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A Literature Review of Nature-Based Expressive Arts Therapy for Bereaved Children

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for Bereaved Children

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Abstract

There is a need for increased visibility of child bereavement to expand research in and accessibility of developmentally appropriate supports, which views the child holistically and within their biopsychosocial context. Worden's (1996) formative work with child bereavement resulting in the "tasks" of child bereavement was the first and most recent study of its scale and kind. This marked an affirming of grief as normative response to death and occurring throughout the developmental lifespan. This work also highlights the need for additional inquiry to expand and deepen understanding of child bereavement. A growing body of research suggests that ecotherapy and expressive arts therapy offer effective models that are trauma informed, adaptable, and developmentally appropriate (Atkins, Snyder, 2018; Berger, Mcleod, 2006; Buzzell, Chalquist, 2009; Hinz, 2009). An approach that integrates both may be ideal for bereaved children existing across a continuum of care needs – from PTSD treatment to community awareness and preventative care. Applications, limitations, and areas for further inquiry are discussed.

Introduction

> "Finding our natural rhythm is a crucial experience of the early
> Self: being attuned to Nature, its rhythms, and attuned to one's
> own inner nature. These are all early manifestations of being in
> accord with one's deepest center, one's environment, and even the
> Great Round of life and death." (Signell, 1990, p.55)

Childhood bereavement is a prevalent and critical issue which research shows may have profound effects on future wellbeing (Doka, 2000; Harris, 1995; Larkin, Shields, Anda, 2012; Milman, Neimeyer, Fitzpatrick, et. al, 2017; Pitman, 2018; Worden, 1996; U.S. Census Bureau, 2001). Child development can be disrupted as a result of the profound stress and adversity children and youth frequently experience after a significant death loss event (Bolton, et al., 2016; Judi's House, 2018; Worden, 1996). The impact of this experience is seen across neurobiological, psychological, social, and spiritual areas (Felitti, et al., 1998; Judi's House, 2018; Larkin, Shields, Anda, 2012; Polivka, 2017).

It is important to note, grief is not an experience limited to bereavement (death loss) but is inclusive of a range of losses – relational, status, employment, income, ambiguous, etc. (American Psychological Association, 2019). Loss and grief are part of a larger conversation, which child bereavement relating to parental and sibling death is nested within. Grief and loss are a normative part of a human experience. Though bereavement – and child bereavement, specifically – contains distinctive qualities of their own and are experienced as uniquely as the person themselves, there is a common thread woven throughout, which serves to connect people across experiences.

The Childhood Bereavement Estimation Model (CBEM) estimates that 6.8% of children in the United States (US) ages one to 18 years old, are grieving the death of a parent or sibling – this amounts to, roughly, one in 15 children (Judi's House/JAG Institute, 2018; U.S. Department

of Health & Human Services, 2013). With the national average class size for teachers in self-contained classes being 17 students, it is reasonable to estimate that there is at least one child grieving the death of a parent or sibling in every class room in the US (US Department of Education, 2011-2012).

The CBEM is a quantitative statistical tool developed by Judi's House/JAG Institute (2018). The CBEM utilizes population metrics gathered from the Center for Disease Control (CDC) and the US Census Bureau to approximate prevalence rates of US children and youth who will experience the death of a parent or sibling by the time they reach adulthood. To protect privacy, data are often suppressed when there is a probability the individuals represented by the data could be uniquely identified.

According to the CBEM's current information, the leading causes of death in youth ages one to eighteen years old (in order from most to least prevalent) are: unintentional accidents, homicide, suicide, cancer, and heart disease. Leading causes of death according to the CBEM for adults ages 26 to 55 years old (in order from most to least prevalent) are: cancer, heart disease, unintentional accidents, suicide, and liver disease. The commonality in leading prevalence of death by unintentional accidents, suicide, and cancer spans both age categories. Dissimilar to their adult counterparts, youth ages one to eighteen's prevalence of death by homicide is number two, just below accidental deaths and just above deaths by suicide.

In light of these numbers, it is important to ask the "why" questions. What are the complex systems at play, contributing to the high prevalence of homicide and suicide in children and adolescents? This is surely a multifaceted issue with many important parts to consider. One such part may be within Nature contact and community. It is stated that 90 to 95 percent of life's happenings now occur indoors, as of the 1980's, which is a first in human history (Buzzell,

Chalquist, 2009). There is a corresponding increase in feelings of loneliness and disconnection to others, prevalent in Western societies. Friedrich Froebel is credited with the development of kindergarten – based on his understanding of how young children learn, in the context of play – which literally translates to "child garden". He understood that children developing life skills within the Natural world also enjoyed increased feelings for life (Buzzell, Chalquist, 2009).

Around 2.5 million children in the US will experience a parental death before 18 years old (Howarth, 2011). Available literature and research in child bereavement are limited. The majority of child bereavement research that is available is small scale and focuses on parental child bereavement. Leaving the subsect of child bereavement literature that considers the impact of sibling death even smaller, despite clear prevalence. For example, most households in Western countries have two or more children, and research indicates that somewhere between 40,000 and 75,000 children and adolescents die in the US each year (Bolton, et al., 2016; Torbic, 2011). This leads to a considerable number of those 40,000 to 75,000 deaths resulting in households containing bereaved siblings.

One Canadian longitudinal study examined mental health disorders and treatment usage among bereaved siblings in the general population and found that, "in the two years after the death of the child, bereaved siblings had significantly higher rates of mental disorders than control siblings, even after adjusting for pre-existing mental illness" (Bolton, et al., 2016, p.59). Additionally, this study found that surviving siblings aged 13 and older were twice as likely to have attempted suicide (in the two years following their sibling's death) than their non-bereaved counterparts. They had higher rates of almost all mental health disorder outcomes compared to controls. When comparing effects between older (13+ years) and younger (<13 years) bereaved

siblings, the rise in depression rates from pre-death to post-death was significantly higher – a 7-fold increase – for siblings aged under thirteen years old (Bolton, et al, 2016).

Limitations of this study include outcomes dependency on treatment seeking, meaning it was not able to encompass all health outcomes within this population. In addition, these datasets cannot assess certain emotional consequences such as complicated grief and post-traumatic stress, which is significant considering the possibility of sibling death being experienced as traumatic. These limitations also highlight that not all people with mental health disorders seek treatment, which may indicate results found in this study underestimate the true burden of sibling bereavement (Bolton, et al., 2016).

Another study conducted by Florida International University (2018), describes surviving bereaved siblings' illnesses and treatments/health services at 2, 4, 6, and thirteen months post-sibling death, as documented by parents. This study documented the majority of illnesses and treatment/health services occurred within six months of the sibling death. This indicates an increased vulnerability in bereaved siblings to physical health issues, particularly in the six months following the death. This study suggests the impact to physical health, death of a sibling may have on the surviving child. This study is limited in that it did not account for a control population for comparison, and its model was small-scale, so generalizability is limited – indicating that further research is needed to assess impact of bereavement and rule out confounding criteria.

Research indicates the mediating effect of certain protective factors which facilitate resilience in the face of adverse childhood experiences (ACE's, National Scientific Council on the Developing Child, 2015). A person's resiliency may help frame the diversity in responses to

adverse experiences, such as death of a sibling or parent. This also provides insight into the strengths an individual may be able to access and build upon in difficult times.

 Resilience has been found to occur within a caring community, in relation to positive role models, through development of healthy coping skills, peer support, encouraging educators, and stability of caregivers (Center on the Developing Child at Harvard University, 2015; Felitti, et al., 1998; National Scientific Council on the Developing Child, 2015; U.S. Department of Health & Human Services, 2013). Treatment solutions currently orient themselves around the fostering of resilience in children and adolescents through attachment, self-regulation, and competency (ACE study; Blaustein, Kinniburgh, 2005). Research suggests that bringing Nature inside produces an increase in mood, decrease in boredom, and the addition of plants to offices boosts innovation and creative problem-solving (Buzzell, Chalquist, 2009). This may provide some insight into Nature's potential in improving human experience and physical functioning.

What appears to be key in resilience as it relates to bereavement is involvement at a relational and communal level (Baker, Sedney, 1996; Doka, 2000; Hogan, 2002; Worden, 1996). The relational aspect involved in resilience highlights attachment theory and child development, which will be expounded on later in this paper, as it plays a centering role for grief work, expressive arts therapy with children, and ecotherapy.

In addition to the relational piece, understanding the child's experience of loss at a developmentally appropriate level and understanding the nature of resilience both seem to be important in supporting the needs of this population (Larkin, Shields, Anda, 2012; National Scientific Council on the Developing Child, 2015; Pitman, 2018). Ecotherapy and expressive arts therapy offer valuable approaches to view and support child bereavement. They share the capacity to facilitate exploration of internal content across diverse experiences.

Ecotherapy and expressive arts therapy use of a variety of modalities, stimulate the imagination and creativity, provide use of metaphor, and facilitate expression. Facilitation through intermodal means, as in expressive arts therapy, assists in gaining access to content (which may not be verbal), providing alternate perspectives of the same content area through shifts between modalities, and an opportunity to transform content material for reintegration (Hinz, 2009). Accessibility is an important consideration on various levels.

Accessibility extends to the larger conversation of mental health treatment, as a clear public health issue, to which ecotherapy has intervening potential. "As mental health professionals find themselves challenged to provide hard evidence that their practices actually work and as costs for traditional modes of health care – including psychotherapy – rise rapidly out of sight, ecotherapeutic methods offer a spectrum of relatively inexpensive earth-based healing approaches backed by a growing body of research." (Buzzell, Chalquist, 2009, p. 17)

It is understood that bereaved children exist across the world, across a diversity of – cultural, community, religious, socio-economic, political, family of origin, and many more – experiences. For this reason, it is of exceptional importance that any approach to child bereavement be flexible to individual needs, culturally sensitive to the diverse understandings of death and grief, and generalizable in unifying bereavement as a normative function and experience within life – that life and death are inextricably bound together across all people and there is no "one way" to grieve.

One size does not fit all, in terms of "best practice" in healthy bereavement or mental health treatment, in general (Boerner, Stroebe, et al., 2017; Corless, Limbo, et al., 2014; Tedeschi, Calhoun, 2008). However, there seem to be emerging factors which help or hinder the bereavement process, as well as general "tasks" of bereavement that have been shown to be

indicative of healthy processing and reintegration of the loss into the bereaved person's new reality (Tedeschi, Calhoun, 2008; Worden, 1996).

Expressive arts therapy is then defined and considered in its ability to support and facilitate expression, empowerment/competency of content material, and allow for transformative experiences through intermodal shifts, which may lend itself as naturally supportive in healing/growth experiences (Estrella, 2005; Hinz, 2009; McNiff, 2009; Rogers, 1993). This offers a lens from which to frame child bereavement, which may be of use to this population as normalizing, developmentally appropriate, and accessible in treatment.

Nature has a long history in providing rich, interactive learning experiences, which engage and help integrate sensory information – to include discovery and use of meaningful metaphors for bereavement and grief (Berger, Mcleod, 2006; Buzzell, Chalquist, 2009; Rogers, 1993). Ecotherapy's uniting principles are defined and its many iterations (wilderness therapy, nature therapy, horticulture therapy, etc.) in mental health treatment are acknowledged. Ecotherapy and its interest in supporting understandings of life and death, effectiveness in clinical treatment of children, and potential as treatment for bereaved children are delineated.

This will lead to a discussion around an existing model of ecotherapy and how an expressive arts therapy lens may be both complimentary and take the model further – in the interest of expanding treatment and support of bereaved children. Some inherent challenges to this practice exist, including living environments and access to Nature, which will also be discussed.

Literature Review

Providing a common language to a prevalent issue which effects mental health (among other areas), such as child bereavement, can assist in reducing stigma and isolation of an issue by supporting a basis of knowledge and inclusivity (Harris, Bordere, 2016; Kelly, Jorm, Wright, 2007; Mehta, et al., 2015). Boerner and associates (2017) define bereavement as the, "…objective situation of a person who has experienced the death of someone significant" (p.1) Grief, is rooted in the Latin word gravare, meaning to weigh down, which helps contextualize its definition as the internal and subjective experience of the different reactions (psychological, social, physical, etc.) the bereaved person might experience as a result of the death (Boerner, Stroebe, et al., 2017).

The initial death of the parent or sibling is often called the "primary loss". This primary loss is followed by a series of "secondary losses" which emerge out of, or as consequence of, the primary death loss. These secondary losses may include but are not limited to areas such as financial, health, security, community, support, and family structure (LaMorie, 2013).

Ambiguous loss is any loss that occurs without closure or understanding, which complicates and may extend the grieving process (Guidry, Simpson, et al., 2013). This is an area where the grieving process may extend beyond bereavement due to the likelihood of a death loss (primary loss) resulting in the experience of several secondary losses (as noted above), which provides some insight into the complexity of the bereavement process.

Additionally confounding, factors such as complicated grief issues, post-traumatic stress disorder (PTSD), pre-existing mental and physical health challenges, and many others often require intervention and processing before any griefwork relating to bereavement can occur. This, in a broad way, begins to cultivate a language and "lay of the land" around bereavement to

illustrate the complex nature of sibling and parental death bereavement as producing a layered effect which impacts functioning and development across domains.

Historical Context of Bereavement

The medicalization of illness and dying at the end of the nineteenth century, in combination with the effects of the mass casualties resultant from the first world war (WWI) on Western ways of expressing grief, shifted current notions of death and grieving practices toward the fringes of acceptable society -including the disappearance of elaborate, public displays of Victorian mourning customs (Gorer, 1977; Clewell, 2004).

Women were discouraged from wearing black as a public sign of mourning in Britain during WWI period because it was perceived as bad for moral – thus contributing to the shift from public displays of mourning to private practices. An anthropologist by the name of Geoffrey Gorer (1977) defined this shift in history as a demonization of all social displays of bereavement. Although Sigmund Freud pushed against this repression of grieving by arguing that the psyche was a necessary internal space for griefwork, his ideas about what kind of grief was normative and what was pathological likely contributed to current stigmas related to grief (Clewell, 2004; Fulton, 2003).

Sigmund Freud argued in his 1917 article, *Mourning and Melancholia,* that the continuation of bonds to the deceased was pathological and the goal for the bereaved was to sever bonds with the deceased or "love object". Freud considered mourning and melancholia as different responses to loss with two different trajectories – one of health and one of pathology. In Freud's understanding of mourning, a person deals with the grief of losing a specific love object, and this process takes place in the conscious mind. In melancholia, a person grieves for a loss

they are unable to fully comprehend or identify, thus this process takes place in the unconscious mind.

For Freud, mourning was considered a healthy and natural process of grieving a loss, while melancholia is considered pathological. Freud reasoned that mourning must come to a decisive end when the subject severs emotional attachment to the lost one and reinvests the free libido in a new object. Furthermore, when this does not occur, a pathology of the unconscious may develop – melancholia. Current cultural misconceptions about the process of grieving continue to contain this "time bounded" message of grief having a clear ending (Fulton, 2003, p.347).

Often people do not consider that children grieve. This may be, in part, due to some traditional Western understandings of grief and its process through bereavement which have persisted despite new information (Boerner, Stroebe, Schut, Wortman, 2017; Clewell, 2004; Pitman, 2018). This lack of consideration of childhood grief may also be due to the recency in understanding the bereaved child from a developmental lens. D. W. Winnicott and other major object-relations theorists set the groundwork, which continued through the work of John Bowlby and Mary Ainsworth's development of attachment theory, beginning in the 1940's (Berzoff, Flanagan, Hertz, 2011).

Attachment theory was developed, in part, as an alternative to psychoanalysis, to explain the similarities between adult and childhood mourning, as an effort to explain separation anxiety, and to better understand defensive processes (Bretherton, 2015). Piaget's four stages of cognitive development were influential to grounding attachment theory. The four stages are as follows: sensorimotor (infancy; physically/experientially based, object permanence, mobility, and symbolic language), pre-operational (toddler, infancy; memory/imagination, language matures,

non-logical and egocentric thinking), concrete operational (elementary, early adolescence; concrete thinking, operational thinking begins, egocentrism reduced), and formal operational (adolescence, adulthood; abstract thinking) (Huit, Hummel, 2003). Though an age range is provided, focus remains on developmental processes, rather than age corresponding absolutely to age to account for individual differences in development.

Primary attachment to caregiver(s) in infancy is thought to provide a secure base, which influences attachment styles throughout a lifespan (Bretherton, 1992, 2015). Piaget, Bowlby, Ainsworth, and others influenced Erikson's identity theory, which gave weight to the psychosocial importance within development (Sokol, 2009). Erikson spoke of the dynamic and intricate weaving of individual and society throughout his work, believing the, "individual cannot be understood apart from his or her social context" (Sokol, 2009, p. 140). This is a general theoretical frame that will be a base from which subsequent sections of this paper will be framed.

In these historical contexts of theory, grief, and bereavement children have been largely overlooked and unacknowledged. This lack of acknowledgement or understanding of how children and adolescents grieve often creates an unhelpful environment for support and intervention – one where stigma breads and higher rates of perceived isolation/lower relatedness to others is more prevalent (Boerden, Stroebe, et al., 2007; Pitman, 2018; Worden, 1996).

Though the body of research for child bereavement is growing, adult bereavement continues to play a more central role in academic and societal understanding of death, loss, grief, and bereavement. Family practices – cultural, spiritual, religious, or otherwise – are an invaluable resource to better understanding resiliency factors and dynamics within family systems (Doka, 2000; Sokol, 2009). To this end, there are a variety of cultures that utilize Nature

as a primary resource for metaphor, continued bonds, imagery, and source of communal comfort in their grieving process. The belief that humans can be reborn as a plant or animal after death has helped people continue bonds to their deceased loved ones, buffering anxieties around death and separation (Berger, Lahad, 2013). A spiritual component of humanity represented in Nature helps provide a unifying principle through difficult experiences.

Western cultures engage in Nature related rituals such as, scattering of cremation remains across beautiful vistas connected in memory to the person who died; the ritual of sprinkling dirt on the casket as it is lowered into the ground; various Nature life/death cycle metaphors; and nature-based memorials or celebrations of life in various creative forms.

The Harvard Child Bereavement Study

The physical/behavioral, emotional, psychological, and spiritual expressions of child and adolescent grief are best understood within a developmentally appropriate lens. The Harvard Child Bereavement Study (HCBS) was the first and only, large-scale study for bereaved children (all parentally bereaved), conducted in 1996 (Worden, 1996). It is understood that because this study has not, to date, been reproduced it is limited in reliability, and its results are indicative of predominantly white children residing in the US. Continued inquiry into cross-cultural contexts is needed to determine areas of universality and areas of this research which are culture-bound.

This was a pivotal study which supported the notion that continued bonds with the deceased person was positively associated with how well the child coped with the loss, as well as providing visibility to child bereavement on a large-scale, for the first time. This was made possible through use of qualitative interviews of the child participants. Prior to HCBS, child bereavement studies used interviewing methods of parents or retrospective interviews of adults

who had lost a parent in childhood, requiring participants to recollect past experiences of bereavement.

Children were observed to naturally stay connected to their deceased parent through talking with, feeling watched and guided by, and dreaming about them. This continued connection to the deceased facilitated sharing of emotional pain with others and accepting support (Worden, 1996). HCBS (1996) also served to confirm some of the bereavement needs of children reported before the study, which are widely accepted by grief counselors, today – including support, nurturance, and continuity after the death loss.

The HCBS (1996) found increased levels of social withdrawal, anxiety, & social problems resulted two years after death, over all, and Maternal loss was associated with higher rates of emotional/behavioral issues – one discussed possibility for this outcome is an increased disruption to daily life/routines Maternal death may cause (Worden, 1996). This study found that better adaption to the death loss was found in families that were cohesive, open to conversation about the parent who died, where disruption to daily life/ routines were minimized, and active coping was engaged and modeled, regularly.

Interestingly, parental dating within the first year of bereavement was perceived by children as negative, producing withdrawn and acting out behavior, as well as somatic complaints in children. Conversely, remarriage after more than one year post parental death seemed to have a positive influence with child reports of feeling less worried about the safety of the surviving parent (Worden, 1996). It is thought that an interplay of various family and interpersonal dynamics contribute to these perceptions and further research is needed to develop a clearer understanding of why and how these outcomes occur.

When children were given the option to attend the funeral for their parent, HCBS (1996) found most children opted to attend the funeral. Children seem to experience better outcomes when they are prepared for the funeral prior with what they could expect to see, what they might feel, and what they can do if they start to feel overwhelmed (Pearlman, Schwalbe, Cloitre, 2010; Shriner, 1996; Worden, 1996). The inclusion of children in the funeral tended to have a positive effect on children's experiences – making them feel useful and important (Worden, 1996). This may capture one way in which professionals and parents are able to intervene to support a child's empowerment and agency when they may be feeling out-of-control and powerless when faced with the death of their significant person.

HCBS (1996) found that when the surviving parent is not coping well, the child had associated lower self-esteem, more depressed symptoms, and decreased coping strategies. Importantly, the most powerful predictor of child adjustment was functioning level of the surviving parent (Worden, 1996). In other words, the biggest indicator of how well the child will be able to cope and adapt, appears to be reliant upon how well the surviving parent is able to cope and adapt.

According to HCBS (1996) there are twelve identified reconciliation needs for bereaved children: clear comprehensible information (that is developmentally appropriate), soothing of fear and anxiety, reassurance they are not responsible, empathetic listening, validation of thoughts and feelings, perspective with emotions, involvement and inclusion in open grieving, continued interests and activities (routine), grief behaviors modeled by adults, opportunities to remember and memorialize, reassurance they will be cared for, and safe companions who are responsive to their questions.

Since the HCBS there have been a series of small-scale studies and academic writings in

diverse fields such as psychology, education, child development, medical research,

neurobiology, and neuropsychology, however the HCBS has never been re-tested. Current

understandings of child bereavement view grief as non-linear and revisited in accordance with

developmental age throughout a lifetime (Corless, Limbo, 2014; Doka, 2000; Hogan, 2002).

Trauma and Bereavement

There is a common thread that trauma and trauma work weave throughout child

bereavement, expressive arts therapy, and ecotherapy. It is, therefore, important to give some

definition and context to trauma as it is understood throughout this paper. Berger and Lahad

(2013) illustrate the distinction between a generalized and culturally understood definition of

trauma as being, "difficult experiences whose impressions last for many years" and a

pathological definition of Post-Traumatic Stress Disorder (PTSD) criteria (p. 22).

Trauma, defined generally as it is above, encompasses death-loss, however this usage and

definition is set apart from a more formal definition. In a formal form, trauma is based in

symptomology or how it shows up in a person. Trauma shows up differently based on age, race,

development, and other differences. Encompassing both understandings of trauma is its totally

subjective and internal nature (Shannon, personal communication, 2019; Berger, Lahad, 2013).

The *Diagnostic and Statistical Manual of Mental Disorders V* (DSM-V) characterizes

diagnosis criteria of PTSD as including exposure to a traumatic event, persistent re-experiencing,

persistent avoidance and emotional numbing, persistent symptoms of increased arousal not

present before, duration of symptoms for more than one month, and significant impairment of

major domains of life activity (American Psychiatric Association, 2013). Though, most people

will experience potentially traumatic events sometime in their lifetime, a minority percentage (5-

10%) are likely to develop PTSD (Berger, Lahad, 2013; Ozer, et al., 2003). Death of a parent or

sibling is one such potentially traumatic event. Additionally, in the case of long-term illnesses of

their significant person, this may result in more prolonged exposure to stressful situations.

Children also appear to be more susceptible to developing PTSD than their adult

counterparts after exposure to prolonged stressful situations and potentially traumatic events

(Berger, Lahad, 2013). Some of the normal reactions that may be expected from children and

adolescents after such events include, physical or somatic, emotional, cognitive, familial and/or

relational, damage to beliefs and values, and imagination (Berger, Lahad, 2013). These are all

normative responses to significant and stressful events, such as death of a significant person, that

do not necessarily require diagnosis to support and treat. Generally, symptoms subside within

days or months of the event (Berger, Lahad, 2013). See *figure 1* for chart example aligning

bereavement needs with Nature Therapy and ExAT (expressive therapies continuum, ETC

model).

When children and adolescents experience the death of a parent or sibling as traumatic

and symptoms become clinically significant, associated diagnoses may be applied such as PTSD.

Complicated grief (or Persistent Complex Bereavement Disorder (PCBD), as it is known in the

DSM-V) is another diagnosis that may be considered if certain symptom criteria are present after

6 months for children. It should be noted that the DSM-V is still limited in its ability to

accurately capture childhood grief and bereavement issues, at this time – limiting its usefulness

in treatment. Some research-based approaches commonly used in the treatment of trauma include

eye-movement desensitization reprocessing (EMDR), cognitive behavioral therapy (CBT), and

somatic experiencing therapy.

The "triune brain" is a term coined by Paul Mclean (1988), which comprises the reptilian brain, the limbic system, and the neocortex. From birth, the reptilian brain – responsible for basic life functions such as heart rate and breathing – is formed first and is also responsible for self-preservation functions (e.g. getting the body to move or not). The limbic system – accounting for the central nervous system (CNS) functions (sympathetic and parasympathetic) – is involved in our experience of emotions, takes in information via images, and is sometimes referred to as the "feeling brain". Importantly, the limbic system is also where attachment is stored. The last part of the brain to be formed is the neocortex. This part of the brain is not considered fully developed until age twenty-six. The neocortex puts information into context in creating narrative thought, supports decision-making, and problem-solving skills.

The limbic system takes in information through images and is emotion-based. This is precisely where children are developmentally. They are equipped with the basic survival reflexes of the reptilian brain and still forming emotion regulation skills and attachment bonds (to a lesser or greater degree, depending on the developmental age). When a significant disruption to development occurs, these systems are affected. For example, in terms of parental death, the child's grief response will likely be oriented around the disruption to the forming bonds to a primary caretaker, as well as difficulties with emotion regulation.

Memories can be stored in the explicit (also known as declarative) memory or implicit (also known as procedural) memory. Explicit memories are those that are conscious recollections which may have a narrative, sequential, time-bound, and fact base to them. Implicit memories are generated unconsciously as moods, sensations, emotions, and images/pictures. Framed developmentally, bereaved children and adolescents may only or primarily have access to implicit memories, since the neocortex has not yet been developed. This means that treatment

must engage the operating systems that are developmentally available: imaginal, sensorial, and emotionally engaged (expressive).

In high-stress situations where the brain interprets an imminent threat of harm, the sympathetic nervous system (SNS) bypasses the neocortex, and in a life-preserving (reptilian brain) effort increases arousal systems to interpret the situation via three main modes: fight, flight, and freeze (Porges, 2011). Fight mode includes physiological arousal like, aggression, irritability/anger, trouble concentrating, hyperactivity or "stillness". Flight includes withdrawal and escape such as, social isolation, avoidance of others (sitting alone in class or at recess), running away. Freeze is understood as a stilling and constriction such as, constricted emotional expression, stilling of behavior, and overcompliance and denial of needs (Blaustein, Kinniburgh, 2010, p.27).

Ideally, after the immediate threat has passed, the parasympathetic nervous system (PNS) counteracts the SNS's increased arousal systems, as the body's natural "braking system" returning the body to a state of homeostasis. However, with prolonged exposure to high-stress situations and/or trauma – where the brain continues to interpret a threat – the SNS continues to send signals of fight, flight, or freeze until the system is depleted (Porges, 2011). This may look like an inattentive, fidgety, behaviorally disruptive, withdrawn, and/or combative child.

The polyvagal theory was developed by Stephen Porges (2011) and defines these three life-preserving modes (the "freeze" mode being his addition) and proposes a hierarchy of strategies to repattern autonomic pathways (encompassing the PNS and SNS) while keeping the person in a "safe zone" of activation. The polyvagal theory ties, "disparate and unconventional techniques together, in that they all activate situations that in the past have precipitated the participants into uncontrollable fight-or-flight and freeze modes, which, with these carious

techniques that rely on interpersonal rhythms, visceral awareness, and the primary use of vocal and facial communication, attempt to reorganize the perception of danger and capacity to manage emotional engagement" (van der Kolk, 2011, p. 16). One of the most basic examples of this repatterning is through intentional breathing practices, where the exhale is extended longer than the inhale.

Berger and Lahad (2013) found that PTSD-like symptoms were present in working with children, post-crisis, despite not meeting diagnostic criteria for PTSD – emphasizing the need for appropriate treatment, support, and intervention for bereaved children. Framing child bereavement within a trauma informed model supports continued processing of traumatic material across a spectrum of care needs, where early intervention leans into to the possibility of prevention of trauma symptomology (Berger, Lahad, 2013).

Expressive Arts Therapy (ExAT)

Expressive arts therapies are initially appealing in support of child bereavement as they support both creative, developmentally appropriate access to play and non-linear processing of grief content (which may or may not include trauma experiences). Expressive arts therapies offer a way to hold, express, and release emotions while providing opportunity to transform and deepen personal understanding and meaning through a diversity of modalities – dance, intermodal, music, poetry, drama, art, etc. (Atkins, Snyder, 2018).

Expressive arts therapy – sometimes referred to as the integrated arts approach, intermodal therapy or multimodal therapy – distinguishes itself from other expressive arts therapies specializations (e.g. art therapy, drama therapy, dance/movement therapy, etc.) by grounding itself in the interrelatedness of the arts (Malchiodi, 2005). According to McNiff (1992) ExAT is a return to the creative process as a natural medicine for the soul. Estrella (2005)

states that expressive arts therapists, "consider their work to be the mastery of the principles of integration and wholeness that underlie the specializations." (p. 185) Specializations in this context refers to the therapeutic modalities which comprise the expressive arts therapies.

Expressive arts therapy allows for intermodal shifts to occur, which allow for non-linear processing of material. This non-linear processing may allow for greater exploration of persons' internal content. This internal content may not be held verbally or in a narrative form due to its experience in the context of trauma and/or at a pre-verbal place of development, as described in Piaget's stages of development.

Traumatic memories are primarily stored as somatic sensations, emotional vulnerabilities, flashbacks and nightmares, dissociative inclinations, and behavioral reenactments (Estrella, 2005; van der Kolk, 2014). The creative arts therapies have shown to be beneficial in gaining access to traumatic material as they are action-taking (lending to empowerment and agency of experience) and serve to make the traumatic material concrete, aiding the link between somatic experience with affective knowing (Estrella, 2005). Particularly applicable, may be the development of the expressive therapies continuum (ETC). The ETC frames expressive arts therapy through hierarchical and interrelated dimensions of express correlated with media-usage (e.g. watercolor, vocalization, clay, etc.).

Different modalities may allow for shifts in perspectives of the same content area, and creative expression in different modalities may correspond to hierarchical levels of functioning (Hinz, 2009). These levels of functioning generally coincide with developmental stages. The expressive therapies continuum seeks to, "classify interactions with the art media or other experiential activities in order to process information and form images (Kagin, Lusebrink, 1978, 1990)" (Hinz, 2009, p. 4).

At the base is the kinesthetic/sensory level (preverbal), followed by the perceptual/affective level (verbal, non-verbal), last is the cognitive/symbolic level (verbal, planning). Each of these three levels are comprised of bi-polar components, accessing the left or right hemisphere brain functions, respectively. The kinesthetic, perceptual, and cognitive components facilitate access to left hemisphere brain functions (sequential, linear, organizational, categorizing). Sensory, affective, and symbolic components facilitate access to right hemisphere brain functions (conceptual, emotional, spiritual). The creative level of the ETC aims to integrate right and left hemisphere functions through creative experience. The ETC offers a structure to assess where a bereaved child is currently functioning, as well as provide a direction for intervention that meets them where they are currently functioning.

Considering supporting research regarding brain development and the human stress response, it follows that alternative means to access individual experience is necessary as part of treatment considerations for bereaved children. ExAT and the ETC provide an appropriate frame for bereaved children across associated developmental needs. Furthermore, ExAT provides an imaginal space to explore continued bonds with the deceased (attachment); expression of a range of feelings that may not be safe to express in child's daily life; and work on reintegration of child's new reality without their significant person's physical presence.

Ecotherapy

Ecopsychology encompasses the theoretical, cultural, and critical foundation for ecotherapeutic work to take place (Buzzell, Chalquist, 2009). Ecotherapy is generally understood as the applied practice of ecopsychology, which studies our psychological relationships with the Natural world. Ecotherapy, like expressive arts therapy, provides a multi-sensory and intermodal

experience which rests upon our interconnectedness as humans to each other and our Natural environments (Buzzell, Chalquist, 2009).

Ecotherapy encompasses a variety of theoretical frameworks and approaches. Nature-based therapeutics are generally defined as professionally facilitated interactions with plants, animals and natural landscapes to bring about measurable outcomes in human health and well-being (Davis-Berman, Berman, 2012; Sonntag-Öström, et al., 2015). Forest therapy is a rich resource for supporting mental health, though is limited to those who have access to both a forested area and access to an area that has a program facilitating forest therapy, which is not widely practiced across the States. This creates limited accessibility to those in urban areas without transportation and/or economic means. For this reason, nature-based expressive arts therapy and ecotherapy may offer the required flexibility to tap into the benefits of nature while accommodating those living in urban areas through imaginal work combined with bringing Nature indoors.

Forest therapy is inspired by the well-researched Japanese practice of shinrin-yoku, which translates to "forest bathing." Forest bathing demonstrates the biological markers affected such as, heart-rate variability, perceived wellness, increased function of immune system, and activation of PNS - regulating arousal which are improved in as little as three minutes in direct contact with nature (Morita, 2006).

Marianne Spitzform discusses ecotherapy's implications for psychotherapy in an enlightening case vignette. "Children raised in poor inner-city neighborhoods and transferred to a summer camp for four, 12-day sessions shared significantly better self-esteem and described themselves and their surroundings more positively at the end of their stay" (Buzzell, Chalquist, 2009, p. 72). This type of interaction with nature is sometimes referred to as "greening". This type of interaction can also be identified as providing a buffer (or area of resilience) among rural children, who generally appear to

be less stressed with nature in close proximity, than children who reside in completely built

surroundings.

Swank and Min Shin (2015) provide a nature-based child-centered play therapy

approach, and a case study conducted by Peterson and Boswell (2015) provide insight into the

experience and use of play therapy in a natural setting, both reporting positive outcomes. Given

the strong link between contact with nature and enhanced human wellness, it is advocated that

greater inclusion of nature-based approaches be considered for clinical practice.

Martin Buber's philosophical work on the "healing relationship model", shifting

understandings of the nature of relationships toward I-Thou relationships, characterized by

dialog and mutuality (Scott, 2009). Ecopsychology seeks to extend the I-Thou relationship to the

fullness of the biological world, toward a more inclusive healing relationship model. Evidence of

grief processing through ecological means and connection is known at an intuitive level, and a

growing pool of research is investigating what ancient and indigenous cultures have known for

centuries – our wholeness is felt most fully when we are in connection to community and in an

"I-Thou" relationship with our environment (Buzzell, Chalquist, 2009).

Nature Therapy

Berger and Macleod (2006) created a theory of ecotherapy called Nature Therapy

designed for children, which borrows from and builds upon theories and approaches before it.

Namely, it resources and seeks to integrate expressive arts therapy, gestalt, the narrative

approaches (Berger, Lahad, 2013; Berger, Macleod, 2006). Some of its tenants include the

healing metaphor and the importance of play in childhood recovery. The healing metaphor refers

to a transference of significance from one frame of reference to another. "Metaphor is a blend

and a unification of two objects, creative a shared link" (Berger, Lahad, 2013, p. 37). Metaphors

have the power to circumvent defenses (left brain function) and facilitate shifts in thinking or

transformation through imagination (right brain function), which may be particularly useful in work with bereaved children.

A central term in Nature Therapy is the therapeutic triangle, which expands the therapeutic relationship between client and therapist to include Nature (Berger, Lahad, 2013). Nature is seen as an active partner in the process that influences the setting or backdrop, source of creative materials, and the process itself. As an influencing process, "choosing the right space" refers to physical appropriateness and symbolic meanings involved in the Natural space, as different terrains and vistas provide a different experience which influence meaning-making.

The importance of rituals is identified in support of its regulating influence on the body. Nature therapy, according to Berger and Lahad (2013), "seeks to include nature's cyclical and eternal elements, as well as our lack of control over them, into the rituals that structure its therapeutic method and processes" (p. 49-50). This confrontation with uncertainties, within the repetitive safety of rituals, helps provide feelings of control, security, and order for chilfren..

Nature Therapy is influenced by and adapts four models: adventure therapy (refers to Nature as something that provides challenge or obstacle), art in Nature (nature as partner in creative process), home in Nature (nature becomes a safe place), and conservation therapy (individual acts to preserve/cultivate Nature). From this theory of Nature Therapy, Berger and Mcleod developed a 12-session protocol called "A Safe Place" for post-crisis work with children. It is thought that this model could be adapted and developed further for the support and treatment of bereaved children. Additional considerations would include an inclusion of the ETC as complementing the existing Nature Therapy frame.

Discussion

The rapid acceleration of modern life increases pressures on people (at individual and community levels) and the Earth's resources, that contribute to a cumulative depletion of individual, communal, and ecological resources (Atkins, Snyder, 2018; Berger, Lahad, 2013; Buzzell, Chalquist, 2009). This defines risk assessment as occurring within relational frame that more fully captures the interplay and interconnectivity between individual, community, and Nature and its rhythms.

Shamanism in Nature Therapy and Expressive Arts Therapy Theory

The "A Safe Place" program is based in Berger's framework of Nature Therapy, which is grounded, in part, in his understanding of Shamanism and ancient rituals (Berger, Lahad, 2013). "The framework integrates elements from Drama Therapy, Gestalt, Transpersonal Psychology, Ecopsychology, Shamanism and Rituals, and creates theory and methods that help the therapist assist the unique characteristics of nature and expand upon the process" (Berger, Tiry, 2012, p. 412). It is the position of this author that Shamanism, as Berger understands it, is not a necessary or appropriate essential component within a nature-based therapeutic framework.

The importance of Shamanism and Shamanic practice to Berger appears to be in its example as ancient means of healing – based in the right hemisphere of the brain connected with emotion, imagination, and sensorial systems. He asserts that this contrasts with modern forms of medicine and healing which rely heavily upon modes of healing which distance themselves from the emotional, sensory-based, and imaginal work, as may be the case in talk-based therapies (Berger, Lahad, 2013). Additionally, Berger highlights a connection between the Shaman and the therapist/facilitator. The Shaman, "helped the individual and the community attain the

transformation it sought" (Berger, Lahad, 2013, p. 41). For Berger, the importance of ritual is deeply nested with his understanding of Shamanism as an ancient and universally accepted term.

McNiff – who is credited with the first expressive arts therapy graduate program at Lesley University in Cambridge, MA – has also written about his view of shamanic dimensions within expressive arts therapy practice (McNiff, 2009). It is interesting to note that both Berger and McNiff draw from the same anthropologist, Mircea Eliade, to source their connection of a "world tradition of healing through creative expression in all of the arts, dreams, rituals, and sacred experience" (McNiff, 2009, p. 38). This highlights the recurring theme of shamanism as applied to current practices and its problematic usage as a gathering point indicating universality in modern healing practices.

Evidence suggests that the word "shaman" may be traced back to ancient Northern China, from the language of the Jurchen people (Guo, 2015). Western anthropologists began to use the word in a broad sense as outside observers, noting what they thought were certain common characteristics in "magico-religious" practices across the world (Thomas, 2015). This is problematic as it homogenizes the intricacies and variations in practices across a great number of unidentified cultures.

Berger, building on preceding Western anthropologists, describes shamanism in broad strokes – attaching near universal meanings and understanding of various cultures without crediting or discriminating between them, in order to define and provide support for his theory of Nature Therapy and "A Safe Place" protocols. A unifying theory based in common, ancient rituals across continents and practices is appealing, and its basic premise appears to be well intended.

However, a critical lens to better understand what is being identified, what is being lost, and the impact on people cross-culturally when the word Shaman is used as part of modern practices is needed, especially as it gains distance away from its original form, source, and intent. More inquiry is needed to parse its appropriateness in and influence on a nature-based expressive arts therapy framework that is culturally sensitive and adaptive to various needs and populations. Giving credit to those cultures and sources from which modern healing practices are built, is crucial to the evolving practice of ecotherapy and expressive arts therapy.

Limitations

While it is preferred and perhaps ideal that Nature Therapy occur outside in a Natural environment with an open space to interact with a variety of Natural materials and stimuli (Berger, Lahad, 2013), this is a constraint for the many people living in metropolitan areas. This presents a need for adaptability within Nature Therapy and other ecopsychology frameworks to consider. Berger and Lahad (2013) provide some direction for adaptive measures of their "A Safe Place" protocol including continued work in the imaginal, additional preparatory steps leading to outdoor use (outside of the classroom), and bringing the outdoors into the indoor space – e.g. bringing Natural materials such as twigs, leaves, seed, plants, etc. to the indoor space (Berger, Lahad, 2013).

Continued research is needed to develop effective, adaptive means to deliver ecotherapy without losing the thread of its integral components. Can ecotherapy be effective without direct contact to open, outdoor spaces? Is it enough to have contact with Nature in its various "transplanted" forms (bringing the outdoors in) to be sustaining and effective? What may be lost in these circumstances? These are just a few questions that may frame future work to bridge the efforts of an increasingly modernized world the shared Natural heritage we have with the Earth.

This marks a beginning step toward identification of a nature-based expressive arts therapy approach for bereaved children. As means to better understanding bereaved children in their biopsychosocial contexts, a more expansive mode of inquiry and theoretical framework for practice is needed. An eclectic theoretical framework is observed throughout this paper, as it is considered in *Expressive Therapies* (2005), "whether a single theoretical framework for expressive arts therapy is possible or even desirable" (p.192).

My depth of understanding around child bereavement and my own experiences with grief and loss have processed parallel to the creation of this paper and is visually represented in *figure 2*, below. I similarly expect and hope this larger conversation of grief and loss in relation to a nature-based expressive arts therapy approach to continue far beyond my lifespan.

Figure 1. Chart aligning bereavement, ETC, and Nature Therapy

Reactions to Event(s)	Bereavement Needs	ETC	Nature Therapy
physical or somatic *(e.g. body pains, digestion problems, fatigue or nervous energy, etc.)*	physical safety and routines (new routines)	Sensory, Kinesthetic	Rituals, Nature contact
emotional *(e.g. fears and anxieties connected with the event, lack of interest in previously known interests, quick-tempered, distressing thoughts related to event, etc.)*	Soothing of fears and anxieties, Communal/Attachment support	Kinesthetic, Affective	Communal/Attachment support (therapeutic triangle)
cognitive *(e.g. difficulty concentrating, problem solving, decision making, etc.)*	Reflected understanding of normative grief process, modeling	Kinesthetic, Perceptual, Cognitive	Conservation nature therapy: preservation of Natural world
familial and/or relational *(e.g. seclusion, over-attachment to parents/authority figures, difficulties/clashes with parents/authority figures, etc.)*	Positive coping skills of parent/caregiver; open communication about grief and bereavement limit-setting	Sensory, Kinesthetic	Communal/Attachment extending to Natural world, Finding rhythm within cyclical nature of ecological world
damage to belief and value system *(e.g. loss of trust/security with parents and other adults, pessimism and loss of faith in the goodness of the world)*	Re-framing of spiritual connection, allowance for and support of new ways of thinking	Sensory, Affective, Symbolic	Cultural, Spiritual, religious beliefs in connection to I-Thou healing relationship, Healing Metaphors
Imagination *(e.g. nightmares and dreams about monsters in sleep and/or day-dreaming, reconstruction of trauma or other frightening issues in play, sense that they can predict the next events according to mystical signs/ foreboding)*	Support of expression of full range of feelings related to death of significant person	Kinesthetic/Sensory, Perceptual/Affective, Cognitive/Symbolic	Healing Metaphors Imaginal Play

Figure 2. A visual representation of personal grief process, Artwork in ink.

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THESIS APPROVAL FORM

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Student's Name: ___Wendy C. Dalton_____

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Title: ___A Literature Review of Nature Based Expressive Arts Therapy for Bereaved Children_____

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In the judgment of the following signatory this thesis meets the academic standards that have been established for the above degree.

Thesis Advisor: __Rebecca Zarate_____