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The Sensory and Haptic Nature of Art Therapy Materials With Young Children Ages 0-5yrs Old of Complex Trauma

by

Sarah Duncan

A research paper presented to the Faculty of the Department of Marital Family Therapy Loyola Marymount University

In partial fulfillment of the Requirements for the Degree Master of Arts

May 12, 2019

### **Signature Page**

Author's Signature

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May 7, 2019 Date

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5/7/19 Date

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#### Abstract

This survey study with an art response aims to further understand how the sensory and haptic nature of art therapy materials can aid in healing within the therapeutic process. Specifically, it will explore young children, ages 0-5yrs old, of complex trauma and how they respond to art materials within the therapeutic process. Surveys were distributed to mental health therapists working with the 0-5 year old population in order to gather baseline information about how young children who have experienced trauma, respond to methods of interventions, including art materials. Through analysis of the participants' survey responses and artwork, emergent themes revealed insight for further research and reinforced the importance of a consistent, nurturing caregiving relationship. These findings and themes illuminated the importance of relationship and revealed inquiries about the sensory and haptic nature of art materials being utilized for assessment in dyadic therapy with children 0-5 years old.

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*Keywords:* Early Childhood, Infant Mental Health, Trauma, Sensory Explorations, Haptic, Art Therapy.

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#### Introduction

#### The Study Topic

This research explores the sensory and haptic nature of art materials with children 0-5yrs of complex trauma in order to gain a better understanding of how to conduct treatment with this population using the sensations and processes of art making. The purpose of this research is to attain baseline information for young children ages 0-5yrs that are receiving therapeutic services with primarily Art Therapists. The baseline information explored pertains to young children's reactions to art making.

This research will provide understanding about the development of children ages 0-5yrs old, specifically with those who have experienced complex trauma. A literature review of the topic revealed that many trauma responses are somatic and reside in the body (Ogden & Minton, 2000). On a personal note, I find that one's bodily experiences greatly influence one's mental health. Especially for populations whose communication is almost solely on nonverbal communication, such as the 0-5 year old age group, their treatment should also attend to their body language and communication. A young child's human experience starts with exploration through sensorial information and feedback (Streri, 2005), which art therapy can be used to satisfy and attend to those needs.

There is more research about the sensorial and haptic nature of art materials being used to aid in the healing and therapeutic process with the adolescent and adult populations who experienced childhood trauma within the art therapy literature and little utilizing art materials with young children (De Young et al., 2011; Metzl, 2015). Additionally, there is research and information about treating children with trauma backgrounds employing modalities other than art therapy, such as dyadic therapy. The researcher's goals are to integrate the knowledge and

information about early childhood development, attachment, complex trauma, dyadic therapy, and the art making process as healing, in order to inform where I need to go to implement treatment with the 0-5 year old population.

#### Significance of the Study

The significance of this study stems from a personal interest with the 0-5 year old population in combination with my study of art therapy. The research question being asked is: How can the sensory and haptic nature of art therapy aid in the healing of young children ages 0-5 years of complex trauma? There has been a big push in the last few decades in understanding the development of young children and how this development affects their lives as adults. For example, initiatives such as First Five California (2017) provide services as well as education to parents, caregivers, and practitioners in ways so as to supplement and further a young child's development. Much of what is being learned is the importance of a child's cognitive development, the impact of socio-emotional development, and social supports in developing supporting a child's mental health, coping and self-regulation. Much of a young child's learning is through non-verbal experience and exploration,, which is supported by attunement from the child's primary caregiver. The Adverse Childhood Experiences (ACES) (Center for Disease Control and Prevention, 2016) screening tool has been used to gain information on a child's trauma background, and inform on ways prevent further adversities, such as to physical health, immune system functioning, and social supports, throughout adolescence and adulthood,. As the Psychology and Early Childhood Development field further develop, there is more information pertaining to how children of trauma present symptoms similarly to and contrastingly to Post-Traumatic Stress Disorder.

There is much discussion about how art therapists use certain materials to illicit emotions and reactions of their older child, adolescent, and adult clients (Penzes et al., 2014). This study will open the door to understanding the reactions of children 0-5 year old when using art materials during their treatment. To understand how to use art materials to illicit reactions in young children, one must first have an understanding of how this age group typically responds to certain art materials. By doing so, a clinician will be able to assess the reactions of young children in the event they become dysregulated using the art materials due to their trauma history, as opposed to a normal reaction when exploring with art materials.

Overall, the significance of the study will provide preliminary findings for further exploration within the utilization of art therapy methods with the 0-5 year old population. By gathering information from Marital and Family Therapists and Art Therapists about their experience and expertise in working the 0-5 populations, themes will be gathered to further hypothesize the early childhood experience with trauma backgrounds and inform on the implementation of art materials during the treatment process.

#### **Background of the Study Topic**

The study topic stems from topics such as early childhood development, sensorimotor development, sensorimotor art therapy, and material reactions in art therapy.

#### **Sensorimotor Development (Sensory and haptic)**

During the 1930's, Piaget (1936) was the first psychologist to develop an understanding of how one's cognitive functioning develops (Mcleod, 2014). Specifically focused on early childhood and young children, and then moving through adolescence, Piaget's discovery was the first of its kind. Piaget established cognitive developmental stages that are typically achieved by a particular age. The stages are Sensorimotor, Pre-operational, Concrete Operational, and Formal Operational stage. It has been argued that not everyone reaches the formal operational stage and that some of the earlier stages are achieved before Piaget's original timeline (Mcleod, 2014). Focusing on the sensorimotor development in regards to the study, during the ages of birth to 2 years old, a great deal of learning, cognitive development, and understanding of the world is accomplished through the infant and toddlers sensations and motor actions. Through trial and error, a young child will repeat actions if it produces a pleasurable response or stimulation. A child receives sensory input and responds with sensory output. Even before testing to achieve stimulation, a young infant responds to external stimuli, as a reflex, in order to acquire their survival needs. Thus the hypothesis that the sensorial nature of art could be useful in the treatment process is derived from the understanding of the sensorimotor stage of Piaget's theory on cognitive development.

#### **Early Childhood Development**

Research on mental health for children 0-5 years old is significantly lacking, and only in the last thirty years has there been an effort to understand the mental health of infant, toddlers,

and preschoolers (De Young et al., 2011). The importance of caring for a young child's mental health stems from Bowlby's attachment theory (1958) and the effects of a caregiving relationship on a child's overall development. Not only is it important to have more research on early childhood mental health, but a necessity. De Young et al (2011) states, infants, toddlers, and preschoolers are amongst one of the most high-risk populations for abuse due to their stage of development. Particularly, children 0-5 years old are completely dependent on the caregiver-child relationship to a "safe, secure, and predictable environment" (De Young et al, 2011, p.241) in order to develop emotional regulation. During the first years of life, a child lacks the ability to adapt and manage strong emotions, which result in physical arousal and behavioral responses, thus relying on their primary caregivers for soothing and affect regulation during moments of distress (De Young et al, 2011). As the caregiver attunes to the child, it models to the child how to self-regulate when strong emotions arise (De young et al 2011).

Additionally, Piaget's theory of cognitive development, discusses the Preoperational stage of development, aiding in a child's autobiographical memory and view of self which can have the potential of being negatively effected due to a poor caregiving attachment and/or abuse (Mcleod, 2018; De Young et al 2011). According to Piaget, a child's egocentrism contributes to their understanding of the trauma event and may influence their reactions (De Young et al, 2018). Children may personalize the trauma event. By utilizing art materials, there is potential for the child to gain an understanding about what materials they can feel a sense of security by being able to control the material and the art materials that are more difficult creating a feeling of being out of control.

#### **Complex Trauma and Adverse Childhood Experiences**

This concept of egocentrism can be a detriment to a child's development if abuse is present in the home, creating low-self esteem, believing the abuse happens because of the child. Additionally, the child's attachment to caregivers can be distorted or ruptured. The concept of attachment was formulated by Bowlby (1958), which explores the importance the parent-child relationship to ensure a child's sense of safety to further their cognitive, social, and emotional development. Ainsworth (1970) furthered Bowlby's theory by codifying attachment styles to categories and examine different characteristics of a child's attachment to primary caregiver.

According to the Adverse Childhood Experiences Study (ACES) (Felitti et al., 1998), the developmental trajectory of child who has experienced trauma or an adverse event can be changed through social supports and/or having a secure attachment with a safe and supportive adult. The study states that a child who has four or more adverse childhood experiences can lead to physiological health problems, which stem from neurodevelopmental disruptions causing socio-emotional and cognitive impairments. These disruptions can lead to an adoption of health risk behaviors, causing disease, social problems, and disability, potentially causing early death.

#### **Literature Review**

This review of the literature explores existing information and research about how sensory modalities and the haptic nature of art therapy is used in treating young children with complex trauma. Since memory is not only stored in the mind and brain, trauma can reveal itself in somatic symptoms, as well as be triggered by sensory input. In my research I aim to look deeper into finding ways to heal through haptic perception and sensory modalities that can be attributed to art therapy. Topics that are explored are art therapy, trauma, young children, sensory and haptic modalities, and different art materials used.

#### **Art Therapy**

While in constant evolution and redefining itself, The American Art Therapy Association's (2017) current concise definition presents art therapy as:

Art Therapy is an integrative mental health and human services profession that enriches the lives of individuals, families, and communities through active art-making, creative process, applied psychological theory, and human experience within a psychotherapeutic relationship. Art Therapy, facilitated by a professional art therapist, effectively supports personal and relational treatment goals as well as community concerns. Art Therapy is used to improve cognitive and sensory-motor functions, foster self-esteem and self-awareness, cultivate emotional resilience, promote insight, enhance social skills, reduce and resolve conflicts and distress, and advance societal and ecological change.

This definition from the American Art Therapy Association (AATA) provides its readers with clear and concrete methodology in which the therapeutic modality can be implemented within the mental health field. Not only is Art Therapy utilized in the mental health field but it is also known for its ability to promote social change and advocacy, further health promotion, aid educational goals, be present in schools settings, and be employed outside the medical model (Moon, 2016). Furthermore the current definition explores the use of the psychological theories integrated with the creative process of art making to inform treatment within the mental health

field. Not only is art therapy utilized in the healing of mental health, but is also used to foster development in cognitive development, sensory motor functioning, and socio-emotional skills.

Art Therapy as Sensory Exploration. Mainly known for being a visual component within the therapeutic conversation, Art Therapy can lend itself to being an exploration through the senses to reach far into our "primitive brains" which hold memories and emotions. As stated by Lusebrink, "Art therapy focuses predominantly on visual and somatosensory information; that is, how images and their expression reflect emotional experiences and how the emotional experiences affect thoughts and behavior (2004, p.129)." Art therapy allows the client to process emotional experiences in a way in which the client can put an image, symbol, color, movement with the material, or projection onto the art materials to have a visceral and/or visual result that may not come through during talk therapy.

An article that mentions and expands on Lusebrink's concepts, written by Elbrecht and Antcliff (2014), explores more deeply on the nature of haptic perception in the art therapy processes. Elbrecht and Anticliff (2014) quote Hass-Cohan and Carr stating, "'Art as therapy' activities have the potential to activate neural pathways related to tactile and kinaesthetic associations" (2008, p.35). By activating certain parts of the brain through a kinesthetic and sensorial experience, one can began processing and gain insight by understanding their associations with the haptic nature of the art materials and their memory of the sensation as it relates to their trauma. By understanding and exploring the memory or emotion associated with a certain sensation can lead to healing and recognizing somatic responses. Elbretch and Anticliff (2014) write, "Through the interaction with art materials such as clay, kinaesthetic experiences of physical actions and movements release energy and the sensory focuses on the experience of

both external and internal sensation." By utilizing kinaesthetic experiences, clients of art therapy can begin to release energy and discharge internal emotions into external experiences.

Art Therapy and the Unconscious. Art therapy aids the client in accessing a more subconscious part of the brain by utilizing art materials to articulate emotions that they find difficult to express verbally. Continuing to look through a psychodynamic Object Relations lens with Art therapy, Hilbuch et al. (2016) explore the transferential aspect of using art materials within psychotherapy. Hilbuch et al (2016) state, "the presence of the art materials in the therapy room avails the client of the opportunity for art making which may facilitate the emergence of a transitional space where clients bridge between their inner subjective experience and external objective reality." Meaning, the client interacting with the art can lead to projection of internal experiences, such as emotions, somatic responses, and desires, onto either their process of creating with the art materials and/or the content of what they created with the art materials.

#### Trauma

Trauma comes in many forms. A traumatic event can be seen as experiencing a natural disaster, witnessing death, losing someone you love, witnessing abuse, being abused, to name a few. When working with clients with trauma backgrounds, intrusive thoughts and feelings can impede a person's daily life sometimes without warning. Written in the Journal of Loss and Trauma, Williams (2006) describe the symptomatology and physiological responses of those reexperiencing their trauma. William's states:

"The bodies and brains of traumatized people contain blueprints of the attempted gesture to survive in the face of threat and injury (Freyd, 1994; Levine, 2004). When faced with danger, the body and mind will temporarily react to alarm by freezing, numbing, detaching, and forgetting. When the defense mechanisms have been overwhelmed,

and there is a failure to restore homeostasis, the memory of that event also becomes encoded in a way that impairs cognitive consolidation. When an organized adaptation response is not possible, mental recall also becomes persistently both intrusive and disjointed (Siegel, 2003; van der Kolk et al., 1996)." (p. 322-323)

This quote speaks of human's inherent biological response to danger and threat of safety. When experiencing a stressful situation, such as a traumatic event, one's Sympathetic Nervous System responses causing cortisol levels in the body to rise, Adrenaline is released, and only organs necessary for survival, such as the heart, lungs, and brain stem, continue to function. Thus, the person's neocortex executive function "turns off" limiting the person ability to make decisions and impairing cognitive functioning (WCSAP, 2016). When a person of trauma is triggered, or recalls the trauma event, their brain cannot separate between real or perceived threat, causing the body to "fight, flight, or freeze." (Mcleod, 2010). As mentioned previously, our bodies have the ability to store memories within the senses, touch, taste, smell, hearing, and sight, to a situation in which we experience distress or our life being in danger.

Trauma and Art Therapy. In a study conducted by Raider et al (2008), they created a 10-11-session program called "SITCAP-ART" utilizing sensory experiences in the treatment of trauma. One of the sessions had the adolescents use drawing as an intervention for healing trauma delving into art therapy. Raider et al (2008) describes, "Drawing [as a] major component of SITCAP-ART. The experience of trauma is stored in implicit memory and is transcribed into iconic representations/ visualizations. Drawing becomes a vehicle for communicating and externalizing what the experience was like" (2008, pg. 173). Furthermore, drawing provides adolescents, children, and adults a safe modality to communicate when those have few words to describe (Raider et al 2008). Not only a vehicle for communication but also a sensory activation to trigger memories, which are then contained on the paper for a sense of security (Raider et al.). By having active involvement as opposed to passive, adolescents take more control over their healing process and the narrative of the trauma and their reactions. (Raider et al., 2008). Lastly,

Raider et al state, "Drawing also provides for the diminishing of reactivity (anxiety) to trauma memories through repeated visual re-exposure in a medium that is perceived and felt by the client to be safe" (Raider et al., 2008). Through visual processing, re-exposure, and being an active participant in the trauma narrative and healing process, it appears to decrease anxiety symptoms and deregulation. This method of processing then leads to acceptance and building the tools to regulate one's emotions when becoming triggered.

Another article that utilizes art making as a sensorial and process experience, as opposed to content based with those how have experienced trauma is Elbretch and Anticliff (2014). Elbretch and Anticliff discuss the Clay Field for providing discharge and a release of energy related to the trauma experience and rebuilding and finding containment when working with clay in a wooden box (Elbretch & Anitcliff, 2014). Elbretch and Anticliff state,

...it is crucial that the art therapist encourages sensory awareness, not cognitive perception, not just blind acting out of motor impulses, but that the client is supported in developing an increasing awareness of genuine needs and impulses. These will initially be wordless, but positive, fulfilling sensory experiences that overtime can be recognised and integrated as new, more fulfilling paradigms of self" (2014 pg. 24).

By working with clay, those of trauma experiences are able to re-write their understanding of certain sensations from triggering and re-traumatizing to a more positive experience. Having the wooden box to contain the clay, it is seen not only as physical and tangible containment for the client to find security in, but also metaphorically finding a safe space to release and contain their challenging emotions associated with their trauma experience.

#### Trauma and Sensory/ Haptic Modalities

Exploring the somatic and bodily reactions a person experiences from being involved in a traumatic event is as important as addressing one's cognitive and emotional responses. Pat Ogden, and Kekuni Minton from the Hakomi Somatics Institute and Naropa University state:

"traditional psychotherapy addresses the cognitive and emotional elements of trauma, but lacks techniques that work directly with the physiological elements, despite the fact that trauma profoundly affects the body and many symptoms of traumatized individuals are somatically based." (Ogden & Minton, 2000, p. 149)

In trauma treatment it is important to note not only cognitive distortions such as intrusive thought or negative thinking patterns, but also how the body responds to being triggered or reexperiencing the trauma. Through art therapy, one can explore through visualization of the problem through content, and one's visceral and bodily experiences. As mentioned previously, those who have endured trauma re-experience their trauma not only through intrusive thoughts and memories, but are also reminded of the trauma through bodily sensations. Some may be in a situation during their daily activities in which their body reminds of them of the trauma due to experiencing an emotion, a guttural reaction, and/or an aversion that causes the person to become triggered and remember their trauma. Ogden and Minton (2000) state, "Traumatized individuals are plagued by the return of dissociated, incomplete or ineffective sensorimotor reactions in such forms as intrusive images, sounds, smells, body sensations, physical pain, constriction, numbing and the inability to modulate arousal." The somatic nature of trauma can also lead clinicians and therapists to use this bodily awareness people of trauma have to aid in processing and understanding why the individuals are having certain reactions. Not only understanding the sensorial reactions, but also naming when it occurs and certain emotions tied to the bodily reactions. When a person of trauma uses the art for tactile and sensorial exploration and

processing, this allows access to more areas of the brain that may provide explanations and insight during the therapy session. According to Lusebrink (2004)

The process of expression through art media and the products created in an art therapy session engage and are perceived predominantly through the tactile-haptic and visual sensory and perceptual channels, and then are processed for their affect, associations, and meaning through cognitive and verbal channels. These activities involve different motor, somatosensory, visual, emotional, and cognitive aspects of information processing with the activation of the corresponding neurophysiological processes and brain structures. (p.125)

The notion that the sensorial, haptic perception or active touch, and tactile aspect of art therapy leads to neurophysiological functioning in the brain presents the idea that when using art materials one's body is not only sensing the materials, but also processing these sensations to make cognitive connections in past and/or possible future experiences. The person's cortisol level runs high and is unable to reach their executive cognitive functioning due to the person's sympathetic nervous system being in a state of "fight or flight or freeze" and needing to attending to the person's survival needs in lieu of self-actualization and stabilization (WCSAP, 2016). The need for a sense a safety before self-actualization and cognitive insights and needs, stems from the concept of Maslow's Hierarchy of needs of addressing lower level deficits (i.e. biological, safety, love and belonging) before working towards the higher level needs (i.e, esteem and self-actualization). (Mcleod, 2018). Furthermore, the relationship between neurophysiological processes, emotions, sensations, and insight all come together in order to come to a clearer understanding and awareness that our bodies have the ability to attach sensations and haptic information into emotions. Written by Carlson, Lusebrink (2004) quotes, "Touch and haptic perceptions involve movement and also activate emotions because the amygdala receives information from the somatosensory primary cortex" (Carlson, 2001). By having the ability to access the somatosensory primary cortex with sensory and haptic modalities one can express and explore nonverbally in order to better article the experiences they had and

are currently having. A therapy modality founded by Pat Ogden, named Sensorimotor Psychotherapy (SM), is a body-oriented method that integrates physical, emotional and cognitive aspects of experience, within a framework supported by neuroscience, theories of attachment and dissociation" (Buckley, Punkanen, & Ogden, 2018). Therapists, clinicians, and medical professionals can use somatic information as an assessment tool during treatment to further understand how the mind-body connection affects a person's overall wellbeing.

#### Art Therapy, Trauma, and Young Children

As for young children, specifically between the ages of zero to five years old, "making art is such an intuitive way for a young child to communicate and express his or her unspeakable and/or troubling experiences (Malchiodi, 1997; Metzl, 2015)." According to Piaget, especially when a child is in the "preoperational stage" in their cognitive development, children have difficulty seeing other's viewpoints. (Mcleod, 2018). With Piaget's concept in mind, it can be inferred that children believe they are the reason for the abuse, due to their magical thinking. When a child feels ashamed or guilty, they may not speak out for fear of getting in trouble and wanting to appease the adult to ensure a secure attachment (Williams, 2006). Consequently, if the secure attachment has been broken through complex trauma with the caregiver abusing, the child will develop an insecure attachment leading to difficulties cultivating healthy relationships in the future. Finn et al concur that, "The absence of affect regulation by caregivers can result in the child's misunderstandings of internal states of the self and others, and subsequent difficulties in forming and sustaining relationship (Cotraccia 2015; Johnson et al., 2002; Finn, 2018)." If a child's attachment is not rebuilt and the trauma they endured is not processed, further developmental delays can occur. Buckley, Punkanen, and Ogden (2018) state:

Unresolved trauma or developmental injury inhibits predictive accuracy by overlaying earlier neural firing patterns onto the present. Clients are often unaware that their responses are based on outdated defenses, which remain active long after the events that originally triggered these. Although it is well established that the amygdala is implicated in activating the fear responses of the ANS it seems the Bed Nucleus Stria Terminalis (BNST) may be the source of arousal of attachment defenses (p.3).

Children of trauma need to rebuild their attachment with a trusting adult before moving into processing their trauma. This is due to the fact that the child's sense of security is lost and is in "survival mode", which means they cannot access their still developing executive functioning, prefrontal cortex in their brain, as mentioned previously. Explained by Finn et al. (2018), complex trauma affects the developing brain and body in young children. Finn et al. (2018) state that in infancy "distress is exhibited in sensorimotor disorganization and disruption of biological rhythms" (p. 278). This is demonstrated through crying for an extended period of time, flailing of the body, and inability to be soothed (Finn et al., 2018). During toddlerhood, complex trauma results in lack of impulse control, selective attention, and difficulty regulating stress responses (Finn et al., 2018).

By intervening in early childhood, a child's brain and socio-emotional development can work towards a more normal and healthy development. Once an attachment to a secure adult is made from either re-establishing the lost caregiver relationship, a foster parent, or external support such as a therapist or social worker, a child will then be able to use sensorial and haptic modalities to process the trauma, possibly becoming activated in a safe space to then learn how to de-escalate and self-regulate with their attachment figure in order to move forward in their development. Buckley, Punkanen, and Ogden (2018) state that "Securely attached children develop physical resources that increase resilience, such as proximity-seeking, boundary-setting actions, grounding, a flexible strong core, body awareness and self-regulation." Furthermore, Waller (2006) suggests, that art making in a safe and contained environment, such as an art

therapy room, may support a child in exploring and expressing challenging emotions that are difficult to articulate with words. These challenge feelings can be discharge into the art the child is making (Waller, 2006). As the art acts as a 'container' for strong emotions, this can enable communication between the child and the art therapist (Waller, 2006). This then allows the child to focus on the "physical enjoyment, and 'play' elements of art therapy" (Waller, 2006). Waller (2006) believes "that the more a child can become creative, the better for his or her psychological growth (p.281)."

The modality of Art Therapy allows children a space in which the problem is externalized and placed in the art materials itself. Through therapy using sensory and haptic modalities, young children can continue to develop their resilience, self-regulation, self-esteem, and self-actualization.

Desmond et al., (2015) discuss the benefits of using creative techniques with children who have experienced trauma. Though the article does not speak specifically about children under the age of 5 years old, it does present case examples of the benefits of using creative interventions for children that could be utilized depending on the age appropriateness such as puppets, sand trays, and art making. Desmond et al. (2015) states, artistic outlets, such as creating with a multitude of art mediums, gives children the opportunity to willingly express thoughts and feelings, allowing insight to their cognitive distortions that can be processed in therapy. By utilizing materials such as crayons or paint, a young child can convey their problems or difficult situations and re-establish their view of self in the context of their surroundings" (Desmond et al., 2015).

By allowing a child to create in mediums that are innate such as play and drawing, is creates a space for the therapist to pick up on themes and metaphors and explore their trauma in

an indirect manner to create a sense of containment. Lastly, art making allows the child to be an active participant in their treatment process, as opposed the potential of never being given allowance to their autonomy due to their trauma.

#### Early Childhood and Art Materials Producing Sensory and Haptic Responses

In much of early childhood, children explore through oral, tactile, and sensory explorations to understand the world around them. Though much research about infancy has been about an infant's visual modes of exploration and understanding, Streri (2005) aims to looks more in depth about an infant's haptic perception as a way of knowing. Streri (2005) concluded, "perception and cognition are two closely linked systems underlies infants' capacities to understand entities by touch." This being said, young children's cognition and understanding their world, is closely linked to their haptic perception.

When looking at the effectiveness of the sensory response while using art materials for psychotherapy it is noteworthy to state what benefits have been found with different materials by researchers and fellow art therapists. In my research the material that was presented to initiate a visceral, sensorial response was clay. Sholt & Gavron state (2006),

"Clay-work involves body expression through the physical work with clay, and mental processes through the act of modeling and through observing the product. Thus it allows integration of emotions, memories, and fantasies from different levels of consciousness. (71)

Furthermore, Sholt and Gavron (2006) explain how when one creates and smashes the clay to destroy what they have made, the metaphor of rebuilding one's identity is explored. It has been hypothesized that, "clay-work enables the client to encounter the constructive and destructive aspects of the self, in processes of psychic change and identity formation, or in becoming himself/herself." (Sholt & Gavron, 2006). Clay being a natural material it is possible children

will feel a sense of grounding due to the clay's weight, consistency, and the ability for the clay to hold its shape once created with.

Pesso-Aviv et al (2014) additionally explore attributes about the many other art materials that illicit a response. One material in which the study explored was oil pastels and the liberating or anxiety producing nature it has on young clients. When using oil pastels it is important to note if the child enjoys the "out of control" and expressive nature of the slippery material, or they are repulsed by the texture, stains, and overall messiness of the material (Pesso-Aviv et al., 2014). Similar to oil pastels for a means of expression, paints, when used with the hands, can produce responses of not wanting to be messy, indulging in the experience, and or freely expression built up emotions. The aversions, the sense of feeling out of control, and need for stimulation can provide therapist insight to possible reasons why a child responses in certain way. Additionally, if a child feels out of control their is an element of their self-esteem being lowered, due to not being able to control the art material in a desired manner (Pesso-Aviv et al., 2014).

Lastly, Penzes et al. (2014) explore material interaction as an art therapy assessment. Though the study's population focused on the adult population, there may be some similarities to reactions of certain art materials that can be seen in young children. When conducting the study, art therapists looked at the "properties of movement, dynamic, space, tempo, pressure, lining, shaping, repetition and control" (Penzes et al 2014) when clients worked with the art materials. Within the study, the authors stated, "material interaction reflected personal characteristics of clients, such as self-esteem, self-efficacy, perfectionism, need for control, rigidness, the ability to deal with and feel (negative) emotions, anxiety and agitation" (Penzes et al., 2014). By understanding and seeing these characteristics in the client's reactions to art materials as an

assessment, will in turn lead to conceptualizing next steps for further material interaction to aid in the process of healing.

#### Conclusion

Through my investigation of researching art therapy and reactions of the sensory and haptic nature of art materials with young children of trauma backgrounds, I have come to the conclusion that there a need for more art therapy research with young children ages 0-5 years old. There has been a great deal of research with ages 0-5 yrs old development and attachment, that furthering the research by understanding how this particular age group uses art materials, can benefit in the healing process of those who experience trauma at an early age. There is a much research about how early intervention can redirect a child's developmental trajectory, as well as, a child's understanding of the world around them through haptic exploration, that using art materials can be a way to link the two concepts to further aid in the healing of young children.

#### Research Approach

This study obtained qualitative and quantitative data through surveys and art responses from the participants to identify the art materials they use in the treatment of children ages 0-5, with complex trauma. Additionally, the study explored the responses of children aged 0-5 to various art materials utilized by Masters level therapists. The art responses from the study provided the researcher with qualitative data, exploring not only the subjective experience of the therapist, but also revealing themes and discoveries within the art process. Overall, the researcher will synthesize the answers from the surveys and art reflections through thematic analysis to inform on conclusions, hypotheses, and areas for further research.

#### Methods

#### **Definition of Terms**

**Sensory:** relating to sensation or the physical senses; transmitted or perceived by the senses.

**Haptic**: relating to the sense of touch, in particular relating to the perception and manipulation of objects using the senses of touch and proprioception. Haptic touch is defined as "an inherently active and exploratory form of perception involving both coordinated movement and an array of distinct sensory receptors in the skin" (Fulkerson, 2011, p. 493).

**Trauma:** a deeply distressing or disturbing experience. "Trauma is a psychophysical event that has happened to an individual whose involuntary autonomic nervous system becomes overwhelmed (Elbrecht, 2012; Levine, 1997, 2010; Rothschild, 2000)" (Elbrecht & Anticliff 2014).

**Complex Trauma:** Trauma event occurring in the home in relation to a caregiver, relative, or sibling that is repetitive and/or cumulative; i.e sexual abuse, physical abuse, and emotional abuse (Williams, 2006).

Early Childhood: Children ages 0-5 years old.

#### **Design of Study**

Through acquiring information about therapists' experiences with the 0-5 year old population within mental health through surveys and art responses, the study will yield information for further research with the early childhood population. The study contributes information about trauma-informed care and early childhood mental health.

Once signing consent, participants were asked to contribute to the research by completing a survey/questionnaire (See Appendix E) with an art reflection. The survey/questionnaire was attached as a Qualtrics link embedded in the email. Examples of questions asked were, "What modalities do you use with your 0-5 year clients?" "What are some reactions your 0-5 year old clients have towards art materials?" and "What behaviors do you see in your 0-5 year old clients of trauma?" Participants were invited to contribute to the study regardless of age and gender, as long as they met the criteria of having a Master's Degree in Art Therapy and/ or Marriage and Family Therapy, and has worked with the 0-5yr old populations.

Potential subjects were contacted from email solicitations from the LMU MFT Art Therapy professors as well as the researcher. In order for snowball sampling, subjects were asked to participate in the study and encouraged to send the survey to other therapist working with the 0-5 year old populations. Subjects were provided with an explanation of the study, how the data collection would be used, benefits to the Art Therapy field, and how the subjects were able to participate in the study.

The researcher contacted subjects via email to participate in study. The researcher provided the survey/questionnaire, and art directive for reflection through Qualtrics, online survey software, which was embedded in the email communication, for data collection.

#### **Quantitative Data**

To collect quantitative data, participants were asked to fill out an IRB approved survey. Participants were asked to complete the online survey through the Qualtrics software, answering questions pertaining to working with children ages 0-5 years old in a therapeutic, mental health setting. The survey informed on the research question "how can the sensory and haptic nature of art therapy aid in the healing of young children ages 0-5 yrs. of complex trauma?" by collecting data about reactions and behaviors children 0-5yrs old of trauma exhibit, as well as interventions and approaches therapists utilize. Some questions included are, "what types of materials do you use in your interventions with 0-5yr old clients?" to elicit information about what sensory input children receive in order to hypothesize potential reactions based off of materials; "what behaviors do you see from children with trauma background?" to gather a possible baseline of typically trauma reactions; and "what reactions do your 0-5 yr. old clients have with art materials?" to gather data and trends of reactions of children 0-5yrs old given sensory and haptic input through art materials.

#### **Qualitative Data**

Additionally in the survey, participants were able to write in comments while choosing responses provided. Furthermore, the art directive, "using art materials of your choice, create a piece about when you think of the age group 0-5 what comes to mind," was prompted for the participants to reflect through the art and attach a written response, producing qualitative data for the researcher to analyze. Using the art and written response created by the participants, themes were derived through thematic analysis and formal assessment of the art. By doing so, the researcher hypothesized therapists' perceptions of working with 0-5 year olds with trauma, potentially

influencing their chosen interventions, thus providing insight on the sensory and haptic responses in young children depending in the materials used within the interventions.

#### **Sampling**

Upon approval from the Human Subjects Institutional Review Board, the researcher sent a survey/questionnaire attached as a Qualtrics link embedded in an email to LMU MFT Art Therapy professors and alumni in hopes of soliciting participants through snowball sampling. After signing consent, participants were asked to contribute to the research by following the survey/questionnaire with an art reflection. The. Participants were invited to contribute to the study regardless of age and gender, as long as the subject meets the criteria of having a Master's Degree in Art Therapy and/ or Marriage and Family Therapy, and has worked with the 0-5yr old populations.

One limitation that resulting from snowball sampling is that a majority of the participants may be from California, resulting in a possible location specific study. Furthermore, the art therapy field is dominated by women, which could potentially skew the results. Lastly, by asking therapists to participate in the study, there is a higher education lens that could potentially inform the answers provided.

#### **Gathering of Data**

As mentioned above, the researcher obtained data from participants' anonymous answers through the Qualtrics survey. By using the Qualtrics software, the data was collected and organized in a manner that aided the analysis. Furthermore, the study incorporated an art response as data. Participants uploaded an image of their artwork within the Qualtrics survey or email the researcher with art response, which was then analyzed by the researcher.

#### **Analysis of Data**.

Once gathered, the quantitative data was analyzed through the Qualtrics software and by organizing the survey responses on an excel spreadsheet in order to tally answers. In addition to keeping a record of the participants chosen answers, the excel spread sheet organized supplementary comments participants contributed when given the, providing more qualitative data within the survey. When analyzing the participants' artwork, the researcher organized themes and conducted an analysis by assessing art elements in deriving the results.

#### **Results**

The following is the presentation and analysis of data received from the seven participants of the survey exploring the haptic and sensory nature of art therapy materials with children 0-5 years old of complex. Six out of the seven respondents completed the survey. For all intents and purposes, the researcher will present and analysis the data from six respondents. Of the six respondents 50% identify as art therapists and 4 out of 6 have had previous experience with the 0-5 year old age group from becoming a mother and an aunt, as well as having childcare and babysitting experience.

#### **Survey Responses**

In the first figure are the results of the proposed question, "what types of reactions do your 0-5 year old clients with complex trauma have with art materials?" to aid in answering the research question, "can the sensory and haptic nature of art materials aid in the healing of children 0-5 years old of complex trauma?" As apparent by the graph in Figure 1, the two most prevalent reactions experienced amongst the respondents when using art materials with their 0-5 year old clients of complex trauma are control and aggression, with 5 out of 6 respondents confirming these are some of the reactions they witness. Having 4 out of 6 votes were sensory seeking, excitement, and repetition. Aversion, lack of control, and shame each presented with 50% of the respondents. Lastly, there was one response in which none of the reactions where applicable.

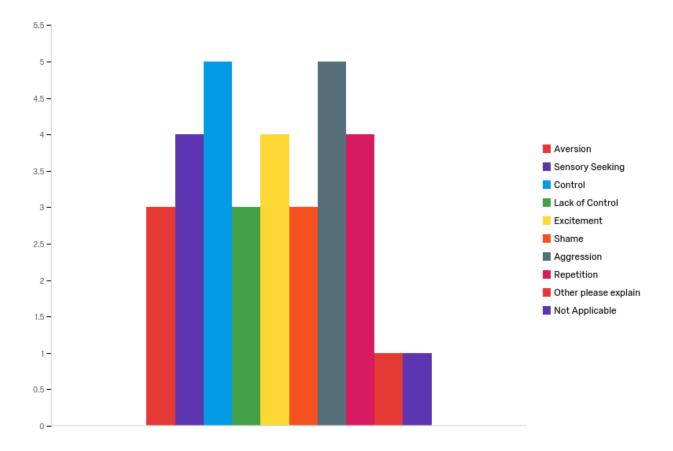


Figure 1. 0-5 year old clients with complex trauma reactions to art materials

In addition to asking the participants to choose responses, they were given the option to explain their experience with each response. The participants' responses explored each reaction in relation to the child's regulation, control and predictability, and the outcome or content of art making (see Appendix A). The participants elaborated on when they typically observed these reactions and as well as how the participants understood these reactions to art making.

Furthermore, when asked how the children reacted to art materials, participants were asked, "What differences do you find in the reactions of children ages 0-5 years old who have experienced trauma and those who have not when using art materials?" Of the six participants, four provided a response. The first response stated, "Positive reaction with art therapy."

Secondly, "More dysregulation or hesitancy to engage in art materials than those who have not." The third response stated, "Some are more tentative or have an element of wanting to be more destructive." Lastly, the fourth response stated, "Not significant differences in my perception. Same differences found within a group of non-traumatized children." As evidenced by the responses, each participant had different observations and opinions on the differences in art making between children 0-5 years old of complex trauma and those without trauma.

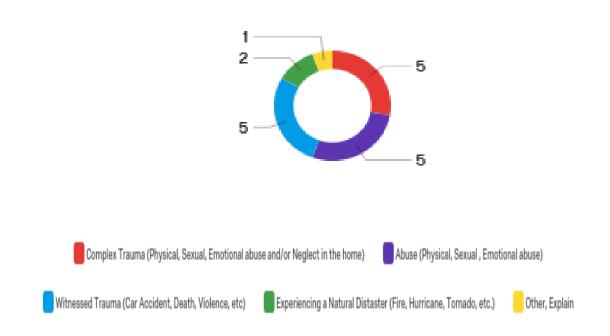


Figure 2. Traumas experienced by clients 0-5 years old.

Furthermore, to gain a better understanding of the reactions of 0-5 year olds of trauma, participants were asked about what traumas their clients have experienced and the behavioral reactions witnessed and experienced, to create a baseline understanding of typical responses to

compare the children's responses when working with art materials. As shown in Figure 2, the majority of the traumas the participants' 0-5 year old clients have experienced are complex traumas, abuse, and witnessed trauma. One respondent added their clients' experienced medical traumas and added community violence and extreme poverty.

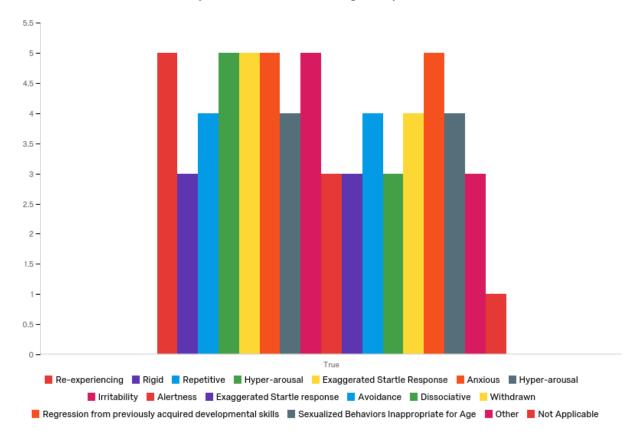


Figure 3. 0-5 year old reactions to trauma.

Of the explored traumas, Figure 3 presents the data of the reactions children 0-5 years old display after a traumatic event. Within the chart, it can be seen the most witnessed reactions with children 0-5 years old of trauma are re-experiencing, anxious (anxiety), irritability, and regression from previously acquired developmental skills with 5 out of 6 participants selecting the above options. 4 out of 6 participants selected repetitive, avoidance, withdrawn, and sexualized behaviors inappropriate to age. There is a duplicate of hyper-arousal on the graph, one

having 5 votes and the other 4 votes. Due to this duplicate and typo meant to ask participants to choose hyper-arousal and/or hypo-arousal, the result of the response for hyper-arousal is invalid. Additionally, exaggerated startle response is also duplicated having 5 out of 6 responses and 3 out of 5 responses, making the results invalid. 3 out of 6 participates selected rigid, alertness, and dissociative. Three participants added other reactions. These reactions being, aggression towards caregiver, hyper-vigilance, and aggression towards adults, peers, and parents. One respondent selected not applicable.

#### What materials do you use in your interventions with 0-5yr olds? (i.e. clay, dolls, paint, blocks, etc.)

Primarily drawing with crayons, markers. Also use play including doll houses, sand tray figures, bibliotherapy.

Toys reminiscent of the trauma, crayons, play dough, paint, developmentally stimulating play materials

Clay, play-doh, toys, puppets, paint, crayons, markers, feathers, legos, etc

Many i.e. toys, dolls, cars, playdough, bubbles, colors, paints, animals, balls,

crayons, markers, pencils, drawing paper (construction paper) colorful paper, scissors, glue, boxes, fabric, buttons, beads, paint, chalk pastels, oil pastels, markers, pens, pencils, natural items (leaves, sticks, pods, flowers), model magic, clay, magazines/ collage, popsicle sticks, found objects.

Figure 4. Materials for interventions for 0-5 year olds.

When working with children 0-5 years old, the following Figures 4 and 5 are the modalities and materials therapists use with their clients. The majority of participants use dyadic therapy and play therapy, receiving 5 out of 6 votes. Next, art therapy is used amongst 4 out of 6 participants.

Behavioral therapy is utilized with 2 out of 6 participants. Last, one respondent added they use narrative therapy with their 0-5 year old clients.

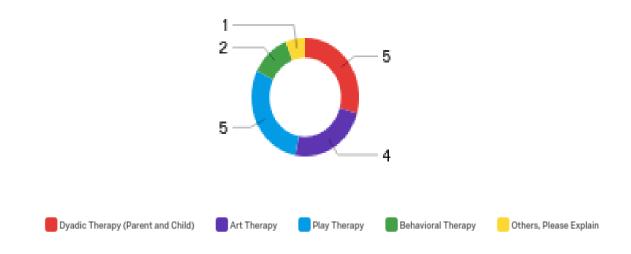


Figure 5. Modalities used for children 0-5 years old.

## **Art Responses**

Lastly, 3 out of the 6 participants provided art responses as seen in figures 6, 7, and 8. Figure 6 depicts an arm reaching out to what appears to be a child hugging itself. The image of the arm is covered in hearts along, indicating the love the person the arm is attached to wants to wants to show children of trauma. The respondent in Figure 6 wrote alongside the image, "Trying to reach out with love and compassion to a child who has learned the world is not safe place." The image created is made with solely a black writing utensil, potentially exploring the absolutist thinking a child can have at an early age. Situations are only seen in black or white, "good or bad." With a child of trauma their view is more often skewed towards "bad" and "not safe."

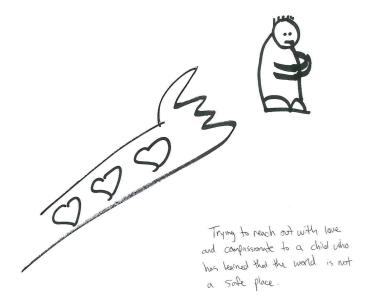


Figure 6. Participant 1's Artwork



Figure 7. Participant 2's Artwork

Additionally, the simplicity of the black writing utensil can also indicate the simplicity of one consistent person showing love and compassion to a young child of trauma setting the path for a positive and healthy trajectory for healing. According to the ACE Study (Center for Disease Control and Prevention, 2016), it only takes one consistent, nurturing adult to combat the affects of Adverse Childhood Experiences such as trauma.

In Figure 7, the image depicted is of a crying child surrounded by a red border. There are red hearts along the left side of the child's head surrounded and covered by blue. Lastly, there is a blue square with quadrants representing a window. The participant wrote, "The kids so often show us what they have experienced through their behaviors like aggression or withdrawal and in their art and play. It's so important to remember this fact and help their caregivers understand the need for love, structure, and safety. Art and play can be a needed window to entering their world and provide patience and consistency." The artwork conveys a sense of pain and suffering a child goes through in dealing with trauma such as complex trauma as seen in the tears drawn of the child face. The hearts can be seen as a desire to be loved and a child's behaviors attempting to speak and convey that desire to others. The red border and the blue windows indicate the escape art and play can be for a child with trauma. The child appears to be looking out a red window as well having a blue window as another form of escapism. The image also speaks about the need for containment for a child to feel secure to continue to develop and explore the world around them by having the image contained by a red border. Play and art can be one source to contain a child's emotions. Responding to a child's desire to be loved brings a sense of containment and security.

In Figure 8, the respondent wrote, "Exploration, Reflection, Translation, and Relationship," for their artwork in which they split a piece of paper in half creating a mirror

image on each side of the paper. The image appears plant-like with its organic serpentine shapes and seedpod or leaf structures. The respondent's description speaks of "exploration" which can be seen in the many directions the extensions of the shape are going and the space taken throughout the page. Additionally, the image reflected on both sides of the paper speaks about the respondent's description of "reflection, translation, and relationship," exploring the parent-child relationship and how the child's behaviors can be reflection of the child translation of the caregiving in the home.



Figure 8. Participant 3's Artwork.

## **Findings of Data**

According to the data, it appears that with children 0-5 years old of trauma there emerged themes of control, aggression, and relationship. Responses from the study revealed that the therapists utilize play, creativity, and sensory experiences for processing and healing in the treatment of children age 0-5.

Control. As evidenced by the responses within the survey, there is a pattern of the child having the need to control the situation, may it be with the play or art materials. The theme of control and containment was present in the literature. A recurring theme in the literature regarding control and trauma, is allowing the client to be an active participant in their healing process. This sense of being in control of their healing process can be achieved through the containment the therapist provides within the therapy space and/ or through the art materials. When a child appears to have a lack of control, dysregulation seems to occur. It appears that repetition of the trauma narrative and repetition in the creation process, such as schemas or dots, may provide a sense of control and predictability that the child is seeking. It is known that children thrive in many aspects of their development, such as socio-emotional and cognitive development, if there is routine and predictability in their everyday lives. Thus supporting the data and the current literature for the presentation of "control" during therapy sessions either with materials, the trauma narrative, and play.

**Aggression.** It can also be seen that aggression, with the materials and behaviorally, plays a large role in a child's reaction and processing of their trauma. With the majority of the participants voting that aggression and irritability are reactions they see with children of trauma, leads the researcher to believe that this may also be related to the child's desire for control. In addition to control, aggression can be used as a survival skill brought upon by the "fight, flight, or freeze"

sympathic nervous system response triggered by the cortisol levels heightened within a child of trauma. Thus aggression appears to be a way to protect themselves in situations that are not predictable or provide a sense of security for the child. In the literature, aggression appears to be a symptom more than a means for healing. It could be argued that aggression is seen as an act of discharge and regulation when placed on the art materials leading to the client's healing. Creativity and Sensory Experiences. When asked about material and modalities, the participants provide open-ended materials in which a child can explore. Thus bringing to the forefront that creativity and play is innate in the child and usually is a language in which the child can use to articulate and understand the world around them. Using creativity and play could also aid in building rapport to create a sense of security, which then could allow the child process difficult emotions and sensations. With this sense of security, there may be more opportunity to rewrite their story through exploring through repetition and creativity when using open-ended materials. In majority of the literature with children of trauma, creativity and sensory activities are presented as impetus for conversation as opposed to the direct tool for healing. This research reinforces the importance of creativity and sensory modalities to aid in the healing process for child 0-5 years old of complex trauma.

Additionally, utilizing sensory experiences within the creative process could potentially aid in regulating internal experiences that are difficult to understand and articulate. There could be potential to connect the external sensory experiences with internal experiences, which could then lead the child to building an emotional vocabulary to aid in the healing process.

**Relationship.** What appeared to be the most evident through the data was the importance of relationship. This study reinforced the literature on the importance of dyadic therapy and of the caregiving relationship for children 0-5 years old. The most common traumas the participants'

clients' have experienced deal with relational traumas. Most responded that their clients' have experienced complex trauma in the home, abuse, and witnessed trauma. These three categories all appear to deal with relationships. In addition to being traumatized by a relationship, a relationship can also be utilized in the healing process. This is evident by a majority of the participants using dyadic therapy in their sessions.

Through analyzing the data, there appears to be an impactful response with children 0-5 years old and their relationships. Relationships can hurt and relationships can heal. Without a sense of security within a relationship, exploring through open-ended play and sensorial/haptic experiences may not provide growth and processing in healing for children 0-5 years old of complex trauma. Children 0-5 years old appear to have a desire for control, utilizing means such as aggression, to provide themselves a predictable and secure environment, which prevents from growing skills through exploration, and only being concerned about survival.

## **Conclusions**

The purpose of the study was to attain baseline information about how the sensory and haptic nature of art materials can be utilized in the treatment of children 0-5 years of complex trauma. The information that was provided from the participants of the survey study revealed many taking off points for further research. The most apparent result and conclusion that were revealed to the researcher is the importance of the caregiving relationship. According to the literature and research in the field of early childhood, the sentiment of the importance of a secure attachment to a nurturing adult for a child 0-5 years old is essential can be confirmed. This survey study reinforced the notion that a healthy caregiving relationship is the basis for a child's healing between the ages of 0-5 years old of complex trauma. What was made apparent to the

researcher is that relationships can hurt a child's growth; but it is with in relationships a child can heal.

As for answering the research question, how can the sensory and haptic nature of art therapy aid in the healing of young children ages 0-5 yrs of complex trauma, there is not enough evidence to directly answer the proposed question. What was discovered and reinforced with understanding children 0-5 years old of complex trauma and the sensory and haptic natures of art materials are the children's responses to the materials. According to the results, the most prominent reactions with the art materials with children 0-5 years old of trauma appear to be aggressive and a desire to be in control. To further support the following research there is a need to have a larger population size to yield more results.

Furthermore, knowing the importance relationships, there is a potential in utilizing the nature of art materials as a tool for assessment in the treatment process with child 0-5 years old of complex trauma within dyadic therapy sessions. This is a call for further research by employing focus groups and case studies utilizing sensory art materials during middle phase treatment as a way for assessment.

#### References

- American Art Therapy Association (2017). About Art Therapy. Retrieved from <a href="https://arttherapy.org/about-art-therapy/">https://arttherapy.org/about-art-therapy/</a>
- Armstrong, V. G., & Howatson, R. (2015). Parent-Infant Art Psychotherapy: A Creative Dyadic Approach To Early Intervention. *Infant Mental Health Journal*, *36*(2), 213-222. doi:10.1002/imhj.21504
- Backos, A., & Samuelson, K. W. (2017). Projective Drawings of Mothers and Children Exposed to Intimate Partner Violence: A Mixed Methods Analysis. *Art Therapy*, *34*(2), 58-67. doi:10.1080/07421656.2017.1312150
- Bauer, M. G., Peck, C., Studebaker, A., & Yu, N. (2017). Attitudes of Art Therapists

  Toward Working With Evidence-Based Practices. *Art Therapy*, 34(2), 83-91.

  doi:10.1080/07421656.2017.1326225
- Bowlby, J. (1958). Separation Of Mother And Child. *The Lancet*, 271(7018), 480. doi:10.1016/s0140-6736(58)90794-3
- Buckley, T., Punkanen, M., & Ogden, P. (2018). The role of the body in fostering resilience: A Sensorimotor Psychotherapy perspective. *Body, Movement and Dance in Psychotherapy*, 1-9. doi:10.1080/17432979.2018.1467344
- Center for Disease Control and Prevention. (2016, June 14). Violence Prevention.

  Retrieved from <a href="https://www.cdc.gov/violenceprevention/acestudy/about.html">https://www.cdc.gov/violenceprevention/acestudy/about.html</a>
- Corem, S., Snir, S., & Regev, D. (2015). Patients' attachment to therapists in art therapy simulation and their reactions to the experience of using art materials. *The Arts in Psychotherapy*, 45, 11-17. doi:10.1016/j.aip.2015.04.006

- Cozolino, L. (2006). The neuorscience of human relationships. New York, NY: W.W. Norton.
- Desmond, Kimberly J., Kindsvatter, Aaron, Smith, Stephanie Stahl & Hillary (2015)

  Using Creative Techniques With Children Who Have Experienced Trauma,

  Journal of Creativity in Mental Health, 10:4, 439-455, DOI:

  10.1080/15401383.2015.1040938
- De Young, A. C., Kenardy, J. A., & Cobham, V. E. (2011). Trauma in Early Childhood:

  A Neglected Population. *Clinical Child and Family Psychology Review*, *14*(3),

  231-250. doi:10.1007/s10567-011-0094-3
- Elbrecht, C., & Antcliff, L. R. (2014). Being touched through touch. Trauma treatment through haptic perception at the Clay Field: A sensorimotor art therapy. *International Journal of Art Therapy*, 19(1), 19-30. doi:10.1080/17454832.2014.880932
- Finn, H., Warner, E., Price, M., & Spinazzola, J. (2017). The Boy Who Was Hit in the Face: Somatic Regulation and Processing of Preverbal Complex Trauma. *Journal of Child & Adolescent Trauma*, 11(3), 277-288. doi:10.1007/s40653-017-0165-9
- First 5 California State Site. (2017). Retrieved from <a href="http://www.ccfc.ca.gov/">http://www.ccfc.ca.gov/</a>
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., .
  . . Marks, J. S. (1998). Relationship of Childhood Abuse and Household
  Dysfunction to Many of the Leading Causes of Death in Adults. *American Journal of Preventive Medicine*, 14(4), 245-258. doi:10.1016/s0749-3797(98)00017-8

- Fulkerson, M. (2011). The unity of haptic touch. Philosophical Psychology, 24, 493–516. doi:10.1080/09515089.2011.556610
- Oster, G., & Gibson, J. J. (1968). The Senses Considered as Perceptual Systems. *Leonardo*, *I*(1), 89. doi:10.2307/1571911
- Gantt, Linda M. PhD, HLM, ATR-BC & Anderson, Frances EdD, HLM, ATR-BC (2009) The Formal Elements Art Therapy Scale: A Measurement System for Global Variables in Art, Art Therapy, 26:3, 124-129, DOI: 10.1080/07421656.2009.10129372
- Giuliano, R. J., Karns, C. M., Roos, L. E., Bell, T. A., Petersen, S., Skowron, E. A., . . . Pakulak, E. (2018). Effects of early adversity on neural mechanisms of distractor suppression are mediated by sympathetic nervous system activity in preschoolaged children. *Developmental Psychology*, *54*(9), 1674-1686.

  doi:10.1037/dev0000499
- Hass-Cohen, N., & Carr, R. (2008). Art therapy and clinical neuroscience. London: Jessica Kingsley.
- Hilbuch, A., Snir, S., Regev, D., & Orkibi, H. (2016). The role of art materials in the transferential relationship: Art psychotherapists' perspective. *The Arts in Psychotherapy*, 49, 19-26. doi:10.1016/j.aip.2016.05.011
- Langmuir, J. I., Kirsh, S. G., & Classen, C. C. (2012). A pilot study of body-oriented group psychotherapy: Adapting sensorimotor psychotherapy for the group treatment of trauma. *Psychological Trauma: Theory, Research, Practice, and Policy*, 4(2), 214-220. doi:10.1037/a0025588

- Leggett, E. (2009). A creative application of solution-focused counseling: An integration with children's literature and visual arts. Journal of Creativity in Mental Health, 4, 191–200. doi:10.1080/15401380902945269
- Lusebrink, V. B. (2004). Art Therapy and the Brain: An Attempt to Understand the Underlying Processes of Art Expression in Therapy. *Art Therapy*, 21(3), 125-135. doi:10.1080/07421656.2004.10129496
- McLeod, S. (2010). What is the Stress Response. Retrieved from https://www.simplypsychology.org/stress-biology.html
- Mcleod, S. (2014, January 03). Jean Piaget's Theory of Cognitive Development.

  Retrieved from <a href="https://www.simplypsychology.org/">https://www.simplypsychology.org/</a>
- Mcleod, S. (2018). Maslow's Hierarchy of Needs. Retrieved from https://www.simplypsychology.org/maslow.html
- McLeod, S. A. (2018). Sensorimotor stage. Retrieved from https://www.simplypsychology.org/sensorimotor.html
- McLeod, S. A. (2018). Preoperational stage. Retrieved from https://www.simplypsychology.org/preoperational.html
- Metzl, E. S. (2015). Holding and creating: A grounded theory of art therapy with 0–5-year-olds. *International Journal of Art Therapy*, 20(3), 93-106. doi:10.1080/17454832.2015.1076015
- Moon, B. L. (2016). The Sirens of Definition: Responding to the Call. *Art Therapy*, *33*(3), 156-159. doi:10.1080/07421656.2016.1199247

- Ogden, P., & Minton, K. (2000). Sensorimotor psychotherapy: One method for processing traumatic memory. *Traumatology*, *6*(3), 149-173. doi:10.1177/153476560000600302
- Pesso-Aviv, T., Regev, D., & Guttmann, J. (2014). The unique therapeutic effect of different art materials on psychological aspects of 7- to 9-year-old children. *The Arts in Psychotherapy*, 41(3), 293-301. doi:10.1016/j.aip.2014.04.005
- Pénzes, I., Hooren, S. V., Dokter, D., Smeijsters, H., & Hutschemaekers, G. (2014).

  Material interaction in art therapy assessment. *The Arts in Psychotherapy*, 41(5), 484-492. doi:10.1016/j.aip.2014.08.003
- Raider PhD, Melvyn C., Steele PsyD, William, Delillo-Storey LPC, Margaret, Jacobs MED, Jacqueline, & Kuban, Caelan MSW (2008) Structured Sensory Therapy (SITCAPART) for Traumatized Adjudicated Adolescents in Residential Treatment, Residential Treatment for Children & Youth, 25:2, 167-185, DOI: 10.1080/08865710802310178
- Sholt, M., & Gavron, T. (2006). Therapeutic Qualities of Clay-work in Art Therapy and Psychotherapy: A Review. *Art Therapy*, 23(2), 66-72. doi:10.1080/07421656.2006.10129647
- Snir, S., Regev, D., & Shaashua, Y. H. (2017). Relationships Between Attachment

  Avoidance and Anxiety and Responses to Art Materials. *Art Therapy*, 34(1), 2028. doi:10.1080/07421656.2016.1270139
- Spooner, H. (2016). Embracing a Full Spectrum Definition of Art Therapy. *Art Therapy*, *33*(3), 163-166. doi:10.1080/07421656.2016.1199249

- Streri, A. (2005). Touching for knowing in infancy: The development of manual abilities in very young infants. *European Journal of Developmental Psychology*, 2(4), 325-343. doi:10.1080/17405620500145669
- Tripp, T. (2007). A Short Term Therapy Approach to Processing Trauma: Art Therapy and Bilateral Stimulation. *Art Therapy*, 24(4), 176-183. doi:10.1080/07421656.2007.10129476
- Waller, D. (2006). Art Therapy for Children: How It Leads to Change. *Clinical Child Psychology and Psychiatry*, 11(2), 271-282. doi:10.1177/1359104506061419
- Washington Coalition of Sexual Assault W. (2016). The Neurobiology of Reactions to Stress: Fight or Flight, then Freeze. Retrieved from <a href="http://www.wcsap.org/neurobiology-reactions-stress-fight-or-flight-then-freeze">http://www.wcsap.org/neurobiology-reactions-stress-fight-or-flight-then-freeze</a>
- Williams, W. I. (2006). Complex Trauma: Approaches to Theory and Treatment. *Journal of Loss and Trauma*, 11(4), 321-335. doi:10.1080/15325020600663078

## Appendix A: 0-5 year old clients of complex trauma reactions to art materials comments.

Aversion	Sensory Seeking	Control	Lack of Control	Excitement
Sometimes they will freeze or show lack of interest	Depending on sensory profile, yes	Often hesitant to express	Get easily deregulated	Yes
Depending on sensory profile, yes	Some seek messy materials and make large "messes"	Yes, frequently to counter feeling powerless	Less frequently	Many clients use all the materials for one small project due to enthusiasm for the abundance of material choices
Some avoid messy materials		Some select items that are easy to control and also struggle to control them or find that nothing they create is quite right to them	When loosing control of materials clients often become uncomfortable and require affect regulation intervention	
Shame	Aggression	Repetition	Other Please Explain	Not Applicable
Self-critical	When dysregulated	Some repeat trauma themes without resolution	Some clients are so controlled with the materials while others are controlled with the story they tell about the images they create.	
Rarely, unless they have been directly criticized	Yes, toward manipulatives (e.g. play dough)	Yes, creating predictability in his or her world and processing memories		
After creating lots of art some clients express remorse about "making a mess"	Some clients will become aggressive with materials, especially if struggling to complete a project in their idealized way.	Clients often repeat the same image over and over on the same page, often lots of dots or lines, while other clients engage in creating the same or similar images week after week.		

## **Appendix B: Email to Participants**

Dear participant,

As an emerging MFT Art Therapist in Loyola Marymount University's Martial and Family Therapy Department, I am conducting research to further understand the Early Childhood experience, specifically of Complex Trauma, in mental health services to attain a baseline for young children ages 0-5yrs.

Currently, I am looking for participants to partake in the survey below to gain insight and themes to inform my research. I am reaching out to those who are therapists and/or art therapists who have worked with the 0-5 yr. old age group within a therapeutic setting. Please consider partaking in the survey to further research within the Art Therapy field, as well as, furthering the understanding of how to treat mental health during a child's critical time of development.

Below is a Qualtrics survey asking about your experience as a therapist working with the 0-5yr old age group with complex trauma. Within this survey you will be asked to provide information about your observations and expertise with this population. Lastly, you will be asked to reflect your experience through art making, which then can be uploaded within Qualtrics. Please allot 15-30 minutes, depending on how long your art making process takes, to complete the survey.

All information will anonymous using the Qualtrics software.

If you have a few moments, please look over the consent form attached, and complete a survey/questionnaire with an art reflection.

Once completed, please forward the survey to your colleagues who work with the 0-5 year old population. This will help to gather more data and is much appreciated.

Please complete the survey by Saturday February 9<sup>th</sup>, 2019.

If any questions arise please contact Sarah Duncan at Sduncan4@lion.lmu.edu or 818.425.1688.

Best,

Sarah Duncan

## **Appendix C: Informed Consent**

#### LOYOLA MARYMOUNT UNIVERSITY

## Informed Consent Form

Date of Preparation December 3rd, 2018

## **Loyola Marymount University**

# Understanding the Sensory and Haptic Reponses of Art Therapy Materials with Children Ages 0-5yrs: Therapists' Experience

- 1) I hereby authorize <u>Sarah Duncan MFTT AT Intern</u> to include me (my child/ward) in the following research study: <u>Understanding the Sensory and Haptic Reponses of Art Therapy Materials with Children Ages 0-5yrs: Therapists' Experience.</u>
- 2) I have been asked to participate on a research project, which is designed to <u>provide the</u> <u>researcher information and insight about the reactions of art therapy with the 0-5year old population, which will last for approximately 3 months.</u>
- 3) It has been explained to me that the reason for my inclusion in this project is that <u>I am</u> <u>currently a Therapist who has worked with the 0-5yr old population.</u> (e.g., I am a student, female, etc.)
- 4) I understand that if I am a subject, I will <u>participate by filling out questionnaires/surveys</u> and creating an art response, **which will be approximately 30 minutes.**

The investigator(s) will <u>collect responses and reflections to synthesize and gain insight to how children 0-5 yrs. old respond to art therapy materials to formulate her Master's Thesis.</u>

# I understand when creating the art response I will use materials in which are accessible and I have the ability to use any art material of my choosing.

These procedures have been explained to me by Sarah Duncan MFTT AT Intern

- 5) I understand that my artwork may be featured in Sarah Duncan's Masters Thesis without my identifiable information and my identity will not be disclosed.
- 6) I understand that the study described above may involve the following risks and/or discomforts: <u>Vulnerability in the art reflection process.</u>
- 7) I also understand that the possible benefits of the study <u>are reflecting on experiences</u> with the 0-5year old populations and gaining insight on how to further this population's <u>treatment through art therapy.</u>
- 8) I understand that <u>Sarah Duncan MFTT AT Intern</u> who can be reached at <u>818.425.1688 or sduncan4@lion.lmu.edu</u> will answer any questions I may have at any time concerning details of the procedures performed as part of this study.

- 9) If the study design or the use of the information is to be changed, I will be so informed and my consent reobtained.
- 10) I understand that I have the right to refuse to participate in, or to withdraw from this research at any time without prejudice to (e.g., my future medical care at LMU.)
- 11) I understand that circumstances may arise which might cause the investigator to terminate my participation before the completion of the study.
- 12) I understand that no information that identifies me will be released without my separate consent except as specifically required by law.
- 13) I understand that I have the right to refuse to answer any question that I may not wish to answer.
- 14) I understand that if I have any further questions, comments, or concerns about the study or the informed consent process, I may contact David Moffet, Ph.D. Chair, Institutional Review Board, 1 LMU Drive, Suite 3000, Loyola Marymount University, Los Angeles CA 90045-2659 at david.moffet@lmu.edu.
- 15) In signing this consent form, I acknowledge receipt of a copy of the form, and a copy of the "Subject's Bill of Rights".
- 16) By completing and submitting the questionnaire/survey and art response on Qualtrics, I certify that I am age 18 or older, and I am consenting to participate in Sarah Duncan's study.

\*If you do not wish to participate in the study, please disregard the email and consent form.

## Appendix D: Experimental Subjects Bill of Rights

### LOYOLA MARYMOUNT UNIVERSITY

## Experimental Subjects Bill of Rights

Pursuant to California Health and Safety Code §24172, I understand that I have the following rights as a participant in a research study:

- 1. I will be informed of the nature and purpose of the experiment.
- 2. I will be given an explanation of the procedures to be followed in the medical experiment, and any drug or device to be utilized.
- 3. I will be given a description of any attendant discomforts and risks to be reasonably expected from the study.
- 4. I will be given an explanation of any benefits to be expected from the study, if applicable.
- I will be given a disclosure of any appropriate alternative procedures, drugs or devices that might be advantageous and their relative risks and benefits.
- 6. I will be informed of the avenues of medical treatment, if any, available after the study is completed if complications should arise.
- 7. I will be given an opportunity to ask any questions concerning the study or the procedures involved.
- 8. I will be instructed that consent to participate in the research study may be withdrawn at any time and that I may discontinue participation in the study without prejudice to me.
- 9. I will be given a copy of the signed and dated written consent form.
- 10. I will be given the opportunity to decide to consent or not to consent to the study without the intervention of any element of force, fraud, deceit, duress, coercion, or undue influence on my decision.

# Appendix E: Survey (3pages)

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Have you had any previous experience with the zero to five populations before becoming a therapist?  O Yes O No	
If so, what setting? (i.e. Early Childhood education, becoming a parent or relative, childcare, etc.)	
What traumas have your 0-5 year old clients experienced?  Complex Trauma (Physical, Sexual, Emotional abuse and/or Neglect in the home)  Abuse (Physical, Sexual, Emotional abuse)  Witnessed Trauma (Car Accident, Death, Violence, etc)  Experiencing a Natural Distaster (Fire, Hurricane, Tornado, etc.)  Other, Explain	
What behaviors have you observed from your 0-5yr old clients as a result from a traumatic event? Check all that apply.  Re-experiencing Rigid Repetitive Hyper-arousal Exaggerated Startle Response Anxious Hyper-arousal Irritability	

	Alertness
	Exaggerated Startle response
	Avoidance
	Dissociative
	Withdrawn
	Regression from previously acquired developmental skills
	Sexualized Behaviors Inappropriate for Age
	Other
	Not Applicable
Wh	at modalities do you use with children 0-5? Choose all that apply.
	Dyadic Therapy (Parent and Child)
	Art Therapy
	Play Therapy
	Behavioral Therapy
	Others, Please Explain
Are	you an Art Therapist?
0	Yes
$\bigcirc$	No
	at materials do you use in your interventions with 0-5yr olds? (i.e. clay, dolls, paint, cks, etc.)

What types of reactions do your 0-5 yr old clients with complex trauma have with art materials? Explain

	Aversion	
	Sensory Seeking	
	Control	
	Lack of Control	
	Excitement	
	Shame	
	Aggression	
	Repetition	
	Other please explain	
■ Not Applicable		
-	ou find in the reactions of children ages 0-5 years old who have	
experienced trauma and those who have not when using art materials?		

Using visual art materials of your choice, create a piece reflecting upon your experience with 0-5 yr. olds with complex trauma. What comes to mind? Please include a written response with your creation. Upload a PDF to the Qualtrics survey or send an email to Sduncan4@lion.lmu.edu.

Powered by Qualtrics