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A Proposal for Emotional Intelligence Development through Dance Movement Therapy

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A Proposal for Emotional Intelligence Development through Dance

Movement Therapy

For more than a decade, emotional intelligence has generated a lot of interest in and out of the field of psychology. The concept by itself has received interest after all evidence on its favor is accumulating. As a predictor of success, it has received a lot of attention since research shows that emotional intelligence can be taught. Traditionally emotional education has focused on skilled-based interventions. Through a theoretical review and reflective process, the aim of this paper is to propose a body focused intervention model with examples to teach emotional intelligence competencies using Dance Movement Therapy. In particular, Laban Movement Analysis and body awareness elements in which the Dance Movement Therapy Emotional Intelligence model is supported. The model is organized in four modules, each module is associated with an emotional intelligence branch, a social-emotional skill, a Dance Movement Therapy element, an exploration quality and an aimed outcome.

Key words: Dance Movement Therapy, Emotional Intelligence, Education, Self-Regulation, Laban Movement Analysis

Introduction

Our culture emphasizes on academic and analytic performance to predict success in our career and as adults but in this fast-changing world, to prosper as independent, active and productive individuals cognitive and non-cognitive competencies and resources are needed (Kautz, 2014).

A social and emotional perspective prepares the individual with competences that not only can contribute to society but can enrich life (Durlak et al., 2011). Several authors emphasize on these skills to benefit education, interventions can start as early as preschool having long term effects

and benefits throughout life, the organizational field in companies and institutions with trainings for their workers focused on supervisory skills, diversity, teamwork, leadership, conflict and stress management, sales and customer relations (Almlund et al., 2011; Borghans et al., 2008; Fernández-Berrocal & Extremera, 2006; Rodríguez-Jiménez & Castilla, 2013; Cherniss et al. 1998). Schutte et al. (2007) concluded that there is a significant relationship between EI and mental health, psychosomatic health and physical health. Overall a growing body of research on emotional learning and behavior change suggests that is possible to help people of any age to become more emotionally intelligent (Fariselli et.al. 2008).

Non-cognitive skills can be shaped, enhanced and changed and there are effective ways to do so (Kotsou et al., 2019). Bar-On (2007) concludes workshops designed to teach Emotional Intelligence (EI) competencies in the workplace are effective and organizations such as CASEL (Collaborative for Academic, Social, and Emotional Learning) develop educational programs that get results. Evidence suggests that Social Emotional Learning interventions have long-term positive effects (Taylor et al., 2017).

This article is part of the final delivery of the Master of Dance Movement Therapy at UAB by the first author. A review of the concept of Emotional Intelligence and the existing models is made in order to make an integrated training proposal from Dance Movement Therapy.

Feelings, Emotions and Intelligence: Emotional Intelligence

Our survival depends on the information we receive and a fast corrective response to perform adaptive actions (Darwin, 1965). The experiences that relate to our external senses like our vision or hearing, commonly cause our emotions, resulting in feelings. Whether feelings reflect

our internal state or are caused by an external situation their content describes a state of the body (Damasio, 1999).

Emotions aid reasoning facilitating decision making, without them the individual would be caught in a loop considering and reconsidering options to which he is indifferent (Damasio, 1994). Based on Damasio's (1994) assertion if emotions aid reason, reason could complement emotion so a person could be intelligent about his/her emotional response and the emotions of others.

Although there is no standard definition for Intelligence, there are very strong similarities between many of the definitions available today. What most of them have in common is how an individual interacts with his/her environment, the ability to succeed or profit to a goal or objective and how the individual adapts to the objectives and environments (Legg & Hutter, 2007).

In the late 1980's Salovey & Mayer (1990) discussed the concept of EI after considering that some intelligent people that behave in adaptive ways make mistakes in judgement, concluding that smart decisions require more than intellect (Loewenstein & Lerner, 2003). This observation implied that one may also need the ability to regulate emotions (Salovey & Mayer, 1994).

Salovey & Mayer (1990) defined EI as a type of social intelligence "that involves the ability to monitor one's own and others emotions, to discriminate among them, and to use that information to guide one's thinking and actions" (p.189). Later this definition was refined and four abilities were proposed and validated: perceiving, using, understanding and managing emotions (Brackett et al., 2004; Mayer et al., 2001; Mayer & Salovey, 1997). Other lines of research suggest that emotional competencies are associated with social adaptation (Eisenberg et

al., 2000). All four branches depend upon the person adapting to the context in which the skill is needed, so being emotional intelligent is more than processing the ability but is having the capacity to recognize and know how to use the abilities properly in a given situation (Eisenberg et al., 2000; Halberstadt et al., 2001).

Empirical research seems to demonstrate that EI could help us develop and sustain better relationships with family and friends. Different scales and instruments were designed to assess the four branch model of EI being the Multifactor Emotional Intelligence Scale (MEIS, Mayer et al., 2002) and the improved version, the MSCEIT (Mayer et al., 1998; Mayer et al., 1999) the most frequently applied. High scores on the MEIS test are associated with lower levels of antisocial behavior and higher numbers of prosocial behavior (Rubin, 1999), people are less likely to have violent behavior, bully, less likely to use tobacco, drink alcohol in excess or take illicit drugs (Brackett et al., 2004; Brackett & Mayer, 2003) and children with high scores are less likely to have tried smoking a cigarette or smoked recently (Trinidad & Johnson, 2002). High scores with the MSCEIT report individuals with more positive interactions and relations with other people (Lopes et al., 2006).

Undoubtedly intelligence in general is very important to be able to perform certain tasks in most jobs. But in this competitive world other abilities have become more critical like cooperating with coworkers and managers. Scores on the MEIS are correlated with the degree of effectiveness (Rice, 1999), peer and supervisor ratings of interpersonal skills, stress tolerance and leadership potential and with merit rises and job status (Lopes et al., 2006).

EI may also play an important role in physical and mental health. Studies have analyzed the helpfulness and contributions of EI connecting good emotion management with stress regulation and psychological and physiological health (Fernández-Berrocal & Extremera, 2006;

Mikolajczak et al., 2006; Pennebaker et al., 1990). Disclosing strong emotional experiences could enhance immune system activity, decrease self-reported physical symptoms, distress and depression (Pennebaker et al., 1998). Studies done with children found that emotional competences promote positive adjustments and decrease mental health problems such as anxiety, depression, substance use, violence and antisocial behavior (Barnes et al., 2014; Clarke et al., 2015; Durlak et al., 2011).

Models of Emotional Intelligence

Three of the most widely accepted models of EI (Ackley, 2016) are Mayer & Salovey (1997), Goleman (1995) and Bar-On (1997). The present study is based on Mayer and Salovey’s model; an ability based model that focuses on emotion-related competencies that can be assessed through performance-based test (Mayer et al. 2002).

Each of the branches describe how an individual can be intelligent about emotions. Branches 1, 3 and 4 include reasoning about emotions. Branch 2 includes the use of emotions to enhance reasoning.

Table 1. Mayer – Salovey’s four-branch model of Emotional Intelligence (1997)

Branches	Perceiving Emotions	Using Emotions	Understanding Emotions	Managing Emotions
	The ability to detect and assimilate emotions. Identify one’s emotions.	The ability to use emotions to facilitate various cognitive abilities	The ability to understand emotional language and to understand the relationship and variations between emotions	The ability to regulate emotions in both ourselves and in others.

Emotional Intelligence and Emotional Regulation

Conventionally Emotional Regulation (ER) has mainly focused on how a person can effectively manage emotions. Different authors have tried to underline the necessity for the science of EI to integrate in other areas of the affective sciences, based on the belief that EI and ER can reciprocally inform and complement fundamental research (Barrett & Gross, 2001; Barrett & Salovey, 2002; Matthews et al., 2002).

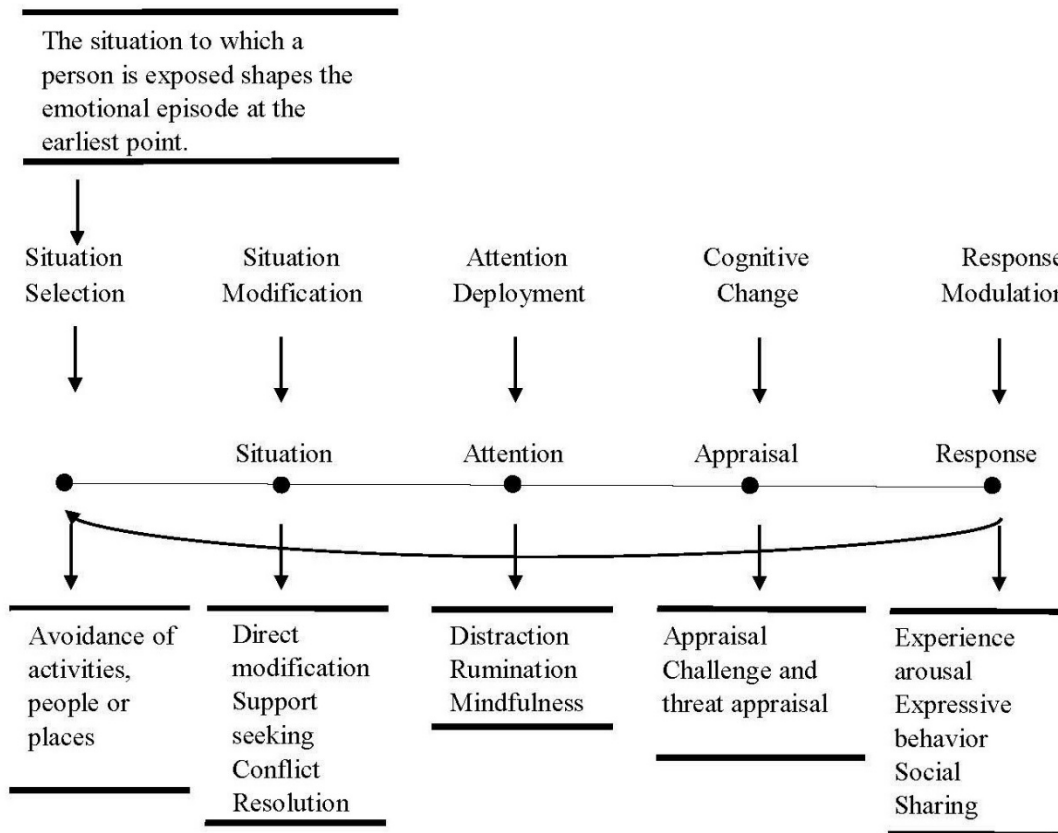
Mayer & Salovey (1997) model focuses attention on self- regulation building a bridge between EI and self-regulation. ER is the process by which individuals modify one or more components of an emotional response (Gross, 1998). ER influences the type of emotion, the intensity, time course and the quality. Emotions can be maladaptive when they are the wrong type, come at the wrong time, occur at the wrong intensity level (Gross, 1998).

People typically try to decrease the experience or behavioral aspects of negative emotions (Gross et al., 2006) but positive emotions are also down-regulated. An ER strategy is considered adaptive if the resulting emotion meets the regulator's goal, regardless of social norms or long-term adaptive value (Gross & Thompson, 2007; Thompson & Calkins, 1996).

The Gross ER model (1998) classifies the processes according to the point in which they have their original impact in the emotion generative process. The adaptive nature of an ER episode has three factors: awareness, goals, and strategies (Gross & Jazaieri, 2014). The awareness of emotions and the context in which it occurs makes it possible to determine whether emotions should be regulated and to access knowledge on how to do so (Barrett & Gross, 2001). The goal determines whether the emotion experience, the expression or physiology must be increased, decreased or maintained in duration and/or intensity. Once the goal is clear the

strategies specify the means that can be more or less efficient to reach the goal (Gross & Jazaieri, 2014).

Figure 1. Gross’s Model of Emotion Regulation (2008) generated by author



Conventionally emotional regulatory processes have focused on skilled-based interventions (Clen et al., 2013). Regular exercise has received little attention as an emotional regulation strategy but years of research suggest that it has benefits for emotional health (Goodwin, 2003; Harvey et al., 2018), it is linked to adaptive emotional tendencies (Bernstein & McNally, 2018) and moderate-intensity exercise shows it is sufficient for mood improvements (Chan et al., 2019). Specific dance movements could also promote learning, self-knowledge and

emotional regulation as a result of body expression and awareness (Lopera-Auñón et al., 2021; Gallagher & Lindgren, 2015; Rodriguez & Castilla, 2013; Rodriguez Jiménez & García-Merino, 2017).

Can Emotional Intelligence be taught?

Genes and the environment are constantly interacting and changing the brain (Ratey, 2003). Experiences, thoughts, actions and emotions change the structure of the brain making new connections and restructuring with what it learns (LeDoux, 2002). Adapting to changing demands results in learning new skills (Hötting & Röder, 2013).

Emotional Intelligence is trainable (Bar-On, 2007) and there is enough evidence about the efficacy of EI programs (Kotsou et al., 2019). Mira-Galvañ & Gilar-Corbi (2020) designed and implemented an emotional education program and the results of their study prove the effectiveness on students' academic performance and emotional competences. Teaching EI to individuals not only builds their emotional skills, but it also sustains the education over several years (Nelis et al., 2009).

The main brain functions have evolved from movement and some functions keep depending on movement to evolve (Ratey, 2003). If elements of movement and cognition are found in body expression (Motos, 2019) and the components develop around the body, space, time and energy, practicing movement favors the circuits that the brain uses to think and reason. If body expression is expressive and cognitive, this would make expressing through the body a very potent tool for education and personal development (Motos, 2019).

The implementation of programs focused on body awareness, body movement and non-verbal communication have had good results concluding that enactive learning improves

competencies related to EI (Terrón-López et al., 2013) and the development of intra and interpersonal skills (Rodríguez-Jiménez et al., 2013).

Dance Movement Therapy: A tool for teaching emotional intelligence

In the last decades, DMT has progressed with a development of a theoretical base and a rapid growth of the field (Levy, 1988). With this expansion and diversification, the field has opened and therapists have been branching out into many areas, expanding the use of DMT to include new populations and areas of research (Levy, 1988). These have included the study of DMT and wellbeing (Koch et al., 2014; Quiroga et al., 2010), DMT in academic environments and/or as an educational tool (Payne & Brooks, 2020; Rodríguez-Jiménez & Carmona, 2021) and DMT and ER (Leigh, 2017; Walter & Sat, 2013).

Research of DMT and emotions (Karkou et al., 2019; Koch et al., 2019; Savidaki et al., 2020) have contributed to the connection between movement and emotions (Brooks & Stark, 1989; Dieterich-Hartwell, 2019).

Motor execution, observation and imagery of whole body emotional movements can enhance the corresponding emotional state as Shafir, et al. (2013) found. The findings showed the importance of movement for self-regulation, emotional recognition and empathy. These authors used Laban Movement Analysis (LMA) to identify which movements might be responsible for increasing a specific emotion (Shafir et al., 2016). In fact, Laban identified space, weight, time and flow as motion factors where movement can have different attitudes depending on temperament, the situation and environment and many other variables (Bartenieff & Lewis, 2002). The Laban model allowed identifying which set of motor characteristics increased or

evoked: anger, fear, happiness and sadness (Shafir et al., 2016). Knowing these predictors demonstrate that the use of specific movements can help explore and regulate emotions.

DMT EI Educational Model

As described above, developing EI implies developing skills that can help enhance mental health and well-being on a day- to -day basis. DMT and LMA both have the potential and the elements to explore emotions, self-regulate and re-pattern behavior to teach emotional competencies.

Social-emotional skills like self-awareness, self-management, social awareness and responsible decision making go hand in hand with the EI branches in the Salovey & Mayer’s model (1990).

Based on this EI model and all these elements combined a proposal for an educational model to teach emotional competencies is proposed.

Table 2. Dance Movement Therapy Intervention model for Emotional Education skills.

Program	Branches (Salovey&Mayer, 1990)	Social- Emotional Skills (S-E skill)	Components of DMT & LMA	Exploration Qualities	Outcome
Module 1	Perceiving Emotions	Self- Awareness	Body/ Body Image	How do I experience myself? What are my perceptions? What are my sensations?	Emotions Resources
Module 2	Using Emotions	Responsible Decision- Making	Time Space	Decision When do I need to act? Attention/Thinking Where am I going?	Identifying solutions Open mind
Module 3	Understanding Emotions	Social Awareness	Relationships	How do I Interact with others?	Taking others perspectives

					Recognizing strengths in others Empathy
Module 4	Managing Emotions	Self-Regulation	Weight Flow Time Space	How can I self-regulate?	Identifying emotions Identifying strategies to self-regulate

Perceiving Emotions is the first branch and it is associated with the social-emotional skill of self-awareness, a pillar for development. The ability to recognize emotions and reflect about them, enables the capacity to manage, self-regulate or understand them in others. This makes it possible to have a better social interaction, to listen and try to see the other person's points of view. How we experience and perceive ourselves and understand our sensations will give us an idea of our emotions and the resources we have available. If something needs to be worked on, explored, re-patterned or introduced it can be done in this first stage.

Being emotionally conscious implies the ability to be able to reflect on them and others emotions (to have a better social interaction) in different social situations. They manifest through the body because they generate a physiological impact and many of the things that we feel express themselves unconsciously in the body. Body awareness and how the emotion is lived implies to reflect on how one feels. To develop this self-awareness, the following interventions are proposed (see Table 3):

Table 3: Program details for Perceiving Emotions and S-E skill (Module 1)

Perceiving Emotions	Target	Proposed Intervention
Internal listening	Awareness of changes in the body.	Shaking the body: In circle leader suggests to shake different body parts. Phrases like “shaking water drops” to help participants can be used. Start from the periphery towards the center of the body. Stop and ask participants to compare any sensations with those parts not moved yet or how the body feels before and after the movement.
Emotional consciousness	Understand and comprehend what one is living and needs.	To experience body sensations through movement participants are asked to spin on the spot (feel the air), then to spin with a partner. Notice how the body feels afterwards. What are you feeling? What do you need? In small groups each member asks the group to do something for them based on what they feel and need, e.g give them a swing, group hug, etc.
Comprehension	Acquire a broader corporal vocabulary.	Using different levels (standing, lying down) leader suggests upper part of the body can be open and stretched. Now close and curl the upper body part using different levels. Do the same with the lower part of the body. Then both upper and lower, closed and opened using different levels can be combined.

The second branch is Using Emotions. The social-emotional skill in this stage is responsible decision making which was linked with the efforts time and space. According to Laban time gives us the *when*, is about intuition, decision making, knowing the right moment when to act, now (sudden) vs. not now (sustained) and it goes together with space which gives us the *where*, as a factor is about thinking, attention, intellect and ideas, using the senses and the environment. If the attention is multi-focused (indirect) is about seeing all the possibilities,

taking it all in but if the attention is single- focused (direct) is associated with phrases like *this is it* or *this is the way*. These two efforts together assist in focusing attention, thinking, having an open mind, identifying solutions and deciding. In Table 4 the proposal for this branch is showed.

Table 4: Program details for Using Emotions and S-E skill (Module 2)

Efforts	Target	Proposed Interventions
Time	When? Now vs. Not now	Group take up individual shapes. Volunteer travels around and under others using a variety of speeds and combinations of movement and stillness and methods to travel from one spot to another.
Space	Focus. One option vs. Multiple options	Each participant takes a pathway towards an object/person. Repeat with a variety of ways across the floor. Explore direct pathways and more complicated ways to/from places.

The third branch is Understanding Emotions. The social-emotional skill is social awareness, linked with relationships which is fundamental in human development (Bartenieff & Lewis, 2002). In group interactions the use of space helps to distinguish the degree to which the participants are self- (body) oriented or other- (space) oriented. The degree to which the whole body is incorporated into the activity can also help define the degree of interaction (Bartenieff & Lewis, 2002). How the interaction between the others and me is can be experienced in this stage and can help us take other perspectives, develop empathy and recognize strengths in others. The intervention proposed is presented in Table 5.

Table 5: Program details for Understanding Emotions and S-E skill (Module 3)

Relationships	Proposed Interventions
Interaction with others	In a turn each member of the group makes a shape in the center of the circle that expresses something unique about themselves or how they feel. Each member chooses to enter the space or not. Once they enter they respond to the person's shape with another and then leave. The initiator returns to the group when they feel they have enough responses. Initiator asks the group what they thought s/he was communicating and how s/he felt when they responded. Group asks themselves their role.
Cooperation	In a circle each participant passes a sound around the circle, then a movement. With music the group follows the leader's movement until the leader says "pass". The person that "receives" the movement develops it for a while and when they feel the group is following it ok they say "pass" and so on.

The fourth and last branch is Managing Emotions. The social-emotional skill is self-regulation. All four Laban efforts were associated with this social-emotional skill. In this stage, movement is used to enhance basic emotions (anger, fear, happiness and sadness) to assist in self-regulation and the recognition of emotions in others (Shafir et al., 2016). Identifying which motor characteristics enhance which emotions could provide a tool to help self-regulate using motor behavior and we could try to incorporate it in our daily lives to enhance positive emotions and avoid or decrease motor behaviors that could enhance negative emotions. The proposed interventions are based on the work of Shafir et al. (2016) allowing the association between motor elements and basic emotions.

Table 6: Program details Managing Emotions and S-E skill (Module 4)

Managing Emotions	Proposed Interventions
Relaxation	<p>Quiet room, soft light, lying on the floor participants become aware of breathing. Breath in and out several times.</p> <p>Concentrate on different parts of the body and if there is tension let it relax. Tense parts of the body and then relax them e.g. clench the hands and the relax, tense face and then relax. Repeat several times moving from neck to toes. Rest for a few minutes afterwards.</p>
Conscious control of breathing	<p>Group stands in circle. Leader suggests they close eyes and take a deep breath. Bend the knees slightly and relax shoulders, arms and legs. Allow the breath to drift out slowly out the nose. Focus on the breathing. Repeat twice as slowly.</p> <p>Group sits down and holds one nostril closed and breaths in and out through the other nostril slowly. Then repeats it reversed.</p>
Self-applied touch	<p>Become aware of areas in the body that need a massage a rub or a soothing touch. Touch gently and slowly add pressure if it is needed for the muscle to relax. Start from head to toe.</p> <p>Focus on Parenting one's self.</p>
Efforts: to self-regulate	<p>Anger: Leader suggests participants practice "karate" or Kung Fu" like actions like kicking, turning, jumping and encourages the use of arms and legs.</p> <p>Fear: Participants walk backwards individually with eyes fixed on an object in front of them. Later obstacles are put out in the space and in pairs one guides and the other who is walking backwards receives instructions and together they explore the space.</p> <p>Happiness: Leader suggests participants move as if they were a feather or a leaf moving gently in the air. They are floating freely in the air.</p> <p>Sadness: Give into gravity. Leader suggests lumbering or plodding walk. Move in a lowering or dropping energy</p>

Conclusions

Multiple studies demonstrate that EI has a significantly positive role in many important aspects of life. It affects the person's individual and professional success in life, the quality of relationships and happiness and the fulfillment feeling in general.

The main purpose of this paper was to develop and propose a model to develop EI on the theoretical framework of Salovey and Mayer's model and DMT. Different models have been used to develop EI, most of them based on a cognitive-rational paradigm. According to literature, the integration of DMT could also support and compliment previous studies. Connection among motor patterns and emotions make room for the development of a specific proposal for an EI educational program. Based on the Salovey and Mayers model four EI components have been identified and associated with EI abilities allowing the proposal of a DMT emotional intelligence model.

The main limitation of this work consists in the fact that the proposal has not been tested due to COVID-19 restrictions and limitations. Nevertheless, we consider the structure of the presented work and the proposed interventions could be of help and guide for DMT professionals that want to work with EI in academic environments. At the same time, the model could be of interest to education professionals, given the potential that DMT has not only in the clinical but also in the preventive and socio-educational settings.

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