is the contribution of biodanza in the kindergarten to the movement of children in space, and what is the contribution of the combination of movement and music to the communication between children?

## Method

This is a qualitative case study (Flyvbjerg, 2011; Yin, 2012). The researcher is a biodanza facilitator certified by The International Biodanza Federation, the world federation of national associations of the Rolando Toro System Biodanza Schools. For three years, the researcher conducted the vivencias in a kindergarten, watching and analyzing audio recordings after each session. The sessions were held once a week, on Thursdays, throughout the entire period.

The duration of each activity was about two hours, divided into three parts: (a) arriving at the kindergarten about half an hour before beginning the vivencia, connecting with the children, and setting up for vivencia; (b) conducting the vivencia (about 45 min); and (c) creative activity following the vivencia.

## Sample

The activities were held regularly for three school years in a kindergarten for five-year-olds. Every year, the kindergarten children practiced biodanza throughout the school year. Each year new children participated in the program, but the kindergarten teacher and assistants remained the same throughout the three-year period.

In the first year of the study, there were 30 children in the kindergarten, in the second year 28 children, and in the third year 30 children, about evenly divided by gender. The parents of all the children agreed that their children would participate in the study, as did the kindergarten staff. The data were collected in Israel in the years 2017–2019.

## Data processing

Data were processed following the method of Bernard and Ryan (2010) and Fletcher-Watson (2013). The vivencias were audio-recorded. After each vivencia, the researcher conducted content analysis and extracted statements, events, and situations. Next, significant recurring themes and codes were identified, followed by grouping several of them into concepts and sorting these by categories (Galletta 2013). The process followed a spiral path, where the nuclear elements identified at the beginning of the study became increasingly condensed into a picture that reflected the process of introducing biodanza into the kindergarten (Glaser and Strauss 2012).

In time, trends emerged that kept reappearing in the different vivencias within the same group as well as in groups that changed each year, as these trends became stronger.

The processing of the data into themes took place in three stages (Galletta 2013):

- (1) Open coding, which started with the beginning of the vivencias in kindergarten. At this stage, the concepts in the collected material were located and defined.
- (2) Axial coding. At this stage, the concepts were associated with categories by merging and separating them and identifying connections between the concepts.
- (3) Selective coding. At this stage, themes were formulated and all the data that did not converge into the formulated themes were discarded.

For three years, an extensive amount of data was collected. From the data, certain items were extracted focusing on the research questions. Because of the length of the study and the vast amount of data collected, an attempt was made to explain the data, arrive at some generalizations, and define working principles for practicing biodanza in kindergartens.

Vivencia in the kindergarten is divided into several parts (Biodanza Catalog 2018; Stueck and Villegas 2012; Toro 2010):

- Get-together and short sharing. Exposing the subject of the vivencia and stimulating motivation using background materials and illustrations.
- Phase 1. Beginning, opening circle, group integration. Walking and dancing for motor and affectivity-motor integration.
- Phase 2. Adrenergic, rhythmic integration; walking; physiological or synergistic integration; rhythmic motor integration, games, jumping, dancing; accepting the body, opening up to new movements, and opening movements that have been closed. Dances from the vitality and creativity lines were usually incorporated in this phase.
- Phase 3. Transition, gradual slowing down (bridge). Reduction in sympathetic activation and transition to parasympathetic, segmental expansion and flow.
- Phase 4. Cholinergic. Accepting the body, opening up to new movements, and opening movements that have been closed. Parasympathetic activity. Dances from the affectivity, pleasure, and transcendence lines were usually incorporated in this phase.
- Phase 5. Final activation, gradual ascent (bridge) from the parasympathetic phase, activation dances, and ending circle.

## Findings

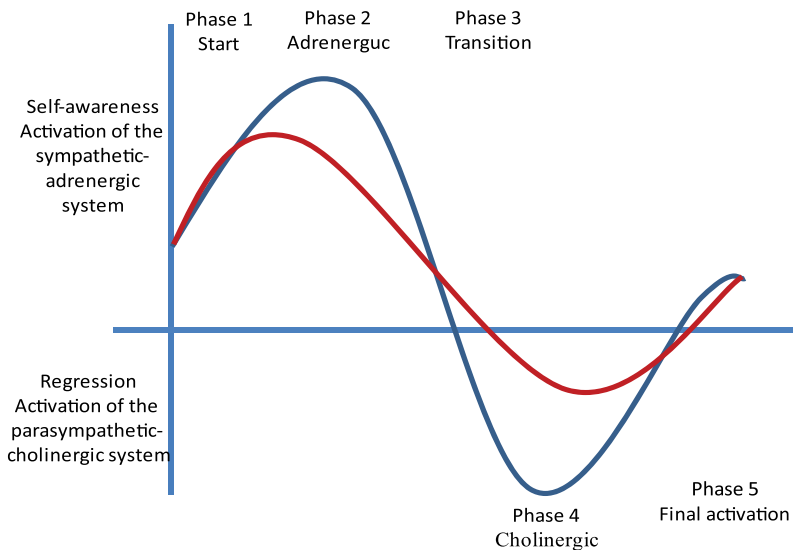
In this section we present the findings in the following order: the structure of the vivencia in the kindergarten at the beginning of the process, vitality, music and encounters, and movement and encounters (Figure 1).

### *The structure of the vivencia in the kindergarten*

The difference between the structure of vivencia and the structure of vivencia in the kindergarten is mainly in the second and fourth phases. The second phase is generally considered the climax of motor rhythmic integration in vivencia: games, jumping, dancing. When it comes to children, one should consider what exercises to do and how many. In time, the children learned to regulate their energy and accumulate energy in the intervals between the exercises. Children are small, and their body has difficulty repeating a certain movement over time, and from one movement it proceeds to a counter-movement; from overactivity to slow activity. In children, the transitions are generally sharper than in adults. But as children gain more experience with biodanza, the structure of the vivencia becomes balanced. Doing things gradually is very important in biodanza, and it can lead to a process of change.

The fourth phase, regression, involves slowing down and resting but in a way that allows opening up, descending for the purpose of ascending, regulating the body, and





**Figure 1.** The structure of vivencia - blue trace = structure of regular vivencia. Red trace = structure of vivencia in the kindergarten.

balancing it. In vivencia in the kindergarten, the emphasis is on flow, relaxation, and light contact with the other. Children in kindergarten are not expected to reach levels of deep relaxation.

### Vitality

The children liked exercises that involved making sounds, combining elemental dances of fire, earth, water, and air. We encouraged them to show themselves and perform creative exercises that stem from the encounter of their body with music and with others. We found that children should be allowed to stimulate a vital urge for action, movement, and coping. In time, the children discovered more and more emotional regulation and movement regulation. They became more and more active, energetic, happy, and full of vitality, and they acted happily. We found that instincts should be stimulated by tasting a variety of foods, both familiar and new; we stimulated children's ability to defend themselves through games of closeness and distance, maintaining personal space within togetherness; stimulated enjoyment in the exercises of harmonization and flow; encouraged emotional, creative, and affective expression; stimulated the senses, the sensations that are the gateway to the world, that open the child to the world; encouraged them to be awake, observant, relaxed, and peaceful; to listen and be in touch with sensitivity and gentleness. If the children did not like an exercise or song, they immediately said so, and restated it again during the activity at the end of the vivencia.

In time, the children learned to plan and regulate their energy in a complete exercise. They learned while experimenting and being aware of time, regulating the energy required to perform an 'average exercise' in each of the phases in vivencia; they learned to conserve their energy throughout the singing and to accumulate energy in the intervals between exercises. In time, we reached a point where no songs needed to be shortened unless it produced an unexpected or unwanted response.

If the facilitator notices that some children are embarrassed to express themselves in dance, or that they are shy or hiding, it is necessary to practice identity expression and use exercises that stimulate the urge to dance, encourage children to express their natural playfulness, and combine games and activities that encourage spontaneous movements, balance exercises, agility, jumping, and running.

The children loved dynamic movements. Practicing dynamic movements affects people's perception of themselves in their interaction with others. Therefore in kindergarten, it has been suggested that it is advisable to allow children to engage in exercises that evoke a sense of power, and to encourage them to carry out the exercises vigorously, to increase their willpower to act and experiment. The intensity of an exercise is experienced differently by different people. Children should perform exercises that allow them to express their feelings and sensations in movement, to listen to sounds and to body language, so that they can achieve a calming of the body and of the mind, and a meaningful process. In time, vivencia creates a 'group,' after which the children feel more free to express feelings, desires, and sensations of great intensity. Powerful movements are generally direct and less circular. The children demonstrate strength, power, exercise their will power, empower their will so that it can find ways to materialize. For example, the gorilla exercise allows children to feel power and strength, so that they can contain their feelings, the other, from a position of strength rather than of weakness. It strengthens their sense of power and reduces their sense of weakness. Other exercises are those of the lion, the lioness and the cubs, the forces of nature, the exercise of the wind, we are a storm, we are fire, earth, air, water, plants, and animals; we are the seasons, fall, spring, summer, winter; we are light, we are darkness, moon dance, sun dance, and star dance.

### ***Music and encounters***

Music is a channel of communication for arousing emotions and behaviors that characterize people and their interpersonal relationships. We found that children should be allowed to listen to music intuitively, with the whole body, flowing, in the rhythm of the music, paying attention to the transition between parts, with repetition, change, symmetry, and hierarchy, in a variety of movements of their choice. Representing music through movement allowed children to create magical and hidden connections and served as a source of great enjoyment. The children expressed pleasure, creativity, originality, and demonstrated perception, imagination, concentration, attention, perseverance, comfort, ease, a sense of belonging, impulsivity, restraint, awareness of their feelings and of the feelings of others, and ability to feel and express pleasure. These experiences encouraged the children to explore, discover, and identify what they like, how they feel, how their friend feels in the encounter between them, how they express their feelings, how their friends express their feelings.

Music and the five biodanza lines in kindergarten: vitality, creativity, fun, affectivity, and transcendence.

### ***Music and vitality***

Vivencia incorporated exercises that encourage activity and play; exciting, rhythmic, happy, energetic dances; flow exercises, a combination of nature and the five senses.

### *Music and creativity*

Vivencia incorporated exercises that encourage the expression of emotions, free dance, free activity, and works of art.

### *Music and affectivity*

Vivencia incorporated exercises that encourage giving, containment, social activities, dancing in pairs and triplets, joint exercises, dancing, and making eye contact.

### *Music and pleasure*

Vivencia incorporated exercises that encourage strong movements to increase vitality, touching another, caressing, and playing the 'tunnel' game.

### *Music and transcendence*

A harmonic activity consisting of the dance of the four elements and the mandala dance.

In choosing music for kindergarten children, it is necessary to address the question of the emotional content of the music and of the exercises that the music allows. We found that it is advisable to choose rhythmic music. Rhythmic music has order and discipline, which makes it easier to use. We found that it is desirable to use music with a clear, simple rhythm that is easy for the children to grasp and does not burden them, not too intense, and not too emotional; music that is happy, quiet, involving light movements, not too complex.

The children like familiar songs, therefore, it is advisable to use music that is familiar to them, which creates a feeling of recognition and makes it easier for them to integrate it. Foreign and unfamiliar music creates a feeling of alienation in some of the children and can evoke a sense of threat, a feeling that new and different things may happen later. Therefore, when incorporating new music into vivencia, familiar exercises should be combined into a demonstration (and *vice versa*).

Melodic music requires attention, leading to expansion and melting. Some children start crying when they hear melodic music.

Music that creates dissonance increases their sense of tension.

'Heavy' music creates a sense of difficulty for them.

Music that had a rhythmic change in the chorus evoked in them a sense of enjoyment, of play, of surprise.

Music creates a connection between the biodanza facilitator and the children. Speech sometimes creates tension. The children are flooded with speech. The facilitator should motivate the children to listen to music, and then let the body move to the sounds of the music.

We found that it is not advisable to play music at a high volume, not even rhythmic music. The volume of the music greatly affects the behavior of the children. Raising the volume may cause some of them to start acting out. Lowering the volume brings some of the children to a state of relaxation, and others to turn inward, become passive, or start crying.

Some music makes children 'go wild' and some music makes them sit and not cooperate.

When children are tired or cold, or when they are sad, there is a need for music that suits their mood and not for fast and rhythmic music that starts suddenly. Children should be allowed to join *vivencia* from wherever they are to help them reach a happier place. If they are too noisy and lively, start with something that suits them, then play soothing music, sounds from nature, and water splashing.

### ***Movement and encounters***

The children's movement in space may reflect their physical, mental, emotional, and cognitive state. Biodanza uses the natural movements of the body, which are a means of personal expression. At the beginning of the year, the movements of some of the kindergarten children were simple, repetitive, mechanical, and automatic. Later, the movements became more and more authentic, and rich, covering a wider range. Gradually, the children incorporated a variety of movements, some of them acquired in the course of *vivencia*, but others were movements that the children allowed themselves to demonstrate in the common space without fear of being ridiculed. Today children are exposed to a variety of media that present to them many and varied dances, can see how others dance, and have a 'movement bank' to draw on. When children are not afraid of being mocked, they allow themselves to express themselves in movements they have adopted from different places and have found to be good for them.

In time, the *vivencia* in the kindergarten gains richer movements, the children are no longer as embarrassed as they were at the beginning of the year, are no longer ashamed to dance their dance, and are no longer afraid to express themselves through dance. They learn to combine a variety of movements, from different areas in the body, in the course of one dance, including walking, running, skipping, and shaking. In time, they incorporated more and more movements interacting with other children in the common space. They learned to dance in pairs following the music, taking into account who was in front of them. They learned to make eye contact, but in a gentle way, not embarrassing, not preaching, not proving, not threatening. At the beginning of the year, some children sent threatening glances in the direction of other children. This gradually disappeared from the common space, and the condemning and threatening glances were transformed into encouraging ones, the children making gentle, affectionate eye contact. In pair exercises, it is advisable to ask the children to make eye contact with each other, to feel each other, and to try to adjust their movements. In general, eye contact is reciprocal contact, except in certain cultures where it is not customary to make eye contact. When we make eye contact with others, they may make eye contact with us. When others do not make eye contact with us we are liable not to make eye contact with them. When someone fails to make eye contact with the other, at times the other also gives up making eye contact. Eye contact creates a sense of connection between people. People who make eye contact feel that they are revealed and not 'transparent.' At times, people feel that they are 'lost' and that eye contact with another person may connect them to themselves and others. In time, the dance in pairs, the encounter between the children, hinted at the nature of the communication between them, and communication evolved into eye contact, smiles, laughter, and synchronous movements that indicated listening to each other.

Eventually, kinesthetic empathy developed between the children. They encouraged each other, joined each other's movements, and imitated each other's movements.

The body of some children is tense and contracted. In some children, there is a gap between what they feel and what they are able to express in movement, so they should be allowed 'space to move,' until little by little they learn to experience the music in their body, to move freely without fear of ridicule, without acting out. Gradually, the children develop a linguistic and imaginative awareness of the differences and similarities in their own and their peers' reactions and expressions of movement.

Slowly, the children developed an awareness of transitions in movement. In one exercise a great deal of movement took place: running, jumping, skipping, and shaking. In the next exercise, the opposite happened, in the form of long, slow movements. This is how the body maintains its energies, its balance. The children's bodies are small and have difficulty repeating a certain movement over time, therefore one movement changes into a counter-movement, from overactivity to slow activity, with slower and more circular movements. In children, transitions are generally sharper than in adults. The structure of vivencia with children is different from that with adults, but as the children gain more experience with biodanza, the structure of vivencia becomes more balanced. First, they go through sharp transitions between vigorous and slow movements, but after some time they learn to soften the transitions.

### *Walking*

Walking is a person's identity card. Who am I before the world? How can we make a person feel that one is part of a whole, not merely exceptional, not merely different? The children's walking before the beginning and after a few biodanza classes changed in comparison to when it was part of the biodanza classes. In some of the children, it was possible to see a change in the posture of the head and chest, a change in the ease and rhythm of their gait (gait rhythm, regularity, cycles, accuracy). Walking, body movements, and posture are affected to one degree or another by our emotions, the self-esteem we have for ourselves, and naturally, by our physiological structure. One's movements and posture are an expression of one's feelings, feelings about the self and about the self interacting with others. Body language, hyperkinesia, side-to-side swaying, involuntary and incessant hand movements, a hunched back, weak body tension, extreme muscle tone, head tilted downward toward the floor, gazes directed at open spaces and not at the children in the common space, involuntary facial expressions – in other words, the posture and movements of the body are an expression of the various aspects of the human psyche that have developed over the course of life. At times, a change in body posture requires a change in a person's attitude toward the self and those around. Gradually, various types of walking should be included in vivencia, for example, walking with affective motivation, walking with an urge that comes from the chest, from an emotion that arises. It is recommended to encourage synergy between the different parts of the body while walking, tilting the chest and extending the arms forward so that the children achieve integrative, motor-affective, synergic walking. In the demonstration, they were shown walking with the left arm moving in sync with the right foot and the right arm in sync with the left foot. It is recommended not to correct the children's movement while they are walking, only to demonstrate the correct way to do it. Synergic walking may significantly minimize the lack of motor synergy, allow integrative walking, and balance energy while walking. Walking and dancing to the sounds of music, during the chorus, the children practice dance walking. Walking and dancing in the same

exercise draw our attention to our body and our environment, evoking a response to the stimulus that the music provides and to the movement that comes out of us, in the common space.

Some of the children did not exercise certain parts of the body and fell into movements they were familiar with, which came to them easily. It is recommended not to correct their movements, not to tell them how to do it, but to demonstrate to them. Most of the children will imitate, to varying degrees, the movements, causing closed movements to open up or new movements to emerge. Because they are still small and still connected to some degree or another to their self, it is possible to consider the signals of the body and its posture as a mirror or a reflection of the mind.

To encourage children to develop movements other than those to which they are accustomed, to try a different posture of the body, to jump without fear of disengaging from the floor, these should be illustrated to the children by various means. For example, when I wanted to create an awareness of the posture of their body, I showed them pictures of sculptures, such as the statue of David by Michelangelo. I asked them what they saw and how they felt when they saw David. I asked them to stand like David. I asked them what feeling it produced in them to stand like David. I asked whether they felt the posture in their body when they stood like David. When children experience different postures and different movements, they discover additional abilities, perhaps better for them than their present ones, positions and movements that enrich their repertoire and allow muscle development in different places in the body, not only in specific places. The muscles of some children are not developed in certain places, therefore they avoid certain movements. Children should be encouraged to exercise their bodies and the muscles in their entire body. They should be encouraged to open up to movements that have been closed to them or have not yet been opened. Young children do not see certain movements that they do not use, perhaps because the muscles of the back, abdomen, or arm are not sufficiently developed yet.

*Movement as an expression, joining the movement of the other and imitating movement.* Some children look 'cramped.' Usually because of fear of shame or fear of exposure they are afraid to let themselves blend in with the music, to listen to music with all parts of the body, therefore they imitate the movements of others. Almost all people imitate movements, but usually, they do so by adapting the movements to themselves and giving the movements a personal expression. In humans, the dance usually originates from the centers (*chakras*) in the body, the chest area, or the pelvis. The more people allow themselves to dance from the center, the more relaxed and less trapped their dance is. Therefore, kindergarten children should be given exercises that allow different rhythms to stimulate the various centers in the body, to release the various centers through exercises and music that is appropriate for each center. Children should be given exercises that are suitable for balance and posture of the body center and base, that stimulate emotion at the center of the solar plexus, and that release voices and gibberish from the center of the throat.

In demonstrations, we should emphasize that we demonstrate our dance, our own expression in movement, and that all individuals have 'their own dance,' 'their own fun dance.' The purpose of our demonstration is inspiration, not imitation. Some children feel confident in dancing when they imitate someone else's movements, but their

imitation stems from their body movements, that is, two children imitate the facilitator, but each child does it in his or her own way.

At first, the imitation is at the motor level, but in time the motor movement usually undergoes a process toward vivencia-like, expressive movement. In other words, the dancer dances a motor dance that causes sensations in the body and develops an alertness to the feelings that arise during the dance. In time, the feeling felt by the dancer creates the movement, as the dancer listens to the sensations of the body in both the motor dance and the vivencia dance.

It is important to emphasize in the demonstration the principle of pleasure in movement, the attention we pay to the sensation that arises in our body during movement, so that children make no movement that may harm them, by imitating without paying attention to their body sensations, as for example, moving segments of the neck. We must emphasize that the movement should be pleasant and enjoyable, paying attention to the sensations that arise in the body while moving. We should encourage children to move in a motion that leads to emotion, to feeling, while integrating the whole body and the three centers. We should demonstrate each time different options for performing an exercise that we are repeating. We should allow children free expression and a free choice to express themselves. We should allow them to experience movement. Such a process will help their self-regulation. In time, they will delve into the depths of their vivencia experience.

*A sense of trust in the body.* Establishing the children's trust in their bodies is essential in building their self-confidence and their trust in their ability to deal with the world, with confusion, misunderstandings, and cynicism. Establishing trust in their bodies means a flexible body as opposed to a rigid one, open movements as opposed to closed ones. Therefore we recommend starting vivencia in kindergarten with basic dances, paying attention to the rhythm of the music, to walking. Gradually, the children will develop greater confidence, and it will become possible to combine creative elements that produce a sense of freedom and choice. A sense of creativity and freedom to choose comes with the children's sense of security in their space and in their dance. Gradually, from vivencia to vivencia, we can see the changes that have taken place in the children, the self-regulation, the self-expression, the openness in relation to others. Movements that come out of the centers of the body, unlike peripheral movements, are expressive movements, which reflect the children's feelings.

Children should be provided, to the extent possible, a space that allows them to express themselves authentically in movement. Dance can bring balance to the body and mind, and help develop the children's imagination. Most children love to dance. We should allow children to turn the dance into an expression of emotions, a gateway to self-expression through the body. It is acceptable for children to object to expressing themselves through dance. At times, such objections stem from barriers they have set for themselves. We must develop a process that makes expression through movement legitimate, that encourages children to be brave and express themselves through movement during the sessions; we must allow children to express themselves when it is convenient for them and according to their desires. With children who initially did not want to participate or who participated in a minimal, detached way, I met after the vivencia in small groups of two to three children, realizing that the movement may make possible for the children a process that would lead them to change, openness, and

development. I put on music and asked them to listen to the music, then slowly move their body to the sounds of the music. I asked them what they felt and what it did to them. I did this to raise awareness of the feelings they experienced and to expand their awareness of what was happening to them and around them. I met individually with children who were ashamed to dance. I spoke with them, found out what song they liked, what types of movements they liked, and I promised them that I would integrate the songs they preferred and the movements they chose in our next vivencia. It is necessary to find out what each child's preferred way of learning is – talk, music, movement, words that bring us closer to each other, caresses – and use all the tools we have. At times we must bend the rules to reach a child, and must do it with love. When children manage to express themselves in dance, in body movement, they are freed from the need to imitate others, from the fear that they will be mocked, that they will do something ridiculous. In this situation, the freedom to give expression to the sounds of music through movement creates a change in the child and the group. The process is often slow. The need for self-control and the fear of embarrassment, of ridicule, is slowly replaced by self-awareness and the recognition of the path to self-expression.

## Discussion

In this study, we examined the introduction of biodanza to kindergarten for five-year-olds, to understand the contribution of biodanza, of movement and music encounters, to the development of children's movement in space, the combination of movement and music, and communication between children.

The introduction of biodanza to kindergarten made possible a process that encouraged children to show themselves and encouraged initiative and expression. Vivencia provided many and varied opportunities for development, for free, playful, and non-playful activities, with emphasis on nurturing and developing social-emotional relationships, cognitive nurturing, and developing creativity that is appropriate for children's development. Vivencia allowed children a space to study their reactions, their movement, and their environment, and to learn from their environment. Biodanza in the kindergarten set challenges for the children at a level of difficulty tailored to their abilities so that they could face the challenges and grow, open up, and develop. The findings of the study reinforce those of previous studies, which showed that the introduction of biodanza spurred creativity, originality, and the perception of human situations through the five senses. It produced curiosity to explore ambiguity and to identify varied perspectives while cultivating empathy and the ability to contain. It stimulated personal expression, enjoyment, and creativity. It strengthened motor, motion, vocal, aesthetic, and artistic development. It nurtured a sense of belonging, and helped develop social-emotional skills, as well as tools for soothing and relaxation (Giannelli, Giannino, and Mingarelli 2016; Jeong et al. 2005; Stueck et al. 2009; Stueck and Tofts 2016; Stueck et al. 2013).

The findings show that the group meetings gradually come to serve, to a different extent for each child, as a place that allows children to make contact, connect, and express themselves freely and without fear of being ridiculed. It provides a place that allows children openness and development, individually and as a group, and encourages and stimulates processes of growth and development. It provides a sense of togetherness, of a 'kindergarten family,' of protection, sharing, and achieving common goals. It provides



a sense of connection between the children and the staff. The biodanza facilitator should help the group come together, to provide all the children a sense that they are important and that they are helpful to the group. The facilitator should provide positive feedback, to show all the children that they are valued, both as individuals and as part of the group. The facilitator should allow everyone openness and development, the opportunity to grow physically, emotionally, socially, and cognitively. The facilitator should encourage the expression of feelings of love, friendship, desire to help the other, mutual respect, and empathy for the other, as well as for the pain and feelings of others. Some children at this age have the ability to show empathy and to contain, but others find it difficult to contain the feelings and sensations of others. For example, when a child fell and received a blow, some of the children started crying along with him, while others made various statements like 'This is nothing. I also fell and received a stronger blow and didn't cry.' When being 'together' is too difficult, children sometimes run to the corner of the kindergarten. Children who have a sense of distrust may not want to hold hands or get close to other children or to a child who has attacked them in the past. It is necessary to grant legitimacy and explain that it is appropriate to feel uncomfortable with someone else and that it does not mean that one is not sociable ('I don't accept what is different from me.') Whoever claims to the contrary does not acknowledge the difficulty the children are having when their boundaries are not respected. The goal is to enable the creation of an affectionate group, without preaching morality, and to do it sensitively, gently, without hurting anyone. We must make possible exercises that provide a sense of a safe place. We must integrate into our routine exercises that evoke a desire to respect the other and to be close to others. Whenever children leave the circle, they must join the hands of those to their right and left, and when they return, they must gently reopen the circle. Children like exercises in small groups, in which they can be tigers or puppies playing together. In exercises where there is a division into small groups, it is recommended to allow children to choose their group. A child may feel comfortable in one group but not at all uncomfortable and unhappy in another, and in the blink of an eye a quarrel can break out. In a closed group, like a kindergarten, everyone belongs, and everyone participates, without punishing, without excluding anyone from the group activity. Gradually, they become able to connect with more and more children.

We found that it is important to demonstrate and respond with affection and empathy to the kindergarten children. Most of the children are hurt by what is being said to them. Those who are hurt usually respond by closing up, but there is no change in their behavior as a result of what has been said to them. Behavior change involves a process of learning alternative responses (Zilka 2014, 2017). For example, when a child was agitated, I bent down to be closer to him and joined him where he was. If we smile at them, they usually smile back; if we behave pleasantly and softly, they usually respond pleasantly to us, reflecting our behavior. Children should be approached kindly, tenderly, and gently, without offending them. The findings of this study show that over time, outbursts, anger, and quarrels decreased, and positive gestures multiplied compared to the beginning of the year and compared to kindergartens where we conducted short activities of several sessions. The findings of this study reinforce those of previous studies Stueck (2011) showing that biodanza provides space for emotional training, for organizing and managing behavior, regulating emotions and behavior, reducing feelings of anger, and stimulating a sense of optimism. It provides space for the development of

social and emotional skills and the acquisition of emotional skills (Jeong et al. 2005; Stueck and Tofts 2016; Stueck et al. 2009, 2013). Researchers (Stueck et al. 2013; 2016) have pointed out the psychological and physiological effects in children experiencing biodanza, and the short-term positive effect on the regulation ability of children aged 4–6 years. Researchers (Giannelli, Giannino, and Mingarelli 2016; Stueck and Tofts 2016; Stueck et al. 2013) found that biodanza leads to improvement in such psychological traits as optimism, relaxation, self-efficacy, the ability for love and empathy, anxiety reduction, stress reduction, and increased sense of wellbeing.

The findings show that in biodanza in kindergarten, emphasis should be placed on a focused and structured process alongside *vivencia*, which allows free activity and grants children initiative and courage to express themselves. It allows many and varied opportunities for development, for free, playful, and non-playful activity, with emphasis on nurturing social-emotional relationships, cognitive nurturing, and the development of creativity, compatible with the development of the children. It helps nurture and develop a positive emotional climate and many ways to express joy, frustration, anger, and insult, while responding to the needs that children express. It gives children basic confidence and daring to explore their bodies, their reactions, their movement, and their environment, and enables them to learn from it. When children have a sense that they take an active part in their developmental process, when their inner urge to explore the environment is allowed, the process is likely to lead to a sense that they are part of the whole, that they understand and know their environment. Children need an environment that presents them with challenges at a level of difficulty tailored to their abilities so that they can face the challenges and grow, open up, and develop. Children need positive feedback and encouragement. The feedback should be clear, concise, and focused so that the child understands the feedback and how change can be brought about. Some children are quiet, others are cautious, others are followers, and their behavior is repeated over and over. Through biodanza, they can become aware of their pattern of behavior and bring about change. It is advisable to schedule exercises that allow the use of different rhythms to stimulate the different centers in the body, to release the different centers through exercises and music suitable for each center. The exercises are suitable for balance and posture (the center of the base), that evoke emotion (the center of the solar plexus), that release voices and gibberish (the center of the throat).

We must approach children softly, gently, and we must be mild so that they feel protected and want to be near us. We ought not to expect children to be ‘as we want them to be,’ but to be as they are; we should help them develop and evolve from this point. We must provide them with options for developing social awareness and mindfulness of their and others’ feelings. Empathy is built on emotional self-awareness and the ability to read signals that others send us, on listening to others, as opposed to being emotionally ‘deaf.’ An optimal environment for encouraging the development of emotional and behavioral self-regulation is one that is attentive, responsive, and sensitive to the child’s needs and perspectives; it is a protected place that inspires security and provides encouragement. The environment must provide opportunities for activities that help develop autonomous self-regulation; allow for personal expression, enjoyment, and creativity; reinforce motor and rhythmic development; and nurture social and group skills. It does so softly, gently, so as not to cause harm. Harm caused in early childhood is severe and often irreversible (Rosenberg 2007; Zilka 2014, 2017).

*In conclusion*, after prolonged experience with biodanza, the children demonstrated confidence in their movement, in approaching other children, and in expressing themselves through movement, creativity, and discourse. Kindergarten children should be provided with process-oriented biodanza, to foster development in movement and encounters. Each encounter stands on its own, it is part of the whole and has a clear and unique definition. We need to provide challenging exercises for the children, who have a developmental horizon in movement and in encounters with others. We must encourage them to do the exercises vigorously to increase their inner drive as well as their willpower to do, initiate, and experiment.

### **Research limitations and future studies**

It is recommended that further studies examine the potential of introducing biodanza in kindergartens to shed light on the subject in depth and from various angles. One of the topics that stood out in the findings of this study is the process of social-emotional development that biodanza provided for kindergarten children. Future studies should examine the effect of biodanza in kindergarten on social-emotional social aspects, given the great importance of this aspect on children's developmental process in early childhood.

### **Disclosure statement**

No potential conflict of interest was reported by the author(s).

### **Notes on contributor**



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### **Compliance with ethical Standards**

Informed consent was obtained from all individual participants included in the study.

The study received approval from the institutional review board (IRB) of Achva Academic College.

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