

Assessing Emotional Regulation in Children:
An Integrative, Drama and Dance/Movement Therapy Approach

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Abstract

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This qualitative, theoretical study explores the intersection of drama and dance/movement therapy as they relate to emotional regulation (ER) in children. While the importance of ER to development has been widely recognized, there have not previously been creative arts therapies methods to assess this phenomenon in children. This research study aims to shed light on the diverse mind-body processes informing ER in children and how integrative approaches from drama and dance/movement therapy can be potentially useful in ER assessment. Integrating language from dance therapy movement observation into drama therapy assessment methods is an attempt to address the physiological expression of emotion by recording a child's movement patterns in a more clear and concise manner. Included in this study is a review of the various socio-emotional, psychological and physiological factors influencing ER, and a template for an assessment tool that clinicians may use as a springboard to enhance their overall assessment of ER processes in children.

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Table of Contents

List of Figures and Tables.....	vi
INTRODUCTION.....	1
Chapter I: METHODOLOGY.....	3
Integrative Review Method.....	4
Chapter II: REVIEW OF THE LITERATURE.....	8
Emotional Regulation.....	8
Defining Emotional Regulation.....	8
Psychoanalytic Perspectives.....	10
Neurodevelopmental Perspectives.....	12
Body-Mind Psychotherapy Perspectives on Emotional Regulation.....	14
Assessing Emotional Regulation.....	17
Assessing ER in Children.....	17
Assessing ER from a Drama Therapy Perspective.....	21
Assessing ER from a Dance/Movement Therapy Perspective.....	25
Chapter III: DISCUSSION.....	29
Theoretical Framework: Integrative Tool for ER Assessment.....	29
Population/Set up.....	31
Ethos of Non-Judgment.....	31
Embodiment.....	32
Social-Emotional Expressivity.....	34
Resiliency in Play.....	35
Therapist Self Observation.....	35
Drama and Dance/Movement Therapy Assessment Tool for ER in Children.....	37
Chapter IV: LIMITATIONS AND FUTURE IMPLICATIONS.....	40
Chapter V: CONCLUSION.....	42
References.....	44

List of Figures and Tables

Figure 1: The three zones of arousal: A simple model for understanding the regulation of autonomic arousal.....	17
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Introduction

The objective of this research is twofold: to explore the intersection of drama and dance therapy as they relate to emotional regulation in children and to suggest future research, including the development of an assessment tool. The desire to assess emotional regulatory capacities in school-age children was derived from my work as a drama therapy intern in a school setting. I was struck by a prominent pattern among the referrals I received; teachers would describe students as not articulating their feelings in socially effective ways, such as, exploding in anger and frustration or shutting down reticently. They explained that the children's difficulty in managing their emotions was significantly impeding their ability to concentrate, affecting their academic engagement and successful communication with others.

The students' presenting problems seemed to reflect difficulties with emotional regulation. Maté (1999) analogizes a child's ability to effectively regulate their emotions to that of a warm-blooded creature; it can exist in a range of environments, but its blood will neither chill nor overheat, no matter what the external temperature. A child's difficulty in regulating their emotions resembles a cold-blooded creature, which can endure a far narrower range of external habitats because it does not have the capacity to regulate its' internal environment (Maté, 1999, p. 161).

Investigating emotional regulatory capacities in children seemed a particularly pertinent field of study considering it is crucial in predicting both concurrent and future child functioning (Swingler, Perry, Calkins, & Bell, 2014). Emotional regulation has been recognized to predicate academic success (Graziano, Reavis, Keane & Calkins, 2007), while a deprived ability to regulate emotions can physiologically inhibit children

from the use of higher order cognitive processes at school (Blair, 2002). Emotional regulatory processes are also vital to mental health (Gross & Muñoz, 1995) and are the most important predictors of later adaptive social-emotional and psychological functioning (Fox & Calkins, 2003; Propper & Moore, 2006). Difficulties with emotional regulation are related to the etiology of many psychosocial issues (Gross, 1998; Wyman et al., 2010). Furthermore, emotional regulation is seen as the primary goal of development (Maté, 1999; Fonagy & Target, 2002), as it facilitates the building of secure relationships (Tortora, 2006) and the ability “to stay focused, remain calm, problem solve, maintain social engagement and benefit from rich learning opportunities in everyday learning experiences” (Prizant, Wetherby & Rydell, 2000, p. 211).

With this knowledge in mind, the modulation of emotional arousal seemed to me to be inextricably linked to everyday social-communicative aspects of school life. Tortora (2006) describes how “entering the school system, children encounter evaluative experiences, in the form of social evaluation and academic evaluation that they have not previously encountered” (p.20). Tortora (2006) further explains that “a child’s access to emotional regulatory capacities, including self-control, frustration tolerance, task persistence and the maintenance of organized behaviour in the face of excitement or distress, become preconditions for smooth academic functioning and peer socialization” (p. 20-21).

In consequence, how a child emotionally resolves the inherent frustrations and triumphs of school life bears a great influence on their learning style and social-communicative outcomes. I was imbued with the understanding that, without the ability to regulate emotionally, a child’s capacity for effective academic and socio-emotional

learning at school is greatly impeded. Considering my career objectives are tied strongly to working with children in school-settings, it seemed to me, that evaluating emotional regulation is where my therapeutic work should begin. I was also seeking a way to integrate theory from both my studies in drama and dance therapy in order to foster emotional regulation in children. As emotional regulation is widely regarded as a mind-body phenomenon, I presumed that theory and assessment methods from the field of dance therapy could expand upon the drama therapeutic theory and methods I was using to assess emotional regulation in children.

The first chapter of this study identifies the integrative review methodology, which was used to consolidate theory from the fields of psychology, drama and dance therapy. The second chapter is a review of the literature pertaining to emotional regulation as a construct and assessment methods pertaining to this construct in the fields of psychology, drama and dance therapy. Chapter three discusses the theory from the previous chapters and attempts to analyze and integrate such theory in the culmination of an assessment tool template. Chapter four discusses limitations of the assessment tool template and future implications and finally, chapter five provides a conclusion of this research study.

Chapter I: Methodology

The primary question of this qualitative research study is: How can dance/movement therapy theory inform drama therapy theory in order to assess emotional regulation in children? An abundance of literature has newly emerged exploring the construct of emotional regulation in children (Heiy & Cheavens, 2014), however there is a lack of progress in the assessment of this construct (Adrian, Zeman,

Veits, 2011). Thompson, Lewis and Calkins (2008) have identified a need for multimethod approaches of assessment to evaluate the various physiological, psychological and social processes that influence emotional regulation. Through the analysis and synthesis of drama and dance therapy approaches, this study is an attempt to fill the gap in the research by providing an integrative approach to assessing emotional regulation in children.

Integrative Literature Review Method

A theoretical, integrative literature review methodology (Whittemore & Knafl, 2005) was adopted to address my research question, as it is rooted in the investigation, critical analysis and synthesis of existing literature. This research method supported the investigation of the research question by allowing me to draw from empirical and theoretical dance/movement and drama therapy literature to provide a more comprehensive and varied perspective of the phenomenon of emotional regulation in children (Broome 1993; Whittemore & Knafl, 2005). This method allowed for the compilation of a groundwork of knowledge concerning drama therapy and dance/movement therapy and enabled me to underscore their theoretical connections, distinguish their relationship to emotional regulation, and potentially inform new perspectives related to these phenomena and concepts.

Considering that the research project did not involve human subjects, ethical considerations pertained to how the data was collected, analyzed and presented in the review of diverse literature. The primary ethical consideration of the integrative review relates to the researcher's rigor: combining diverse methodologies as well as theoretical sources can contribute to inaccuracy and bias (Whittemore & Knafl, 2005). In *Criteria*

for Excellent Qualitative Research, Tracy (2010) supports that the criteria for maintaining honesty and sincerity in research can be achieved through self-reflexivity about subjective values, biases and inclinations of the research and transparency about the methods and challenges of the research. As it is vital in strengthening the rigor and validity of a theoretical research study, I adopted a reflexive and critical standpoint by transparently addressing my biases and perspective throughout the research process (Howell Major & Savin-Baden, 2010). Due to my personal involvement with the therapeutic effects of dance/movement therapy and my enrolment in dance/movement therapy training, I concede that I may have been inclined to favor data, which supports my personal bias that dance therapy, with its focus on body-based communication and interaction between soma and psyche, can enhance current drama therapy theory in evaluating emotional regulation in children. To further support the ethical rigor of my research presentation, this study credits authors appropriately and accurately according to the ethical guidelines from the North American Drama Therapy Association's Code of Ethics, which emphasizes that an ethically competent drama therapist will follow standard guidelines for referencing other's theories, research or clinical work in publications or presentations (NADTA, 2013). This research project provides appropriate references and recognition for ideas, which are not my own, using the latest American Psychological Association guidelines (APA, 2009).

To help curb inaccuracy, enhance transparency, and strengthen the validity and reliability of theoretical research, this paper adhered to Whittemore and Knafl's (2005) systematic steps for carrying out integrative review research:

1. Problem Identification

2.Literature Search

3.Data Evaluation

4.Data Analysis

5.Presentation

1. Problem Identification

The researcher must focus their problem (how can dance therapy theory inform drama therapy theory?), identify the health phenomenon (emotional regulation) determine a target population (school-age children) and determine the sampling frame (experimental/non-experimental studies and theoretical literature).

2. Literature Search

Cooper (1998) and Conn et al. (2003) attest that well-defined literature search strategies are critical for enhancing the rigor of any type of review because incomplete and biased searches can create an inadequate database and the potential for inaccurate results. As a student researcher, a meticulous review of emotional regulation and assessment was beyond the scope of this paper, thus a purposive sample of this literature as it pertains to drama therapy, dance/movement therapy, assessment and children was sourced. Relevant book chapters, online periodical (EBSCO Host, PsychInfo, Academic Search Premier) and online search engines (Google Scholar) were used to search the following terms: “emotional regulation”, “affect regulation”, “children”, “drama therapy” and “dance/movement therapy” and “assessment”. Articles containing the words “emotional regulation” or “regulation” in combination with “children”, “drama therapy” “dance/movement therapy” or “assessment” were retrieved. Particular attention was given to data that supported the perspective that emotional regulation is a complex mind-

body phenomenon. A total of 120 artifacts (articles, theses, book chapters, dissertations) were examined for this study.

3. Data Evaluation

Primary research is the data collected, evaluated and analyzed in a theoretical integrative review, comprised of preexistent research and academic sources from diverse authors within the literature (Whittemore & Knafl, 2005). This study collected data from a large repertoire of varied data and artifacts related to dance/movement therapy, drama therapy, emotional regulation, children and assessment, which were evaluated and analyzed to form the body of data for my research study.

4. Data Analysis

This stage involved an evaluation of the various perspectives on emotional regulation and assessment and synthesizing patterns and themes. Data was evaluated in a reiterative process and then patterns and common themes in assessing emotional regulation strategies pertaining to children were analyzed; interrelationships between the drama and dance therapy methods were then delineated by exploring how they related to assessing emotional regulation in children. This data was analyzed and connections were established in a comprehensive review of the literature.

5. Presentation

Whittemore and Knafl (2005) note that the accumulated results should ideally capture the depth and breadth of the topic and contribute to a new understanding of the phenomenon of concern. My overall objective was to underscore how dance/movement therapy could inform drama therapy in creating an innovative approach to assess the diverse processes underlying emotional regulation in children. To provide an

understanding of the mind-body processes underlying emotional regulation, this research consists of a literature review by chronologically presenting a purposive sample of psychological and physiological perspectives regarding this health phenomenon. Methods of assessment from the fields of psychology, drama and dance/movement therapy as they pertain to emotional regulation in children, are then considered sequentially. Drawn from the findings from the integrative review of the literature, the second half of the paper focuses on how the findings can be used clinically by proposing a template of an integrative tool for clinical assessment. As a complete intervention was beyond the scope of this study, I proposed an assessment tool that integrates the information gleaned from studying both drama and dance/movement therapy. This assessment tool may act as a preliminary model to inspire future studies, or more in-depth research and clinical work in the fields of drama and dance/movement therapy.

Chapter II: REVIEW OF THE LITERATURE

In the following seven sub-sections, a distillation of disparate bodies of literature is provided. The literature surveyed includes emotional regulation as it pertains to mind-body processes, assessment and the creative arts therapies.

Defining Emotional Regulation

In order to understand how to assess emotional regulatory capacities in children, an explanation of this construct must first be provided. Emotional regulation (ER) has emerged as one of the most prevalent research topics in clinical psychology over the past two decades, with more than 2,500 published works citing ER as a keyword (Heiy & Cheavens, 2014). The growth of interest in the term is driven by multiple findings that

connect ER to physical health, psychological health, interpersonal relationships and well-being (Aldao, Nolen-Hoeksema & Schweizer, 2010).

The study of ER in children is a relatively new and abundant field of research, coined as an *affect revolution* that has transformed how emotion processes have been conceptualized (Fischer & Tangney, 1995; Adrian, Zeman & Veits, 2011). Despite its popularity in research, there remains confusion regarding the processes that regulate emotion (Gross & Barrett, 2011) and no universally accepted definition (Thompson, 1994; Cole, Martin & Dennis, 2004; Gross & Barrett, 2011). An abundance of studies exist, which use the term directly, or related terms such as affect regulation, self-regulation, mood-regulation, coping or emotional control (Gross, 1998; Cole, Martin & Dennis, 2004). There is a general consensus across diverse theoretical approaches however, that ER is a multi-component process, influenced by complex social, environmental, behavioral, cognitive and biological factors (Gross, 1998; Cole, Martin & Dennis, 2004; Thompson, Lewis & Calkins, 2008; Gross & Barrett, 2011).

For this research study, Thompson's (1994) commonly accepted definition of ER will be used: "Emotional regulation consists of the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals" (p. 27-28). The subsequent sections of this literature review will describe the diverse perspectives on ER to provide a deeper understanding of the various theoretical lenses, which inform this construct.

Psychoanalytic Perspectives

The psychoanalytic tradition is one important precursor that has informed the contemporary study of emotional regulation (Gross, 1998). Freud considered that ER was influenced by psychological defenses, which are activated to regulate anxiety (as cited in Gross, 1998). According to Freud, the over-repression of instincts leads to a lack of emotional expression, whereas insufficient control of the ego leads to an excess of emotional expression; Freud believed emotional reactions must be modulated according to the needs of each circumstance (as cited in Mayer & Salovey, 1995).

Over the last two decades, attachment theory has become one of the most functional and generative conceptual frameworks for understanding how ER is informed by the dyadic relationship between caregiver and child (Mikulincer, Shaver, & Pereg, 2003). One of the key functions of the attachment system is to regulate emotional experience (Borelli et al., 2010). Bowlby (1969; 1973; 1980; 1988) and Ainsworth (Ainsworth, Blehar, Waters, & Wall, 1978) provided seminal groundwork for understanding the connection between emotional regulatory skills and parent/child relationships.

Bowlby (1969) conceived of ER as a result of different patterns of interactions with significant others. According to his ethological theory of “proximity seeking”, Bowlby (1969) argues that infants are born with a repertoire of attachment behaviors, which aim at seeking and maintaining proximity to figures of support; this proximity seeking system emerged evolutionarily as a survival mechanism for infants who lack the ability to move, feed or defend themselves. Mikulincer, Shaver and Pereg (2003) explain Bowlby’s theory from the lens of ER:

Bowlby highlighted the anxiety-buffering and physical protection functions of close relationships, conceptualized proximity seeking as an alternative to instinctive fight-flight responses, and stressed the importance of interpersonal experiences as a source of individual differences in affect regulation over the life span. (p. 77)

Ainsworth, Blehar, Waters and Wall (1978) further elucidated how attachment theory was related to ER in the assessment of infant attachment in the strange situation. In evaluating infant behavioral responses in the context of separation from and reunion with a preferred caregiver, Ainsworth, Blehar, Waters and Wall (1978) identified a typology of three attachment styles: secure, insecure-avoidant and insecure-ambivalent. Main (1996) subsequently identified a fourth pattern of attachment: disorganized. Attachment theorists conceptualized attachment behaviours as the first form of a specific ER mechanism (Zimmerman, Maier, Winter, & Grossmann, 2001) derived from an organized pattern of relational expectations, emotions, and behaviors that result from the internalization of a particular history of attachment experiences and their consequent reliance on a particular attachment-related strategy of affect regulation (Fraley & Shaver, 2000; Shaver & Mikulincer, 2002; Mikulincer, Shaver, & Pereg, 2003).

Winnicott (1971) and Kohut (1959) conceived of ER from an object relations paradigm. Winnicott (1971) regarded infants as dependant upon a “good enough” mother to “hold” and attentively adapt to the changing and complex emotional needs of the child. For Kohut, (1959) a “good-enough” mother holds difficult emotional material the child cannot hold for themselves, which in turn helps the child regulate within the dyadic relationship (Ben-Shahar, 2014).

Fonagy and Target (2002) regard attachment as the most integrated, coherent theory to understand how interpersonal experience between caregiver and child informs one's ability to regulate emotions. Fonagy and Target (2002) support that:

All key mechanisms underpinning the enduring effects of early experiences interface with an individual's capacity to control (a) their reaction to stress, (b) their capacity to maintain focused attention, and (c) their capacity to interpret mental states in themselves and others. (p. 307)

Fonagy and Target (2002) propose that the early relationship environment equips an individual with a regulatory system, which is arguably the most important evolutionary function of attachment to the caregiver; moreover, the authors argue that the whole goal of child development to be the enhancement of regulation (p. 313).

Neurodevelopmental perspectives on Emotional Regulation

The window for optimal development of ER is established from the fetal period until roughly two years of age; this period creates a blueprint that influences every system in the body, including the expression and regulation of emotion, to nervous system resilience (Levine & Kline, 2007). Patterns of parental and child ER most likely have genetic as well as experiential linkages across generations (Vondra, Shaw, Swearingen, Cohen, & Owens, 2001). Schore (2000) has shown that intergenerational transmission of stress-coping deficits occurs within the context of early relational environments that are growth-inhibiting to the development of regulatory corticolimbic circuits. A child's biological temperament also shapes the development of emotional regulation (Calkins & Hill, 2007). Maté (1999) explains that children may have a good or bad fit co-regulating with their parents, as "no two children have exactly the same parents, in that the

parenting they receive may vary in highly significant ways” (p. 56). Maté (1999) further emphasizes that an adult’s temperament is not independent of its child’s emotional development, as a parent’s unconscious attitude toward a child along with psychological tension in the parents’ lives during infancy, can predicate a child’s emotional regulatory capacity.

Contemporary neuroscience and developmental research has furthered explored how the development of regulatory mechanisms involves both physiological and social processes of mother–infant interaction. Stern’s (1985) affect attunement theory, concerning the role of parental affect-reflective behaviours in early social-emotional development, contends that emotional-reflective parental displays have an important influence on emotional regulation. Stern (1985) emphasizes the multiple ways that caregiver’s somatic communication with the infant, including gesturing, facial expression and sound, help regulate a child’s affect. Beebe and Lachmann (2002) also investigate the dyadic, interactive components of ER. Beebe and Lachmann (2002) recognize *interactive regulation* as a mutually affective exchange involving somatic attunement to the infant’s non-verbal cues.

Schore’s (1994; 2000; 2003) pioneering, neuroscientific research has linked the impact of mother–infant bonding in developing behavioral and biological regulatory systems. Schore (2000) attests “attachment theory is essentially a regulatory theory, and attachment can be defined as the biological synchronicity between organisms” (p.23). The interaction of a psychobiologically attuned caregiver, through rapid face-to-face transactions, helps the development of synchronized interactions and is fundamental to the healthy emotional development of the infant (Schore, 2000). Schore (2000)

underscores the “psychobiological”, mind-body processes of ER, which are stimulated by attachment patterns and involve mechanisms in the right hemisphere of the brain. Face-to-face attunement was found to increase the regulatory capacities of the infant, by developing the orbito-frontal cortex region of the brain to help regulate future stressors (Schore, 1994). Early attachment relationships have direct influences on the prefrontal areas of the right brain, which are “dominant for the unconscious processing of socio-emotional information, the regulation of bodily states, the capacity to cope with emotional stress, and the corporeal and emotional self” (Schore, 2003, p. 271-272). Siegel (2009) further elucidates the neurobiological and attachment-related processes of ER, highlighting how human relationships form and nurture emotional regulation and the powerful role of the prefrontal cortex as one of the regulatory integrative brain regions.

Body-Mind Psychotherapy Perspectives on Emotional Regulation

In physiological research spanning 1926-1952, William Reich identified ER as a mind-body process and that caregiver-infant attachment is the foundation of one’s emotional regulatory capacity (as cited in Carleton & Padolsky, 2012). Reich identified that an attuned and emotionally expressive parent understands the non-verbal, movement cues of the child; a lack of physical contact between caregiver and infant creates a nervous system reaction, which Reich termed as body “armouring” (as cited in Carleton & Padolsky, 2012). This defensive response manifests somatically in the infant as anxiety, muscular contraction, lowering of peripheral bioenergetic charge and body temperature, difficulty with full exhalation, disturbed sleep, and increased mucus secretion (Reich, Higgins, & Raphael, 1984; Carleton & Padolsky, 2012). Young (2008) further elucidates Reich’s notion that, as a survival response to disrupted attachment

processes, the child adaptively represses emotions and embodied tensions; this “armour” rigidly lives in their musculature as a “frozen history” of the disrupted attachment experience.

Levine (1997) developed Somatic Experiencing (SE) based on the survival, regulatory mechanisms of the autonomic nervous system. From the SE frame, Levine & Kline (2010) assert that in working with children who have difficulty regulating *fight, flight, freeze* responses, “the body holds the solution” (p. 37). Levine’s physiological approach is informed by Porges’ Polyvagal theory of emotion (Porges, 1991; 2011), which links ER to complex processes of the autonomic nervous system. Porges (2011) emphasizes that emotional regulation and social behaviour are “functional derivatives of structural changes in the autonomic nervous system in response to evolutionary processes” (p. 155). The theory proposes a hierarchy of three emotional/behavioral responses to stressful events: social engagement, mobilization, and immobilization (Porges, 2011); social engagement engages the ventral parasympathetic branch of the vagus nerve and relates to optimal arousal, mobilization engages the sympathetic branch of the vagus nerve and relates to hyperarousal, and immobilization engages the dorsal parasympathetic branch of the vagal nerve and relates to hypoarousal (Ogden, Milton & Pain, 2006; Porges, 2011). These arousal states are released from the autonomic nervous system and held in muscles and connective tissues; each state regulates access to psychomotor skills and emotions that regulate survival (Brantbjerg, 2015).

Sensorimotor psychotherapy conceptualized a model for understanding emotional and physiological dysregulation, by clinically applying Porges’ polyvagal theory to neurodevelopmental and trauma theory. Figure 1 below, excerpted from Ogden, Minton

and Pain, (2006), illustrates *the window of tolerance*, the differentiation between *hyper-* and *hypoarousal*, and the various physiological behaviours that correspond to each form of regulation/dysregulation. *Hypo-* and *hyperarousal* reflect overactive survival defenses, which compromise social engagement (Ogden, Milton & Pain, 2006). The *window of tolerance* falls between the extreme states of autonomic nervous system dysregulation: within this window, a client can experience emotion and maintain cortical functioning, allowing for integration on cognitive, emotional and sensorimotor levels (Ogden, Milton & Pain, 2006).

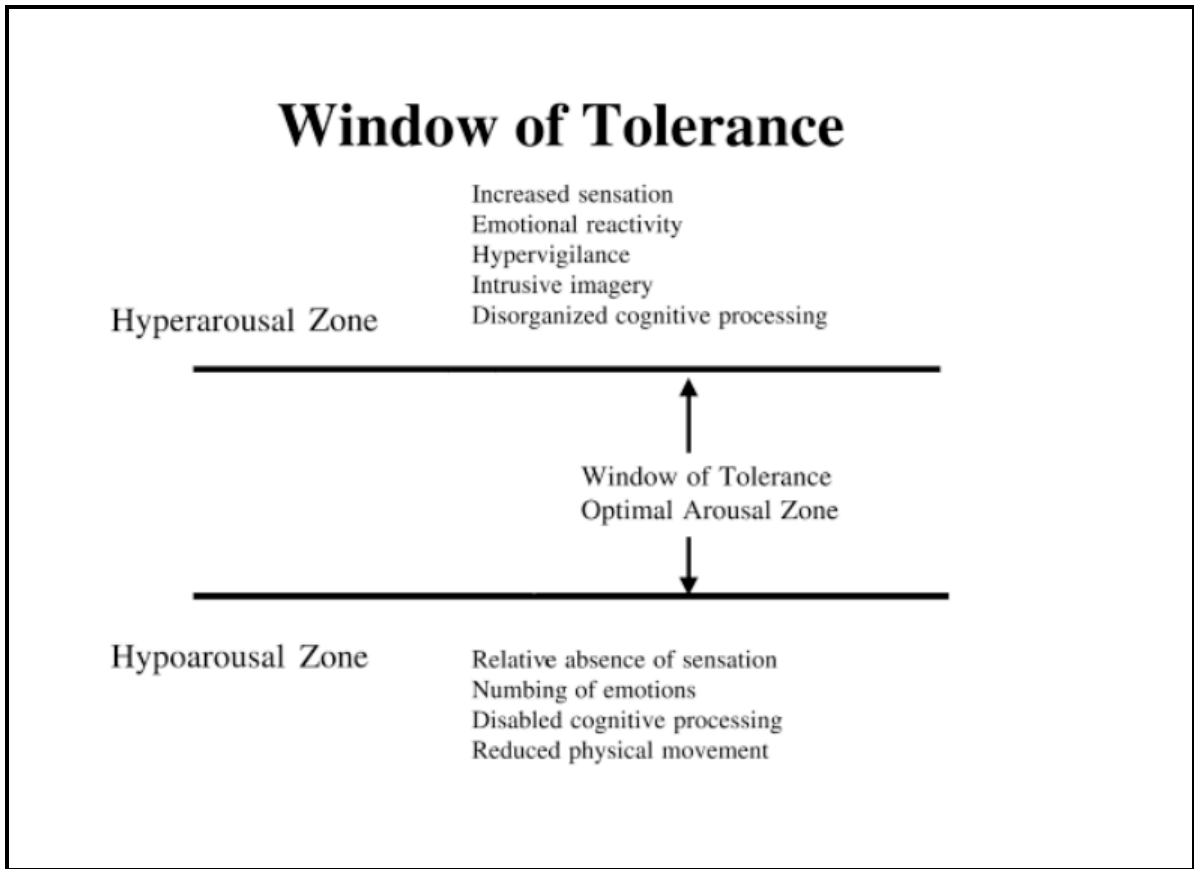


Figure 1. The three zones of arousal: A simple model for understanding the regulation of autonomic arousal (Ogden, Minton & Pain, 2006, p. 27)

Assessing Emotional Regulation in Children

In the previous section, the multidimensional nature of ER has been demonstrated through various theoretical lenses. The remainder of this literature review will acknowledge ER as it pertains directly to assessment methods for children across the fields of psychology and the creative arts therapies

The literature has revealed that ER is a relatively new construct that involves a variety of mind-body processes. As research on emotional regulation is still in its early stages, it has been a challenge for researchers to find a clear definition of ER and

subsequently develop and implement assessment methods (Langlois, 2004; Cole, Martin, & Dennis, 2004).

In their 35-year review of emotional regulation assessment in children, Adrian, Zeman and Veits (2011) found that current research of ER in children is plentiful, yet progress in the assessment of ER in children lags behind. The authors reviewed 157 methodologies (not including creative arts therapies approaches) used to study and assess emotional regulation in children and found that ER in children has been assessed primarily in four ways: self-report, other informant (parent, teacher or peer), observational, and physiological-biological indicators (Adrian, Zeman & Veits, 2011). Self-reports are an important form of assessment, however they are limited by the child's awareness and ability to communicate information about their emotions (Durbin, 2010; Zeman, Klimes, Cassano & Adrian, 2007). Other reporters provide an opportunity to understand children's ER in the context of their social setting, however this form of assessment is subject to bias (Fergusson, Lynskey, & Horwood, 1993). Observational methods are often seen as the "gold standard" in developmental research (Cummings, Davies, & Campbell, 2000) as body gestures, tones of voice, and facial expressions relay important information about emotional experiences and expression; however, observational approaches are limited in that they do not investigate the associated internal unobservable processes and a child's ability to evade emotional displays as they grow older (Adrian, Zeman & Veits, 2011). The neurophysiological processes involved in ER, have been measured by neuroimaging (Ledoux, 1996) and the vagal tone index (Porges, 1991).

Adrian, Zemana and Veits, (2011) identify a need for more integrated methods of assessment: “because ER is conceptualized as a multicomponent process, a multimethod approach not only is appropriate for research investigating ER in children, but also may be necessary to determine the precise mechanisms involved in ER” (p. 186).

Furthermore, a need for more research on ER in middle childhood has been recognized. ER research has primarily focused on infancy, early childhood and adulthood, while middle childhood and adolescent years have been relatively neglected (Borelli et al., 2010; Gullone & Taffe, 2012). This is recognized as a significant limitation of ER research because the middle childhood periods arguably constitute a time of profound transformation related to ER (Gottman & Mettetal, 1986) and a critical turning point in the acquisition of cognitive, social, and emotional skills (Gullone & Taffe, 2012).

Clinical psychologist and play therapist Gnaulati (2008) addresses the need for research and assessment related to ER in school-age years. In *Emotion-Regulating play therapy with ADHD children*, Gnaulati (2008) extrapolates research from the fields of psychology, attachment and child development to formulate a descriptive criterion for optimal self-regulation of affect for school-age years. Gnaulati’s (2008) criteria lacks a systematized method of assessment, however, it fills a gap by offering a framework, to assess optimal qualities of ER in school-age children. Gnaulati’s (2008) criterion for optimal self-regulation of affect for school-age years include the following:

- *Modulating the intensity of emotion (“down-regulating” or “up-regulating”)*: pertains to amplifying or deamplifying the intensity of emotions to improve the likelihood a child’s interpersonal, communication goals will be realized.

- *Continuous display of organized thought and behaviour despite high levels of distress or excitement*: self-contains arousal in face of fear, envy, excitement, aggression, risk of shame etc.
- *Emotional responsiveness supplanting emotional reactivity*: measure of control over expressive actions versus impulsive processing of socio-emotional information.
- *Self-attenuated transitioning out of and recovery from strong emotional reactions*: shows ability to recover from strong emotional reactions and aptness to experience emotions as temporally impermanent.
- *Seeing tasks through without undue frustration and premature discontinuance*: demonstrates perseverance in completion of tasks, pursuits, activities; may use self-soothing or positive self-talk to help.
- *Flexible handling of other's emotions*: distinguished by degree of self-other boundaries; demonstrates empathic concern without becoming overwhelmingly infused with and disorganized by other's emotionality.
- *Adept use of language and symbolic play to facilitate higher-order emotional expressiveness*: an emotionally fluent child has access to a broad vocabulary, either in language or symbolic play, as representational forms to convey feelings. The use of symbolic play is representative of high order emotional expressiveness as the child is able to displace potentially threatening feeling states onto play figures, thereby affording them with mastery over and deeper processing of such feeling states (p. 2-5).

Assessing Emotional Regulation from a Drama Therapy Perspective

There currently exists no drama therapeutic assessment tool that explicitly assesses ER, however, drama and dramatic play have long been utilized to assess emotional expression and pathology in children. Social scientist Binet utilized dramatic scene work to psychologically examine children in 1893 (as cited in Pendzik, 2003), Anna Freud (1928) and Melanie Klein (1932) used play as a substitute for verbalized free association in their work with children, and role play and projective techniques were adopted as assessment tools later in the 1960s (Woltmann, 1960; Exner, 1969).

Irwin was the first drama therapist to create an assessment tool; her *Puppet Assessment Interview* (Irwin, 1985) was “was widely used by child psychotherapists for work with emotionally disturbed children” (Snow, Johnson & Pendzik, 2012, p. 21). Irwin (1985) argues that form and content of play allows the therapist to evaluate the child’s ability to enter into the “as if”, assess non-verbal communication, and observe the child’s defenses and the level of ego control. Irwin (1985) explains that the use of projective media and methods revealed in a dramatic story can further help the therapist delve into the private world of the child’s emotional state, cognitive abilities, memories, subjective views, serving as a compass for therapeutic work. As with many drama therapy assessments, *The Puppet Assessment Interview* is qualitative by nature, relies on the therapist’s subjective interpretations, and lacks reliability, validity and standardization (Snow, Johnson & Pendzik, 2012, p. 21).

Lahad, a drama therapist and specialist on posttraumatic stress in children, developed another story-based assessment with *Storymaking in assessment method for coping with stress: six-piece story-making and BASIC Ph.* (Lahad, 1992; Berger &

Lahad, 2010; Lahad & Dent-Brown, 2012). The assessment is comprised of a tool, BASIC Ph, which addresses a client's six possible ways of coping with stress and their ability to be resilient. Lahad regards resiliency as the resources that help people regulate emotions (Berger & Lahad, 2010). According to his BASIC Ph resiliency model, "there are six modalities/channels that constitute resiliency: Beliefs, Affect, Social Functioning, Imagination, Cognition and Physiology" (Berger & Lahad, 2010, p. 890). The therapist applies the BASIC Ph model and adopts a psycholinguistic frame for analyzing the words and phrases of the individual's projected story (Lahad & Dent-Brown, 2012). Lahad's model and research purports that each person has a unique coping mechanism composed of a combination of the BASIC Ph languages most available to them; the more languages one is able to articulate, the greater the ability to cope with change, distress and trauma symptoms (Berger & Lahad, 2010). The tool is qualitative in nature and some aspects have been shown to have adequate reliability and validity (Lahad & Dent-Brown, 2012). The tool has also been applied in various studies to assess how children and adolescents cope with stress (Shacham & Lahad, 2004; Dunne, 2012).

Johnson's (1982) developmental model involves assessing the intensity of affect which one can tolerate in any given situation without overwhelming anxiety and also puts emphasis on emotional expression (Armstrong et. al, 2015). Developmental transformations theory (DvT) evaluates a client's ability to manage the inherent instability of life by evaluating their flexibility within the "playspace" (Johnson, 2014). Johnson now applies DvT methods in school settings with the ALIVE program, a direct, embodied approach to reduce the symptoms of traumatic stress towards facilitating student success (Sajnani, Jewers-Dailley, Brillante, Puglisi & Johnson, 2014).

Jennings' Embodiment-Projection-Role (EPR) is a developmental paradigm that charts the progression of dramatic play from birth to seven years (Jennings, 1998; 1999; 2011; 2012). EPR postulates that children first play through physicalized, embodied forms, then explore the world of projective objects and substances around them, and eventually broaden their dramatic development into playing both personal and interpersonal roles (Jennings, 2012, p. 177). The basic supposition of the EPR theory is that a fully developed child would be able to function and enter into the world of imagination in any of the three modes (embodiment, projection, role) (Pendzik, 2003). The EPR model serves as a way of assessing and working with children and pre-adolescents whose dramatic development may have not occurred or has become distorted (Jennings, 1999; 2012). Adhering to the notion that EPR is an accurate observation of the stages of dramatic development, it therefore follows that EPR can reveal missed experiences and facilitate a re-working of a child's developmental deficits (Jennings, 2012). Jennings has developed qualitative, observational tools to assess EPR including the Embodiment-Projection-Role Observation Chart (Jennings, 1999, p. 140) and the Play and Story Attachment Assessment (PASSA) (Jennings, 2012). However, Jennings recommends therapists evolve and experiment with their own way of observing and transcribing EPR. The EPR model is well positioned as a model, which can be incorporated with other assessment paradigms, as Jennings (2012) points out "it can be integrated into any psychological model or therapeutic or educational practice, because it is based on detailed observation rather than on interpretation" (p. 178).

Jennings (1998; 2011) distinguishes the body as "the primary means of learning" and embodiment play concentrates on experiences with the body, including sensory,

rhythmic, and early dramatic play (Jennings, 1998; 1999; 2011; 2012). Projection, according to Jennings “is important for learning how we organize the world outside and also to be able to have imaginative responses to the world of flexibility and change” (Jennings, 1999, p. 57). Role-play can be related to how the child empathizes and understands other people’s emotions, as one learns about themselves by taking on the role of the other (Jennings, 2005, p. 71). Powell (2014) has pointed out that within Jennings’s EPR paradigm, *embodiment* play is especially related to emotional regulation, as it elicits internal physiological and emotional experiences and allows children to practice regulation and coping strategies through sensory or movement based experiences. Powell (2014) has further identified *projective* play as related to the interpersonal dimensions of emotional expression, while *role* play relates to emotion understanding and empathic capacity.

Recent quantitative research conducted by Armstrong et al. (2015) has further supported “there is a strong connection between emotional arousal and the drama therapy processes of dramatic projection and dramatic embodiment” (p. 156). The study used Jones’ definition of these two core processes; *dramatic projection* (DP) refers to the externalization and projection of inner conflicts onto dramatic materials, and *dramatic embodiment* (DE) refers to physical expression in dramatic enactments (Jones, 2007). The results of this quantitative study “suggest that both DP and DE can facilitate client emotional arousal, bringing about sustained expression and potentially leading to the processing of emotion, which can in turn be therapeutic” (Armstrong et. al, 2015, p. 147). This supports the findings that embodiment and projection are significant processes in drama therapy, and should be considered in the assessment of emotional regulation.

Assessing Emotional Regulation from Dance/Movement Therapy Perspective

Dance movement therapists have systemized tools that can be used to analyze a child's movement repertoire and bodily expression. Laban (Dell, 1970), Kestenberg (Kestenberg-Amighi, Loman, Lewis & Sossin, 1999), Bartenieff (Hackney, 1998) and their co-researchers, have developed observational analysis principles, which can be used to assess emotional expression in the body. The use of movement analysis for therapeutic assessment reflects the basic tenet of dance therapy, that mind, emotions and body are closely mutually interacting systems (Kestenberg-Amighi, Loman, Lewis & Sossin, 1999).

Laban Movement Analysis (LMA) is a systematic method of observing, recording and analyzing the qualitative aspects of movement (Dell, 1970; Govani & Weatherhog, 2007). Laban developed a language for describing movement, including patterns termed *Effort* and *Shape*; *Efforts* are seen as dynamic movements capturing approaches to space, weight and time and flow, while *Shape* refers to the forms the body makes in space, giving structure to effort patterns (Sossin & Birklein, 2006, p. 52). *Effort-Shape* analysis "is based on the assumption that an individual's inner attitudes (conscious or unconscious) towards efforts are present in every movement and can be observed" (Gross, Crane & Fredrickson, 2010, p. 226). Laban believed that movement qualities belied emotion: "Movement...can characterize momentary mood and reaction as well as constant features of personality" (Laban, 1950, p. 2).

Bloom (2006) argues that effort theory is concerned with expressive, qualitative aspects of movement and can therefore help us understand the relationship between movement and emotional states. *Weight* and *Flow* efforts are particularly pertinent to

assessing emotional regulation as they have been identified as physical and emotional efforts (Bloom, 2006, p. 25). Bloom (2006) argues that *Weight* effort, designated as either *Strong* or *Light*, relates to the physical sensation of the body itself (skin, muscles, surface and depth of body, sense of touch), to intention and one's sense of agency to have an impact (p. 23-24). *Weight*, relates to how the body uses its force, but not the quantity of muscular mass that exists in the body (Fernandes, 2015). *Flow* effort, designated as either *Bound* or *Free*, refers to the muscular tension used to let movement flow (free) or to restrain it (bound) (Fernandes, 2015). *Flow* effort, is associated with the relative freedom or restriction of the flow of breath and energy, which has a bearing on the control or release of feelings and the experience of emotion in the body" (Bloom, 2006, p. 25). *Time* effort is also worth mentioning, as it relates to the when of movement, intuition and decision-making (Bloom, 2006; Fernandes, 2015).

The Kestenberg Movement Profile (KMP) builds upon the LMA framework of *Effort-Shape* by systematically assessing and describing nonverbal movement patterns with a developmental and psychodynamic perspective (Kestenberg, Loman, Lewis &, Sossin, 1999). The KMP elucidates the correlation of body and mind in the process of development as each movement pattern is seen to have intrinsic developmental significant and psychological meaning (Loman, 1998; Sossin, 2007). The KMP provides therapists with a framework for relating to children and formulating goals and treatment plans (Loman, 1998). The KMP can be used when working with children to identify specific areas of developmental delay, coping strategies, as well as relational styles (Loman, 1998; Gass, Kennedy, Hastie, & Wentorth, 2013).

The KMP follows a developmental scheme outlining movement patterns, with nine distinct classes of movement (Gass, Kennedy, Hastie, & Wentworth, 2013). *Tension-flow* and *Shape-flow* are two movement patterns particularly relevant to assessing affect/emotional experience in children. As Sossin and Birklein (2006) identify, “both tension-flow and shape-flow are seen as somatic regulatory processes with particular psychological relevance, especially to affective experience and emotional expression” (p. 11). *Tension-flow* refers to ongoing rhythmic changes in muscle-tension, between unimpeded ‘free flow’ and constricted ‘bound flow’, and *Shape-flow* which refers to ongoing growing and shrinking of bodily dimensions, specifically in horizontal, vertical and saggital dimensions (Sossin & Birklein, 2006, p. 11). Loman and Sossin (2009) clarify how *Tension-flow* is linked to affect regulation: bound flow can correspond to cautious feelings (inhibition, discontinuity, affects related to danger, anxiety), while free flow attributes are associated with carefree feelings (facilitation of impulses, continuity, affects related to release and safety). *Shape-flow* consists of *Bipolar shape-flow* and *Unipolar shape-flow*, which are catalogued across horizontal, vertical and saggital dimensions (Sossin & Birkelin, 2006). *Bipolar shape* flow is linked to comfort (growing and exposure) and discomfort (shrinking and reduction of exposure); one’s sense of self in the world, alongside feelings of trust, stability and confidence, are served by bipolar shape-flow (Sossin & Birkelin, 2006). *Unipolar shape-flow* patterns involve asymmetric expansions and contraction; such patterns are linked to approach-avoidance (Sossin & Birkelin, 2006).

Bartenieff applied Laban principles to creating Bartenieff fundamentals, which concerns developmental, neural and relational patterning that are integrated in the body

through movement (Levy, 1998). Each fundamental pattern of total body connectivity represents a primary level of development and experience, and each is relational (Hackney, 1998, p. 13). The Bartenieff approach believes that fundamental patterns of total body connectivity form the basis for our patterns of relationship and connection, when these patterns are not achieved, the individual will develop compensatory patterns that might not effectively support the next stage of development and may lead to either physical or psychological problems later on (Hackney, 1998, p. 13). A fundamental movement pattern, which relates to emotional expression, is *Breath*. From the Bartenieff perspective, *Breath* is “the central liberator and controller”, and “the regulator of inner space” (Hackney, 1998, p. 13). *Breath* is the fluid ground from which all movement emerges, provides the baseline of flow for effort and is also key to the functional/expressive content of communication (Hackney, 1998, p. 13). If *Breath* is not integrated, compensatory breathing patterns may emerge; “when emotional blocks to integrated movement occur, they have to be dissolved or at least addressed to allow the regenerative aspects of integrated movement to return” (Goldman, 2004, p. 126).

Dance Therapist Tortora, has developed a Laban-derived, observational approach to movement behaviour entitled *Ways of Seeing* (Tortora, 2006; 2010), which focuses on multisensory and socio-emotional dimensions of regulation. Tortora (2010) considers multisensory regulation, as “the regulation of internal sensations balanced with the ability to regulate how information from the outside world is taken in and processed that enables the growing child to decipher, learn, respond and create relationships with his surroundings” (p. 38). Thus, how a child manages internal and external stimuli affects interpersonal (social) and intrapersonal (emotional) interactions and relationships

(Tortora, 2006; 2010). *Ways of seeing* also considers the role of *Breath* in ER, as “free flowing breath, or the stomach extending and flexing, is a developmental milestone correlated to their body’s self-regulation system” (Tortora, 2006, p. 82).

Tortora (2006) also uses the therapist’s self-observation and self-reflective comments of experience, as she believes that engaging with one’s own kinesthetic and perceptual senses when observing a child may help connect their movement with meaning. *Ways of Seeing* uses *witnessing*, drawn from authentic movement, to allow for emotional, felt-sense “kinesthetic seeing; these sensations may affect how the therapist interacts with the child and may also lead them to reflect on possible ways the child may be experiencing their surroundings and relationships” (Tortora, 2006, p. 232). These qualitative aspects of the therapist’s responses are influenced by Laban Movement Analysis’ acceptance that empathetic images or expressions of personal feelings/reactions to a client are relevant assessment material (Dell, 1970).

CHAPTER III: DISCUSSION

Theoretical Framework: Integrative Tool for ER Assessment

The review of the literature demonstrates that ER is a complex, multicomponent phenomenon, informed by various complex factors. A review of ER assessment also indicated that there is a need for more integrated, multimethod approaches to assess the socio-emotional, psychological and physiological dimensions of ER. The aim of the following theoretical framework is to address the gap in the literature that exists at the intersection of ER, assessment and mind/body approaches.

To help evaluate the multifaceted mind-body processes informing a child’s ER capacity, the assessment tool combines drama with dance/movement therapy theory and

assessment approaches discussed in the literature review. An integrative dance/movement therapy and drama therapy assessment tool may offer a new approach in the assessment of ER, by allowing for both conscious and unconscious processes related to ER to manifest and be observed within the therapeutic setting. As Levy (1998) attests, creative arts therapies can involve the body and musculature in the therapeutic process, evoking psychological material and deeply held emotions, which allows clients to emote in both verbal and non-verbal ways.

The assessment tool was developed from this author's hypothesis: dance/movement therapy movement observation methods can potentially enhance drama therapy assessment to evaluate ER in children. Relevant drama therapy assessment approaches from Jennings (1998; 1999; 2011; 2012) and Lahad (1992; Lahad & Dent-Brown, 2012) have been adapted for the assessment tool, as they address psychological and developmental aspects of ER through storytelling and dramatic play. However, as the literature review reveals, ER greatly involves physiological processes that manifest in the body. Integrating language from dance therapy movement observation into drama therapy assessment methods is an attempt to address the physiological expression of emotion by recording a child's movement patterns in a more clear and concise manner. Emotional regulatory processes are acquired non-verbally within the attachment relationship, thus observing nonverbal qualities can provide a window into the child's implicit and intersubjective experience of regulation (Tortora, 2010). Laban Movement Analysis (Dell, 1970), which is based on the assumption that an individual's inner attitudes (conscious or unconscious) can be observed in movement (Gross, Crane & Fredrickson, 2010), provides a system for observing and recording patterns of movement

which may reveal particular coping styles (Levy, 1998). Recording a child's movement dynamics may in turn provide further insights into non-verbal patterns of regulating emotions. Gathering information about patterns of movement may help the therapist address how they might expand a child's movement repertoire in the future to foster emotional regulation. Furthermore, Laban (1950; Dell, 1970), which incorporates Kestenberg (Kestenberg-Amighi, Loman, Lewis, & Sossin) and Bartenieff (Hackney, 1998) is a particularly valuable tool to integrate into this drama therapy assessment tool as it is used to analyze movement dynamics of client/therapist interaction and develop the therapist's ability to observe themselves (Levy, 1988).

Population/Set-up

The assessment tool is intended for individual, school-age clients. If possible, an initial interview with parents to obtain a family history is recommended to gain vital information pertaining to any adverse childhood experiences and/or patterns of emotional regulation. Other reporters, including teachers or peers, can also provide preliminary assessment information. In both cases, the therapist should be mindful of reporters' biases. The therapeutic space should have adequate room to move freely and with access to basic dramatic/projective media (mats, scarves, pillows, crayons, paper, clay, stuffed toys). The assessment is to be administered in a client-centered manner, in that the child is invited to engage freely with the space. The only structure needed to administer the assessment involves: a greeting and farewell at the beginning and end of the session, help from the therapist with facilitating transitions from activities (if required), and an agreement of restraint from harm between the child and therapist. The observations are made in written form at the end of each session and can be made cumulatively over time

to identify patterns of behaviour, which may prove useful for treatment planning and planning interventions that foster emotional regulation.

Ethos of Non-judgment

The assessment makes an attempt to provide objective descriptions of complex emotional regulatory processes in terms of drama and dance/movement therapy perspectives. When using observational assessment tools, the therapist can never accurately know if movement behaviour is indicative of regulation/dysregulation. Inferences can be made, but the therapist must avoid making definite correlations between movement/play patterns and ER as there exists a plethora of reasons why a child could be moving or expressing in a particular way, including physical conditions, disability or injury, cultural or environmental influences, to name a few.

To help guide the observation of ER with an ethos of objectivity and non-attachment, a tenet from the integrative mind-body spirit assessment paradigm is adopted. Emphasizing a non-judgmental stance, observations are not deemed as good nor bad, rather presenting issues are only partially indicative of an overall imbalance to the mind-body-spirit (Lee, Ng, Leung, Chan & Leung, 2009). It is of utmost importance to emphasize that each therapist will imbue his or her own subjectivity into the assessment observation. The therapist's self-awareness and reflection is integral to address issues of bias implicit in observational assessment methods. Socially/culturally competent therapists will further explore their own privilege, internalized body shame, and unresolved or unconscious bias; avoidance of these issues can lead to labeling movement behaviours of oppressed social categories as restrictive, dysfunctional or problematic

because the observed person moves as a member of an oppressed social category (Caldwell, 2013).

The assessment tool template is divided into the following criteria:

1) **Embodiment:** *physical expression in dramatic enactments, movement and play*

The first assessment criterion relates to how the child's experiences emotion on an *intrapersonal, embodied level*. Research has supported the notion that emotional regulation is a physiological phenomenon, thus the assessment tool has a strong focus on how emotions manifest through *embodiment*. As explained in the literature review, *embodiment* refers to physical expression in dramatic enactments (Jones, 2007) and has been related to emotional process in the body (Powell, 2014; Armstrong et al., 2015). Movement observation terms related to regulation (*Weight, Flow, Time, Integrated Movement, Breath*) have been used to further clarify regulatory aspects of embodiment.

Weight denotes how the body uses its force (Fernandes, 2015) and can relate to agency and intentions (Bloom, 2006). Observers should note whether the force of the child's movements are *strong* or *light*. *Flow* signifies muscular tension used to let movement flow (Fernandes, 2015) and can relate to the control/release of feelings and experience of emotion in the body (Bloom, 2006). Observers should note whether the muscular tension in the child's movements is *free* or restrained in *bound flow*. *Bound flow* has also been seen to correspond to cautious feelings (inhibition, discontinuity, affects related to danger, anxiety), while *free flow* attributes may be associated with carefree feelings (facilitation of impulses, continuity, affects related to release and safety) (Loman & Sossin, 2009). *Breath* is indicated by the flexion and extension of the stomach and observed as either *bound* or *free*. *Free* flowing breath may indicate self-regulatory

capacities (Hackney, 1998; Tortora, 2006), whereas *bound* breath may relate to compensatory patterns of emotional control (Hackney, 1998). The *Body Parts* the child engages with in movement should be observed, as they may indicate elements of body connectivity/integration (Hackney, 1998), keeping in mind multiple factors related to functioning (injury, disability etc.) that may impede full-body movement. *Time* indicates the variation in movement velocity and is denoted as either *quick* or *slow*. *Time* can be related to intuition and decision-making (Bloom, 2006; Fernandes, 2015). Observing a child's relationship to *Time* during transitions in the session may help understand temporal patterns of responsiveness/reactivity, which relate to a child's ER capacity (Gnaulati, 2008). Transitions can be difficult for children, and paying attention as to how the child manages them within the session may give indications of how they cope with these potential stressors outside of the session.

2) **Social-emotional expressivity:** *interpersonal dimensions of emotional regulation in dramatic enactments, movement and play*

The second criterion of the assessment aims to evaluate the *interpersonal* dynamics of emotional regulation, which are deeply rooted in attachment patterns. A child's ability to flexibly relate to and understand others in a social-emotional way is an indication of optimal regulation (Ogden, Minton & Pain, 2006, Gnaulati, 2008; Porges, 2011). As projective and role play can relate to interpersonal aspects of emotion (Jennings, 1999; 2005, Powell, 2014), engagement or non-engagement with these two core processes may indicate a child's capacity to externalize feelings and empathically relate to others. The flexible handling of others' emotions is related to optimal ER capacity (Gnaulati, 2008).

The child's use of interpersonal space with the therapist is observed through patterns of opening or enclosing. Opening movements may relate to comfort and safety whereas closing movements can relate to discomfort, defense of protection (Sossin & Birkelin, 2006). Eye contact may also indicate patterns of regulation/dysregulation (Ogden, Minton & Pain, 2006), thus the quality of the child's eye gaze is noted, including whether the child sustains, avoids or presents disorganized eye contact.

3) Resiliency in Play: *resources for emotional coping*

It has been identified that a child's capacity to use language and symbolic play facilitates higher order emotional expressiveness (Gnaulati, 2008). Furthermore, ER processes can be conscious or unconscious, automatic or effortful (Cole, Michel, Teti, 1994; Thompson, 1994; Gross & Thompson, 2007;), thus assessing a child's symbolic play can provide inroads to understanding unconscious aspects of emotional regulation. Lahad's BASIC Ph resiliency model (1992; Berger and Lahad, 2010; Lahad & Dent-Brown, 2012;) is used to assess a child's emotionally fluency in play as Lahad regards resiliency as the resources that help people regulate emotions. Five of six "channels" are used to assess a child's resiliency: Beliefs, Affect, Social Functioning, Imagination, Cognition. (Due to the detailed *embodiment* criteria used in this assessment, which addresses physical, the Physiology (*Ph*) channel of Lahad's assessment was omitted.) If the child engaged in dramatic play, the *BASIC* channels the child uses should be observed and noted accordingly.

4) Therapist Self Observation: *Emotional-Kinesthetic responses*

This aspect of the criteria evaluates the therapist's countertransference responses on a somatic level. These qualitative, felt responses have been recognized as relevant assessment material in revealing empathetic images or feelings related to a client (Dell,

1970; Tortora, 2006). It is vital “that the therapist have the self-awareness to understand his or her bodily-based affective states as part of the intersubjective relational experience in therapy” (Dales & Jerry, 2008, p. 299). Kinesthetic responses may also help the therapist empathically relate to a child’s sense of dysregulation (Tortora, 2006).

DRAMA and DANCE/MOVEMENT THERAPY ASSESSMENT TOOL FOR EMOTIONAL REGULATION











Child's Name: _____

Age: _____

Date(s): _____

1) Embodiment: individual physical expression in dramatic enactments, movement and play

*Circle arrows corresponding to qualities of embodiment observed
Note specific physical movement in 'as evidenced by' section (AEB)
(ex. "strong weight AEB stomping")*

Weight <i>(how the body uses its force)</i>	Session 1 	Session 2 
	AEB	AEB
Flow <i>(freedom or restriction of movement, as revealed by muscular tension)</i>	Session 1 	Session 2 
	AEB	AEB
Breath <i>(stomach extending and flexing)</i>	Session 1 	Session 2 
	AEB	AEB
Body Parts <i>(overall use of body parts)</i>	Session 1 	Session 2 
	AEB	AEB
Time <i>(variation in movement speed during transitions, enactments/play)</i>	Session 1 	Session 2 
	AEB	AEB

2) Social-Emotional Capacity: interpersonal dimensions of emotional regulation in dramatic enactments, movement and play

*Circle arrows corresponding to qualities of social-emotional capacity observed
 Note specific indicators of social-emotional communication in 'as evidenced by' section (AEB)
 (ex. "engaged with scarves during role play")*

Projective Play <i>(engages with dramatic materials to express)</i>	Session 1 	Session 2
	AEB	AEB
Role-Play <i>(engages in roles)</i>	Session 1 	Session 2
	AEB	AEB
Interpersonal Space <i>(moving towards or away from therapist)</i>	Session 1 	Session 2
	AEB	AEB
Eye contact <i>(with therapist)</i>	Session 1 	Session 2
	AEB	AEB

3) Resiliency in Play: resources for emotional coping

*Circle arrows corresponding to qualities of resiliency observed in play
Support observations with examples in the 'as evidenced by' section (AEB)
(ex. "presented joyful affect during role play"; "no hope evident in storytelling";
"does not engage in positive-self talk"; "uses social support of imaginal characters in play")*

Belief = hopes, meaning making, values, spirituality
Affect= verbal/non-verbal expression
Social= social support
Imagination= capacity to enter into play/creativity
Cognition= positive self-talk, problem solving, self-navigation



AEB	AEB
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4) Therapist Self-Observation: Emotional-Kinesthetic responses

Note your kinesthetic-emotional "felt sense" when moving with or observing the child

What thoughts/images is the child provoking in me when I observe them?

What is the tension/relaxation level of my breathing, body, limbs, and facial expressions while watching and interacting with the child?

CHAPTER IV: Limitations and Recommendations for Future Research

While the framework is grounded in empirical and theoretical literature, the current research is still an exploratory and provisional study. Thus, there are many limitations to the research and findings presented in this paper. A great limitation of this research is the inherent bias, which has informed the results of the study. The goal to examine how dance therapy theory could inform drama therapy theory in order to assess ER in children stemmed from my personal involvement using movement analysis with clients, and from my belief that applying movement analysis to my work with children enhanced my competency in assessment. The findings in the assessment tool template may favor results, which support my underlying belief in the value of movement observation.

Furthermore, the limitations of qualitative, observational tools must be also be heeded. Although observational methods of assessment are seen as the “gold standard” in developmental research (Cummings, Davies, & Campbell, 2000), they cannot investigate associated internal and unobservable processes a child may be experiencing (Adrian, Zeman, & Veits, 2011), which may be relevant to understanding their emotional regulatory capacities. Movement observation also lacks published empirical evidence as an assessment tool in creative arts therapies (Tortora, 2010). The elements of movement observation adapted from dance/movement therapy used to substantiate links between ER and observable movement behaviours are all possible theoretical links, whose validity and reliability need further improvement. As mentioned in the discussion, the observing therapist can never make distinct correlations between movement behaviours and ER. Rather, the observations gained from the assessment tool may help guide the therapist in

understanding movement patterns which *may* help make more informed inferences about a child's emotional regulation capacity. Furthermore, the drama therapy concepts of embodiment, projection, role play adapted for this assessment tool are also understood from a lens applicable to ER and cannot be generalized to the use of these terms in all of drama therapy.

Furthermore, the assessment tool is based on theoretical research, which lacks generalizability to all school-age children. Due to a lack of literature on ER and school-age children, the framework assumes parallels between emotional regulation processes documented in infant and developmental research and the related context of later childhood. In addition, the assessment tool does not address differences in gender, which may affect differences in ER. Although differences may exist, no clear empirical trends have been established regarding gender differences in emotion socialization, emotion displays, or ER (Betty, 2013). In addition, movement analysis literature tends to expound the idea that movement assessment forms are only describing what is observable in the present moment, in terms that are culturally neutral and universally applicable; this assumption exemplifies a potential pitfall of using movement observation strategies, which tend to universalize and do not always take diversity issues into account (Caldwell, 2013). Therapists should take into account the multiple dynamics, which can affect observation including health, culture, race, gender identity, sexual orientation, class, ability, and power dynamics; indeed, clients being observed by members of a dominant culture or social category (therapists) can result in members of marginalized categories adapting their movements, gestures and eye contact in ways that are more relevant to power and privilege dynamics than personality constructs (Caldwell, 2013, p. 184).

This assessment tool is intended to act as a preliminary template to inspire future studies pertaining to ER and creative arts therapies methods of assessment. More in-depth research is needed to substantiate and strengthen the theoretical links made between drama therapy and dance/movement theory and ER processes. Further empirical evidence of the use of movement observation methods to evaluate emotional processes in children is needed to substantiate its relevance to creative arts therapies assessment.

There is significant potential to strengthen and repair ER mechanisms through the therapeutic relationship (Dales & Jerry, 2008), thus assessment of ER mechanisms are a vital and relevant field of future research. As a field of therapy, which inherently addresses the mind-body processes of ER, the creative arts therapies hold strong potential to develop tools that can help clinicians better understand ER. Links could be made between the creative arts therapies and the growing body of research, which explains the neurophysiological elements of dysregulation. The fields of sensorimotor psychotherapy and somatic experiencing have systems for understanding patterns of regulation/dysregulation, which could be more systematically explored and integrated with creative arts therapies methods of assessment.

CHAPTER V: Conclusion

This theoretical research study aimed to shed light on the diverse mind-body processes informing ER in children and how integrative approaches from drama and dance/movement therapy can be potentially useful in ER assessment. The goal was to provide a template for an assessment tool that clinicians could use as a springboard to enhance their overall assessment of ER processes in children. While the importance of ER to childhood development has been widely recognized, there have not previously

been creative arts therapies methods to assess the phenomenon in children. Further research of this nature is necessary to understand the complex processes of ER in school-age children and how to develop reliable and valid assessment methods, which evaluate the mind/body processes of ER.

The assessment tool provides an example of how dance therapy theory and assessment methods can be beneficial to drama therapy assessment, by providing a systematic way of analyzing and recording physiological movement behaviours. Observing movement behaviors may provide clinicians with greater insights to the emotional regulatory capacities of school-age clients. This study may be used to inspire future assessment approaches which integrate both drama and dance/movement therapy.

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