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by

Ronald Camacho

A research paper presented to the

FACULTY OF THE DEPARTMENT OF MARITAL AND FAMILY THERAPY LOYOLA MARYMOUNT UNIVERSITY

In partial fulfillment of the requirement for the degree MASTER OF ARTS

May, 2019

Signature Page



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Abstract

This paper depicts a U.S. veteran and graduate student's experience using meditation, artmaking, and journaling to target the effects of trauma and its symptoms of post-traumatic stress disorder and dissociation. This is a self-study utilizing art as the main method for communication and knowing. The data was gathered by using a combination of Pat Allen's Open Studio Process and elements of the Art Therapy Trauma Protocol using bilateral artmaking in a five-session process conducted in a local art studio in San Diego. The meditation was conducted as a contemplative practice with attention and intention focusing on traumatic experiences. Fragmented memories and phenomenological experiences were stimulated during the research process through metaphoric content in the art and archetypal visualizations during meditation. These were explored through the multiple phases of meditation, artmaking, observing, and journaling. This process allowed for integration and healing through meaning making, bilateral stimulation, and somatic experiencing.

Disclaimer

This research project contains the author's personal experience with art therapy in conjunction with a meditative practice. It is not a direct representation of LMU faculty or staff. This is a self-study using art as a way of knowing, informed by the author's own personal experiences, biases, and cultural perspectives. It focuses on subjective experiences and data, and is not intended to represent any general findings.

Dedication

I want to dedicate this research study to my daughter Selena Camacho, for showing me how to love and inspiring me to work on my invisible wounds in order to be a better father and role model. I am grateful to feel unconditional love towards another human being, which is undeniably the basis of our relationship. I also want to dedicate this research to individuals who have suffered and lived through the seemingly insurmountable pain that can occur in many ways and forms in this human experience. I hope this study provides insight into the lived experience of post-traumatic stress disorder and dissociation. I hope, too, that it can highlight potential avenues for integration and healing.

Acknowledgements

This has truly been a transformative endeavor that I could not have accomplished without the support and invaluable experience of the all the faculty and staff members of LMU's Marital and Family Therapy / Art Therapy Department. I want to express tremendous gratitude for the timely guidance, inspiration, and passion for the field of art therapy that the faculty and staff demonstrated throughout my graduate school experience. I greatly appreciate the program Chair, Dr. Einat Metzl, for always providing a kind heart and gentle space for open communication and concerns, especially when I thought I was losing my mind. I want to thank my research mentor, Dr. Jessica Bianchi, for providing the flexibility for my own personal struggles concerning this research project and for providing warm encouragement throughout this personal journey. I also want to give thanks to the people in my life who supported and encouraged me throughout the sleepless nights, the doubts, and the tears that accompanied this experience.

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Introduction

The Study Topic

This research study explores the experiential process involved with art therapy which can help in the integration of fragmented memories associated with dissociation in relation to trauma. Due to my own military service and extensive trauma history including dissociative states, I intend to explore art therapy's impact on trauma recovery while working on my own healing to improve my overall quality of life as well as the ability to be of service to the clients I work with. This motivation is ignited by my childhood trauma, which included physical, emotional, and sexual abuse, as well as my experience of military service, during which time I experienced combat-related trauma during Operations Iraqi and Enduring Freedom. Since childhood, I have been struggled with not being able to recall large portions of my life, as well as with chronic depression, identity crises, anxiety, addiction, and feeling as if life is somehow unreal.

Insight into these concerns and questions did not really begin until I was medically retired from the Marine Corps due to being diagnosed with post-traumatic stress disorder (PTSD) and started the transition into graduate school. I felt like my life was turned upside down as I entered into a career field of helping, healing, and advocacy, which in many ways is the mirror opposite of my military experience. Although I had been in my own mental health treatment for four years before my retirement, it was not until I was out of the military environment that I began to reflect on my experiences and how they have impacted my mind, body, relationships, behavior, and overall sense of self. This reflection, accompanied by new insights gained through the graduate program, highlighted feelings of guilt, regret, deep sadness, and hopelessness, which manifested itself as what I thought to be an existential crisis. Once I realized that the majority of my life had been traumatic, I began to feel lonely, cut off from people. I felt grief about my life experiences, and wondered: what is the purpose of life? Through this research study and through intense work in my own therapy, I have sought to experience a different perspective on my life and gain more insight into how art therapy can be a catalyst for healing.

Veterans currently struggle with PTSD, depression, substance use disorders (SUDs), Traumatic Brain Injuries (TBIs), anxiety, and suicide at a higher rate compared to non-veteran populations (Ganzer, 2016). The U.S. Department of Veteran Affairs ([VA], 2018) reports that up to 20% of veterans who served in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) are diagnosed with PTSD. Symptoms involved with PTSD include sleep disturbances, outbursts of anger, emotional numbness, and difficulties in adjustment concerning their activities of daily living (American Psychiatric Association [APA], 2019), which has also been my experience living with PTSD. Of particular interest in this study is the PTSD symptom of dissociation.

According to the VA (2018), the research concerning the relationship between PTSD and dissociation has indicated that there is a dissociative subtype of PTSD (D-PTSD), permeated by symptoms of derealization and depersonalization. Derealization (i.e., feeling as if life or the world is not real) and depersonalization (i.e., feeling as if oneself is not real) are feelings and experiences that I have felt since childhood and which have persisted throughout my adult life. A European study with Danish soldiers returning from Afghanistan indicated that individuals living with PTSD experienced a greater degree of dissociation (Ponce de León, Andersen, Karstoft, & Elklit, 2018).

Researchers suggest that dissociation, which affects memory processing and organization, is the mechanism underlying the development and severity of PTSD after

various types of trauma (Bedard-Gilligan & Zoellner, 2012). Depending on their theoretical positions, researchers describe dissociation as a process, a set of symptoms, or a type of psychological defense mechanism (Mattos, Pedrini, Fiks, & de Mello, 2016). Due to the way traumatic memories are stored and processed, verbal processing of memories and emotions involved with trauma seems to be limited in its effectiveness. Because of the memory difficulties experienced by those with dissociative experiences, producing art may serve as a means of accessing those memories (Murphy, 1994). Although research specifically addressing art therapy and dissociation seems to be limited, the research concerning trauma and art therapy indicates that art therapy can assist in integrating dual-hemispheric brain functions, helping to integrate traumatic experiences (Bogousslavsky, 2005; Chong, 2015; McNamee 2003, 2004, 2005; Tarwal, 2007; Ziadel 2005). It may therefore lead to the effective treatment and recovery of individuals diagnosed with PTSD, including the dissociative subtype, D-PTSD.

This study uses a qualitative research approach through an art-based inquiry, utilizing a combination of Pat Allen's Open Studio Process (OSP; Allen, 2016) and elements of the Art Therapy Trauma Protocol (ATTP; Tarwal, 2007). The following research questions are concerned with the relationship between art and trauma and art therapy's effectiveness in treating symptoms, meaning making, and knowing:

1. What are the felt experiences – both physical sensations and emotional responses – when using meditation, art, and journaling to process traumatic memories?

2. How did the process of meditating, artmaking, and journaling impact D-PTSD symptoms and characteristics (e.g. avoidance, derealization, depersonalization, and memory fragmentation)?

3. What metaphoric content emerged during the process of meditation, artmaking, and journaling and how are these metaphors connected to lived experience?

Significance of the Study

Although I have spent the majority of six years working on my trauma using traditional "talk therapy," it has not been effective at targeting the fragmented memories that occur during the dissociation process. After I retired from the military, memories of my childhood trauma began to surface, including some that I had not recalled for over 10 years. This sudden resurgence of childhood memories seemed to have been repressed and avoided during my approximate 14-year military service. The military served as a new identity and new life, which may have made it easier to compartmentalize my childhood experiences in order to manage the different roles associated with being in the military.

This seems to correlate with how dissociation is described as a defense mechanism whereby memories of trauma are not encoded properly and therefore become fragmented. The dissociation and the fragmented memories seemed to have served a purpose in order for me to survive traumatic events and continue to function in different roles in my life. Although essential to survival, these fragmented memories encoded in the limbic system (Levine, 2005) were the source of unpleasant symptoms that permeated every element of my life. Talwar (2007) explains that suppressed traumatic memories retain their vivid intensity on an affective level, even years after the traumatic event(s). Therefore, treatment modalities that use verbal language as the main source of communication present a fundamental obstacle for the course of treatment as well as an obstacle for the individual seeking the treatment concerning resources available to them. According to Greenwald (2005), traumatized individuals cope with the trauma in in two ways. One is via the adaptive method, where an individual maneuvers through the stages of grief and loss. The other, non-adaptive method, the individual suppresses the traumatic event; seeking emotional relief from the intensity of the emotion (Talwar, 2007). It is understood that individuals diagnosed with PTSD report vivid sensations, memories, emotions, and experience a lack of control, as if they were unintentionally reexperiencing the trauma (Tarwal, 2007). Van der Kolk (as cited in Tarwal, 2007) confirms that "particularly emotions, images, sensations, and muscular reactions related to trauma may become deeply imprinted in the mind and the traumatic imprint seems to be re-experienced without applicable transformation" (p. 23).

It is my personal experience and testimony that living with PTSD is an experience that has been a ubiquitous process in life which seemed to be telegraphed by my own dissociative defense mechanism in order to survive traumatic events. Years of traditional talk therapy have provided limited assistance in processing the felt traumatic experiences that still manifest as intrusive thoughts, nightmares, somatic symptoms, and hyperarousal, as if I am in a constant state of "fight or flight." The lack of effectiveness of using words to process my trauma seems to be warranted due to the fact that reliving traumatic experiences impairs the frontal lobes and, as a result, affects the processing of thought and speech (van der Kolk, 2002).

Non-verbal modalities of therapies based on artforms such as painting, poetry, music, dance, and drama all stimulate the subcortical areas of the brain and access preverbal memories through kinesthetic and sensory pathways (Talwar, 2007). Talwar states that "visual imagery captures somatic memory and stands as a testimony to the individual's felt experiences" (p. 28). This highlights what Klorer (2005) considers to be the overall goal of trauma treatment: leading people to feel emotions and feelings that have been suppressed.

The findings in this thesis may assist practitioners in understanding the lived experience of utilizing art therapy to process trauma with clients diagnosed with PTSD. This can illuminate art therapy's overall significance, impact, and efficacy in the field of trauma treatment as a whole.

Background of the Study Topic

According to the National Center for PTSD, up to 20 % of veterans who served in OIF and OEF will be diagnosed with PTSD. A dissociative subtype (D-PTSD) is, according to the *DSM-5*, characterized by a disruption in integration of memory, consciousness, identity, or perception of the world (APA, 2018). Kulkarni, Porter, and Rauch (2012) have found that dissociation during and after a traumatic event is related to higher occurrence and increased severity of PTSD in military personnel and civilians alike. Bedard-Gilligan and Zoellner (2012) also affirm this notion, suggesting that consistent dissociation, improper processing of memory, and dissociative encoding are the elements underlying the development and severity of PTSD after various types of trauma. Traumatic memories specifically affect the limbic system and non-verbal regions of the brain. Mattos et al. (2015) remind us that traumatic experiences can create overwhelmingly intense emotions that exceed the capability of the brain to integrate both the sensory and the affective elements of the traumatic event, thus resulting in dissociation.

This indicates that the trauma is not stored in the verbal analytical regions of the brain – i.e., those concerned with written and oral language – but in areas of the mind and body that cannot be processed by words alone (van der Kolk, 1994, 2002; Talwar, 2007). Trauma causes a state of intensified physiological arousal caused by sensory inputs such as sounds, images, textures, smells, and tastes (Rothschild, 2000; van der Kolk, 1994). This response can also be triggered by the traumatic memories themselves, which can increase the persistence of the arousal response (Steele & Raider, 2001).

Furthermore, Levine (1992) endorses that PTSD is a highly activated, incomplete, biological response to trauma, that seems to be frozen in time, and that trauma gets

"locked" in the body in a process also referred to as "somatic memory," (see also Rothschild, 2000; van der Kolk, 1994). Talwar (2007, p. 23) further elaborates that "it is the failure to transform and integrate these sensory imprints related to the trauma that keeps traumatized individuals at an increased level of hyper-vigilance, a cognitive state that prevents the individual from feeling a sense of psychological well-being and physical safety." Treatment approaches for trauma have historically been Evidenced-Based Treatments (EBTs), such as Cognitive Behavioral Therapy (CBT; Davis, 2017), which rely heavily on the prefrontal cortex for processing the traumatic event (Tarwal, 2007). However, studies have shown that individuals who have experienced trauma, process their trauma from the "bottom up – body to mind—and not top down – mind to body" (Tarwal, 2007, p. 25).

Traumatized individuals are unable to regulate the incoming stimuli of the trauma, and this interferes with various parts of the brain, including the amygdala and hippocampus, subsequently bypassing the prefrontal cortex that usually assists with the cognitive processing of the experience (Tarwal, 2007). Van der Kolk (2002) further suggests that the "subcortical regions of the brain are not under conscious control and have no linguistic representation" (p. 5). These subcortical regions retrieve memory in a different way than the more sophisticated areas of the brain that are found in the prefrontal cortex (van der Kolk, 2002). This indicates that, effective trauma treatment must incorporate non-verbal modalities to integrate the emotional and cognitive memory (Talwar, 2007).

According to Tarwal (2007), artmaking and creative processes stimulate the sensorimotor perception and activates the limbic system, specifically the amygdala, which is responsible for the social emotional processing that is connected to the

prefrontal cortex, which permits the integration and activation of the physiological, emotional, and cognitive processes. Therefore, art therapy, due to its therapeutic mechanisms, seems to represent an effective treatment for D-PTSD: a treatment that can enable the processing and integration of traumatic memories more effectively than with verbal modalities of treatment alone (Spiegel, Malchiodi, Backos, & Collie, 2006). Although the non-verbal processing involved in art therapy seems to be an effective way to process traumatic memories, the research concerning its efficacy on treating the dissociative subtype of PTSD is currently limited.

Literature Review

The literature reviewed for this study indicates that there is an extensive amount of research being done to understand veterans' symptomatic experience with PTSD. This section reviews this literature as follows. It begins with an overview of veterans diagnosed with PTSD. Next, there is some background information about PTSD, followed by a discussion of the relationship between PTSD and dissociation. Following that, art therapy's history with treating veterans with PTSD is discussed, along with art therapy's relationship with dissociation.

U.S. Veterans Diagnosed with Post-Traumatic Stress Disorder: An Overview

The U.S. Department of Veteran Affairs (VA) reports that the number of veterans with PTSD varies by service era. Between 11% and 20% of OIF and OEF veterans are thought to have the condition, while 12 % of Gulf War (Desert Storm) veterans suffer from PTSD in any given year. The VA (2018) has also reported that about 15% of Vietnam War veterans were diagnosed with PTSD; however, this number may be inaccurate since these veterans were diagnosed with PTSD approximately 40 years ago which was the most recent study at the time (i.e., the National Vietnam Veterans Readjustment Study, or NVVRS). The VA (2018) estimates that about 30% of Vietnam Veterans have had PTSD in their lifetime.

One of the causes of PTSD in the military is reported to be military sexual trauma (MST), which the VA (2018) describes as any sexual harassment or sexual assault that that is experienced while the individual is in the military. According to the VA (2018), MST can happen regardless of gender and can occur in many settings that include peacetime, training, or war. The Veteran Health Administration (VHA) reports that 23%

of women reported sexual assault when in the military, while 55% of women and 38% of men have been sexually harassed while in the military (VA, 2018).

Research indicates that VHA services provided to separated or retired servicemembers has increased up to 60% in recent years since 2001 (Ramsey et al., 2017). However, it is difficult to obtain accurate statistics regarding the percentage of this population who have been treated, as the majority of the VA data is usually only conducted during veterans' post-retirement screenings (Ramsey et al., 2017). According to Ramsey et al. (2017), any diagnoses acquired later in treatment are not accounted for in the data collected by the VA.

Post-Traumatic Stress Disorder: A Background

The source of trauma leading to PTSD in veterans differs significantly and includes (but is not limited to): "a pre-military personal history of trauma, childhood abuse, adult sexual and physical assault, combat experiences, and MST" (Lehavot et al., 2017). PTSD is characterized by three groups of symptoms: "intrusive re-experiencing, avoidance of reminders and triggers, and hyperarousal including hyper-vigilance and exaggerated startle response" (Spiegel et al., 2006, p. 157). According to Spiegel et al. (2006), it is typical for people with PTSD to continuously re-experience traumatic events in the form of upsetting thoughts, intrusive memories, nightmares, or flashback episodes.

Krystal et al. describe flashbacks as vividly reexperiencing elements of the traumatic event while feeling detached from the world as well as heightened emotional responses and panic-like states. Individuals may dissociate during flashbacks and sensory processing may be distorted and disrupted, leaving individuals feeling like they are in a fog or that they have blacked out. PTSD symptoms are exacerbated especially when individuals are exposed to stimuli that remind them of the trauma, such as similar environments and anniversaries of the event(s) (Spiegel et al., 2006). Symptoms also involve emotional numbness, sleep disturbances, irritability, outbursts of anger, and difficulties in adjustment concerning their activities of daily living (APA, 2019). According to the National Institute of Mental Health ([NIMH], 2019), there is often a shifting between re-experiencing the traumatic event and avoidance of triggers leading to social isolation that can resemble agoraphobia depending on its severity. Furthermore, Spiegel et al. (2006) find that many researchers suggest that, depending on the severity of the trauma, symptoms of PTSD can become chronic if avoidance persists after the initial trauma exposure. According to the NIMH (2019), it is common for PTSD to be co-occurring with depression, substance abuse, and/or other anxiety disorders, as well as with psychosomatic symptomatology such as headaches, gastrointestinal complications, immune system difficulties, dizziness, and chest pain.

It is understood that PTSD is diagnosed when symptoms last more than one month and usually begin within three months of the trauma event but may not begin until years later (Kessler et al., 2017). Some individuals can recover within a short period of time, such as six months, while others continue to be in distress for much longer (Kessler et al., 2017). While the mean average duration of PTSD symptoms is approximately six years across all traumas, it varies significantly depending on the type of trauma type. The duration can range from 13 years or more for traumas involving combat experiences to about one year for natural disaster related traumas (Kessler et al., 2017).

Post-Traumatic Stress Disorder and Dissociation

Of particular interest in this study is the PTSD symptom of dissociation. According to Canadian governmental health services, it is believed that the "underlying cause of dissociative disorders is chronic trauma in childhood" – potentially including repeated physical or sexual abuse, emotional abuse or neglect, and chaotic family environments – which may cause the child to "disconnect" from reality during times of stress ("Dissociation and dissociative disorders", 2019).

The dissociative subtype of PTSD is defined primarily by symptoms of derealization and depersonalization. Tsai, Armour, Southwick, and Pietrzak (2015) describe depersonalization as experiencing "feelings as if you were separated from yourself, watching yourself or your thoughts and feelings as if you were another person, as if you were in a dream, even though you were awake, as if something about you was not real and feeling as if time was moving more slowly" (p. 69). Derealization is described as feeling that things around you seem unreal, strange, and/or unfamiliar, like a dream or a movie (Tsai et al., 2015). While I cover some of the relationships and connections between dissociation, memory fragmentation, and PTSD, a full review of this abundant literature is outside the scope of this paper due to the time frame of a master's level research project. Indeed, the present study focuses more specifically on how art therapy can be an effective approach to treating PTSD and its dissociative subtype.

Dissociation has been variously described as a process, an organization, a set of symptoms, and a set of psychological defense mechanisms (Mattos et al., 2015). Mattos et al. (2015) mention that dissociative symptoms can be "categorized as negative (as functional paralysis) or positive (as intrusions) and psychoform (as amnesia) or somatoform (as tics)" (p. 2). Terms such as "shell shock" have been used to describe

dissociation, whereby "acutely traumatized individuals may appear confused, emotionally dulled, or even catatonic" (Krystal et al., 2000, p. 308), which sounds similar to the experience of having "flashbacks."

Ponce de León et al. (2018) have found that dissociation occurs to some degree in everyone; however, there is high occurrence of dissociative symptoms for individuals with mental health disorders such as PTSD. A European study with Danish soldiers returning from Afghanistan indicated that the level of dissociation is significantly higher among combat-exposed veterans with PTSD; however, this study acknowledged its limitations, in that it did not assess pre-trauma dissociation and prior life difficulties (Ponce de León et al., 2018).

It is possible that the immediate effects of dissociation during the traumatic event – or "peritraumatic dissociation" as termed in Candel and Merckelbach (2004) – function to reduce sensations and emotions such as pain and humiliation, but this is detrimental in the long term. Bedard-Gilligan and Zoellner (2012) refer to dissociation as a "defense mechanism that enables the individual to avoid the traumatic experience" (p. 278). Some researchers assume that peritraumatic dissociation is closely related to PTSD symptoms of emotional numbing and avoidance, which would obstruct the proper processing of information that is required for effective behavioral treatment of PTSD (Candel & Merckelbach, 2004).

Bedard-Gilligan and Zoellner (2012) suggest that dissociative encoding, consistent dissociation and improper memory processing are the elements underlying the development and severity of PTSD after various types of trauma exposure. Bedard-Gilligan and Zoellner (2012) highlight that many researchers understand dissociative encoding as the disruption of the initial processing of the traumatic event, consequently leading to the development and continuation of PTSD. Therefore, dissociation during the traumatic event or "peritraumatic dissociation" (Candel & Merckelbach, 2004) prevents elaboration during encoding (Bedard-Gilligan & Zoellner, 2012), which disrupts both memory storage and retrieval. This consequently increases the susceptibility of an individual to PTSD upon experiencing a traumatic event.

Although research has shown that there is a relationship between peritraumatic dissociation and memory fragmentation, some studies indicate mixed results mostly due to the lack of research concerning this connection (Bedard-Gilligan & Zoellner, 2012). As Ponce de León et al. (2018) suggest, there is a need for longitudinal studies to examine whether dissociation at the time of trauma is a factor that predisposed an individual to PTSD. However, Bedard-Gilligan and Zoellner (2012) further report that, despite the lack of research, traumatic experiences have been found to increase the release of cortisol which is associated with hippocampal dysfunction. Hippocampal dysfunction is linked with discrepancies in declarative memory, specifically, memory processing and fragmentation (Bedard-Gilligan & Zoellner, 2012), which correlates with dissociative encoding. This also supports Candel and Merckelbach's (2004) findings that peritraumatic dissociation would impact the way information is processed, which ultimately impacts the effectiveness of behavioral treatment for traumatized individuals.

Furthermore, there also seems to be a relationship between dissociation and high levels of sexual assault (Wolf et al., 2012). Wolf et al. (2012), in a study of 492 veterans and their intimate partners, found that the individuals with dissociative symptoms reported more sexual abuse during childhood (before age 13 years) and adulthood (18 years old and older). Krystal et al. (2000) further elaborate that dissociative symptoms stemming from childhood trauma continue to impact the individual into adulthood. The sights, sounds, smells, and touch during the traumatic event are encoded as compartmentalized fragments frozen in time; making the traumatic experience feel like a life time (van der Kolk, 1994).

Art Therapy with Veterans Diagnosed with Post-Traumatic Stress Disorder

Most therapeutic approaches used with veterans have historically involved treatments such as CBT and other treatment modalities considered to be evidenced-based (Davis, 2018). Davis (2018), in her comprehensive review of art therapy with veterans, has found that prior to art therapy, occupational therapists, artists, and volunteers used therapeutic art interventions to treat veterans physical and psychological wounds encountered during and after World War I. The first occupational therapist was hired at Walter Reed Medical Center in 1917. The art that was used during that time, which included art activities, ceramics, arts and crafts, and knitting can still be found in the National Museum of Health and Medicine (Howie, 2017).

Although art therapy has not been extensively researched overall, a number of small studies of art therapy for veterans with PTSD have produced beneficial results. Art therapy's ability to provide an opportunity for nonverbal communication has been shown to be helpful with the veteran population, serving as a means to unlock unconscious memories and feelings as well as induce a state of calmness (Avrahami, 2005; Chong, 2015; Lobban, 2014; Lobban & Murphy, 2017; Palmer, Hill, Lobban, & Murphy, 2017). Spiegel et al. (2006) find that art expression has helped individuals recall, re-enact, and integrate traumatic experiences, which further illustrates the impact art therapy has on trauma.

Despite the lack of research on art therapy, there is significant evidence supporting the efficacy of art therapy and the reconstruction of trauma narratives as well as management of stress, physiological symptoms, and mental health disorders resulting from acute or chronic trauma (Spiegel et al., 2006). Avrahami (2005), Chong (2015), Davis (2018), Howie (2017), and Spiegel et al. (2006) all expound on art therapy and its applications in multiple settings and uses with a variety of types of trauma, including domestic violence, school violence and homicide, sexual abuse, medical trauma, and war situations.

Spiegel et al. (2006) highlight a study by Johnson, Lubin, James, and Hale (1997), designed to identify the effectiveness of components of a Specialized Inpatient PTSD Program (SIPU), which found that art therapy was the only component that produced the greatest therapeutic outcome for veterans with severe PTSD symptoms among 14 other standard SIPU elements, such as drama therapy, group therapy, community service, anger management, and journaling. Spiegel et al. (2006) also outline art therapy's various therapeutic mechanisms used to reduce PTSD symptoms as the reconsolidation of memories for fragmentation, progressive exposure to reduce avoidance, externalization for integration of traumatic narratives, reduction of arousal by the innate calming quality of artmaking, reactivation of positive emotion to address emotional numbing, enhancement of emotional self-efficacy for emotion regulation, and improved self-esteem by sharing similar experiences in group art therapy.

Dissociation is specifically linked to emotional numbing and avoidance, which hinders the correct information processing that is required for effective behavioral treatment of PTSD (Krystal et al., 2000). Therefore, art therapy, due to its therapeutic mechanisms, represents an effective treatment for combat-related PTSD as it can "reduce immediate symptoms, can help overcome avoidance and emotional numbing, and can facilitate the organization and integration of traumatic memories in ways that may not be possible with words alone" (Spiegel et al., 2006, p. 161).

Art Therapy and Dissociation

The overall literature indicated a lack of research specifically concerning art therapy and dissociation. Most of the literature does not address the dissociative subtype of PTSD but rather dissociative disorders such as Dissociative Identity Disorder (DID), formerly known as Multiple Personality Disorder. However, the research reviewed in this study indicates that art can have significant effects on memory and the brain which seems to highlight art therapy's promising effectiveness in treating trauma and dissociation. Murphy (1994) finds that people who have been traumatized seek to express their trauma in some tangible way.

Van der Kolk (1994, 2002) suggests that the imprint of trauma impacts the limbic system and non-verbal regions of the brain and are only slightly engaged by cognitive processes that are associated with the verbal more analytical areas of the brain. The art product may be a way to describe a traumatic event that cannot be described verbally for any number of reasons; art may provide clues or function as a way to begin to access those memories (Murphy, 1994).

Many researchers have found that dissociation impairs performance on verbal memory tasks but has less of an impact on visual tasks (Krystal et al., 2000). Thus, art therapy may be a useful means of trauma treatment due to its greater access to more right-hemispheric areas of mental functioning involved in dissociation and trauma (Murphy, 1994). Murphy (1994) suggests that there might be associated links between visual imagery, right brain functions, and dissociation due to the fact that traumatic imagery is located primarily in the right brain regions, as is visual imagery.

The use of art media and the process of creating images may provide a way to access the traumatic imagery associated with dissociation and dissociative disorders due to the assumption that drawing and visual perception are more right-hemispheric activities (Murphy, 1994). Evidently, the majority of the research reviewed associates emotional expression, depressive affect, and traumatic imagery with the right hemisphere of the brain, while the left hemisphere is associated with controlling language and sequential thought (Bugousslavsky, 2005; McNamee 2004, 2005; Murphy, 1994; Tarwal, 2007; van der Kolk, 1994, 2002). However, Ziadel (2005), argues that the research does not support the view that creativity concerning the arts exclusively lives in one hemisphere and states that associating creativity with only the right hemisphere is an "old notion" dating from the infancy of left-right hemisphere research. Ziadel further reports that both left and right hemispheres are stimulated concurrently in the production of visual art. This view was emphasized by Bogousslavsky's (2005) findings, where brain activity indicated that when carrying out an art task, a "complex combination of sensory, cognitive and motor activities - immediately emphasizes the holistic functioning of the brain in creativity" (p. 106).

McNamee (2004), who designed the "Bilateral Art" protocol, also argues that art therapy involves both left and right hemispheric brain activities and incorporates both verbal and non-verbal processes. She further explains bilateral art as a "process of using both hands in an effort to stimulate memories and experiences that reside in both sides of the brain" (p. 232), consequently resulting in the integration of experiences, which is essential for trauma recovery. Although the left hemisphere is concerned with language, speech, analytical thinking, and sequential processing, it is also responsible for confabulation, which is the process of creating narrative (McNamee, 2004, 2005). Bugousslavsky (2005) further makes the bilateral connection by explaining that, in an art therapy, the left hemisphere offers an explanation to the right hemispheric visual creations while the right hemisphere engages visual and sensory motor processes, intuition, emotions, and the procedures involved in creativity. Chong (2015) has highlighted the dual-hemispheric interaction by explaining the various ways in which art therapy aided in the modification of neurobiological pathways that were impacted by early childhood trauma.

Conclusion

The research indicates that the dissociative subtype of PTSD is under-researched especially in relation to art therapy. The research further indicates that there is a significant prevalence of PTSD among combat veterans, who have historically been provided with EBP therapeutic models and traditional "talk therapies." It is understood that dissociation is a natural process or defense mechanism against trauma, where the traumatic experience is fragmented in order to survive the traumatic event. The dissociative phenomenon affects the way the traumatic memories are stored, which, in turn, affects the way the trauma is processed primarily via non-verbal means. Thus, art therapy seems to have an inherent advantage in integrating fragmented traumatic memories which are at the core of dissociation, a probable factor in the severity of the lived experiences of PTSD among veterans and other traumatized individuals.

Research Approach

This case study uses a qualitative research approach including detailed, in-depth data collection and systematic analyses via a self-study. Art is utilized as the main method for communication and knowing. In case study research, data collection can be in-depth and extensive and the data can be collected by conducting interviews, observing the subject (in this case, the self), producing textual memos or journals, and/or examining life histories and profiles or (auto)biographical information (Kapitan, 2010).

According to Kapitan (2010), case- and self-study research approaches focus on contemplating one's behaviors and actions. Some researchers even argue that the data from case or self-studies is too specific and therefore cannot be generalized and used for others (Steinke, 2013). However, my own personal story and experience with using art therapy may provide insights that others may find clinically applicable or useful. This research approach allows for a detailed understanding of a specific person, event, or the self (Steinke, 2013). Obtaining a thorough understanding of myself in this research is essential to helping me become a more effective therapist when working with traumatized clients. More specifically, utilizing self and case study approaches in this research will help me to become more aware of counter-transference and cultural issues concerning the therapeutic relationship.

Additionally, utilizing an art-based inquiry in this qualitative study will help increase my understanding of how artmaking may be beneficial to others in a clinical context by assisting in mind-body integration. In this research, my own emotions and physical responses are observed throughout the process of meditation, reflective artwork, and witness writing. According to van der Kolk (2003), it is not the verbal account of the trauma event that is important, but the non-verbal memory of the fragmented sensory and emotional elements. Therefore, an art-based inquiry seems to be an appropriate avenue to further understand the phenomenon of dissociation in PTSD and its effects on veterans and other trauma survivors.

Sullivan (2010) defines art-based inquiry as the creation of knowledge using visual means within a research perspective. This implies that the art becomes the landscape for investigating certain research problems and methods (Kapitan, 2010). Hervey (2000) defines art-based inquiry as using artistic methods for gathering, analyzing, presenting data, and engages in a creative process. According to Kapitan (2010), one of the purposes of art-based inquiry is to "understand, as a research outcome, the individual and social transformative power of art knowledge in the practice of art and art therapy" (p. 162). Art-based inquiry can enlarge perception, thought, and feeling in order to perceive subtle relationships (Kapitan, 2010) within the complex links between traumatic memories, the brain, the body, and the mind. Furthermore, art-based inquiry can initiate interactions between information coming from the artwork and information already stored in a person's mind (Kapitan, 2010). Through this process, it can assist not only in better understanding the effects of trauma but also in allowing a parallel healing process through the manipulation of this information.

Research Methods

Definition of Terms

Veteran. Title 38 of the Code of Federal Regulations defines a veteran as "a person who served in the active military, naval, or air service and who was discharged or released under conditions other than dishonorable" ("Title 38 United States Code", 2019). Merriam-Webster (2019) defines a veteran as a former member of the armed forces.

Trauma. The APA (2019) defines trauma as "an emotional response to a terrible event such as an accident, rape, or natural disaster. Immediately after the event, shock and denial are typical". Chronic symptoms include unpredictable emotions, flashbacks, strained relationships, and somatic symptoms such as headaches or nausea (APA, 2019). Van der Kolk and Fisler (1995) add that "trauma arises from an inescapable stressful event that overwhelms people's coping mechanisms" (p. 505). These definitions all seem accurate for the purposes of this study.

Post-Traumatic Stress Disorder (PTSD). According to the APA (2019), PTSD is an anxiety disorder that can "occur in people who have experienced or witnessed a traumatic event such as a natural disaster, a serious accident, a terrorist act, war/combat, rape or other violent personal assault". PTSD may cause "intense disturbing thoughts and feelings related to their experience that last long after the traumatic event has ended" (APA, 2019). PTSD symptoms may include flashbacks or nightmares; feelings of sadness, fear or anger; detachment; avoidance of social situations; and exaggerated startle response (APA, 2019).

Dissociation. According to Better Health ("Dissociation and dissociative disorders", 2019), dissociation is a mental process whereby "a person disconnects from their thoughts, feelings, memories, or sense of identity." Dissociation and dissociative

disorders include "dissociative amnesia, dissociative fugue, depersonalization disorder, and dissociative identity disorder" ("Dissociation and dissociative disorders", 2019). Merriam-Webster (2019) defines dissociation as the "separation of whole segments of the personality or of discrete mental processes from the mainstream of consciousness or behavior". Researchers have described dissociation as a process, an organization, a set of symptoms, or even a set of psychological defense mechanisms (Mattos et al., 2015). In this research, I address dissociation as a mental process and a defense mechanism in terms of its relationship with PTSD.

Archetype. For the purposes of this study, I use the following definition of archetype. Archetypes and archetypal patterns are a background tapestry, against which our individual complexes are played out (Reppen, 2006). These are ideas and images in our psyche that are elements in the personality which are instinctive humans characteristics to react, behave, and interact with others in a typical and predictable manner (Reppen, 2006).

Study Design

This case study was conducted using meditation, art, and journaling as a way of knowing, to process and integrate fragmented memories involved with the dissociative subtype of PTSD. An art-based inquiry was utilized in this case study to explore how art can help in processing fragmented traumatic memories through a graduate student and combat-veteran lens. The intention was to integrate traumatic memories back into consciousness, identity, and perceptions of environment, allowing for acceptance and healing. The art-based inquiry was based on a combination of Pat Allen's Open Studio Process (OSP) (Allen, 2016) and elements of the Art Therapy Trauma Protocol (ATTP; Tarwal, 2007).

According to Allen (2016), the Open Studio Process can access the unlimited potential of the creative source through art and writing and support change for healing as well as clarify life experiences. The Open Studio Process involves setting an intention as a guide to artmaking, nonjudgmental experimental artmaking, allowing the art to lead through its creative energy, and writing and reading as a witness to the art individually or in a group environment (Allen, 2016). I incorporated Allen's (2005) three key principles of intention, attention, and witnessing through writing and reading, as these can provide the foundation for self-healing as well as a gateway towards art as a spiritual practice. Allen (2005) highlights Florence Cane's experience with artmaking, stating "that while engaging in a disciplined practice of art making, one's problem areas arose naturally; and that the demands of creating art provided reparative opportunities" – thus allowing individuals to manipulate and reinterpret their traumatic memories via the artmaking process (Talwar, 2007).

I analyze in this thesis the results of a five-week process, and examine five experiences during meditation and four reflective art pieces focused on my traumatic experiences and memories. I also examine five written journals as witness writing for the art pieces and experience during artmaking. The process included a culminating piece to reflect on the entire process and one final written journal to conclude the data collection. The art and journals were reviewed by an art therapy supervisor, research mentor, or practicing art therapist as a witness, providing an objective perspective on the emerging themes from the art.

The ATTP seemed to be an appropriate method for this study since the integration of traumatic experiences is "dependent upon the bilateral stimulation of the frontal lobes, especially within the prefrontal cortex" (Talwar, 2007, p. 26). The ATTP provides a non-

verbal method to target somatic memory of traumatized individuals using right and leftbrain stimulation influenced by Shapiro's (2001) Eye Movement Desensitization and Reprocessing (EMDR), McNamee's (2003) bilateral art protocol, and Cassou's (2001) Point Zero method of painting. The differences between the EMDR protocol and the ATTP are in targeting memory. EMDR targets specific events, which requires individuals to be able to recall the event to be able to talk about it (Talwar, 2007). However, with art therapy, individuals can use images that reflect or express their abstract emotional states more clearly than with words. Talwar (2007, p. 28) proposes that the "visual image captures their somatic memory and stands as a testimony to their felt experiences."

To initiate the process, I meditated for 30 minutes with the intention and attention on my own traumatic experiences. I then sat with any images, visuals, physical sensations, tastes, smells, sounds, and memories that arose. I used elements of the ATTP after meditating for 30 minutes and determined which hand was most connected to the emotions experienced during the meditation before creating an art piece with reflective intention. After the first art piece was completed, I then created another image reflecting on the opposite emotion using the opposite hand to promote bilateral stimulation (Tarwal, 2007).

Once both elements of the experience had been expressed, I then determined which element "wanted" to be explored first with the hand that did not draw it; for example, the left hand was used to explore the drawing made with the right hand, and vice versa (McNamee, 2003). I let my hand rest on the drawing made by the opposite hand, and then explored the art piece using any desired amount of pressure that felt appropriate in the moment (McNamee, 2003).

According to Levine (2005), when an individual is able to access body memories through a felt sense, it is possible to process and discharge the instinctive survival energy and restore ideal functioning. "This bilateral stimulation through the art may also allow for new insights and learning through creating new associations given that all memory and learning occurs through the creation of new associations" (Shapiro & Maxfield, 2003, p. 197). In my case, the intention was that such new associations may have been able to provide new learned and felt experiences for my mind and body to be able to assimilate and integrate the trauma into my psyche and be able to store it as an explicit memory that is not encoded in the sympathetic nervous system (i.e. fight, flight, freeze response) (van der Kolk, 1994, 2002, 2006; van der Kolk & Fisler, 1995).

After the artmaking, the formal elements in the art were intently observed for any meaning that may have arisen while noticing body sensations, judgments, and reactions (Allen, 2005). As Allen (2005) recommends, I then wrote openly about the experience in a witness journal which (along with the art) is shared below, and with a supervisor or mentor for further analysis. The completion of each session was marked by a closing ritual which allowed me to transition into the rest of my daily activities in a safe and contained manner.

Sampling.

I used myself as the sample subject due to my extensive trauma history including dissociative states. I am a 34-year-old Latino heterosexual male and a current graduate student at the Marital & Family Therapy / Art Therapy Program of Loyola Marymount University. I am a U.S. veteran who served over 13 years in the U.S. Marine Corps and was medically retired in 2017. I have participated in four combat tours to OIF and OEF

and I am currently diagnosed with PTSD and Major Depressive Disorder (MDD). I have been receiving mental health treatment for approximately six years, and this has mainly consisted of EBPs such as CBT, Dialectical Behavioral Therapy (DBT), EMDR, prolonged exposure (PE), group therapy, and other non-traditional therapies such as the Adult Attachment Repair Model (AARM), and art, music, and recreational therapies.

My symptoms and experiences living with PTSD have included flashbacks, nightmares, hypervigilance, avoidance, emotional numbness, lack of trust, insomnia, derealization, depersonalization, and dissociative states, among other stereotypical symptoms associated with complex trauma. As outlined above, the data on my experiences with art therapy is drawn from five meditation sessions, four reflective art pieces, and five witness journals which were reviewed by my art therapy supervisor or research mentor in order to highlight themes, illuminations, and biases that would arise naturally in this case study research approach.

Data Collection.

The data was gathered through the experiential process of meditating and artmaking, and a systematic examination of each art piece, as well as journal writing. I gathered this data in a five-week process using an expressive arts studio in the San Diego area. I scheduled weekly two-hour sessions at the expressive arts studio. The expressive arts studio is available to the public for rent and offers space for events, parties, and individual open studio time. The expressive arts studio provided all art materials except for the Bristol paper. It also provided amenities such as a restroom, sink, heating, and air conditioning, as well as furniture such as chairs, cushions, and tables.

Analysis of Data.

The process and data was analyzed by the researcher in conjunction with an art therapy supervisor or research mentor for recurrent themes in the self-directed art and journals informed by Pat Allen's Open Studio Process and the ATTP process. This analysis was also informed by the experience during meditation; the content, latent content, and formal elements of the art; the contents of the journal writing; and my own subjective experience of the entire process. The analysis was guided by the research questions listed below. Phenomenological experiences were also taken into consideration depending on their relevance to and impact on the study topic. For the purposes of this study, phenomenological experiences are defined as recurrent dreams, nightmares, and experiences not easily explained by the literature reviewed.

- 1. What are the felt experiences both physical sensations and emotional responses when using meditation, art, and journaling to process traumatic memories?
- 2. How did the process of meditating, artmaking, and journaling impact D-PTSD symptoms and characteristics (e.g. avoidance, derealization, depersonalization, and memory fragmentation)?
- 3. What metaphoric content emerged during the process of meditation, artmaking, and journaling and how are these metaphors connected to lived experience?

Results

Presentation of Data

In this section, I offer detailed descriptions of my experiences in each of the five two-hour artmaking sessions, focusing on the steps and procedures that I implemented each time. For each session description, I organize the data into categories: preparing the space, the meditation, the artmaking, observing and journaling, and the closing ritual. Pertinent information concerning the journal entries are also included as part of the process. I established a safety net by adding guidelines to this process, such as letting a friend know that I might call them if the sessions became too overwhelming, doing jumping jacks to physically stimulate a different response, and letting my therapist know of the process that I would be undertaking. The meditation time was monitored by setting a 30-minute alarm on my cell phone.

Session 1 (01/25/19): "Building a Relationship with the Space".

Preparing the space. As I prepared the week before beginning, I felt the anxiety constrict me like a snake, making my body feel weak and sluggish. I felt pain in my body, in all of my joints, muscles, and bones. It was exhausting to feel and avoidance has been key for the majority of my life in order to numb this crushing pain. I was hesitant to start this process due to fear of what would be illuminated. The actual process of healing also scared me; I was fearful or anxious of the unknown and uncertainty of what it is to be without my trauma being such an anchoring element in my life. The seemingly eternal pain seemed like it had become so intertwined with my identity. As the day drew closer, I felt more and more anxious and some self-doubt about being able to proceed with this process. However, I knew that this process was necessary in order for me to heal my own wounds and provide the best service possible to my current and future clients.

As I walked into the expressive arts studio (see Figure #1), I felt a sense of openness as a warm and kind woman welcomed me into her studio with open arms, giving me a hug. It was unexpected but what I needed at that moment; I felt comfortable in this space. After the expressive arts therapist left the studio, I walked around taking things in, letting the space know that I was there. I observed the messages in the art, images, and words on the walls and I felt as if the space was speaking to me through a creative connection.

My intention during this session was to create an intimate relationship with the space and to experience if it would be conducive for healing. In preparation for meditation, I locked the door of the studio and closed the large curtains to cover the windows. I also lit white sage to cleanse the space, provide an olfactory stimulation, and symbolize the beginning of the healing process. The goal of lighting the sage – a process known as "smudging" – is to render a place clear of any lingering energy that is different from what you may be intending for that space. I also used a portable Bluetooth speaker to play alpha, theta, and delta brainwave sounds. The purpose of the sounds was to facilitate the calmness of the mind and assist in deeper meditation.



Figure #1: Image of the Work Space

Meditation. I got the sudden urge to meditate so I found a spot on the floor and sat down. After a few minutes, I felt a rush of unexpected emotions as I experienced the space in my mind's eye. I started to grieve as the space embraced me. While meditating, I received feelings of unconditional acceptance. It was a benevolent experience as I grabbed the floor to feel, to touch, and to sense the space. I thanked the space for allowing me to be there and I asked if it would allow me to conduct my data collection there. I opened my eyes after the conclusion of my meditation and noticed a Starbucks gift card lay on the ground a couple of feet away from me (See Figure #2). There was a red heart on the bottom left corner of the card with text pointing to the center of the heart that read "you are here." I resonated with this symbol as it brought meaning to the moment and I began to feel the release of intense emotions; I felt accepted and loved at that moment. I opened my eyes after having them closed for a couple of minutes and I observed the multi-colored splattered paint on the walls of the studio as the space welcomed me to the beginning of this healing process.



Figure #2: Starbucks Gift Card Attached to Journal

Journaling. After standing up from meditating, I felt somewhat tired and calm. I began to journal about my experience with developing a relationship with the space. My intention was to develop a sense of the space and not necessarily to delve into my trauma history during this session. I did not, therefore, practice the bilateral artmaking; however, I felt the urge to draw in my journal so I decided to create a small art piece using oil pastels in reflection on the experience. I created a circle with multiple rings colors, similar to a mandala, which was representative of what I saw while meditating (see Figure #3).

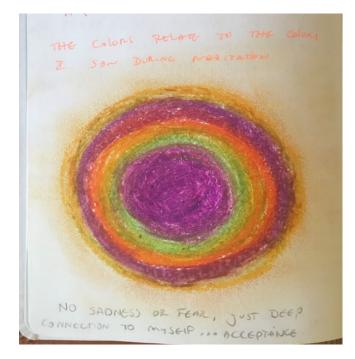


Figure #3: Journal Reflection

Closing ritual. As a closing ritual, I opened the curtains and began to clean the space and put the art supplies back in their place. As I got to the restroom, I noticed all the art pieces and quotes hanging on the walls. I ended up looking up at the ceiling and I saw light gray clouds painted on the ceiling of the restroom. These gray clouds triggered a significant memory of a phenomenological experience while I lived in Hawaii approximately 12 years ago.

Session 2 (01/31/19): "Inner Child".

Preparing the space. I began this session by re-establishing my relationship with the space. I lit sage and walked around the space to cleanse the area. I started playing the brainwave sounds on the portable speaker. As I walked around, I started to feel anxiety in my chest. Feelings of fear and anxiety swirling around my core and it seemed like I was anxious to begin this process today. I used tape to put up two 14x17 pieces of Bristol paper on the wall side by side. I gathered two boxes of oil pastels and set them on top of a

chair slightly behind the area where I intended to meditate. The oil pastels were set approximately five feet away from the wall in order to provide movement to and from the materials, which further allows for bilateral stimulation.

Meditation. While meditating I felt somewhat labile, switching quickly through emotions. It took me a while to concentrate as there was more outside noise than usual. My thoughts were racing, and I started to feel pain in my body. I thought maybe this could have been a defense mechanism as a way to avoid the unpleasant emotions that were arising. The physical pain could have been a form of somatic experience that was manifesting as I brought my attention to the unpleasant emotions. Images of recurrent dreams began to come forward in my mind's eye that I had not thought of for many years. I used to have recurring dreams of vampires when I was a child. One in particular: I would be staring in the mirror as a little boy and all of my front teeth would fall out and I would grow instead a set of vampire fangs.

In another dream, a vampire would chase me down this dark hallway and out of my apartment building. I immediately mad the connection that these dreams were related to a traumatic childhood episode I experienced. My mother knocked my two front teeth out when I was about six years old. As I made this connection, I began to grieve and process through physically shivering while the impact of the emotions swept my body. I eventually shifted to a state of wellbeing and I became able to sit in a space of awareness and freedom. The alarm sounded and I opened my eyes and stood up to begin the artmaking.

Artmaking. I determined which hand was attached to the unpleasant emotion that I felt while meditating. I determined that I should begin to create with my right hand using violet oil pastel. I started by making an organic figure in violet then I added black

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oil pastel to the background. I began to feel anger and I began to add more pressure to the paper as I continued to add more saturation to the piece. I walked back and forth as I continued to add more color to the drawing. Once I felt like I was done, I attempted to sit with the opposite emotion of that pain and anger and began to create using a green oil pastel.

I began to recreate the memory from my childhood when I was jumping on a bed right after my mother had given me a bath. It made me feel pleasant as I drew myself having fun, being a child, and being free, which was the opposite of what actually happened that night. I then began to explore each piece with the opposite hand from the one that created them one at a time; for example, I used my right hand on the left drawing and the left hand on the right drawing. I first explored the piece representing the unpleasant emotion using my left hand and various shades of violet and red oil pastels. In this process it felt like I was "softening" the unpleasant emotion and seemed like the impact of the unpleasant emotion was reduced as I explored the piece in a clockwise circular motion. The drawing was not visually altered in this process.

I used my right hand and a brown oil pastel to explore the opposing emotion, which represented as me as a child jumping on a bed. I traced over the green oil pastel with the brown; however, the empty background made me feel uncomfortable so I decided to add a small amount of color to it. Something still felt like it was missing in the drawing so I decided to create my mother smiling and enjoying me as a child. I used the brown oil pastel to create the body and I created a violet dress and blond hair. This is the ideal situation that I wished would have happened instead of my mother knocking my teeth out that night for jumping on the bed (see Figure #4). It felt comforting to see my mother enjoying my presence and it brought a smile to my face. Once I felt like I was done exploring the art pieces, I removed the oil pastels from the chair and sat down to observe the art and journal.



Figure #4: Inner Child

Observing and journaling. While observing, I noticed that the unpleasant emotion represented by the violet organic swirl was the same organic form that I experienced during a sleep paralysis episode approximately eight months earlier during a trip to Mexico with the LMU MFT/Art Therapy program. During the sleep paralysis, I witnessed three different colored organic shapes circling counterclockwise following each other in the center of a pitch-black empty space. These organic shapes all stopped at once and began to vividly swirl into my chest. As they entered my chest, I began to feel pain and anguish. I seemed to have been yelling but the only noise that would come out of my mouth sounded more like groaning. I had a felt sense that these swirls were demonic in nature at the time. I felt intense fear and almost panic after the organic forms entered my chest and I "snapped out of it." At the time I just disregarded this experience as being "weird" and carried on with my life. While observing the artwork, I also noticed that the organic swirl seemed to be flowing into my mother as it was the same color as her dress on the opposing drawing. It seemed as if this unpleasant emotion was infiltrating my mother, causing her to do the unthinkable. As I observed, I began to feel that the child in the opposing drawing was scared of the "demon," knowing it would hurt him. This possible connection to my sleep paralysis experience highlighted the deep imprint of pain that I had been carrying for almost 29 years. This also brought a different perspective in the sense that I could now see that it was not my mother's fault or intention, but a consequence of someone battling with her own demons. This of course does not excuse her of the responsibility of what she did.

I understood that my mother had her own "demons" that she was attempting to manage and unfortunately the turmoil within her was too great at that time. This illumination allowed for a sense of unconditional acceptance of my trauma, how the trauma has affected me, and how my mother was not the ideal parent figure. The pleasant emotion art piece seemed regressive even if it was drawn with my non-dominant hand. This can be indicative of my "inner-child" coming forward to process this traumatic event. I found it interesting that I felt better after I traced the drawing with my dominant hand, which could be seen as a metaphor for the "inner adult" embracing my "inner child" in an expressive and subtle manner. It felt like I acknowledged myself in this process. I noticed the studio time was coming to an end; it was time to clean up and close this session.

Closing ritual. As a closing ritual, I put away the oil pastels and opened up the curtains that covered the large windows. I packed my bag with the speaker, sage, and journal, and took down the art pieces from the wall. The movement around the art studio

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allowed me to decompress from the session and ground myself as the session literally came to a close. I put the key in the front door and locked the studio behind me.

Session 3 (02/15/19): "The Moon and the Ocean".

Preparing the space. On this day, there were people still in the studio and I started late. Although the owner of the studio allowed me to take extra time for myself, it still somewhat disturbed the flow of my process while preparing the space. After the people left, I lit the sage and started walking around in order to cleanse the space of the previous energy. I set up the speaker and began playing the alpha, theta, and delta brainwave sounds as I gathered the oil pastels and placed them on a chair behind the area I would use to meditate. I then taped the two pieces of 14x17 Bristol paper side by side on the wall and sat down in front of them in order to begin my meditation.

Meditation. This meditation seemed slow and somewhat distracted as many thoughts continued to go in and out of my consciousness. It seemed to take a while for any memories, sensations, or images to arise. After clearing my mind of thoughts, I was then able to objectively observe the past without judgement and without feeling unpleasant despite the images that arose. Images of my combat experiences began to come forward, such as burn victims, a child that I killed in Afghanistan, and mutilated bodies, as well as other seemingly unrelated events and experiences that I had not thought of since my childhood. This observation without the pain seemed interesting to me as I felt a sense of compassion for myself and gratitude for these events because I knew that these traumatic events influenced my decision to come into this therapeutic field. The alarm went off and I noticed that I had lost track of time; it had seemed like I was only meditating for about 10 minutes.

Artmaking. I attempted to determine which hand was attached to the unpleasant imagery since I did not really notice any unpleasant emotion while meditating. It was not until I put both hands on the paper that I began to feel unpleasant emotions. I then began to create with my left, non-dominant hand on the left piece of Bristol paper using a yellow oil pastel. I began in the center of the paper, creating a circle. I used different shades of violet to surround this circular form. I filled in the space around the outer edges of the composition with navy blue to finish. I actually started to feel pleasant once I began to create, although it was intended to be attached to the unpleasant imagery experienced during meditation.

I then used my right dominant hand to create the opposing "pleasant emotion" using blue-green oil pastels. I started in the center of the paper going in circular clockwise motions using different shades of green. Creating this piece initially triggered anxiety as it felt somewhat chaotic. The anxiety seemed to be reduced as I continued to add more and more pressure while doing the circular movements. Once I felt like I was done, I used the opposite hands to explore each drawing. I used the same oil pastels as the original while exploring, which did not alter the imagery (see Figure #5). The exploration of both drawings felt pleasant each time and placing my hands on the drawings, one hand on each piece of paper, made me feel a sense of calmness and wholeness.

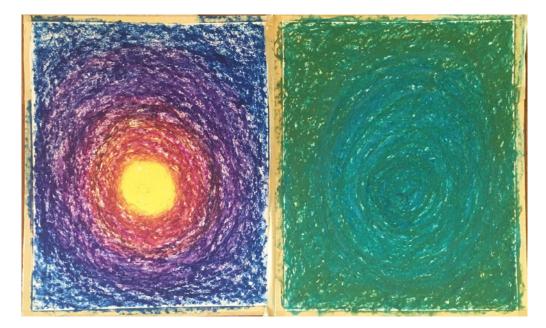


Figure #5: The Moon and the Ocean

Observing and journaling. As I looked at the art pieces, I realized that they actually mirrored each other, just as the ocean mirrors the moon. The moon also affects the tides in the ocean due to its gravitational effect, which can symbolize a dance between trauma and healing. This reminded me of how Levine (2005) describes pendulation between pleasant and unpleasant sensations. The moon in some cultures can symbolize feminine energy, which correlates with the struggle of emotions concerning my mother and how she has impacted my life. I also noticed that the unpleasant emotion art piece was very similar to the small journal artwork I created during the first session where I was building a relationship with the space.

The unpleasant emotion reminded me of looking at the night sky and it made me feel pleasant, as if it lacked an emotional charge. However, the opposing pleasant emotion still seemed dangerous. It made me feel like how I feel while I am swimming in the ocean. While I love being in or near the ocean, I also respect its power and ancient symbolism. It is humbling to say the least. *Closing ritual*. As I was observing the art, the people who had booked the next time-slot in the art studio came in early to set up for a birthday party. I attempted to continue to observe and journal but I did not feel comfortable, so I decided to put away the oil pastels and pack my bag with the speaker, sage, and journal, and take down the art pieces from the wall. I thanked the space and went home.

Session 4 (02/22/19): "In the Know".

Preparing the space. I felt anxious while driving to the studio today. When I arrived, there was a person packing up her things after creating some personal art in the studio. We exchanged a few words while I unpacked my things and I explained to her my research process that I was undergoing in the studio. The woman seemed very interested as she was an expressive arts therapist. She gave me her contact information in case I wanted to share the space for artmaking in the future. After the kind woman left the studio, I began the session by lighting sage and cleansing the space. I turned on the brainwave sounds on the portable speaker and began to set up the oil pastels on the same chair as usual. I then put up the two 14x17 pieces of Bristol paper on the wall side by side and gathered a few cushions to use during the meditation.

Meditation. My meditation started slow as I was a bit physically uncomfortable and kept shifting my body around. After about 10 minutes, images of military experiences started to flow through my mind's eye. Images arose relating to military combat experiences where children were hurt and specifically the boy that I killed. Images of multiple traumas started to flow and one finally came to the forefront that was not related to my military experiences. The image was of my mother's brother pinning me down on the floor and pulling my pants down as he began to fondle me and as my mother watched and did not do anything.

I could see the pain in her eyes as she watched but she seemed paralyzed; she was incapable of doing anything at that moment. I felt paralyzed also. I could not even scream. I felt violated to the core as the only person that would protect me just watched. My emotions were shifting very quickly at this moment in my meditation from deep sadness to anger and then to a neutral place. There was a sudden shift in the imagery when I saw my mother attacking her brother at that moment. However, it was not enough; it did not feel right to me. I then visualized myself as an adult coming into the room, attacking him, using techniques that I have learned in my military career and mixed martial arts training. My "inner adult" beat and choked my mother's brother to death. I felt strong. My breathing was short, shallow, and rapid during this visualization.

My inner adult then held my 10-to-12-year-old self and consoled him. My inner adult told my younger self that he is strong and that everything is ok now; that he has "me" (the inner adult) now and that anyone who tries to do harm will have to go through me. "It's been a hell of a ride and I've learned a few things along the way," the inner adult told my inner child. "We are strong now." My emotions kept shifting back and forth. I was shaking but feeling gratitude at the same time. I focused on my heart and I began to see a visual of all my previous ages walking towards me. I imagined hugging all of them at the same time as they walked into me. I got the sensation and feeling that we were one. I told them that we are here, we are safe, and we are alive. I am here, I am safe and alive. I opened my eyes and saw a small torn piece of paper on the ground, with text that read "in the know." This was meaningful to me as I felt like I was "in the know" by exploring and acknowledging my trauma which seemed to have been providing relief and further understanding of myself.

Artmaking. I sat with the emotions and sensations and noticed that my right hand felt connected to the unpleasant emotions. However, my emotions began to shift once I started drawing. I started with a circular motion using a blue oil pastel in the center of the paper. I then added violet on the outer layer of the blue circle, then I added a lime-green layer around the violet and navy blue around the lime-green layer. I then added burgundy in a vertical motion from the bottom of the paper towards the top and began to feel the unpleasant emotions arise again. I added a violet half circle to the bottom of the paper in a circular motion with burgundy surrounding the violet.

Then I started to feel anger; I felt the anger around my chest and I decided to add black in the central lower third of the paper as I continued to embrace the anger. The anger quickly turned into disgust as I was adding the black color which made me think of my genitals and I felt the visceral sensation in my stomach. I then concluded the drawing (see Figure #6). I then started drawing the opposing emotion using a green oil pastel in the center of the paper, creating a vertical line from the bottom to the top of the paper. I began to add a blue in a similar motion, starting from the bottom of the paper and expanding towards the top creating a cone-like shape.

I continued to add green, starting from the center of the paper and fanning outward towards the edges of the paper. I felt pleasant while creating this drawing and felt like I was at a good place to stop. I began to explore each drawing using the opposite hands, starting with the unpleasant emotions. It felt perfect to explore and smudge the oil pastels (see Figure #7). I felt a sense of control and a sense of release while putting pressure on the paper. I had a similar response while exploring the pleasant emotion and smudging the oil pastels around the paper.



Figure #6: Release & Blockages



Figure #7: Release & Blockages Modified

Observing and journaling. While observing the artwork, I noticed that the two pieces slightly mirrored each other as they both had a certain dynamic movement from the bottom of the paper towards the top. The colors on the circular figure on the

representation of the unpleasant emotions were similar to the colors of the opposing drawing. Both drawings felt like explosions, except the pleasant representation of the emotions seemed smoother and calmer while the unpleasant emotions seemed to have blockages or obstructions in the path of the upward movement. The pleasant representation of the emotions reminded me of the ocean or a gush of water like a geyser and made me feel a sense of release. As I wrote the journal entry, I noticed that my right hip began to tighten. This reminds me of a similar somatic experience while I was meditating and experiencing images and visuals of killing a child in Afghanistan during Session 3.

Closing ritual. I continued with the same closing ritual, by putting away the oil pastels and opening up the curtains that covered the large windows. I packed my bag with the speaker, sage, and journal, and took down the art pieces from the wall. This movement around the art studio, as with the other sessions, allowed me to decompress from the session and ground myself as the session came to an end.

Session 5 (03/02/19): "Closing Session".

Preparing the space. Although I was feeling anxious before coming to the studio, I began this last session by feeling gratitude and a sense of relief that this intense process was almost over. I walked around the space looking at any new art pieces that had been put on display. I began the session as usual by lighting sage and cleansing the space. I turned on the brainwave sounds on the portable speaker and began to set up the oil pastels on the usual chair. I gathered a few cushions for meditation and put up the two 14x17 pieces of Bristol paper side by side on the wall.

Meditation. The intention for this meditation was to reflect on this entire process with gratitude and to conclude the data gathering. This meditation was different than the

other meditative experiences during the other sessions. Initially I felt anxious about this process coming to an end and anticipating the "what's next." However, after what seemed to be a few minutes, I was able to fall into a deep meditative state. I felt myself radiating with energy and I could physically feel my body temperature rise. I felt a tingling sensation around my genitals for a few moments before I began to tremble as if I was shocked by some type of electrical current. The trembling lasted for a few seconds before my body settled and I felt a sense of deep calmness, almost as if I was asleep and awake at the same time. After a few minutes of being in this deep, calm state, my limbs began to intensely twitch and shake seemingly on their own.

I had been experiencing this somatic phenomenon for approximately two days before this session during routine meditation, except not as intensely. I decided to let go and experience what was happening. I began to feel immense gratitude towards my life, including the unpleasant experiences. The overwhelming feeling of love and gratitude expanded outward such that I began to feel a deep compassion for the world as it is without wanting to fight it or change it in any way. I felt unconditional acceptance for myself and others and absolute appreciation to have an opportunity to work on myself and on my trauma through this research process. The alarm on my phone went off marking the 30-minute mark. I stayed with my eyes closed for a bit longer as I wanted to continue feeling this pleasant state of being. After a few minutes, I opened my eyes. I felt much lighter and in a pleasant mood overall.

Artmaking. I started with a semicircle centered at the bottom of the paper using blue oil pastel and create a yellow ring around it. I then created a violet ring around the yellow and a blue ring around the violet which sat approximately in the middle of the paper. I created a vertical stripe from the bottom of the page through the semicircle of

colored rings and up to the top using aquamarine oil pastel. The stripe fanned out onto the edges of the paper. I added blue and yellow color to the sides of the stripe and decided to use my non-dominant hand to blend in the oil pastels in various directions (see Figure #8). I continued to feel gratitude and unconditional acceptance while creating this art piece. I felt a sense of release while blending the oil pastels, and felt my body tingling from the tip of my fingers to the tip of my toes. I felt like I was at a good place to stop.



Figure #8: Integration

Observing and journaling. Today I did not feel like journaling. I felt somewhat tired after the intense experience during meditation and the "release" during the artmaking. Observing the art made me feel joyful as I could see the release on the paper. It also made me feel content and calm, which made me notice how long it had been since I felt a genuine calmness without expectations of what would come next. The

feelings of gratitude enveloped my body and I closed my eyes as I thanked the space for letting me do this work. I did not write much today.

Closing ritual. I continued the usual ritual of opening the curtains and putting away the oil pastels. I packed my bag with the speaker, sage, and journal, and took down the art pieces from the wall. I felt a sense of gratitude as well as a sense of sadness that the process was coming to an end. I put everything back in its place, locked the door behind me, and slid the key through the mailbox slot.

Analysis

The data presented above are now analyzed in relation to the research questions in order to structure the information gathered and provide meaning to the lived experiences of this research process. The intention was to analyze the information in conjunction with my art therapy supervisor. However, due to conflicting schedules, the information gathered in this study was analyzed by myself using a self-reflective process. The self-reflective process included further observation of the art and contemplative meditation. For the purposes of organization, each question below will be answered by analyzing each consecutive session.

1. What are the felt experiences – both physical sensations and emotional responses – when using meditation, art, and journaling to process traumatic memories?

There were many different physical sensations and emotional responses during this process. There was a sense of avoidance and anxiety before each session. The meditation process allowed me to bring awareness to parts of my body and emotions that I would typically avoid and/or would feel numb to. For example, during Session 1, I was able to experience intense emotions such as grief, fear, acceptance, and love which led to a state of being calm while journaling. The journaling phase of the sessions felt like a descending shift where I no longer felt the peak of emotions and was able to objectively observe the overall experience of the process as well as the content and formal elements of the art.

I had some somatic experiences during Session 2, whereby my body was shivering during meditation. My emotions were intense: I felt grief and a subsequent sense of freedom. During artmaking in Session 2 (see Figure #4), I felt pleasant emotions as well as anger as I created and explored each art piece. The third session was slightly different during meditation in that I did not sense the somatic experiences but I was able to feel pleasant emotions such as compassion and gratitude. It was not until I began to create the art (see Figure #5) that I began to feel the anxiety and unpleasant emotions associated with the memories that arose during meditation. Engaging in the artwork shifted my emotions to a state of wellbeing as I kept putting more pressure onto the paper, eventually leading to feeling calm and whole. Journaling allowed me to take it all in and feel the dichotomous emotions that were projected onto the artwork.



EFFECTS OF ART THERAPY ON DISSOCIATION

Figure #4: Inner Child

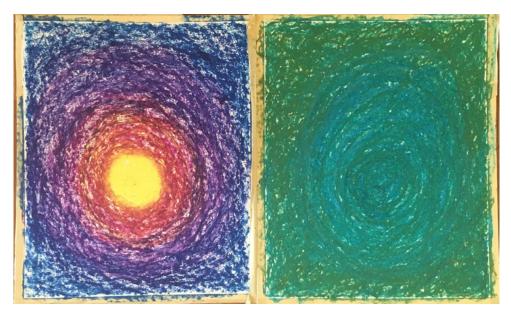


Figure #5: The Moon and the Ocean

During Session 4 meditation, I felt intense emotions switching back and forth from pleasant to unpleasant. My breathing was short, shallow, and rapid, and my body was shivering during the images of my childhood trauma. Those feelings shifted to being whole and at one with my inner Self. I felt anger while artmaking with the physical sensation around my chest, which eventually developed into a visceral feeling of disgust in my stomach. While creating the opposite emotion I felt pleasant and the feeling carried on into the exploration phase of the artmaking. Smudging the oil pastels and feeling the pressure on the paper allowed me to feel a sense of control and release. During the observing and journaling, I felt physical sensations of tightness around my hip similar to the physical responses during Session 3 meditation, which were in response to observing the unpleasant visualizations.

In the last session, I noticed I was anxious to begin. However, once the session had begun I was able to feel gratitude and a sense of relief. I was able to fall into a deep meditative state whereby I began to feel physical sensations of heat, tingling, shaking, twitching, and trembling with feelings of calmness and a state of lucidity. The overall emotions experienced during all sessions during meditation included an overarching sense of gratitude and acceptance even after processing trauma memories. I continued to feel the physical sensations of tingling and the sense of gratitude and acceptance during the artmaking. Observing the art made me feel joyful, calm, and content as I reflected on the imagery while journaling.

2. How did the process of meditating, artmaking, and journaling impact D-PTSD symptoms and characteristics (e.g. avoidance, derealization, depersonalization, and memory fragmentation)?

The avoidant characteristics associated with PTSD have noticeably changed in that I do not avoid thinking about my traumatic experiences, and the intrusive thoughts and memories do not have the same impact and emotional charge they used to. This was highlighted during Session 3 when I was able to observe the images of traumatic events and not feel the emotional impact during the meditation. Throughout each session I was able to feel the spectrum of emotions and experienced minimal avoidance as I knew that the process would be contained by the art and the space.

The meditation process with the intention to work on trauma seemed to have an effect on symptoms of derealization and depersonalization. For example, during Session 1, I was able to feel a sense of myself and a sense of reality as I grabbed the floor to sense the space. This allowed me to get a sense of my body and of my body within the space, reaffirming my reality. The meditation also allowed me to sense my body through physical responses (e.g., pain in Session 2 and tightness around my hip in Session 3). The meditation seemed to have allowed memories that were not previously in the forefront of

my consciousness to arise, such as childhood recurring dreams in Session 2 and trauma memories in Session 3.

The bilateral artmaking also provided me with a sense of my body as the movement within the space provided me with sensory input such as touch, sight, smell, and movement that stimulated me to be present in the moment, challenging the symptoms of dissociation. The artmaking allowed me to process the memories that arose during meditation by living and manipulating the memories through the artwork. For example, in Session 2, I was able to manipulate the imagery associated with childhood trauma which provided me with a different experience of the traumatic event. This is seen in Figure #4 where I depicted my mother being joyful instead of doing harm (see Figure #4).



Figure #4: Inner Child

Session 4 was similar in allowing me to manipulate the art (see Figure #7) while reflecting on trauma memories. This seemed to let me digest some of the trauma and take some control of what happened. I can confidently say that I feel much more grounded, centered, and confident in myself after undertaking this journey into this research project. I feel more comfortable in my own skin and I feel a sense of confidence and acceptance for all of my experiences.



Figure #7: Release & Blockages Modified

3. What metaphoric content emerged during the process of meditation, artmaking, and journaling and how are these metaphors connected to lived experience?

During the closing of Session 1, I made a connection to the artwork on the bathroom ceiling that reminded me of a phenomenological experience from approximately 10 years ago while I lived in Hawaii. One night in Oahu HI, I was asleep when suddenly I felt something hovering over my face. As I opened my eyes, I noticed a translucent form approximately two inches away from my face and I launched at it. Attempting to grab the translucent form, I sat up with my arm extended towards the ceiling and I become stuck in place.

I was unaware of how long I was stuck but I suddenly snapped out of it and startled myself as I noticed that I was sitting up on my bed with my arm extended. As I glanced at the ceiling, I saw multiple cloud-like figures that seemed to dance like smoke. I had a moment of panic and at the same time I felt "okay," as if the figures were not there to cause me harm. This happened on two more consecutive nights where I would experience the translucent forms hovering around my bedroom ceiling, but then it never happened again. The clouds in the studio's bathroom immediately brought this memory up for me in the form of a connection and validation that I was in the right place and on the right path towards wholeness in a strange "full circle" type of moment.

The meditation in Session 2 illuminated recurrent childhood nightmares of vampires and my teeth falling out and growing fangs. I made the realization that these dreams were connected to the childhood trauma of my mother knocking my teeth out. It seems like my psyche, in an attempt to protect me from the reality of the trauma, created archetypes to ignite resiliency in me as a child. I remember that, in one of the recurrent dreams where the vampire was chasing me, I fought back with a piece of chalk and chased the vampire off a rooftop. I remember a cathartic feeling of strength and power. The chalk in this dream can be symbolic of how this process is integrating and becoming whole by coming full circle, using art therapy as a vehicle for healing.

The content of the artwork created during Session 2 (see Figure #4) connected with another phenomenological experience where I felt unpleasant forms enter my body during sleep paralysis. I associated this form with the inner chaos that my mother must have been attempting to manage and that ultimately injured me deeply. The artwork produced during Session 2 is also very different than that of the other sessions. I believe the pleasant emotion representation was led by the imagery of the memory and what I would have wanted to happen, instead of leading with a particular emotion. Although the drawing was based on a visualization and not an emotion, creating the artwork still invoked an emotional response of wellbeing. I also noticed the regressive nature of the drawing and associated it with my inner child expressing himself. My inner child was then comforted by my inner adult while I was exploring the art piece with the opposite hand. This can symbolize integration, wholeness, and unity.



Figure #4: Inner Child

In Session 3, the artwork (see Figure #5) reminded me of how the ocean mirrors the moon. The symbolism of how the moon affects the tides parallels Levine's (2005) pendulation between pleasant and unpleasant emotions. The pendulation can also be perceived as the struggle between dichotomous emotions concerning my relationship with my mother. The moon, which often represents feminine energy, impacts the tides just as my caregiver impacted my life with ripples of mental and emotional consequences. It was interesting to feel pleasant once I had engaged in creating the unpleasant emotion, and this experience was similar to the Session 1 journal art piece (see Figure #3) through which I established a relationship with the space. Organic circular forms were common in my artwork and could be perceived as a representation of coming full circle, integration, and stability; like Ouroboros, a symbol of wholeness. The circles also remind me of mandalas and their symbolism of the universe, being complete, and unity which resonates with my emotional experience using art as a way of knowing.

A few days after the third session and some further reflection, a memory came up of an experience of almost drowning when I was about four years old in Puerto Rico. As I struggled to stand up from the water, my mother's brother watched and waited until I was frantic, struggling, and choking in order to help. I associated that same feeling of frantically struggling to breath with how the pleasant artwork in Session 3 (see Image #5) made me feel conflicted and paradoxical emotions.

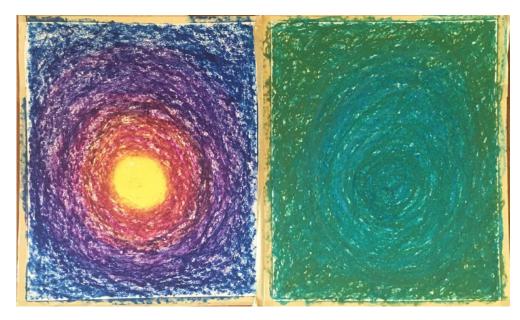


Figure #5: The Moon and the Ocean

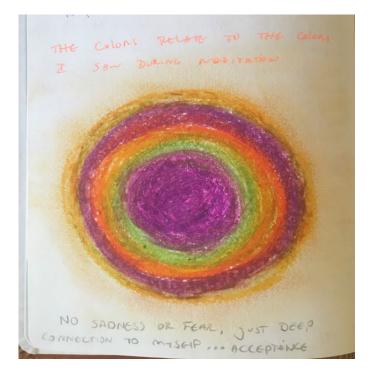


Figure #3: Journal Reflection

During Session 4 meditation, I was able to experience my inner child in various ages and my inner adult overcoming an impactful memory. After the meditation, I found the torn piece of paper that read "in the know" and from which I derived meaning. For me, it was a way of the universe communicating and endorsing this process. The artwork produced during Session 4 (see Figure #6) seem to mirror each other as they both have a certain dynamic movement from the bottom of the paper towards the top. However, the unpleasant emotion depicts blockages in the flow of energy, especially around the areas in my body where I had the somatic responses to the artmaking. This can be interpreted as physiological and psychological blockages in my life resulting from an imprint of traumatic experiences. The pleasant emotion seems to depict the same upward, geyser-like flow of energy, except it is larger and without blockages. The colors are similar to the circle in the unpleasant emotion art piece. To me, this can represent the obstacles in the way of integration, flow, wholeness, and unity that the circular forms embody.



Figure #6: Release & Blockages

The art pieces from Sessions 4 and 5 look very similar (see Figure #8) in terms of their shapes, forms, movement, and colors. The Session 5 artwork seems like a combination of the pleasant and unpleasant emotions from Session 4. This can indicate the free-flowing energy without obstruction, which is similar to the electrical sensation felt during meditation and artmaking. The merging of these art pieces can also symbolize the integration of the trauma into the Self, also highlighting the symbolism of the release of stuck energy becoming whole and united. The color of the energy flow on the unpleasant emotion art piece also reminds me of the color of the "demon" in Session 2, which further illuminates the blockages and traumatic imprints from childhood experiences.



Figure #8: Integration

Findings

It is important to point out that there were many elements involved in this healing process and research project. The efforts towards healing that are described in this thesis were preceded by different experiences such as an intense and transformative graduate program, my own therapeutic work on my combat trauma, working in practicum with clients who have endured trauma, and my own meditation/spiritual practices. I believe that all of these prior experiences were necessary in order for me to be at a place where I could face the deep-seated traumatic imprints in my psyche and body. This may explain why most of the data related to childhood trauma and not necessarily military experiences, although the military trauma seemed to be intertwined within the abstract archetypal visualizations and felt experiences during meditation, artmaking, and journaling. The key themes that emerged during this study are organized by somatic memories experienced during meditation, archetypal visualizations and metaphoric art content that emerged during this process, the impact of bilateral artmaking on trauma, and conclusion to summarize the impact of this research project on healing and integration.

Meditation & Somatic Memories. There seemed to be a sense of avoidance and anxiety involved before every session, which correlates with PTSD symptoms of avoidance and hyperarousal (Spiegel et al., 2006). I found that establishing a structure to the process – from the preparation of the space to the closing ritual – provided me with the necessary containment and safety that trauma work demands. The trauma-focused meditation seemed to have reduced the anxiety and set the stage for my body to fall into a relaxed state in which my attention could follow the sensations associated with traumatic memories that live in the body (Levine, 2005; van der Kolk, 1994, 2002; van der Kolk & Fisler, 1995). This may also be what some researchers refer to as "somatic memory" (Rothschild, 2000; van der Kolk, 1994), whereby the memories are stuck in the body as sensory imprints. Levine (2005) reminds us that the ability to access body memories through a felt sense may lead to the discharge and transformation of the instinctive survival energy and restore ideal functioning.

The meditation seemed to have allowed for memories to arise in the form of imagery and visualizations that otherwise would have been difficult to cognitively recall on command. The meditation highlighted unconscious metaphors such as a child "growing fangs" and turning into a "monster." In this metaphor, the child no longer needs a caretaker to protect him and is able to protect himself. This can indicate inner resilience as well as the psyche attempting to make sense of the trauma which seemed to have been fragmented and stored in the subconscious.

Artmaking & Archetypes. The meditation process seemed to have illuminated the subconscious trauma memories that were imprinted in the limbic system (Levine, 2005; van der Kolk, 1994, 2002) in the form of archetypes. These archetypal visualizations inherently led to artmaking as a way to externalize the emotions associated with the imagery and allowed me to process the emotions and sensations in a safe and tangible approach. This is reminiscent of how Talwar (2007) considers that visual imagery captures somatic memory and stands as a testimony to felt experiences. This also correlates with Murphy's (1994) belief that the art product may be a way to describe a traumatic event that cannot be described verbally and may provide clues that can help begin the process of accessing those memories.

This is highlighted in the data, specifically with regard to the illumination of a repressed memory of almost drowning as a child, which manifested in similar physical and emotional sensations as well as the creation of the art piece that resembled the ocean in Session 3. Engaging in this process provided me with a different relationship to my trauma even when trauma memories arise or there is a trigger in my environment. Spiegel et al. (2006) remind us that art expression helps with recalling, re-enacting, and integrating traumatic experiences. In my case, observing the artwork in Session 2 reminded me that my mother was also abused as a child and had her own "demons" she was attempting to work through. This experience gave me a sense of empathy for her and for myself. This also allowed me to objectively observe the trauma without having the emotional impact associated with PTSD symptoms such as flashbacks, intrusive thoughts, and hyperarousal (Spiegel et al., 2006).

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The archetypal visualizations and metaphoric art content that emerged, such as the inner child, inner adult, memories of recurrent dreams, phenomenological experiences, and cultural beliefs, allowed me to process and release some of the previously "stuck" physical and emotional energy and make meaning from lived experiences. This stuck energy may be an indication of the body's somatic memory (Rothschild, 2000; van der Kolk, 1994). Jung (as cited in Reppen, 2006) writes that archetypes are the unconscious images of instincts themselves; they are patterns of instinctual behavior, a primordial image that is the instinct's perception of itself or a kind of a self-portrait of the instinct. Therefore, this "stuck" energy in my body, which may have been caused by dissociation during a traumatic event or "peritraumatic dissociation" (Candel & Merckelbach, 2004), may be my own instinctual human response that needed to be acknowledged and manifested in the form of imagery and physical and emotional sensations.

This is highlighted by my experience in Session 4 when I felt my inner adult attack my abuser and was able to overcome the situation during meditation. My experience with and interpretations of archetypal imagery, metaphoric content in the art, and emotional and physical responses highlight the potential that PTSD sufferers have to manipulate and reinterpret traumatic memories (Talwar, 2007), as well as support change for healing and clarify life situations through the unlimited potential of the creative source (Allen, 2016).

Bilateral Artmaking. Further emphasizing the release of sensory imprints, the bilateral stimulation of using dominant and non-dominant hands during the artmaking as well as the walking back and forth to and from the art materials seemed to have engaged the body as an instrument to process emotions through movement and manipulation of the art materials (Talwar, 2007). This correlates with Bogousslavsky's (2005) findings,

namely that creating art provides a complex combination of sensory, cognitive, and motor activities which incorporate the entire brain. According to McNamee (2004), art therapy involves both left and right brain functions and integrates both verbal and non-verbal processes. McNamee (2004, 2005) continues to explain that the left hemisphere, which is responsible for more analytical processes, is also responsible for confabulation, which is the process of creating narrative. This means that art therapy can illuminate fragmented memories and also make sense of the story and recreate a new story. The bilateral movement may have also contributed to feeling pleasant after drawing some of the "unpleasant emotions" on the paper, which also correlates with the process of pendulating between pleasant and unpleasant emotions in order to integrate trauma, as described by Levine (2005).

Summary of Findings

My experience while conducting this research seems to resonate with various researchers' opinions on art therapy's ability to provide an opportunity for nonverbal communication, serving as an avenue to unlock unconscious memories and feelings (Avrahami, 2005; Chong, 2015; Lobban, 2014; Lobban & Murphy, 2017; Palmer et al., 2017), and thus allowing for the integration of trauma into the mind and body. This can be seen in the metaphoric theme of circles – present throughout the artwork in this study – that symbolize unity, wholeness, stability, and connection. This symbolism or archetype of wholeness, connection, and unity seemed to be somatically manifested during the concluding session where my body felt electrical sensations while meditating and artmaking, and I was filled with feelings of gratitude. The contents of the artwork also illuminate wholeness, unity, and flow of energy of the felt experience during this culminating session. This new relationship to the trauma can create new learned

experiences through associations (Shapiro & Maxfield, 2003) via archetypal imagery, bilateral artmaking, and journaling that can provide the scaffolding for the assimilation and integration of trauma.

Conclusion

It seems that this research study allowed my mind and body to integrate the experiences of my trauma through meditative visualization, movement using the art materials, metaphoric content within the art, and journal writing. The meditative visualization allowed for somatic memories to arise while the movement using the art materials provided bilateral stimulation of the brain hemispheres and the ability to release stuck energy through the movement. Furthermore, the journal writing incorporated the cognitive ability to process the trauma which would have otherwise been too difficult to recall due to the way traumatic memories are stored in the limbic system.

Memories of seemingly unrelated events and experiences arose during the research process which were able to be explored through the multiple phases of meditation, artmaking, and journaling. As the literature states, traumatic imprints that reside in the limbic system are not cognitively recalled. Therefore, our daily reactions, behaviors, and beliefs about ourselves and the world could be influenced by traumatic events that an individual may not even be aware of; this mirrors Jung's archetypes as patterns of instinctual behavior. Art therapy can target trauma memories and create the ability to manipulate, change, and process the trauma in a non-verbal, ritualistic approach that highlights meaning in the moment of expression and contemplative practice. It is my experience that art therapy, due to its therapeutic mechanisms, seems to demonstrate an effective treatment for D-PTSD. Further, art therapy seemed to facilitate the organization and integration of traumatic memories in a way that has not been possible for me with words alone.

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