

Running head: MOVING TOGETHER

Moving Together: Reintegrating the Body/Mind Connection through Dance/Movement Therapy
with All Operation Enduring Freedom and Operation Iraqi Freedom Veterans
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Submitted in partial completion of the Master of Science Degree at Sarah Lawrence College,

May 2017

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Abstract

This thesis discusses the unique experience of veterans of the wars in Iraq and Afghanistan, the longest running military conflicts in United States history. Specifically, it explores how the focus on a diagnosis of Post Traumatic Stress Disorder (PTSD) leaves many veterans without treatment, despite the presence of significant symptoms resulting from extended and repeated deployment in these war zones. An understanding of the impact of trauma on the body and the lack of integration of the body in traditional treatment leads to a discussion of how dance/movement therapy may provide a more comprehensive treatment model for this population. Dance/movement therapy provides the healing benefits of self-regulation, group work, and the body to help OEF/OIF veterans address the underlying affects of trauma.

Keywords: OEF/OIF veterans, Iraq war, Afghanistan war, dance/movement therapy, PTSD, mirror neurons

Acknowledgement

First, I would like to thank my thesis advisor Erin Humbaugh for the continuous guidance and support during my thesis writing process. Besides my advisor, I would like to thank Elise Risher for her additional direction on my thesis throughout the past year, as well as the other faculty and staff for their knowledge and encouragement. I thank my family and closest friends for believing in me and always being there when I needed them. Last but not least, I would like to thank my fiancé for his unwavering support through everything. I could not have done it without him. And finally, I would like to thank all United States veterans for the sacrifices they have made for this country.

The events that occurred on September 11th, 2001 initiated the beginning of two grim wars. In 2001 the Afghanistan war, also known as Operation Enduring Freedom (OEF) began. This was followed by the Iraq war, Operation Iraqi Freedom (OIF). The OEF war became the longest United States war, lasting thirteen years. Nearly three million soldiers served in these two wars, and more than 2.5 million veterans have returned home. Some soldiers still remain in war areas (Department of Defense, 2015). The long-term effects of these wars have created serious issues that continue to plague our veterans today.

Veterans have returned from these wars in physical and psychological distress. The understanding of the effects war has on veterans has progressed through years of research. Advances in research, specifically on combat stress, have initiated growing attention to mental health. As veterans began returning home from the OEF and OIF wars, there was evidence of a growing need for more research and discussion on the effects of war. Significantly higher percentages of veterans are returning home with Traumatic Brain Injuries (TBI), Posttraumatic Stress Disorder (PTSD), and high rates of suicide (100,000 Homes Campaign, 2013; Calhoun et al. 2008; Eisen et al., 2012; Langdon et al., 2016; Metraux et al., 2013; Schnurr et al., 2009; Tsai et al., 2013; United States Department of Labor, 2016).

Toward the end of the Vietnam War, the United States ended the military draft. This has led to a steady decline in service members over the past forty years (Institute of Medicine U.S., 2010). Decreased numbers led to almost half of all OEF/OIF veterans being deployed more than once. Many veterans deployed four or more times, with some deploying upwards of ten times. High numbers of deployments leave soldiers with more time in battle and less time to process their experiences, thus increasing their physical and psychological distress (Institute of Medicine U.S., 2010). With countless soldiers spending more time in battle, home becomes more foreign

than war lands. The difficulty of reacclimating to home, often coupled with the effects of with depression, anxiety, PTSD symptoms, and traumatic brain injury, has led to significant numbers of veterans experiencing homelessness, unemployment, and substance abuse. In order to help these veterans, it is important to study the factors that make readjusting to civilian life so difficult (100,000 Homes Campaign, 2013; Calhoun et al. 2008; Eisen et al., 2012; Langdon et al., 2016; Metraux et al., 2013; Schnurr et al., 2009; Tsai et al., 2013; United States Department of Labor, 2016).

There is significant research on homelessness, unemployment, substance abuse, and suicide with veterans. Any one of these has major implications on the ability to rebuild a life at home. OEF/OIF veterans are suffering at higher percentages from these issues than previous veteran groups (Schnurr et al., 2009; Tsai, Pietrzak, & Rosenheck, 2013; United States Department of Labor, Bureau of Labor Statistics, 2016). Many of these veterans are younger, and facing more than one of these issues. Rates of suicide and unemployment continue to increase amongst these veterans. While there is research that shows why homelessness, unemployment, substance abuse, and suicide are major concerns for this cohort of veterans, it does not look to address the causes of these problems. The only associated factor that is time and time again linked to these studies is PTSD. When looking at the research though, there are veterans identified as dealing with one of these four issues, but they have no mental health diagnosis. These veterans prove that PTSD cannot be the only answer as to why the OEF/OIF veterans are struggling at such high numbers with these issues. They show that the research being done is only addressing the outermost layer of the problems, rather than addressing the underlying causes (100,000 Homes Campaign, 2013; Eisen et al., 2012; Elter, Jones, Kudler, & Straits-

Troster, 2008; Jakupcak et al., 2009; Lemaire & Graham, 2011; Metraux et al., 2013; U.S. Department of Veteran Affairs, 2016).

Much of the research is being done strictly through the network of the Veterans Affairs (VA). The populations being studied are primarily found through VA databases of outpatient and inpatient care and individuals who have been referred for care at the VA (Calhoun et al., 2008; Grossbard et al., 2013; Jakupcak et al., 2009; Langdon et al., 2016; McDevitt-Murphy et al., 2010; Thomas et al., 2010). If the studies are intended to be a representation of all OEF/OIF veterans, they are leaving out entire portions of this population. A reader may believe that most veterans struggling with any issues are struggling because they have PTSD, unless they focus on the data that often shows more. In the few studies that have done large scale surveys to a broader veteran population, the results have indicated that many veterans outside the VA system and outside the PTSD diagnosis are also struggling to readjust to civilian life, and face the issues of homelessness, unemployment, substance abuse, and suicide (Eisen et al., 2012; Elter, Jones, Kudler, & Straits-Troster, 2008; Lemaire & Graham, 2011). This shows that the majority of current research does not provide the whole picture of OEF/OIF veterans. It does not represent all of these men and women, it does not tell why these issues exist at such high levels, and it does not provide insight into how to better treat every veteran in need of help. What is needed is first hand insight that offers a better understanding of what the greatest barriers are once home. This allows the beginning of a conversation on why veterans may end up homeless, unemployed, or dealing with substance abuse, and suicidal ideation. This not only provides a more authentic understanding of veteran's struggles, but also what treatments may be lacking (Crawford et al., 2015; Demers, 2011; Finley, 2011; McFarlane & van der Kolk, 2007; van der Kolk, 2014).

When provided firsthand accounts from veterans, themes of being misunderstood, fear, anger, feeling unsafe, and relationship issues come up repeatedly (Crawford et al., 2015; Demers, 2011; Finley, 2011; McFarlane & van der Kolk, 2007; van der Kolk, 2014). Many veterans report it taking up to a year to regain any feeling of normalcy after returning home (Finley, 2011). Returning home often triggers shock. After spending extended periods of time, sometimes multiple times, in a place so different from home, everything around them is changed. They no longer have the job they had been doing for years, their family dynamic and roles may have changed in their absence, their responsibilities day to day have changed, and they have free time, to name a few of the changes they face. Meanwhile, they are still trying to process their experiences from war. All of this can lead to a variety of feelings. Fear upon returning home was one of the most consistent feelings reported by OEF/OIF veterans (Finley, 2011). “I was more afraid of coming home, honestly, than I was of going to Iraq” (Finley, 2011, p. 53). For many, the loss of feeling safe was one of the greatest struggles for them. After living in an unsafe environment for so long, surrounded by a variety of triggers, veterans describe almost never feeling safe. These triggers are things that may mean nothing to someone else, but bring an individual back to past trauma. This fear and feelings of being unsafe often causes issues in their relationships. Many face family and friends who are bothered by their excessive caution at home. They are expected by those closest to them to leave the war behind. Their loved ones are incapable of comprehending what the veteran is going through (Finley, 2011).

Fear in some veteran’s turns to anger in others. Many struggle to handle the rage that comes unexpectedly and seemingly unwarranted. Even more worrisome than the outbursts themselves, are the extended time and intensity of the anger. The anger often results in negative situations, such as physical and verbal fights. In extreme cases, as described by Finley (2011),

some veterans try to remain close to home and only do things they feel would not risk an outburst. In these moments of intense rage, the veterans often describe not recognizing themselves. They become disconnected from themselves and others. This is associated back to their experience in war and trauma (Finley, 2011).

The ways in which veterans react to their trauma contributes to the difficulty they have in reacclimating to civilian life. Their perceptions and expectations of how they thought they would react once in war are often very different than what actually occurs. Shame and guilt about how they did or did not react or what they did or did not do, often leads them back to war in an attempt to make up for their previous experiences. They experience overwhelming guilt over leaving comrades behind and shame over things they did when they were in combat. In the case of a veteran's first time in combat, he/she may freeze, becoming unable to utilize his/her training. This can lead to feeling shame and guilt, especially if something happens to someone they feel responsible for (Finley, 2011; van der Kolk, 2014). The weight of shame and guilt greatly burdens veterans' relationships. It can cause withdrawal from those around them. They often experience feelings of being unworthy of any kind of relationship. It becomes a means of protection for themselves and others. If they are not close to anyone, they cannot disappoint or be disappointed (Finley, 2011; van der Kolk, 2014).

Veterans report that re-establishing relationships is one of the hardest parts of readjustment (Finley, 2011). Veterans return home to loved ones who do not understand what they have experienced. They are unable to communicate their feelings, which leaves them feeling misunderstood. This causes them to withdraw, further damaging their relationships (Demers, 2011; Finley, 2011; van der Kolk, 2014). This lack of understanding, on both sides, often begins during deployment. Both sides hold back circumstances that may cause the other

stress. Each person believes that they are protecting the other, but the result is that neither party truly knows what the other is experiencing. This can cause both sides to struggle to understand what has truly occurred over months of separation (Finley, 2011; McFarlane & van der Kolk, 2007).

Another common struggle amongst trauma survivors is communicating, even to themselves, what they experienced. In many cases, if they try, they become triggered, re-experiencing the traumatic event over again. Although social support can be a major protective factor after experiencing trauma, talking about the trauma may be too painful, shameful, or scary to think about. Receiving validation from others is a protective and healing factor after experiencing trauma (McFarlane & van der Kolk, 2007). In many cases, veterans' inability to clearly express what they have experienced makes the support system unable to validate their experiences. (Demers, 2011; Finley, 2011; McFarlane & van der Kolk, 2007; van der Kolk, 2014). Their challenges in expressing themselves are compounded by the fact that society tries to avoid discussing traumatic events. Not only can veterans not accurately describe their experience, but their support systems may not want to know what truly occurred. This further separates the support system from the veteran, removing even more of this protective factor (McFarlane & van der Kolk, 2007). This lack of societal support is seen in veterans' testimonies of feeling, "No one understands us" (p. Demers, 2011, p. 170). Some veterans expressed that once they return home, they seem normal to everyone who does not know that just hours, days, weeks, or months before they had been fighting in combat. Overall, there is a sense that society as a whole does not understand what they experienced and why they may act the way they do (Demers, 2011).

Taking a deeper look at why veterans express feeling so misunderstood provides another layer of insight. It is theorized that veterans experiencing different symptoms caused by trauma exposure may be perceived by society as something else (Finley, 2011). These symptoms may appear as unpleasant behaviors rather than a serious issue. One veteran described how his wife consistently referred to him as mean and an “asshole” (Finley, 2011, p. 77). His wife perceived a symptom he was experiencing as a controllable behavior. In many cases, the symptoms can be viewed as stereotypical male behaviors. Veterans are often considered to be especially masculine. They are pictured as stubborn, ill-tempered, controlling, physically built, and devoid of feelings other than anger. The symptoms they are experiencing can be viewed as stereotypical behaviors of men, particularly men in the military. For example, hyperarousal can be presented in the body as anger or irritability (Finley, 2011). When a veteran has an outburst, or seems overly irritable, it may be interpreted as a male trying to be overtly masculine or fueled with testosterone. Numbing, withdrawal, and functional-impairment are all examples of symptoms that can be viewed as aspects of typical negative male behavior (Finley, 2011). With their support systems treating symptoms like negative behaviors, veterans may also believe the problem is them, not symptoms caused by trauma. Combining societal views of their symptoms with their anger, fear, shame, and guilt leads many veterans to believe that they do not need treatment-it is their own responsibility and problem they need to fix. With the stigma around mental health and the perception of veterans as overtly masculine, the choice to seek help is often hindered (Crawford 2015; Finley, 2011; van der Kolk, 2014).

Overarching many of the issues facing veterans is a loss of understanding themselves. Self-identity is one of the biggest issues affecting individuals who experience trauma. They return home to find that so much of their environment and their identity have changed. In the

military, every aspect of their lives is specifically defined. Throughout the day they have set times, set duties, and a set purpose in their community. Upon returning home, this disappears. Many veterans return home to open ended schedules and the luxury of free time, something they rarely experienced in war. Their identity as a soldier has ended, forcing them to form a new identity (Demers, 2011; Finley, 2011; van der Kolk, 2014).

Veterans have to find a way to rejoin civilian life. Some must find a new job and a place to live. Some must adjust to a changed family dynamic that formed in their absence. Many have to adjust to the overwhelming fear or explosive anger they do not understand. When someone joins the military, they go through a period of adjustment from civilian to soldier life during boot camp. Returning home from war, there is no period of readjustment to civilian life (Demers, 2011). They are thrust back into a life they have not fully been a part of for an extended period of time. They struggle to integrate their past and present experiences into a new self-identity. Without their own sense of identity, their ability to join the community around them becomes even more difficult (Demers, 2011; Finley, 2011; van der Kolk, 2007). Additionally, the experience of trauma affects “the core of who we are” (van der Kolk, 2014, p. 21). It affects the mind and the body, disconnects them from their own self-awareness, and changes their perspective of themselves. This is an experience that many trauma survivors have, whether this lasts for a short or extended period of time. Trauma is not only detrimental to one’s life when it turns into a diagnosable illness (Finley, 2011; van der Kolk, 2014).

When thinking of trauma, PTSD is often the first thing that comes to mind, especially with veterans. So much research on veterans focuses on PTSD. While PTSD is a serious diagnosis and many veterans do suffer from it, many other veterans may experience symptoms found within the diagnostic criteria without meeting the full requirements to be diagnosed. The

diagnostic criteria for PTSD in the DSM-V are extensive. There are eight different layers of criterion that must be met in order to receive a diagnosis of PTSD. Many veterans suffer from one or more of these symptoms, but because they do not meet the extensive criteria, they are not considered to have any diagnosis. This has led to veterans being left out of treatment options. The majority of veterans experience recurrent exposure to trauma in war, which causes significant stress on the body and mind. If this is not addressed, the struggle to readjust can be made even more difficult (Demers, 2011; Finley, 2011; van der Kolk, 2007; van der Kolk, 2014).

Trauma has a significant impact on the body. This is imperative to understand in the treatment of veterans. To explain the reaction trauma causes in the body, van der Kolk (2014) describes the “emotional brain” (p. 57). The emotional brain includes the limbic and reptilian parts of the brain. It is essentially made to protect and alert us. It alerts us to both good and bad stimuli within our environment. The central nervous system is controlled by this part of the brain. This means the emotional brain is also responsible for the fight-or-flight response. In a situation that may exude danger, the emotional brain takes over. This prevents the “conscious, rational” part of the brain from realizing that there is no real danger. Seeing something that resembles danger or fear may cause a physical response, only to then recognize the perceived danger is not threatening (van der Kolk, 2014). For the majority of individuals who experienced trauma, there is a period of readjustment within the body. The brain and body become hyperaware after a traumatic event. In many individuals, this process lasts for only a short time before it becomes regulated. For some, the body cannot regulate, leading to long-term issues. Stephen Porges’ Polyvagal Theory explains why individuals have different reactions to the same traumatic event (van der Kolk, 2014).

The Polyvagal theory is based on the action of the vagus nerve. The vagus nerve connects the brain to the heart, respiratory system, and gastrointestinal system (Berrol, 2006). The Polyvagal theory provides an explanation for the biological relationship between safety and danger. Porges' research on the vagal nerve defined the three levels of safety. These levels are regulated by the autonomic nervous system, which triggers the different levels dependent upon the situation (van der Kolk, 2014). When threatened, the first reaction and level of safety is to engage socially. Often times, the first reaction is to call out for help or search for someone who can help. This is when the ventral vagal complex (VVC) is engaged. The VVC plays a role in our interactions with others. For example, when someone smiles at us, the VVC often prompts us to smile back. The VVC can also send alerts to the body to calm down by "slowing down our heart rate and increasing the depth of breath" (p. 83). Simultaneously, when threatened, the VVC prompts facial and voice changes to display distress (van der Kolk, 2014). In the event that an attempt at engaging socially fails, the limbic system (emotional brain) begins to take over (van der Kolk, 2014). This occurs because the first line of defense has failed, triggering the perception that the threat is more intense. The limbic brain then ignites the sympathetic nervous system's (SNS) fight-or-flight response. When this occurs, the body begins to prep for movement. The heart, lungs, and muscles become prepared for action. If the distress signals are not met by others or there is no way to "fight-or-flight," the body activates the "ultimate emergency system" the dorsal vagal complex (DVC; van der Kolk, 2014, p. 84). When the DVC takes control, the body essentially shuts down. Metabolism and heart rate are drastically slowed, causing the "heart drop" feeling (van der Kolk, 2014, p. 84). Van der Kolk (2014) describes it as the point the body will "disengage, collapse, and freeze" (p. 84). At this level of engagement, physical pain can go

unnoticed. It is a complete shutdown of body and mind. When dealing with this level of reaction, readjusting after the trauma has ended becomes drastically more difficult (van der Kolk, 2014).

The Polyvagal theory describes the body level reaction to trauma. Trauma causes the mind and body to become numb to the events occurring. This causes a fracture in the connection between the mind and body. While this protects us during the traumatic event, it causes significant impairment to the ability to heal. Most treatment today only addresses the mind, leaving the body separated. Trauma is directly related to the mind and body. There is a biological and psychological component, regardless of whether the trauma goes on to cause significant issues later. In the moment, the body disconnects from the conscious mind, utilizing the emotional brain. It is a protective factor in the oldest part of the brain that removes the conscious mind in order to protect the body in the most efficient way possible. However, this fracture between the body and mind can lead to significant issues in trauma survivors. More recent research on trauma and the body has highlighted the importance of involving the body in treatment, but, in practice, it is still difficult to find treatment that utilizes the body (van der Kolk, 2014).

There are many different methods utilized for trauma treatment. There are some aspects of treatment that seem to work well, while others are lacking greatly (van der Kolk, 2014). Research has been conducted in the hope of identifying the issues that are impacting veterans the most (Crawford et al., 2015; Demers, 2011). As discussed previously, the majority of research ignores the cause (Demers, 2011; van der Kolk, 2014). Treatment becomes a means of covering up, rather than addressing what is causing the symptoms. Many treatments focus on a quick fix (van der Kolk, 2014). This is helpful at the time, because it reduces the struggling, which can be immense. Long term however, it can lead to more problems, because the cause is not being

worked on. Some of the treatments used have shown positive outcomes, but in many cases, there is still a lack of attention being paid to the real cause of the symptoms (Crawford et al., 2015; Demers, 2011; van der Kolk, 2014). This also includes the problem that many of these treatments do not involve the body. The most recent popular trend of treating trauma is eye movement desensitization and reprocessing (van der Kolk, 2014). This technique uses memory recall of the trauma, while moving the eyes back and forth in a rhythmic motion (van der Kolk, 2014). In this procedure, the client typically does not speak about what emotions or reactions they are having, but instead internalizes the experience. While the body is utilized in this treatment, it only engages one part, the eyes. This technique has been shown to heal many individuals experiencing PTSD, but this treatment is only used for those with clinical diagnosis (van der Kolk, 2014). Psychiatric drugs for depression, anxiety, and other psychiatric issues are often prescribed to help alleviate the symptoms, such as numbing, loss of interest, decreased energy, insomnia, restlessness, and irritability (American Psychiatric Association, 2013). They may help alleviate some symptoms, but these drugs do not treat the underlying problems, which prompted the need for medication in the first place (van der Kolk, 2014).

Even with these treatment techniques and medications, OEF/OIF veterans are still not receiving the treatment they need. This is shown in the high percentages of veterans seeking treatment, but not remaining in treatment. The percentage of OEF/OIF veterans seeking VA care is much higher than after previous wars (Cohen et al., 2009; Crawford et al., 2015). However, most veterans only attended an average of two therapy sessions. This does not allow for any real benefits of the treatment. They are showing an interest and a desire to be treated, yet clearly are not getting what they need out of it. Research needs to begin focusing more on why veterans are leaving treatment. In the few studies done, there have been barriers identified as potential causes

that make veterans leave treatment early or to not seek treatment at all (Cohen et al., 2009; Crawford et al., 2015; Demers, 2011; Finley, 2011; van der Kolk, 2014).

It is important to recognize some of the barriers to seeking treatment for OEF/OIF veterans. The stigma of mental health and the stigma of expected male norms are strong reasons veterans do not seek treatment (Finley, 2011). The reoccurring idea that “I should handle it myself” adds to the other barriers that exist (Crawford et al., 2015, p. 119). Other veterans report believing that the way they felt upon returning home and the things they were experiencing were normal. If they believe they are having a normal reaction, something similar to everyone else, they see no need to seek treatment. The question becomes whether this is more about feeling normal or about the stigma of seeking treatment. In addition to the stigma of receiving treatment and believing that only they can fix their mental health issues, another barrier was avoidance of talking about their war experiences (Crawford et al., 2015).

For those individuals who do not have a clinical diagnosis, but are still experiencing symptoms, the likelihood of them seeking treatment is even lower. If their comrades who have diagnoses are not seeking treatment, it may be extremely difficult for them to justify getting any form of help. Another major barrier for non-diagnosed veterans is that they are not entitled to receive benefits from the VA (Demers, 2011). If the VA is telling them treatment is not necessary, the chances of them seeking treatment elsewhere is unlikely. Additionally, research found that a major barrier to OEF/OIF veterans seeking treatment is the resistance to the use of psychotropic drugs. This topic comes up again and again in studies, showing that veterans are strongly against the use of medication (Crawford et al., 2015). It would be beneficial to look deeper into the aversion of taking psychotropic drugs to better understand why there is such resistance. Knowing these barriers can be helpful when addressing why veterans do not seek

treatment, but it needs to go beyond just barriers and into what issues are most important to address in treatment. Identifying OEF/OIF veterans wants and needs in treatment will entice veterans to not only seek treatment, but stay in treatment (Crawford et al., 2015; Cohen, et al., 2009).

The amount of research done on treatment barriers has helped make improvements in OEF/OIF veterans seeking treatment. Research is finding significantly more men and women are seeking treatment than previous war cohorts (Crawford et al., 2015; Cohen, et al., 2009). This indicates that these veterans want help and see fewer barriers to seeking that help. The issue of remaining in treatment, however, continues to be a problem (Crawford et al., 2015; Demers, 2011). Something happens in treatment that stops them from coming back. With little research done on what veterans are actually looking for in treatment, it is not surprising that it is difficult to maintain treatment compliance. This seems to be a constant reoccurring theme in the research on OEF/OIF veterans, where only side effects of the trauma are addressed, while the core issues of addressing the physiological and psychological affects the trauma has had on the body and mind. This leads to a lack of understanding about what issues veterans are really facing when they return home, leading to a lack of recognizing what veterans need in treatment (Crawford et al., 2015; Demers, 2011).

What OEF/OIF veterans want in treatment is hard to find. Amongst the studies done, three recurring topics for treatment are anger, sleep, and stress management (Crawford et al., 2015). The desire to connect with other OEF/OIF veterans is another common subject. The idea is that other veterans understand the experiences they have had, while civilians do not (Demers, 2011). Social support has been repeatedly studied as a major protective factor for veterans upon returning home. Social support, specifically with other veterans, may offer a transition period

between war and civilian life. Demers (2011) highlights that before joining any of the armed services, there is a period of adjustment from civilian to soldier. Boot camp is set up specifically to teach individuals about the culture of the armed services, help them adjust to soldier life, and provide the necessary training. When veterans return home, they have no adjustment period. The change from civilian life to boot camp is drastic, but the difference from a foreign country in a war to civilian life is extreme. There are not a few weeks or months' worth of time to begin to calibrate back to civilian life. In many of the personal anecdotes from the research, veterans describe going straight from war onto a plane ride back home. Veterans not only need the chance to address sleep, anger, and stress management, but they need time to ease back into civilian life (Demers, 2011).

Verbal psychotherapy, one of the most common forms of treatment in VA settings, can address anger, sleep, and stress management. Psychotherapy can be beneficial for veterans and others who have experienced trauma. Within this work though, a major aspect of trauma is not being addressed. The body plays a direct role in the way trauma is experienced and how it affects the mind. If the body is not being addressed in treating trauma, the treatment is not attending to the individual as a whole (van der Kolk, 2014). It deals with only one aspect of the trauma.

Yoga, another common therapy for veterans, can address the body, but it is not typically done with a clinical therapist who can also address the psychological aspects of trauma.

Dance/movement therapy is a form of psychotherapy that can meet all the needs of veterans. It is a treatment that utilizes the body and the mind, does not require verbalizing the traumatic event, can address anger, sleep, and stress management, and provides the support of a group of other veterans (van der Kolk, 2014).

Dance/movement therapy is a psychotherapy that works to reintegrate, cultivate, and improve the body/mind connection through creative and authentic self-expression, leading to a healthier body, mind, and spirit. It utilizes the body and mind, where the body becomes the tool for expression, communication, and experience. The use of the body as a tool for healing has been present in different cultures for centuries (Levy, 2005). Dance/movement therapy was codified as a form of therapy in the 1940's. Marian Chace is credited with being the foremost pioneer of the field. Chace's work began primarily in the back wards of psychiatric institutions. She also worked with World War II veterans, exploring the benefits of empathetic movement with a group of veterans who had become non-verbal due to PTSD (Homann, 2010). When looking at research, there seemed to be work focused on dance/movement therapy working with veterans with PTSD, but none seemed to focus on working with veterans without physical and psychological diagnoses. Working with PTSD in general is a common topic of discussion with dance/movement therapy, which can be seen by flipping through the American Journal of Dance Therapy. Dance/movement therapy has become an increasingly more common treatment being used for veterans. Many dance/movement therapists are currently employed at VA's across the United States. This demonstrates the power of the work for the veteran population, but again leaves out a significant percentage of veterans who, due to lacking a clinical diagnosis, cannot receive treatment at a VA. No research was found on working with veterans without clinical diagnoses through dance/movement therapy, however, the benefits are clear for veterans with clinical diagnosis. It is imperative that non-diagnosed veterans have the opportunity to engage in the healing benefits of dance/movement therapy.

The most important aspect dance/movement therapy brings to trauma work is the involvement of the body. Trauma is initially processed through the body. The body registers the

event unconsciously, before the conscious mind becomes aware of what is occurring. The reaction that occurs in the body can directly affect the way the mind processes and responds. This can also occur in the opposite direction where the mind is affecting the body. Whether it is something that the person is able to overcome or whether it turns symptomatic, the body is always involved (van der Kolk, 2007; van der Kolk, 2014). Bessel van der Kolk, a foremost voice on trauma, dedicated the entirety of his last book to the importance of including the body in treatment of veterans and the lack of using the body in current treatment. When trauma occurs, especially repeatedly, the body is continually in a state of physiological reaction (Homann, 2010; van der Kolk, 2007; van der Kolk, 2014). This affects the way individuals experience their own body and bodily sensations. For some veterans, the body translates this hyperarousal as the new norm. Veterans may not only be experiencing constant hyperarousal from traumatic experiences, but from their day-to-day lives in war. While living in a war zone, some veterans may never experience a traumatic event. However, being in a war zone puts the body in a constant state of hyperarousal. They must constantly be on guard knowing that they and their comrades are in constant life threatening danger. Their hyperarousal becomes necessary to survival, but also potentially damaging. Essentially, they cannot do their job without being in this state, because they must be ready to act at any given moment. (Finley, 2011; van der Kolk, 2014). This can become the permanent state of physical and psychological functioning. It affects the way they perceive themselves and the world around them. Without the ability to lower arousal physiologically and psychologically from this heightened state, they struggle to feel safe, to interact with others appropriately and fully, leading to many of the issues addressed earlier (van der Kolk, 2014).

Losing control of the body creates a loss of agency. Agency is feeling largely in charge of one's own life. It is the individual knowing that they control most aspects of their life, what they do, why they do it, and how they do it (van der Kolk, 2014). Many veterans have lost the sense of being in charge of their lives, in large part because of their constant hyperarousal. They are often either numb or desensitized to everything around them or they are experiencing heightened and extreme reactions to everything around them. In both of these cases, they are not in control. There is a fracture between the body and mind. The ability to handle being in this extreme state and functioning typically can only last so long. As a protective factor, the individual splits away from listening to body sensations to prevent the constant barrage of them. It becomes too overwhelming to be consciously aware of the extreme messages the body is trying to send. What is left is someone who has stopped sensing anything in his or her body. This can lead to the psychosomatic effects often seen with recurrent trauma exposure, loss of awareness of emotions before they become overwhelming, and feelings of no longer being in control of oneself (van der Kolk, 2014).

Dance/movement therapy can help veterans reintegrate the body and mind and find means of sensing their body safely. Interoception and proprioception are two common aspects explored in dance/movement therapy. They allow for feeling the inner sensations of the body (Homann, 2010; van der Kolk, 2014). Throughout a dance/movement therapy session, the therapist can help to guide the individual(s) to continually pay attention and notice any feelings they experience throughout their body (Homann, 2010). It is just about noticing anything that may be felt within the body. For instance, within the body an individual may notice feelings such as a tingling, tightening, itch, pain, release, etc. This provides a beginning level of exploration to safely becoming more connected to the body. Rather than trying to determine why they may be

experiencing that sensation, the important aspect in the beginning is just noticing the sensations. This attention to only the body sensation can allow for later exploration into the why, but especially in early work with individuals who have experienced trauma, simply noticing sensations can be powerful and healing. It is a less intimidating way of making connections.

Having an awareness of inner sensations felt within the body has been shown to down-regulate, or relax, the nervous system (Homann, 2010). This occurs because of the involvement of the vagus nerve and its innervation throughout the body. Body awareness helps to initiate an organization of “perception, arousal, and regulation” as it acts on all three of these aspects at once (Homann, 2010, p. 83). It allows for a potential change to perception of feelings and emotions, which then acts on arousal, leading to regulation of the nervous system. Increased awareness of body sensations also allows for engagement of the vagus nerve. As the vagus nerve helps the nervous system calm down, gaining awareness of bodily sensations can do the same. Being mindful of sensations triggers the vagus nerve to respond and provide the calming effects it can have on the body. It acts as a voluntary means of initiating the vagus nerve. When the body is in a constant state of hyperarousal, the vagus nerve may not be able to act as efficiently as usual. Fostering awareness of bodily sensations acts as a manual means of engaging the vagus nerve to act on the nervous system. This offers the veterans a means of cultivating self-regulation. This helps the individual feel a sense of control over their body. Sensing the bodies feelings and beginning to form means of self-regulation can leave the individual feeling safe and relaxed, two things veterans continually reported not feeling, but desiring (Homann, 2010; van der Kolk, 2014).

The move toward feeling safe and more relaxed is a process. As the veteran is guided through dance/movement therapy sessions by the therapist, he/she has the opportunity to become

more aware of what they feel inside their body. Awareness of sensations occurring throughout the body has a close relationship to emotional processing. The body plays a vital part in the mind's processing and experiencing of emotions (Homann, 2010). When experiencing emotions, the body is sending somatic cues to different areas of the brain. The many systems of the body all engage differently when experiencing different emotions. Something in the environment cues the body to send signals to the brain. The brain then conducts messages throughout the body systems, each responding differently, causing emotional formation. This information goes to a specific sensory area known as the parietal lobe. The parietal lobe is responsible for responding to sensations such as touch, pressure, and pain (Berrol, 2006). The parietal lobes are simultaneously working with the limbic system, which is made up of the hippocampus and amygdala. This is the area earlier referred to as the "emotional brain." The connection between the limbic system and the parietal lobe leads to the bodily sensations from the parietal lobe being linked to emotions by the limbic system. The parietal lobes bodily sensations interact with the limbic system to form the emotions being experienced. Without the body and its reaction to the environment, emotions would not be formed (Homann, 2010; Berrol, 2006). Dance/movement therapy's use of movement and the body allows for more conscious awareness of emotions. Through sensing the changes in different body systems, such as the respiratory (breathing) and digestive systems ("gut feelings"), the ability to feel what an emotion feels like within the body heightens conscious awareness of emotions. Bringing emotions and feelings to the forefront of the conscious mind allows for clearer processing and understanding. Gaining access to emotions and sensations in the body creates greater feelings of agency. If a veteran can sense in their body when they are becoming angry, before they erupt into rage, they have a better chance of controlling their choices and understanding why they are angry. Otherwise, they only become

conscious of what is happening after they have already erupted with rage, leaving them feeling they have no control over themselves (Homann, 2010; van der Kolk, 2014).

Forming skills of self-regulation means not only working towards healing, but also potentially avoiding the need for medication. As mentioned earlier, one of the biggest reasons veterans avoid treatment is because of psychiatric medication (Crawford et al., 2015; Cohen, et al., 2009). In today's society, medication is often more popular than therapy. It can be seen as an easy fix, treating the symptoms, but it does not address the issues causing the need for medication in the first place. This is not to say that medication is not a vital component of treatment for many individuals. In the case of treating veterans, though, medication may act as a barrier to treatment. Therefore, if there are other treatments that may help eliminate the need for medication, they should be of the utmost importance. For anyone receiving medication, there should also be a continual attempt to work on the symptoms in order to provide a greater level of healing and a higher quality of life. Dance/movement therapy can help veterans foster the skills needed to address the issues. This means that dance/movement therapy provides veterans with a treatment that may not require them to be on medication, unless they want to be (van der Kolk, 2014).

Dance/movement therapy also provides a space to address the issue of memory. Memory for an individual who has experienced trauma is often not explicit, but remains an implicit memory. These implicit memories are held within the body on an unconscious level. Explicit memories are memories we can consciously speak about to others, ones that we consciously remember. The ability to consciously remember memories is believed to come from discussing or narrating them early after the event happens (Homann, 2010). When trauma is experienced, the amygdala processes the event as dangerous, and utilizes a protective factor by storing it in the

subconscious. When something then stimulates the perceived danger in any way, the body responds as if the threat or a similar threat were present. This may occur subconsciously, triggering a physiological and psychological response without conscious understanding of what is occurring (Homann, 2010). In this scenario, the emotional brain takes over, unconsciously raising arousal and preparing for reaction to the perceived danger. In typical memory formation, the emotional brain and the rational brain work together to form a clearer depiction of what actually occurred. In the event of trauma though, the emotional brain takes over completely as a protective factor (van der Kolk, 2014). For some individuals, after trauma they may vividly remember the events, but recall them with little to no emotion (van der Kolk, 2014). The same reaction in the body has occurred, but it has responded with numbing over the event rather than repressing. This is another example of why becoming aware of bodily sensations is key to reintegrating the memory's emotional content. Dance/movement therapy provides the means to explore the implicit memories and work through them utilizing the body. By accessing the memories through the body, they come to the conscious and are viscerally experienced. Essentially, the body acts as the means for verbalizing the event, in order for it to become explicit. This allows for the memory to become integrated into conscious understanding by processing it and exploring its effect on the self (Homann, 2010). None of this implies attempting to dig out the trauma and re-experience it, but instead, through movement and the body, aspects of the memory become conscious without being forced. They come from body experiences that occur through the movement. This allows for processing of what is coming up and why, without it needing to be entirely about the trauma itself. Within these experiences, it does not make the memory less painful, but it allows for processing and healing (Homann, 2010; van der Kolk, 2014).

By addressing and working on emotional and physiological regulating, integrating, and forming a greater sense of agency, dance/movement therapy directly address the concerns that veterans reported of anger, sleep, and stress management. This means that dance/movement therapy can address three of the major concerns veterans want to work on in treatment. As mentioned previously, fostering a greater awareness of bodily sensations allows for an increased ability to recognize what the body is feeling. Being able to recognize anger and stress allows for a heightened ability to regulate and employ coping strategies to manage it. This is when the ability to initiate the vagus nerves becomes even more important. Whether it is anger or stress, the vagus nerve has the ability to help down regulate the nervous system, bringing a calm and relaxed feeling. Similarly, this can be important when attempting to sleep. If the nervous system is in a state of hyperarousal, sleep will be difficult. When a veteran gains the ability to utilize breath, movement, and body sensing, they also gain the ability to help themselves sleep better through self-regulation. Dance/movement therapy can help provide the skills needed to address these concerns through the reintegration of the body/mind connection (Finley, 2011; Homann, 2010; van der Kolk, 2014).

Dance/movement therapy is not only about fostering awareness of body sensations to support healing. One of the greatest benefits dance/movement therapy has to offer veterans is the group. There are many therapy groups that can be attended, but for veterans, few can compare to what a dance/movement therapy group can provide. Veterans continually bring up the issue of being misunderstood and having no place in their new civilian life (Crawford et al., 2015; Demers, 2011; Finley, 2011; McFarlane & van der Kolk, 2007; van der Kolk, 2014). When the draft existed, veterans returned home in groups to their hometowns. They remained surrounded by individuals who had been through similar experiences. Now, rather than returning home with

people they have known most of their lives, they return home as potentially the only OEF/OIF veteran they know within their town (Crawford et al., 2015; Demers, 2011; Finley, 2011). This can be even more difficult when leaving a lifestyle that praises the group above the individual. Within the military, individuality becomes less important than the group as a whole. The group they belong to becomes everything - their family, their protectors, and their responsibility. They are trained to work together and rely on one another throughout the war. Demers' states that troops, "foster an intimacy based on sameness" (Demers, 2011, p.162). Then they leave their troop, after substantial experiences together, to return to their civilian lives. Their support system is no longer with them. They are left to process their experiences on their own, without the people they shared them with. Dance/movement therapy provides the opportunity for veterans to come together to ease the transition from a group focus, back to a more individual focus. It provides a group setting for veterans, focused on movement, cohesiveness, and universality (Crawford et al., 2015; Demers, 2011; Finley, 2011).

In the military, veterans utilize different types of machinery, but their bodies play a key role in operating it. Intensive physical training of their bodies is part of their daily lives. Physical health and ability allows them to do what they do in training and in war. The body holds a fundamental place in their work. Dance/movement therapy brings veterans together and builds on this fundamental use of their bodies. They are accustomed to moving together, and dance/movement therapy can employ this familiarity for therapeutic interventions. Training and military work often employs choreography and specific movements, all being done together. All the while, training their bodies in means of working together. The use of the body not only provides familiarity, but also carries the immense healing power of mirror neurons. Mirror neurons are present from birth. Through social interactions with others, babies learn to imitate

what they see (van der Kolk, 2014). Out of the innate need for connection, infants gain awareness of what is occurring in those around them and react accordingly. This is all possible through mirror neurons (van der Kolk, 2014). Much of what mirror neurons are assessing is non-verbal communication. We are constantly adjusting in relation to those around us, basing much of this off of our often unconscious, felt experience of what the other is feeling or thinking. A dance/movement therapist utilizes mirror neurons to foster the power of early attachment (Homann, 2010). Trauma can disrupt mirror neurons. “Trauma almost invariably involves not being seen, not being mirrored, and not being taken into account” (van der Kolk, 2014, p. 59). For veterans, this can become even more disrupted, because they are already experiencing feelings of being misunderstood and seen differently. A dance/movement therapist provides a safe space for moving together, activating mirror neurons, which allows for the veteran to feel seen and accepted (Homann, 2010). Mirroring between the therapist and veteran provides an opportunity for cultivating self-awareness in the veteran, because they are seeing themselves in another. Through kinesthetic empathy, the therapist sees the veteran and accepts the veteran fully, then reflects that back through movement. Mirroring also provides a chance for connection. It is a tool that cultivates the therapeutic relationship between the therapist and veteran. It does so in a way that places the veteran and therapist on the same level, both moving together and mirroring each other. This provides a greater sense of equality within the dyad of therapist and veteran (Homann, 2010; van der Kolk, 2014).

Mirror neurons are not only engaged through movement between therapist and veteran, but amongst veteran to veteran as well. Within the group, sharing in synchronized movements and mirroring one another can enhance attunement and emotional connections that are often missing in veterans’ lives. When mirror neurons become activated between veterans, it enacts

empathy and feelings of mutuality (Berrol, 2006). They are able to experience others' experiences and emotions on a level deeper than surface presentation. Through connections in the prefrontal cortex and the limbic system, empathy arises through an emotional and cognitive experience. This takes the level of connection and feelings of universality to another level, physically embodying experience and feeling, rather than just hearing it verbally communicated. This biological reaction leaves veterans feeling less isolated, feeling safer, and fostering connections. With social support being continually reported as a major protective factor when dealing with trauma, the ability to lessen isolation and feel safer while making connections with others is a fundamental role of treatment (Demers, 2011; Finley, 2011; McFarlane & van der Kolk, 2007; van der Kolk, 2014). Marian Chace employed the use of mirror neurons as a key to her work with World War II veterans. The majority of them had become non-verbal from severe withdrawal due to their traumatic experiences. Chace engaged through mirroring, first with each veteran and then by encouraging them to mirror one another. It opened up a safe place for creating connection for men who had become severely withdrawn (Berrol, 2006). When working with individuals with trauma, isolation and safety are some of the most difficult to treat, especially with verbal therapy. Veterans report not wanting to speak about what happened, therefore making it difficult to share in a collective discussion of things that connect them and foster safety (van der Kolk, 2014). In dance/movement therapy, there does not need to be any verbal communication to activate mirror neurons and promote these feelings of safety and reduced isolation. Even in the most resistant groups, any group rhythmic action can initiate the activation of mirror neurons. Dance/movement therapy provides the means to nurture these important aspects of treatment (Berrol, 2006; Homann, 2010; van der Kolk, 2014).

An important benefit of engaging mirror neurons is that it allows for varied levels of engagement. When watching another person's movement, facial expressions, and other body actions, mirror neurons become engaged. The individual's mirror neurons become engaged without having to mirror in return to experience the same affects. When only observing, brain structures still become engaged. The amygdala and the insula both engage in observing others while mirror neurons are activated. The insula is connected with somatosensory processing and cognition, while also having deep connections with the amygdala that provides the emotional association. This means that whether or not a veteran is fully engaged in the movement participation, because of choice or because they are unable, they are still experiencing connection and healing.

Through engaging mirror neurons, there is again engagement of the vagus nerve. Through cues and interactions with others that engage mirror neurons, the ventral vagus complex (VVC) also becomes engaged. The VVC synchronizes the sympathetic and parasympathetic nervous systems (van der Kolk, 2014). Similarly to mirror neurons, the VVC forms and is engaged through connection with others. It is another means of connecting with others through engagement and mirror neurons, helping an individual to recognize emotions and reactions in others. Connection with others engages the VVC, which responds by sending signals through the body to lower heart rate and deepen breathing, lowering arousal levels. As these physiological aspects change, the psychological reaction leads to feeling safe, relaxed, and comforted. Without using the power of mirror neurons to allow for feelings of safe connection with others, the VVC could not be engaged at the same capacity to allow for its beneficial reactions within the body (van der Kolk, 2014).

The group experience for veterans can enhance the full body experience of universality. With many individuals that suffer from trauma, there is a sense that they are alone. As previously mentioned, veterans, in particular, return home to a world drastically different from which they came, with different norms, and different expectations. Additionally, the majority of the individuals around them were most likely not in war. As previously mentioned, many veterans today return to a place that they have little to no knowledge of other OEF/OIF veterans around them. With veterans who are not diagnosed with PTSD, are not receiving treatment or may not even be qualified to receive treatment, the feeling of being on their own may be even more intense. Feeling like they do not deserve treatment, they may carry more shame about dealing with the symptoms that they experience. Comparing themselves to other veterans they know who have been diagnosed with PTSD or suffer from a traumatic brain injury, they may feel they are much better off and do not need help. By bringing together this group of veterans, it shows them that they do deserve help. Universality is the theory that when in a group of individuals experiencing similar issues, there comes the opportunity to recognize that they are not alone, they are not terrible for having the issues they have, and they deserve treatment, because they often believe that everyone around them deserves it (Yalom, 2005). When these veterans did have the opportunity to come together, they supported each other and believe they deserve to get better. Feeling this, ideally brings an awareness that because they are experiencing the same thing, they do deserve to get better. Experiencing this on a full-body level with others can enrich the experience, as it employs the whole person. Their whole identity deserves to receive help and is worthy of treatment. The ability to experience these things as a group of individuals who all understand the struggle provides a unique means of healing (van der Kolk, 2014; Yalom, 2005).

Veterans that are not diagnosed with PTSD or other major physical or psychological illnesses deserve not only access to treatment, but to feel that they deserve treatment. With the psychological and physical trauma they experienced in the OEF/OIF wars, they deserve to know that it is not expected that they return exactly how they left. They deserve to experience some modulation between being in war and returning immediately to civilian life. With the statistics on the major issues of homelessness, unemployment, substance abuse, and suicidal ideation, there is significant evidence that these issues are affecting more than just veterans with diagnoses. Researcher need to develop a more nuanced understanding of what is leading to these problems , and explore the effects of trauma that does not lead to PTSD. Time needs to be spent on understanding what veterans experience when they return home, what they struggle most with, and what they need to readjust to their new lives back at home. Once there is a better understanding of this, there will be a better understanding of what is needed in treatment. Regardless of what treatment is employed, there is proof that the body needs to be involved. Van der Kolk (2014) dedicated an entire book to the importance of the body in treating and working with trauma, yet the execution continues to lag behind the research. Dance/movement therapy has scientifically backed research that demonstrates its power to work towards healing not only trauma related issues, but the problems veterans want and need addressed.

Ideally, as treatment evolves with these veterans, it would expand to their families. It would encourage a new means of communicating and connecting amongst the people from which the veterans need long term support. It would also provide an opportunity to form a new understanding of the dance at home. The research on the power of dance/movement therapy amongst veterans and their family would be the next step in understanding the benefits this could provide.

Healing is possible for OEF/OIF veterans. The current state of the treatment though, does not provide the best results. The awareness of mental health is increasing, but it has yet to reach those who do not meet criteria for diagnosis of a psychological disorder. By researching and accepting that all veterans who desire and need treatment deserve it, it opens up the opportunity to truly address the high statistics of homelessness, unemployment, substance abuse, and suicidal ideation amongst OEF/OIF veterans. As a nation, we cannot truly say we are doing everything for our veterans if we are forgetting an entire cohort of them. It is our duty to provide them with healing, community, and support as they have done for us in serving our country.

References

- 100,00 Homes Campaign. (2013). *National Survey of Homeless Veterans in 100,000 Homes Campaign Communities*. Retrieved from <http://100khomes.org/sites/default/files/NationalSurveyofHomelessVeterans.pdf>
- #22 Pushups to honor those who serve. Retrieved from <https://www.22kill.com/22-honor-pushups/>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders*. Arlington, VA: American Psychiatric Association.
- Berrol, C. F. (2006). Neuroscience meets dance/movement therapy: mirror neurons, the therapeutic process and empathy. *The Arts in Psychotherapy, 33*, 302-315. doi: 10.1016/j.aip.2006.04.001
- Berrol, C. F. (1992). The neurophysiologic basis of the mind-body connection in dance/movement therapy. *American Journal of Dance Therapy, 14*(1), 19-29.
- Calhoun, P. S., Elter, J. R., Jones, E. R., Kudler, H., & Straits-Troster, K. (2008). Hazardous alcohol use and receipt of risk-reduction counseling among U.S. veterans of the wars in Iraq and Afghanistan. *Journal of Clinical Psychiatry, 69*, 1686-1693.
- Cohen, B. E., Gima K., Bertenthal, D., Kim, S., Marmar, C. R., & Seal, K. H. (2009). Mental health diagnoses and utilization of VA non-mental health medical services among returning Iraq and Afghanistan veterans. *Journal of General Internal Medicine, 25*(1), 18-24. doi: 10.1007/s11606-009-1117-3
- Crawford, E. F., Elbogen, E. B., Wagner, H. R., Kudler, H., Calhoun, P. S., Brancu, M., & Straits-Troster, K. A. (2015). Surveying treatment preferences in U.S. Iraq/Afghanistan veterans with PTSD symptoms: A step toward veteran-centered care. *Journal of Traumatic Stress, 28*, 118-126. doi:10.1002/jts.21993
- Demers, A. (2011). When veterans return: The role of community in reintegration. *Journal of Loss and Trauma, 16*, 160-179. doi: 10.1080/15325024.2010.519281
- Department of Veteran Affairs. (2015). *Analysis of VA health care utilization among operation enduring freedom (OEF), operation Iraqi freedom (OIF), and operation new dawn (OND) veterans*. Retrieved from <http://www.publichealth.va.gov/docs/epidemiology/healthcare-utilization-report-fy2014-qtr4.pdf>
- Eisen, S. V., Schultz, M. R., Vogt, D., Glickman, M. E., Elwy, A. R., Drainoni, M. Martin, J. (2012). Mental and physical health status and alcohol and drug use following return from deployment to Iraq or Afghanistan. *American Journal of Public Health, 102*, 66-73. doi:10.2105/AJPH.2011.300609

Finley, E. P. (2011). *Fields of combat: Understanding PTSD among veterans of Iraq and Afghanistan*. Ithaca, NY: Cornell University Press.

Friedman, M. J. (2016). PTSD history and overview. *VA National Center for PTSD*. Retrieved from <http://www.ptsd.va.gov/professional/PTSD-overview/ptsd-overview.asp>

Grossbard, J. R., Hawkins, E. J., Lapham, G. T., Williams, E. C., Rubinsky, A. D., Simpson, T. L.,...Bradley, K. A. (2013). Follow-up care for alcohol misuse among OEF/OIF veterans with and without alcohol use disorders and posttraumatic stress disorder. *Journal of Substance Abuse Treatment, 45*, 409-415. doi: 10.1016/j.jsat.2013.04.007

Homann, K. B. (2010). Embodied concepts of neurobiology in dance/movement therapy practice. *American Journal of Dance Therapy, 32*, 80-99. doi: 10.1007/s10465-010-999-6

Institute of Medicine (U.S.). Committee on the Initial Assessment of Readjustment Needs of Military Personnel, Veterans, and Their Families. (2010). Operation enduring freedom and operation Iraqi freedom: Demographics and impact. *Returning home from Iraq and Afghanistan : preliminary assessment of readjustment needs of veterans, service members, and their families* (pp. 17-38). Washington, D.C.: National Academies Press.

Jakupcak, M., Cook, J., Imel, Z., Fontana, A., Rosenheck, R., & McFall, M. (2009). Posttraumatic stress disorder as a risk factor for suicidal ideation in Iraq and Afghanistan war veterans. *Journal of Traumatic Stress, 22*, 303-306. doi: 10.1002/jts.20423

Koch, S. C. & Fischman, D. (2011). Embodied enactive of dance/movement therapy. *American Journal of Dance Therapy, 33*, 57-72. doi: 10.1007/s10465-011-9108-4

Langdon, K. J., Fox, A. B., King, L. A., Eisen, S. (2016). Examination of the dynamic interplay between posttraumatic stress symptoms and alcohol misuse among combat-exposed operation enduring freedom (OEF)/operation Iraqi freedom (OIF) veterans. *Journal of Affective Disorders, 196*, 234-242. doi: 10.1016/j.jad.2016.02.048

Lemaire, C. M. & Graham, D. P. (2011). Factors associated with suicidal ideation in OEF/OIF veterans. *Journal of Affective Disorders, 130*, 231-238. doi: 10.1016/j.jad.2010.10.021

Levy, F. J. (Ed.). (2005). *Dance/movement therapy: A healing art*. Reston, VA : National Dance Association an Association of the American Alliance for Health, Physical Education, Recreation, and Dance.

Metraux, S., Clegg, L. X., Daigh, J. D., Culhane, D. P., & Kane, V. (2013). Risk factors for becoming homeless amongst a cohort of veterans who served in the era of the Iraq and Afghanistan conflicts. *American Journal of Public Health, 103*, 255-261. doi:10.2105/AJPH.2013.301432

- McFarlane, A. C. & van der Kolk, B. (2007) Trauma and its challenge to society. In Van der Kolk, B., McFarlane, A. C., & Weisaeth, L. (Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (pp. 24-46). New York, NY: The Guilford Press.
- Schnurr, P. S., Lunney, C. A., Bovin, M. J., & Marx, B. P. (2009). Posttraumatic stress disorder and quality of life: Extension of findings to veterans of the wars in Iraq and Afghanistan. *Clinical Psychology Review, 29*, 727-735. doi:10.1016/j.cpr.2009.08.006
- Tsai, J., Pietrzak, R. H., & Rosenheck, R. A. (2013). Homeless veterans who served in Iraq and Afghanistan: Gender differences, combat exposure, comparisons with previous cohorts of homeless veterans. *Administration and Policy in Mental Health and Mental Health Services Research, 40*, 400-405. doi: 10.1007/s10488-012-0431-y
- United States Department of Labor, Bureau of Labor Statistics. (2016). *Employment Situation of Veterans-2015*.
- United States Department of Veteran Affairs, VA Suicide Prevention Program. (2016). *Facts About Veteran Suicide*. Retrieved from http://www.va.gov/opa/publications/factsheets/Suicide_Prevention_FactSheet_New_VA_Stats_070616_1400.pdf
- Van der Kolk, B. & McFarlane, A. C. (2007). The black hole of trauma. In Van der Kolk, B., McFarlane, A. C., & Weisaeth, L. (Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (pp. 3-23). New York, NY: The Guilford Press.
- Van der Kolk, B. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York, NY: Penguin Books.
- Yalom, I. D. (Ed.) (2005). *The theory and practice of group psychotherapy*. New York, NY: Basic Books.