



## **DANCE AND ITS INFLUENCE ON EMOTIONAL SELF-CONTROL AND REGULATION AND EMOTIONAL INTELLIGENCE ABILITIES AMONG EARLY CHILDHOOD-AGED CHILDREN**

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Movement is a basic form of gaining experience and communication through which children learn to cope with different tasks in their lives (Sharir, 2007). Humans are capable of using their bodies to express their ideas and emotions through movement (Ronen, 2011). In particular, children learn to move their bodies, develop their imagination and express their thoughts through dance (Bahat-Ratzon, 2004). This research study focuses on two important areas for proper overall child development: the area of motor skills and the area of emotions. The study examined the effect of folk dancing/circle dancing on emotional self-control and regulation and self-confidence among early childhood-aged children, while comparing circle dancing to dancing in an unorganized open space. In addition, the study examined the effect of circle dancing on the children's emotional intelligence abilities. Questionnaires were distributed to 60 children from a varied age range in two kibbutz kindergarten classes: in one kindergarten class, the children gained experience in dancing in an organized fashion throughout the year; in the second kindergarten class, the children were not exposed to folk dancing. The Trait Emotional Intelligence Questionnaire examined the emotional intelligence level of the children in both kindergarten classes and their progress in this area throughout the year. The findings showed evidence of an improvement in emotional intelligence among children in both kindergarten classes; there were significant differences between children in the two classes regarding some emotional intelligence variables as a result of circle dancing. In addition, the findings point to a strong correlation between circle dancing and emotional regulation and self-control. On the contrary, no strong correlation was found between emotional regulation and self-control and the variables of gender and age of the children.

**Keywords:** Circle dancing, Early childhood emotional intelligence, Emotional regulation, open space, Self-control.

### **Introduction**

Life in the post-modernist world is characterized by a fast-paced lifestyle, success and prosperity, parents spending long hours at work, and children spending most of their leisure time playing with plastic toys, electronic games, the computer, and watching television already at an early age. Under these circumstances, the children have difficulties in developing motor skills or social skills, which contradicts their natural development. Emotional, motor, cognitive and social development are created and shaped during early childhood.

The development of a young child's personality is a complex, multi-lateral process, expressed through his physical-motor development, his cognitive development and his

emotional-social development. Therefore, the experiences a child undergoes during this period are the most significant ones in his life, and have a great influence on his values and habits later on as an adult. Seruf (1998) believes that today, more and more children are failing to establish social connections in kindergarten and are experiencing frustration and pressure, which could adversely affect their proper emotional development. The level of frustration that children experience as a result of their failure in establishing social connections is great and even dangerous since their abilities to express their emotions verbally is poor relative to adults. Goleman (1995) emphasizes that the success in socially integrating in the future depends on a person's emotional intelligence more than on his cognitive intelligence. Mayer and Salovey (1997) coined the term "emotional intelligence" as relating to the ability of different individuals to cope with their feelings, including self-awareness of feelings, managing feelings, self-motivation, identification of feelings, and managing relationships. From here, arises the question: how can we deal with the emotional intelligence of children? Shuval (2006) and Walter (2011) explain that through movement, it is possible to practice and promote social relationships and emotional abilities, since bodily movements call for social interactions and coping with emotional abilities. Movement is a person's primary need (Cotler, 2007; Walter and Hen, 2012), through which he can learn and cope with different tasks in life. And when movement turns into a dance form, it is possible to experience different aspects of life such as sensory, movement, perceptual, social and emotional aspects (Koff, 2000).

Dance is one of the most ancient art forms. It is an artistic language in which an individual expresses himself and communicates with others through movement. Dance is a basic human impulse and need. Every person is able to use his body and express himself, his ideas and his emotions through movement. During group dancing, children must learn to adapt their movements to the movements of other children dancing together with them in order to move harmoniously and maintain relationships in order to succeed in dancing together. These attempts require restraint, control and emotional regulation (Walter, 2011). In addition, Brutonov (1982) claims that the geographical structure of folk dancing is based on the concept of "together" and working in a "team," giving expression to the joy of partnership and reciprocity. Brutonov (1982) adds that the creation of folk dancing is based on collectivism; it expresses the joint emotions and feelings of every person and not just something private, personal and individual. This creation belongs to everyone.

Based on the findings of a research study carried out by Walter and Ben Zvi (2011) in which circle dancing was found, contrary to dancing in an unorganized space, to contribute to emotional self-control and regulation among kindergarten children, this study examined the influence of folk dancing on the ability of emotional self-control and regulation among early childhood-aged children in a group of children from a different area of the country, as well as the influence of circle dancing as opposed to dancing in an open space on emotional intelligence abilities.

## **Emotional Intelligence**

Keidar (2010) claims that emotional intelligence is a rational connection of thoughts and feelings that leads an individual towards a desired situation with himself and with his environment. Proper merging and use of feelings and the cognitive process enables providing a response that stems from choice and not from impulsivity. The concept "emotional intelligence" was first mentioned with the publication of Gardner's (1983) multiple intelligences theory. Contrary to the traditional approach that minimizes human intelligence, Gardner (1983) claimed that the concept

of intelligence as a sole factor does not reflect the range of human abilities. He therefore proposed that the following eight intelligences exist: verbal/linguistic intelligence, logical/mathematical intelligence, visual/spatial intelligence, musical/rhythmic intelligence, naturalistic intelligence, bodily/kinesthetic intelligence, intrapersonal intelligence and interpersonal intelligence.

However, Gardner (1983) did not define the concept “emotional intelligence.” Goleman (1977) relates to two aspects of Gardner’s multiple intelligences theory in terms of different abilities: interpersonal abilities and intrapersonal abilities. He relates to four separate abilities in interpersonal intelligence: leadership, fostering relationships, keeping friends, and perceiving the social structure. Intrapersonal intelligence is the internalized ability that provides an individual with access to autologous feelings, enabling him to discern between them and use them. This self-awareness helps a person understand and evaluate himself in the right way (Goleman, 1997).

In addition, Mayer and Salovey (1997) claimed that emotional intelligence is a series of abilities enabling us to be convinced how emotional understanding and perception change from person to person. Mayer and Salovey’s emotional intelligence model includes five main components:

- **Self-awareness of emotions:** the ability to identify how a person feels at a certain time and the thoughts accompanying this mood
- **Managing emotions:** the ability to regulate and moderate feelings in such a way as to prevent “emotional overload” and severe distress
- **Self-motivation:** the ability to harness emotions in order to achieve an objective, and the ability to delay gratification that postpones the objective
- **Identifying emotions:** the ability to identify social signals and the feelings of others
- **Managing relationships:** the ability to control social skills, proper emotional expression, self-control and empathy to the feelings of others

Therefore, emotional intelligence could be defined as the ability to understand and express feelings, implement emotions in our thoughts, understand and decide through emotions, and manage feelings about ourselves and about others. Emotional intelligence abilities develop during early childhood according to developmental stages through interaction with the environment and adult mediation. Studies point to the importance of emotional education with children that works on two levels: learning about emotional processes, and studying emotional awareness (Zeidner, Gerald and Richard, 2012; Best and Geddes, 2002; Barford, 2002).

### **Emotional Self-Control and Regulation**

Processes take place in our brain over which we often have no control. Ronen (1992) defines the concept of self-control as a person’s ability to control his behavior in the absence of external impulses. Through his behavior, a person influences the environment in which he functions, and in this way becomes the controller of his environment. The abilities of self-control, delaying gratification and moderating impulses are included in the concept of emotional regulation, which relate to the ability to respond to an instruction or a request, and the ability to initiate and/or stop behavior according to the situation at hand (Berger, Kaufman and Henick, 2008; Walter, 2011). Ronen (1992) divides the significance of self-control influencing various circles of human life into the following four categories:

**Existential** – when a person has control over himself, he can be flexible with changes and take advantage of opportunities to improve his life and tap his full potential.

**Existential** – the ability of a person who is in control to suppress his impulses and desires in order to comply with the norms that society has determined.

**Social** – a person's ability to manage his life and adapt his actions to a main joint objective in different cultures in order to become an independent person according to cultural needs and to tap his full potential as a community member.

**Personal** – a person's ability to change things related to his life, thus giving him a feeling of hope and security, a feeling of being responsible for his actions and a feeling of control.

It may be concluded that emotional self-control and regulation is a main factor in maintaining a person's emotional health. It is also a way of achieving a stable, well-established life. When a person lacks self-control, he will be perceived by society as being someone suffering from emotional problems and unable to cope with situations pressuring his life, and he will feel helpless and depressed (Cooperman, 2004). In addition, emotional self-control and regulation develops starting from the first mother and child bond, and continues in social interactions established within formal and informal educational frameworks in parallel to motor development during early childhood. Activities in kindergarten involve group movement activities that require the child to cope and develop his social skills while conforming to the need to adapt as an individual to others (Shakedy, 2004; Carlson and Moses, 2001.).

### **Emotional Development during Early Childhood**

During early childhood, children undergo very significant emotional changes. Contrary to the adult who has already acquired self-control skills, young children have difficulty in controlling their impulses and delaying gratification. However, these abilities improve as the child grows older. Already during infancy, infants start to learn to delay gratification. This ability develops as part of overall child development; it is therefore affected to a great extent by external factors. From this, it could be said that a strong connection exists between movement and emotional self-control and regulation as external factors affecting child development (Seruf, 1998; Cooperman, 2004). Early childhood-aged children start understanding their feelings and the reasons behind these feelings. They even develop an emotional self-regulation ability, which controls the expression of their emotions, in order to behave properly under different situations (Seruf, 1998, p. 453; Fink-Kronenberg, 2007). A child learns through the experience he gains in society during his daily life to be more flexible in terms of expressing his emotions. Sometimes a situation arises that requires considerable restraint; other times a situation enables a child to act according to impulse and express his feelings as he so wishes. A child having self-control will succeed in adapting his emotions to different and specific situations. In order for early childhood-aged children to develop properly in different areas, the adults in their environment must worry about enriching stimulations that the environment could provide in addition to the developmental and biological maturation processes (Lidor, 2004).

Experience helps a child tap his inherent potential, and the effective functioning and quality abilities that he develops will be determined by the quality and frequency of this experience. Humphrey (1985) believes that reciprocal relations exist between movement and the physical-motor, emotional, social and cognitive personality components in a child's overall development. Through movement, children investigate their environment, expand their knowledge, and develop physical and emotional skills.

## Movement

Movement is an intimate and primary expression of human beings; through movement, a person discovers his environment. Already in the mother's womb, an infant makes preliminary movements, and movement precedes the first sound he makes (Binter, 1972; Orpet, 1972; Ratzon, 1993). The development of movement and motor skills during a child's first years starts in his reflexes. Motor activities are carried out by the brain stem alone during this stage (Hanford, 2000). Later on, the coordination between the senses improves as a result of the child's repeated experience in movement and following the genetic processes of delaying his primary responses (Gallahue and Ozman, 1995). Movement is an essential component enabling a person to exist, understand and adapt to his environment, and in creating a connection with others (Giliun, 1979).

The concept of "movement" includes various terms, and several researchers defined movement as follows (Cooperman, 2004; Smyth and Wing, 1980; Cabbard, 1984):

- **Action** – carrying out a task. For example, when throwing a ball to a friend, one must straighten out one's hand in order to complete the action of throwing (Smyth and Wing, 1980).
- **Physical activity** – a general term referring to a collection of activities that require execution. Movement involves dismantling the activities while placing emphasis on the process of execution.
- **Ability** – a person's potential to learn physical movements and perceptual components for absorbing and changing (Singer, 1980).
- **Skills** – an action having well-defined movements. Each skill is unique in itself and it is difficult to prove moving from one skill to another (Cabbard, 1984)
- **Physical education** – a teaching profession that deals with physical activity, duplicating and practicing motor skills (Giliun, 1979).
- **Educating about movement** – relates to the analysis of the movement process in physical activity (Shakedy, 2004; Giliun, 1979; Walter, 2012).
- **Rhythmics** – a music teaching method that uses movement in order to explain music (Shakedy, 2004; Giliun, 1979; Walter, 2012).

Motor ability works in combination with several abilities so that a child will succeed in carrying out a large number of motor activities. Psychomotor ability relates to the process that takes place while carrying out motor activity, that is, a child must think and plan his actions while carrying them out (Haywood, 1993; Lencer, Gal-Or and Shoval, 1982; Giacomo, Leonardo and Vittorio, 2006).

There are four basic motor abilities: balance, kinesthesia, coordination and speed. Practicing these abilities at early stages of movement development will improve a child's motor functioning in the future (Lidor, 1993; Haywood, 1993). Exposure to different movement activities (sports, dance, etc.) is very important during early childhood in improving a child's psychomotor abilities, which will ensure his proper physical functioning, control over his body and over the space he is in. Levine (1989) adds that actual experience and physical activity in combination with other elements from the environment is essential for a child to improve his psychomotor skills.

In a stimulation-rich environment, a child will naturally investigate and examine objects. The more active a child is and experienced in diverse physical activities, the faster his neural system will develop; the brain's neural development enables the child to take advantage



effectively of the possibilities within his environment. In the end, different systems in the body develop and the child will be capable of carrying out more complex tasks. Flavell (1981) emphasizes that without a child's ability to investigate and be curious, no proper intellectual development will take place. According to Flavell (1981), a child examines objects through movement and learns about their properties, and even learns about the basic concepts of size, shape, color, distance, speed, time, direction, etc. When a child reaches the advanced thinking stage, he will acquire the ability to compare, differentiate, classify, simplify, generalize and solve problems. Through these processes, a child learns to be more focused and ignore superfluous stimuli.

In addition, movement is very significant in the area of emotions. A child who gains experience in diverse types of movement will improve his motor abilities, and his feeling of control over his body will increase as will his self-confidence, and he will develop positive self-esteem. Through movement, a child even learns to show initiative, independence and responsibility (Walter, 2012; Sherborne, 2001).

Movement tasks enable a child to learn to take reality into consideration by delaying gratification, exhibiting restraint and self-control, facing frustrations (Mayer, Bar and Dudai, 1978), and adapting (Nichols, 1990).

### **Motor Development During Early Childhood**

Early childhood-aged children need movement just like they need rest and food. Movement helps them grow, develop and build motor infrastructures while shaping their movement and activity habits. During early childhood, wellbeing and health foundations are established, the basis of self-evaluation continues to grow, and rational thinking and diverse social functions develop. These processes do not take place separately; rather, they influence one another and strengthen the quality of the process (Lencer, Shoval and Gal-Or, 1980). A person's motor development starts in actuality already in the womb where different bodily systems develop, and it reaches maturity close to the time of birth (Nabal-Heller, Raviv, Lidor and Levianne, 1999). The development of movement deals with physical and movement changes taking place during a person's life, and a large part of these movements are acquired at a young age. A child undergoes several developmental stages in order to control different motor activities and skills (Lidor, 1993).

In addition, the model developed by Gallahue (1982) describes the development of movement according to developmental stages. Gallahue emphasizes that a child must undergo several developmental stages in order to demonstrate a skilled movement or sports ability. The development of movement takes place gradually. The four stages of Gallahue's (1982) model are presented below:

1. **Reflexive movements:** involuntary responses to a certain stimulus, characteristic of the first year of a child's life.
2. **First voluntary movements:** there are three types of basic movements:
  - Advancing movements: crawling, walking, etc. Through these movements, a child learns about his environment.
  - Fine movements: working with a single limb and small groups of muscles.
  - Stabilizing movements: working on stability in a stationary situation and in a mobile situation.

3. **Basic movements:** At this third stage in the development of physical movement, a child between the age of approximately two and seven starts to discover voluntary control in movement similar to the adult. A child is aware of his desire to plan his actions and carries them out by saving energy and efficiency in movement using a minimal number of limbs and short movement directions. During this period, a child acquires diverse basic movements, mostly course movements that require the cooperation by most of his body (Lidor and Yazdi, 1996). At this stage, a child begins to discover the full control of voluntary movement; therefore, this is a very important stage for imparting to him the basis of movement for the rest of his life (Lidor, 1993).

4. **Sports movement:** At this stage, a child chooses for himself a branch of sports and starts practicing his abilities and skills related to this branch.

It may be concluded that gaining experience in movement activities during early childhood is very significant due to its influence on many areas. Through these activities, a child acquires social skills, while maintaining norms and being considerate of others, and learns about behavior patterns in different areas such as providing help at the right time, conceding, waiting, building trust and teamwork. Needless to say, all of these skills enable a child to mature and be ready for school, as well as later on during his lifetime (Fleishman, 1972).

### **Influence of Movement on Emotional Regulation and Self-Control**

Sherborne (2001) and Walter (2011) claim that a strong connection exists between movement and emotion. Every movement appears in combination with other movements and works closely with them and with cognitive and emotional-social functioning, such as self-confidence, self-control, empathy, independence and leadership (Nabal-Heller, Raviv, Lidor and Levianne, 1999). Movement and games free a child from his anxiety and frustration; when he moves his body, he is happy and the pressure that accumulates due to frustration and emotional and physical aspects decreases (Hanford, 2000).

Hanford (2000) adds that a child who controls his movements and acquires different skills is not worried about participating in competitive games taking place in his environment in his daily life or in being exposed to the company of other children, so he will have more opportunities to make friends and develop social skills. Physical control enables a child to cope with motor challenges and even social and emotional challenges. These processes already start when the child is in the womb; the infant signals to his mother that he exists through the movements he makes in the womb and the movements he continues to make until the time he is born. Gallahue (1982) claims that movement is the infant's first form of communication through which he learns about his surroundings and creates a connection to them. So, every small movement such as throwing, caressing, touching or pushing an object is related to cognitive and emotional-social development, and not just to motor development. When a child is more active, he will gain maximum experience and will improve his level of different functions as well as his motor and cognitive areas, and in this way will increase his self-confidence and develop a positive self-esteem (Zeifer, 2000). But emphasis on these activities must be made on the quality of the activity; the more experiential and enjoyable the activity, the more a child will learn to take matters into consideration and delay gratification, face his frustrations and control his impulses in movement, in emotions, in thoughts and in behavior. When a child is faced with the task of movement, he assesses his ability opposite the resources required to carry out the task and invests the necessary efforts. These skills enable a child to develop emotional and self-control regulation while his body serves as a "tool" to carry out the movement. Therefore, it is

impossible to separate movement from the emotional area, and it contributes greatly to a child's emotional development.

### **Circle Dancing as a Factor in Developing Emotional Intelligence**

Dance has existed in human culture from its inception. It is the first expression of life and movement, and it has tremendous power. It shapes culture, self-esteem, personality, nationality, religion and emotions (Bahat-Ratzon, 2004). Dance is one of the most ancient art forms, a basic human impulse and need. It is an artistic language through which a person expresses himself and communicates with others using movement. Every person is able to use his body in order to express himself, his ideas and his emotions through movement, and unique folk dances exist in every society that are influenced by its culture (Ronen, 2011). Folk dances are frequently referred to in other nations as "farmers' dances" or a "national dance," which were first created by the rural society that was influenced by the dances that preceded them.

In the beginning, these dances served as a form of expression of religious content and helped overcome the villagers' fears or encouraged them or got them enthused (Brinson, 1991). In recent years, the number of educational institutes, including kindergartens, has grown that have chosen "folk dancing" as part of their curriculum. Group dancing, like folk dancing, enables expression on many levels, such as motor, sensory and cognizant levels, and represents a main and important component of a child's emotional and social education (Walter, 2011). During group dancing, children must be able to adapt their movements to the movements of other children in order to move efficiently with the other group members and maintain proper relationships (Nichols, 1990; Cholod, 1994; Walter and Ben Zvi, 2011). This action requires restraint, emotional self-control and regulation, and it promotes mutual social trust while dispelling pressure and personal distress, imparting a feeling of "belonging" to those participating in the activity. Even a shy child lacking self-confidence can join in this type of dance where everyone is equal; no one stands out and there are no soloists.

In addition, there is great importance to the way in which folk dances are carried out in a circle (Gross, 2005; Walter, 2011). The circle symbolizes inner perfection, connecting both to a feeling of self-confidence and a feeling of self-control. When a person feels whole with himself, it is reasonable to assume that he will feel he has good self-control, and his feeling of self-confidence will increase. Chais (1975) used circle dancing in her treatments. The circle serves as a tool for expressing emotions whereby every participant moves towards a joint gathering of energy and experiences an uplifted feeling of power and security (Chaiklin, 1975; Savir, 2006). The circle is the first circle from which additional connecting shapes develop. The circular trajectory enables departing from the same point and afterwards returning to it, therefore, it could inspire self-confidence in a spatial orientation (Savir, 2006). Developed spatial perception imparts a feeling of control in the environment and about what is going on in the environment, and it contributes to a child's self-confidence through movement. Circle dancing could represent a tool for a child through which he could restrain, refine and shape his movement. The circle is a shape that forces a child to adapt himself to everyone in it, and practice emotional self-control and regulation, develop emotional awareness, as well as have it serve as place inviting touching, which induces a feeling of self-confidence (Walter and Ben Zvi, 20011; Mayer, Bar and Dudai, 1978).

Two kindergarten classes from one kindergarten participated in Walter and Ben Zvi's (2011) research; one class was exposed to dance activity, the other was not. It was assumed that the class that would be exposed to dancing would reveal an improvement in emotional intelligence



abilities. In addition, we assumed that a positive correlation would be found between the feeling of self-control, emotional regulation and emotional intelligence abilities and between gaining experience in movement in a circle (folk dancing) as opposed to dancing in an open space.

## Research Questions

1. Does circle dancing advance emotional intelligence abilities, self-control and emotional regulation among early childhood-aged children?
2. Would the emotional intelligence abilities of children engaging in folk dancing be higher than children who do not?
3. Will the children report that they feel the abilities of emotional regulation and self-control in circle dancing more than children dancing in an unorganized open space?
4. Does a relationship exist between age and gender of the research participants (in terms of emotional regulation and self-control and emotional intelligence abilities)?

## Research Method

### Research Population

The research study was carried out in two kibbutz kindergarten classes for children aged 3-6 years from medium socio-economic backgrounds (a total of 60 children):

- **Kindergarten 1:** having four staff members (kindergarten teacher, kindergarten assistant and two care-givers), 19 boys and 11 girls. The children in this kindergarten class participated in a 30-minute folk dancing activity once a week in two groups.
- **Kindergarten 2:** having five staff members (kindergarten teacher, kindergarten assistant, tutor and two care-givers), 17 boys and 13 girls.

### Research Procedure

Kindergarten 1 was chosen as the experimental group in which the intervention would take place by integrating folk dancing activity; Kindergarten 2 served as the control group. Folk dancing lessons were given to Kindergarten 1 children who were divided into two groups. Each group participated in the 30-minute activity once a week throughout the entire school year. Within the framework of the folk dance activity, the children danced and learned folk dances, which combined circle dancing and dancing in an open space. Approval forms for the research participants were filled in and signed by parents of all of the children in Kindergartens 1 and 2 after they received a detailed explanation of the research study and its objective.

The children from Kindergartens 1 and 2 were asked questions by the researcher at two time periods during the school year: the first time in November and the second time in May. Data were collected through a personal meeting held with each child. Each child sat with the researcher in a quiet room within the kindergarten class during free play activity in the yard and in the class; in Kindergarten 1, the children were asked questions immediately at the end of the folk dance activity during free play activity. The children responded to 36 questions from the Trait Emotional Intelligence Questionnaire (2008) and to a questionnaire about regulation, self-control and self-confidence during free play activity in the kindergarten and in the yard. Their

answers were either “yes” or “no”; sometimes they added an example that confirmed their answer.

## Research Tools

Use was made in the research study of two questionnaires: (1) the Trait Emotional Intelligence Questionnaire; and (2) a questionnaire about emotional regulation, self-control and self-confidence in a circle and in an open space. The children were asked the questions separately, and their answers were marked by the researcher due to their young age.

1. The Trait Emotional Intelligence Questionnaire – the abbreviated version for children (Mavroveli and Petrides, 2008)

This questionnaire was first tested on young children (aged 3-6 years). Therefore, prior to using this questionnaire, a pilot was carried out on 30 children in this age rang. The questionnaire comprised 36 questions divided into 15 sub-categories: three items related to the trait of adaptability, three to assertiveness, four to expressing emotions, two to managing emotions, three to identifying emotions, one to regulating emotions, two to empathy, one to happiness, four to control impulsivity, two to optimism, two to social skills, four to self-esteem, two to motivation, two to social competence, and one to stress management.

2. The questionnaire about emotional regulation, self-control and self-confidence in a circle and in an open space (Walter and Ben Zvi, 2011)

This questionnaire comprised eight questions: six from the world of content of self-control and two from the world of content of self-confidence (reliability: Alpha = 0.582>0.0001). In the analysis, use was made only of the world of content of emotional regulation and self-control.

## Variables

The variables included background variables, dependent variables and independent variables:

- **Background variables:** Kindergarten 1, Kindergarten 2, gender variables and age variables
- **Dependent variables:** emotional intelligence variables, including 15 worlds of content, the variable of emotional regulation, self-control and the variable of self-confidence.
- **Independent variables:** circle dancing and dancing in an open space.

## Data Analysis

1. In this research study, several data analyses were made: an analysis of the independent variables between children from Kindergarten 1 and children from Kindergarten 2 before after the intervention process regarding emotional intelligence variables.
2. A  $\chi^2$  analysis to examine the correlation between gender, age and emotional regulation and self-control ability of the children (the dependent variables in this research).
3. Pearson's coefficient for examining the average level of emotional regulation and self-control ability in circle dancing compared to dancing in an open space.

## Findings

The first research assumption was that a difference would be found in emotional intelligence abilities among children who participated in the folk dance activity (Kindergarten 1) compared to children who did not (Kindergarten 2). The dependent variable was emotional intelligence abilities and the independent variable was folk dancing. The assumption was examined using a t test for dependent samples for each of the kindergarten classes; in addition, an analysis was made of the independent variables between children from Kindergarten 1 and children from Kindergarten 2 both before and after the intervention. Prior to the intervention through the folk dancing activity, significant differences were found in six worlds of content of emotional intelligence between the kindergarten classes (adaptability, assertiveness, expressing emotions, identifying emotions, regulating emotions, empathy). In five areas, the grades of Kindergarten 2 were higher than those of Kindergarten 1. In addition, significant differences were found between the two kindergarten classes before the intervention in the following areas: in Kindergarten 2 in the areas of adaptability and expressing emotions, and in Kindergarten 1 in the area of identifying emotions.

**Table 1.** Differences in the worlds of content of emotional intelligence before the intervention.

World of Content	Class	Average	Standard Deviation
Adaptability	Kindergarten 1	1.44	.29
	Kindergarten 2	1.66*	.30
Assertiveness	Kindergarten 1	1.43	.21
	Kindergarten 2	1.57	.27
Expressing emotions	Kindergarten 1	1.46	.27
	Kindergarten 2	1.70***	.20
Identifying emotions	Kindergarten 1	1.60**	.26
	Kindergarten 2	1.37	.24
Regulating emotions	Kindergarten 1	1.16	.37
	Kindergarten 2	1.46	.50
Empathy	Kindergarten 1	1.50	.29
	Kindergarten 2	1.66	.30

\*p<0.005, \*\*p<0.001, \*\*\*p<0.000

In the second period after the intervention, the findings pointed to differences between the kindergarten classes; these differences decreased in two worlds of content – regulating emotions and empathy. In five worlds of content, the differences still remained between both kindergarten classes. The significant differences are presented in Table 2.

**Table 2.** Differences in the worlds of content of emotional intelligence after the intervention.

World of Content	Class	Average	Standard Deviation
Adaptability	Kindergarten 1	1.41**	.28
	Kindergarten 2	1.64	.23
Assertiveness	Kindergarten 1	1.45*	.22
	Kindergarten 2	1.63	.26
Identifying emotions	Kindergarten 1	1.78***	.20
	Kindergarten 2	1.51	.29

\*p<0.005, \*\*p<0.001, \*\*\*p<0.000

In addition, an analysis was made of dependent variables in each of the kindergarten classes (Table 3) with the objective of examining the significant worlds of content of emotional intelligence in each class before and after the intervention. An analysis of this type enabled assessing an improvement in worlds of content within each class beyond the differences between the classes. Differences were found in eight areas in Kindergarten 1 before and after intervention. A higher grade was found in seven worlds of content (expressing emotions, managing emotions, identifying emotions, empathy, happiness, motivation, and stress management). In the world of content of impulsivity, significant differences were found, having a lower grade after the intervention with folk dancing. In addition, a significant difference was found in the following areas: expressing emotions, managing emotions, identifying emotions and empathy.

In Kindergarten 1, differences from the first period to the second period were found in six worlds of content of emotional intelligence. A higher grade was observed in five areas (assertiveness, expressing emotions, identifying emotions, self-esteem, social qualification, stress management). In the world of content of regulating emotions, which is the most important one for the development of emotional intelligence during early childhood, a lower grade was observed. In the worlds of content of identifying emotions and regulating emotions, which serve as the basis for developing emotional intelligence, a significant difference was found.

**Table 3.** Differences in the standard deviations and averages in worlds of content of emotional intelligence between kindergarten classes before and after the intervention.

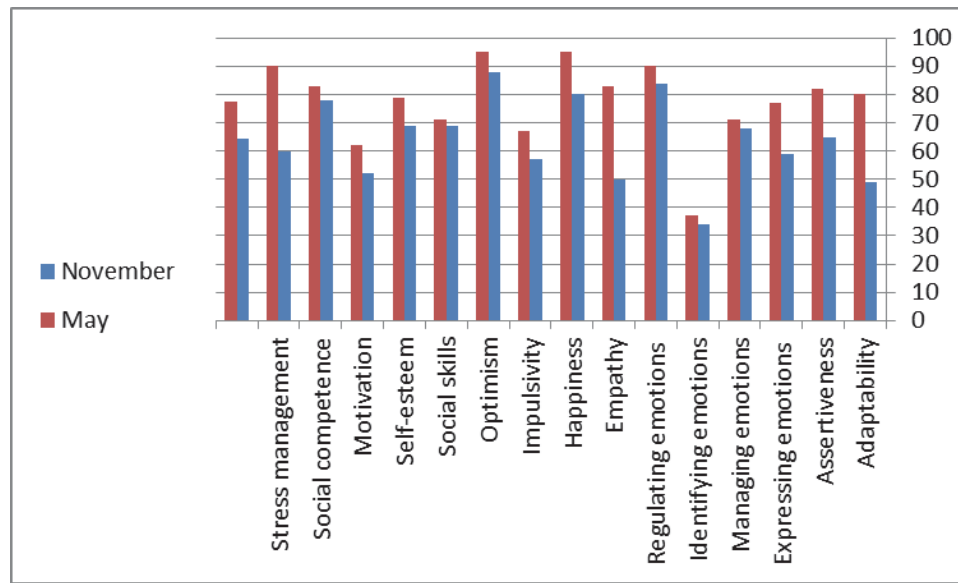
World of Content	Kindergarten	Before Intervention		After Intervention		T
		Average	Standard Deviation	Average	Standard Deviation	
Expressing emotions	1	1.47	.27	1.68***	.29	-5.27
	2	1.71	.20	1.74	.19	-2.11
Regulating emotions	1	1.16	.38	1.10	.30	1.43
	2	1.47	.50	1.23*	.43	2.97
Managing emotions	1	1.48	.27	1.71***	.31	-4.47
	2	1.51	.42	1.53	.41	-1.00
Self-esteem	1	1.61	.26	1.64	.24	-.90
	2	1.59	.22	1.67	.22	-2.53
Identifying emotions	1	1.60	.26	1.78***	.20	-4.95
	2	1.38	.24	1.51**	.29	2.97

Social competence	1	1.78	.31	1.83	.23	-1.36
	2	1.77	.28	1.87	.22	-2.26
Empathy	1	1.50	.29	1.66**	.35	-3.34
	2	1.67	.30	1.71	.28	-.571
Happiness	1	1.80	.40	1.93	.25	-2.11
	2	1.80	.40	1.9	.30	-1.79
Motivation	1	1.51	.40	1.62	.40	-2.26
	2	1.55	.33	1.55	.28	1.439
Stress management	1	1.60	.50	1.73	.50	-2.11
	2	1.60	.49	1.73	.44	-2.11
Impulsivity	1	1.54	.29	1.44**	.29	3.52
	2	1.51	.28	1.48	.22	1.16
Assertiveness	1	1.58	.27	1.63	.27	-.571
	2	1.57	.27	1.63	.20	-2.40

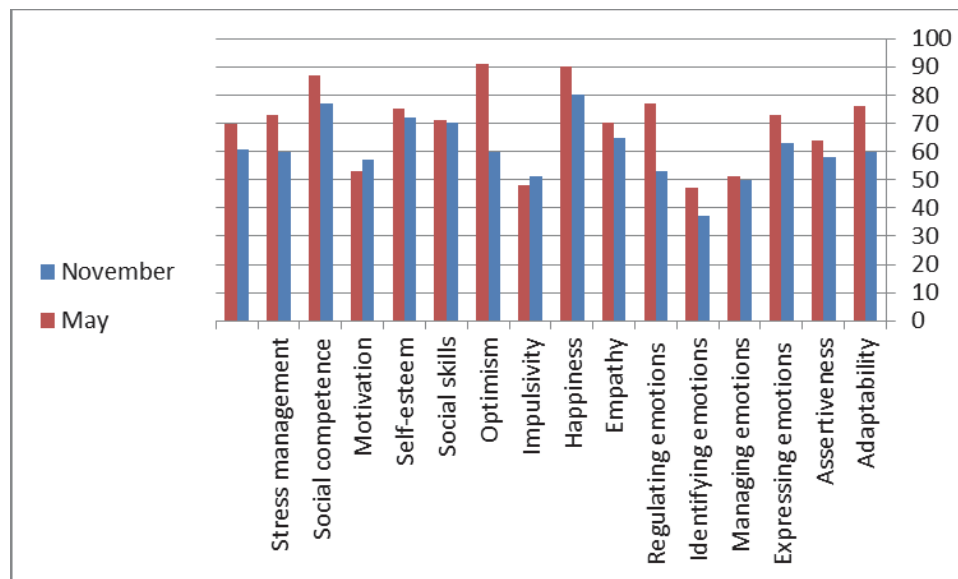
\* $p < 0.005$ , \*\* $p < 0.001$ , \*\*\* $p < 0.000$

The findings presented later on point to an improvement by an average of 10 points in the average of both kindergarten classes (Kindergarten 1 – a change from 64 to 78; Kindergarten 2 – a change from 60 to 69); the experimental kindergarten class showed a greater improvement. Figure 1 (for Kindergarten 1) and Figure 2 (for Kindergarten 2) illustrate the change in composition of worlds of content of emotional intelligence in each of the kindergarten classes. Components of emotional intelligence are significant during early childhood, and it is important to examine them in order to determine where the improvement is the most significant and where greater intervention is required. The figures show that in both kindergarten classes, there was an improvement in emotional intelligence among all of the children throughout the year, both in Kindergarten 1 where the children gained experience in the folk dancing activity and in Kindergarten 2 where the children did not (Fig. 1 for Kindergarten 1 and Fig. 2 for Kindergarten 2). The most significant change was observed among children from Kindergarten 1 who participated in the folk dancing activity. In addition, the findings in Figure 1 point to a 14% greater change in all worlds of content for Kindergarten 1 children who were exposed to the folk dancing activity; impulsivity control was increased as a result of the activity. Figure 2 (Kindergarten 2) points to a change in worlds of content of emotional intelligence, but the change is smaller than in Kindergarten 1. In the world of content of managing emotions, almost no change was observed in this kindergarten class. The worlds of content of identifying emotions, managing emotions, regulating emotions, expressing emotions and empathy are the most significant components in developing emotional intelligence during early childhood. The less significant change in developing emotional intelligence is the world of content of assertiveness, which improved for children from Kindergarten 2, in addition to the world of content of control impulsivity, which points to the ability of children in expressing empathy and consideration for others. This was found to be higher for children from Kindergarten 1 who were exposed to the folk dancing activity, pointing to an improvement in their ability to be considerate of others.





**Figure 1.** Kindergarten 1 – distribution of emotional intelligence in worlds of content according to category.



**Figure 2.** Kindergarten 2 – distribution of emotional intelligence in worlds of content according to category.

In the second assumption, we wanted to examine to what extent differences would be found between circle dancing and dancing in an open space in terms of the emotional self-control and regulation ability in circle dancing as opposed to dancing in an open space. The findings of the questionnaire that was distributed only to children in the experimental group are presented in Table 4. As can be observed in the table, the children reported that it was easier for them to maintain self-control and regulate their emotions while dancing in a circle compared to dancing in an open space. The children reported on their ability to exhibit restraint, behave well and exhibit a lesser tendency to act wildly in circle dancing. Their ability to control their movements and restrain themselves in bypassing children, which was reported by the children in circle

dancing, points to the strength and influence of the circle in promoting the development of understanding and differentiating between personal space and general space and the limits between them, which contribute and influence emotional regulation and self-control abilities to a great extent.

**Table 4.** Data relating to the world of content of emotional self-control and regulation for the entire kindergarten.

Questions taken from the world of content – emotional regulation and self-control	Circle		Open Space	
Where is it more comfortable for you to act wildly?	11	%36.67	19	%63.33
Where is it easier for you to control yourself?	22	%73.33	8	%26.67
Where are people angry at you more for behaving poorly?	20	%66.67	10	%33.33
Where do you feel that you behave better?	20	%66.67	10	%33.33
When hopping and galloping, where it is permitted to bypass someone?	1	%3.33	29	%96.67
Where are you in more control of your movements?	22	%73.33	8	%26.67

In the third assumption, it was claimed that no correlation would be found between the children's gender and their emotional regulation and self-control ability (the research study's dependent variables). An examination was made using the  $\chi^2$  test. It may be observed that this assumption was partially confirmed: a moderate correlation was found between the age variable (independent) and emotional regulation and self-control ( $\chi^2 = 0.281$ ) (see Table 5).

An identical examination in the calculation method for examining the correlation between gender showed that there was no correlation between gender (independent) and emotional regulation and self-control ( $\chi^2 = 0.434$ ). An identical examination of the calculation method for examining the correlation between gender showed that here too there was no correlation between the children's age (independent) and emotional regulation and self-control ( $\chi^2 = 0.291$ ,  $p > 0.05$ ).

**Table 5.** Average and  $\chi^2$  between worlds of content and emotional self-control and regulation and age and gender variables in circle dancing.

Emotional Self-Control and Regulation	Average	r	Age $\chi^2$	Gender $\chi^2$
Control 1	1.00	0.498**	0.45	-0.569**
Control 2	1.17	0.530**	0.09	-0.146
Control 3	1.33	0.521**	0.00	-0.196
Control 4	1.50	0.463**	0.00	0.342
Control 5	1.67	0.425*	0.122	0.141
Control 6	2.00	0.469**	0.066	-0.146
<b>Total Emotional Self-Control and Regulation</b>	1.47	0.469**	0.281	0.434

\* $p < 0.005$ , \*\* $p < 0.001$ , \*\*\* $p < 0.000$

## Discussion and Conclusions

This research study examined whether an improvement took place in emotional intelligence abilities as a result of folk dancing activity held among early childhood-aged children, whether circle dancing, as opposed to dancing in an open space, caused a greater feeling of emotional

regulation and self-control, and whether a correlation exists between the children's gender and age regarding these abilities. The assumption that differences would be found in emotional intelligence abilities in children who participated in the folk dancing activity was confirmed, and was found to be significant in some of the worlds of content of emotional intelligence, which included 15 areas: the traits of adaptability, assertiveness, expressing emotions, managing emotions, identifying emotions, regulating emotions, empathy, happiness, control impulsivity, optimism, social skills, self-esteem, motivation, social competence, and stress management.

The findings point to a reduction in differences between the two kindergarten classes in two areas – regulating emotions and empathy, as well as differences in five areas. As a result of the folk dance activity, significant differences were found particularly in the areas of adaptability, assertiveness and identifying emotions. In addition, marked differences were observed in Kindergarten 1, in which the intervention had taken place with the folk dancing activity: a significant improvement was observed from the beginning of the year to the end of the year in emotional intelligence abilities in seven areas; prominent differences in the ability of identifying emotions, regulating emotions, managing emotions and empathy, as well as a marked increase in impulsivity, which strengthens the power of circle dancing – through folk dancing activity that influences and promotes emotional intelligence abilities. Emotional intelligence abilities develop during early childhood through the child's interaction with his surroundings, through natural development and through adult mediation. It is significant to note that in this research study, prior to the commencement of the intervention, differences existed in the levels of emotional intelligence between the kindergarten classes; higher grades were found among the children from Kindergarten 2.

During early childhood, different interventions take place to promote emotional intelligence to which growth contributes even further. Together with this, the literature survey (Ziedner, Gerald and Richard, 2012) emphasizes the importance of emotional education, which works on two levels: learning about emotional processes, and investigating emotional awareness among children (Best and Geddes, 2002; Barford, 2002, 2012).

Folk dance activity enables the development of emotional awareness, and a study in real time explained the reduction in gaps between kindergarten classes and the progress made, and the more significant improvement that occurred among the children from Kindergarten 1 who were exposed to the intervention through the folk dancing activity. The exposure of children from Kindergarten 1 to folk dancing in a circle advanced their emotional intelligence activities more significantly than children from Kindergarten 2, particularly in the worlds of content relating to identifying emotions, assertiveness and adaptability; in addition, there were reduced differences relating to the worlds of content of regulating emotions and empathy. According to Mayer and Salovey, 1997), these abilities relate to the ability by different people to cope with emotions, which include self-awareness of emotions, managing emotions, self-motivation, identifying emotions and managing relationships. According to Goleman (1995), Mayer and Salovey (1990), managing emotions is the ability to regulate and moderate emotions in such a way as to prevent emotional overload and severe distress. There was a significant improvement in the ability of children who participated in the folk dancing activity to manage relations ( $p < 0.00$ ) as a result of their involvement in the folk dancing activity compared to children who did not engage in this activity, for whom no significant difference in managing emotions was observed between the measurement periods. This fact takes on additional validity on the ability to manage emotions regarding the folk dancing activity in a circle.

The circle creates unexpected situations that encourage coping with emotional abilities. Circle dancing forces a child to adapt to the group and in this way practice emotional self-control

and regulation, develop emotional awareness in a place that calls for touching, which gives him a feeling of security (Walter and Ben Zvi, 2011; Mayer, Bar and Dudai, 1978). However, significant differences between both kindergarten classes were found only in the worlds of content of identifying emotions, assertiveness and adaptability. One cannot ignore the fact that the kindergarten in which the children participated in the folk dance activity (Kindergarten 1) started out with lower grades of emotional intelligence than children in Kindergarten 2. After the intervention using the folk dancing activity, significant differences were found in the results in many emotional intelligence abilities before and after the intervention: identifying emotions, regulation, emotions, managing emotions, empathy, identifying to the world of content of managing relationships according to Mayer and Salovey, 1999), controlling social skills, expressing suitable emotions, self-control, and empathy towards the feelings of others. During group dancing, a situation arose whereby the children had to be able to match their movements to those of other children in order to move effectively with the rest of the group and maintain proper relationships (Nichols, 1990; Cholod, 1994; Walter and Ben Zvi, 2011), and this contributed significantly to the development of emotional intelligence abilities.

In addition, it was found that a larger percentage of children, regardless of gender, stated that circle dancing contributed to an improvement in their emotional self-control and regulation. Through the questionnaires and the findings from the questionnaires, we see from the world of content of “emotional self-control and regulation in a circle and in an open space” that a larger percentage of the children reported that they felt the self-control ability during the circle dancing more than dancing in an open space. A further confirmation of this was made from the findings gathered from the emotional intelligence questionnaire, which pointed to a significant improvement in the abilities of identifying emotions, regulating emotions, managing emotions and empathy, and a decrease in impulsivity among children in the kindergarten who participated in the folk dance activity.

The current study and its findings are consistent with the definition of the concept of emotional regulation, which relates to the ability to respond to an instruction or a request, the ability to initiate and/or stop behaving according to circumstances at hand, and the length of time of the motor activity in social and educational environments. In the kindergarten where the intervention took place (Kindergarten 1), it was found that the behavior was proper and acceptable in the absence of external follow-up in circle dancing, which causes greater emotional regulation, as stated in the research by Kaufman and Henick (2008) and Walter (2011). A larger percentage of children felt and reported more emotional self-control and regulation during circle dancing compared to dancing in an open space.

Evidence of the therapeutic effect of the circle appeared already in ancient times as a symbolic expression of power and security (Samaritter, 2009). An additional use of the power of the circle may be seen from Chais (1975), a pioneer in the area of treatment using movement, who used the circle as a primary tool in her therapy. The circle serves as a tool for expressing emotions, whereby each member participating in the circle moves as a joint unit of energy and experiences an uplifted feeling of power and security (Chaiklin, 1975). Savir (2006) also strengthens the assumption through her claim that there is something embracing, protective and secure in a circle.

The assumption that no correlation would be found between the children’s age and gender and the level of their emotional self-control and regulation and emotional intelligence was confirmed. No correlation was found between the child’s gender and emotional regulation and self-control abilities; together with this, a moderate correlation was found between the child’s age and his emotional regulation and self-control abilities in the world of content relating to

acting wildly. The circle provides the feeling that everyone is equal; the reason for this is expressed by Caplinski (1998, p. 234), who claims that “each and every child has an equal role during the dance, since the child is a member having equal rights during the process. During the dance, there is a need and desire on the part of the group for all children to succeed in carrying out the tasks. In order to achieve maximal success in dancing, each child tries to contribute to his success and to the success of the entire group, in particular regarding folk dancing that is danced in a circle.” In light of the fact that the circle does not facilitate discrimination, it is not reasonable that the answers of the children will differ from each other and be affected by the different background variables. The moderate correlation between age and emotional self-control and regulation may be explained by relating to the age group where the correlation was found. A correlation was found for children aged 3-4 years at stages of acquiring emotional self-control and regulation abilities. Together with the moderate correlation, it is evident that dance has an influence in advancing these abilities at a young age. Moreover, the children improved their emotional intelligence abilities in all worlds of content regardless of gender and age; the combination of development and dance contributes to an improvement in emotional self-control and regulation ability, which is a complex skill. This strengthens the beliefs of the researchers (Seruf, 1998; Cooperman, 2004) who claim that a significant correlation exists between movement and emotional self-control and regulation in combination with external factors affecting the child’s development as part of his overall development. Fink-Kronenberg (2007) strengthens this argument and claims that self-regulation ability, which controls the expression of emotions, develops through experience gained in society in daily life, and adults must provide, in addition to the biological development and maturation processes, activities that promote and foster these abilities (Lidor, 2004), that is, the use of dancing as was observed from the findings of this research study.

## **Summary**

The findings of this research study emphasize that circle dancing, as opposed to dancing in unorganized open space, contributes to emotional regulation and self-control among children and imparts to them a feeling of security. Significant differences were found in emotional intelligence abilities both between the two kindergarten classes and within the kindergarten class that participated in the folk dance activity, as was assumed. The children’s answers are not related to the different demographic variables of age and gender. The findings of this study strengthen the claim that the circle has unique qualities contributing to a child in terms of the emotional-social aspect (Walter and Ben Zvi, 2011), also in a different geographic location. The study contributes to the understanding that the circle has added value in significantly promoting emotional intelligence in two kindergarten classes in the worlds of content of regulating emotions and empathy. In addition, significant progress was made before and after the intervention in the kindergarten participating in the folk dance activity in terms of the abilities of identifying emotions, regulating emotions, managing emotions and empathy, moreover an increase occurred in impulsivity control – these are defined as emotional intelligence abilities according to Mayer and Salovey (1997).

The influence of the circle is well known, but this research expanded on a previous study by Walter and Ben Zvi (2011). Additional confirmation was found of the influence of the circle on early childhood-aged children regarding emotional regulation and self-control abilities, regardless of age and gender. In addition, the effect of emotional intelligence abilities was measured using the Trait Emotional Intelligence Questionnaire – 2008 Child Short Form.



This research study does not invalidate dancing in an organized space or any other activity fostering the emotional intelligence abilities of emotional self-control and regulation. The fact that it is possible through the folk dance activity to advance several emotional abilities and simultaneously foster motor abilities and culture could be useful and effective for many organizations in different and diverse areas. It is recommended expanding the study to a broader early childhood population and studying emotional intelligence in a more in-depth fashion during early childhood using the Trait Emotional Intelligence Questionnaire – 2008 Child Short Form.

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