5-1-2020

TRAUMATIC BRAIN INJURY IN SERVICE MEMBERS AND CHANGES IN THEIR FAMILIES: A QUALITATIVE INTERPRETIVE META-SYNTHESIS

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by

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Presented to the Faculty of the Honors College of
The University of Texas at Arlington in Partial Fulfillment
of the Requirements
for the Degree of

HONORS BACHELOR OF SOCIAL WORK

THE UNIVERSITY OF TEXAS AT ARLINGTON

May 2020

ACKNOWLEDGMENTS

I want to take this time to highlight my incredible support system. To my family, thank you all for being my cheerleaders. Thank you for the late-night talks, for being a listening ear, and supporting all my endeavors. You guys are my rock, and with that, you keep me grounded and breathing. Thank you for being the consistent in my life.

To my husband, thank you for being my living, breathing inspiration. Thank you for sharing that far out study you had read so many years ago. I would have never been writing this today if it were not for our life experiences together and that study. Thank you for being interested when I get wild ideas and for gently being the voice of reason.

Amber, thank you for your friendship. I am thankful to have you in my life and that we get to enjoy ticking things off our bucket list each time we meet. I am grateful to have met someone who shares the same drive and compassion for service members and TBI that I do. I will be forever thankful for that study abroad, and the classes after that helped us mold the friendship that we have today. Thank you for your laser focus and a fine-tooth comb. Your detail-oriented brain has, in many ways, made this study what it is.

Dr. Marie C Salimbeni, thank you for your quick-wittedness and gentle guidance. I appreciate your support from the very beginning and your willingness to do this study with me. Thank you for the quick responses, helping me see the big picture, and being there when I cried. Your guidance and wisdom have pulled all the pieces together in pretty stitching.

April 17, 2020

ABSTRACT

TRAUMATIC BRAIN INJURY IN SERVICE MEMBERS AND CHANGES IN THEIR FAMILIES: A QUALITATIVE INTERPRETIVE META SYNTHESIS

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The University of Texas at Arlington, 2020

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With the prevalence of Traumatic Brain Injury (TBI) in service members, there is little research on how this injury affects a service member holistically, including the family. This Qualitative Interpretive Meta-Synthesis sought to answer the question: how does existing literature depict the changes in the family after the service member sustains a TBI? Using qualitative methods, this study examined the original themes individually drawn from the literature of the eight existing articles on the topic. Then, methodically and with triangulation, finds overarching themes among the eight studies from the existing literature. Finding overarching themes helps to shed light on what individual researchers may or may not have found within their findings. This study helps to synergize information to create a web of knowledge. This study can provide help for people who may be going through TBI-

related experiences themselves and are seeking to find information and commonalities within their life. This study also provides Social Work practitioners and educators on how to care for the military population and their loved ones.

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CHAPTER 1

INTRODUCTION

Traumatic Brain Injury, otherwise known as TBI, is a growing concern among healthcare professionals as more knowledge is acquired about this condition, especially within the military community. "From 2000-2011, there were 233,435 reported cases of mTBI in military members; the actual number of sustained mTBI is expected to be much higher as many cases remain undiagnosed and untreated" (Kontos et al., 2013, p. 680). Much of the research conducted on TBI in the military has been designated solely for the physical injury itself. With the effects that TBI can have on its victims, it can impact every aspect of their life, causing residual effects on the people who are close to them. This Qualitative Interpretive Meta-synthesis will look at the existing or published qualitative studies to synthesize the research done for the service members and their families. It will also look for gaps in the literature. Finding this literature and the themes within it will show the extent of the impact that it has on service members and their families. What are the changes in military families' integration when the service member has been diagnosed with TBI?

1.1 Statement of the Problem

Reports indicate that up to 20% of service members sustain a TBI (Swanson et al., 2017). Many of these same service members also suffer from a wide array of other co-occurring mental, emotional, and physical ailments as well. Studies also indicate that veterans with TBI are 1.5 times more likely to commit suicide than those without injury

(King & Wray, 2012). The statistics further suggest that TBI sufferers have a harder time coping and adjusting to the losses associated with TBI (King & Wray, 2012). Due to TBI's holistic widespread effect, especially among members of the military, TBI is a problem that must be researched exhaustively in a person-in-environment perspective alongside the physical, mental, and emotional symptoms. The known symptoms of TBI results in a direct shift in the victim's personality and what makes them who they are. This shift in person results in a change in the family dynamics. Knowing how the family copes with the losses that come with the TBI is vital for future caregivers. How families experience changes in the service members with TBI can also give care providers a different perspective on treatment. With those findings, an evolution for future treatment to the service members and their families may occur.

1.2 Significance to Social Work

A Social Worker's role is to advance equality, social justice, conduct research for research-informed practice, and to ensure we do our best to care for others while upholding a high ethical standard. This research takes deep care of the Social Workers' competencies from the National Association of Social Workers (NASW). This study takes all proper precautions and necessary steps, such as triangulation, to ensure that the integrity of this research does not waver. This study will network established knowledge from individual research studies and collaborate them into a web of knowledge for a more profound understanding of a vulnerable population. Additionally, bringing light to what is also known, illuminating gaps in knowledge for further research needs. This research set out to study a holistic view of the person-in-environment from many service members with TBI and the different perspectives of those closest to them. Taking in to account the

environmental contexts of the service members gives dignity and worth to each of the individuals, not just the uniform they wear. Doing this will give social workers tools to give more effective, culturally competent, research-informed care. With advancing research, it provides the firepower needed to fight to further social justice for the vulnerable populations that Social Workers care for (NASW, 2008).

CHAPTER 2

LITERATURE REVIEW

In recent years Traumatic Brain Injury, more commonly known as a concussion, has become one of the staple diagnoses for military members both returning from war and training. Traumatic brain injury, commonly referred to as TBI, is defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) as "impact to the skull or other rapid movement of the brain within the skull," causing brain damage and resulting in "loss of consciousness [LOC], posttraumatic amnesia, and/or disorientation-confusion" (Gjertsen & Littlefield, 2019, p. 2). TBI is classified - mild (mTBI), moderate, and severe - through assessment for specific criteria, including the length of LOC, the severity of neurostructural damage, Glasgow Coma Scale (GCS) rating, as well as the severity and persistence of amnesia (Sundman et al., 2014).

Since 2000, there have been 383,947 veterans who have been diagnosed with Traumatic Brain Injury (TBI) (DOD,2019). Even though it has become such a widespread issue amongst service members, few qualitative research studies have been done on the long-term effects of TBI on both the service member and their families.

With the influx of diagnosis, it has sparked an interest and a sense of urgency for research to learn all they can about TBI and the effects it has on the victims. Military databases have

"noted substantially more head and neck injuries, including TBIs (during Operation Iraqi Freedom and Operation Enduring Freedom)…the fact that such a large

proportion of recent military service members has sustained a TBI underscores the importance of a deeper understanding of and ongoing research into the epidemiology, classification, evaluation, and treatment of TBI" (Swanson et al., 2017, para.3).

2.1 Population

The military population is unique in that when many receive a TBI, it is also concurrent with other trauma like PTSD. Concurrent traumas happen so frequently that the term post-deployment syndrome is used to reference a combination diagnosis in the military. “Post-deployment syndrome may include a combination of TBI, dysthymia, PTSD, chronic pain, and generalized anxiety” (Swanson et al., 2017, para. 22). Outside trauma affects the view of TBI because much of TBI research has been done in cohesion with PTSD, confusing others who want to look solely at TBI. In recent years data show that up to half of service members meet the criteria for Post-Traumatic Stress Disorder (PTSD) that have been diagnosed with combat related mild TBI (mTBI). (Linquist et al., 2017) In addition to that, because of their environment, military members are an at-risk population for TBI. In the field and combat, military members are expected to excel in strenuous activity and withstand unsafe physical conditions. They are often exposed to improvised explosive devices (IEDs), mortars, artillery, and other weaponry (Swan et al., 2015). Through its known symptoms and recent data, growing evidence is indicating that TBI argues an increased risk for depression and PTSD for veterans (Morissette et al., 2011). The military population is also different from other TBI sufferers due to the culture of the military. The culture is different in that they are specially trained warriors and subjected to a significant amount of stress with structure and command forces.

2.2 Family

The family of service members is different than those whose life is civilian based. The difference is that civilians do not go through many of the experiences that military families go through. Many spouses experience isolation from friends and family with moves that come with service member spouses who are in active duty. (Voris & Steinkopf, 2019) Some families experience relocations and are sent to different countries, many of which speak different languages. With cultural changes, finding new support groups can be difficult. Many families feel torn between the experiences that come with being a part of the military while still managing the expectations that come with being a civilian. Many families feel that they are disregarded by the military and ignored by the civilians because they cannot fit either culture. (Voris & Steinkopf, 2019). Military families have reported being unable to find their place in the world between the military and civilian life. One wife spoke on if she felt respected between the military and civilians: "I can say I don't feel disrespected. I feel disregarded, which is different. I mean, you know, to be disrespected would be acknowledging me where disregarding is Lack of acknowledgment. I feel unacknowledged. If you're not acknowledged, how can you be disrespected? I'm disregarded." (Voris & Steinkopf, 2018, p.505).

The staple of military families includes deployment. Families do not see their loved ones for several months to years with limited communication and available information. When the service member returns home, they are often plagued with post-deployment obligations and wounds, both seen and unseen. "As far as activity within the first few weeks of coming home . . . It was all getting in the car, driving to a doctor's appointment; I would say he probably had eight or nine doctors' appointments a week"

(Hyatt., 2013, p. 53). The reintegration process includes its difficulties with routine changes and other life changes that the families were forced to cope with while the loved one is gone. Children face their own mental and emotional challenges due to missing their parents during their formidable childhood years. The service member misses births, birthdays, holidays, weddings, funerals, and other life-altering events. In civilian families, missing events such as this would create disdain and retaliation amongst families. In military families, the sadness that comes with the service member missing those moments must be dealt with in love and forgiveness as the person is not gone due to personal choice but due to military obligations. "Soldiers with mTBI face the added challenge of returning to a family that may have changed due to life events during the soldier's absence" (Hyatt, 2013, p. 5). Many families also struggle with the issues that the service members suffer through the adjustment back into civilian life while also dealing with injuries such a TBI, PTSD, and other service-related mental issues. The spouse often finds their role as being a caregiver along with their other life roles. "the women struggled with civilian expectations while caring for a combat veteran. They find that these women struggled to manage work and family responsibilities and struggled to care for themselves" (Voris& Steinkopf, 2018, p.496).

2.3 Traumatic Brain Injury

TBI has been around since humans have been able to get concussions; however, it has only recently gained the attention of military helping professionals. "Traumatic Brain Injury (TBI) is a wound that was unheard of just a few short years ago today; however, TBI is becoming a more common injury among military members" (Traumatic Brain Injury Overview, 2020). There are over 1.7 million TBI diagnoses per year, nearly 80% of which

are classified as mTBI (Gjertsen & Littlefield, 2019; Swan et al., 2015). Despite the prevalence of its diagnosis, mild Traumatic Brain Injury, or mTBI, is also the most underdiagnosed and misdiagnosed form of TBI due to discrepancies in symptoms among sufferers (Kontos et al., 2013). The World Health Organization (WHO) predicts that by 2020, TBI will be ranked as the third leading factor in early disease onset and mortality (Sundman et al., 2014). TBI has made waves of significant diagnosis, and it is believed to be far more widespread then professionals can know. With the threat of military members being considered nondeployable or being sent home during a deployment, many service members never get their symptoms checked out. In addition to the immediate symptoms, many symptoms appear several weeks to months later. Symptoms for TBI affect every part of the individual from biological, mental, emotional, and socially.

2.3.1 Biological Symptoms

The most apparent symptoms often represent the physiological symptoms that one may see in their TBI wound.

"A traumatically induced structural injury and/or physiological disruption of brain function as a result of an external force that is indicated by new onset or worsening of at least one of the following clinical signs, immediately following the event: 1. any period of loss of or a decreased level of consciousness (LOC), 2. any loss of memory for events immediately before or after the injury (posttraumatic amnesia (PTA), 3. any alteration in mental state at the time of the injury (confusion, disorientation, slowed thinking, etc.), 4. neurological deficits (weakness, loss of balance, change in vision, praxis, sensory loss, aphasia, etc.) that may or may not be transient, 5. intracranial lesion." (Kimbler, 2011, para. 6)

The long-term effects can become muddled as they may not seem related to the victim. Known impacts of TBI that can last a lifetime include memory loss, change in personality, substance abuse/ addiction, and other life-altering effects.

2.3.2 Mental/Emotional

In recent years researchers have found that many of these symptoms make long term indirect behavioral changes. These symptoms are met with weak coping mechanisms such as alcohol and drug abuse that quickly lead to addiction. ("Traumatic Brain Injury [TBI] and Suicide," n.d.). As a result of these symptoms, many veterans become angry and bitter, leading them to feel helpless and alone. In a research study, Morisette explored the life satisfaction rate with many aspects and found that the life satisfaction rate over the next five years declined after the onset of TBI (Morisette et al., 2011).

2.3.3 Psychosocial Impact

Mild Traumatic Brain Injury has long been a recognized medical issue but has been under-researched and under-treated. MTBI symptoms can impact all areas of life, resulting in physical and socioemotional alterations. Symptoms and related diagnoses may include headache, sensitivity to stimuli, disorientation, memory loss, aggression, and agnosia. There are also many related psychosocial diagnoses, consequences, and symptoms that are a result of TBI. Some of these include posttraumatic stress disorder (PTSD), depression, a higher risk of developing addictions to substances like alcohol, domestic violence, suicidal and homicidal ideations ("Traumatic Brain Injury [TBI] and Suicide," n.d.). Because each person is different, the symptoms may vary widely from individual to individual, making it difficult to distinguish between behavior changes resulting from neurostructural damage and secondary behavior changes.

Repeated mTBI also has long-term implications and increases individuals' risk for developing neurodegenerative diseases, including dementia, chronic traumatic encephalopathy (CTE), and amyotrophic lateral sclerosis (Sundman et al., 2014). Due to impaired socio-behavioral functioning, resulting from neurostructural damage and awareness of the declined baseline, mTBI poses a risk not only for the sufferer but also for the entire family unit. Many military families experience unexpected difficulties throughout the reintegration process, including but not limited to learning to cope with trauma-related changes, taking on the caregiver role, re-establishing roles and responsibilities, reforming a family life, and overcoming mismatched expectations. These attributes of TBI can destroy marriages and families. TBI impacts physical, cognitive, emotional, and social functioning and can affect sufferers' personal, family, and professional life. While this can be described in medical terms, it is most understood through mTBI sufferers' first-hand account of their experiences:

"I used to cry a lot…I just have to deal with it. It is financial for us too…[education is] not something that can be offered because I already [have a master's Degree]. I could be retrained, but with my cognitive [deficits it will be difficult]…want to be able to identify what kind of work it is, and you know for me it also has to be [fulfilling], I'm not willing to go to work to be a Wal-Mart greeter" (Hyatt et al., 2019, p. 62).

These psychosocial changes resulting from TBI exposure are very difficult for individuals and families. These socioemotional complications are further escalated within military families. They are concurrently struggling to recreate family cohesion as they adjust to family changes and changes in the service members' physical, mental, and emotional ability. Through proactive and family-focused VA TBI education and treatment,

military members with mTBI and their families can become skilled and knowledgeable in working through the range of issues they may experience throughout their TBI recovery and reintegration process.

2.3.4 How TBI Creates Risk

Through its known symptoms and recent data, growing evidence is "indicating that TBI confers increased risk for PTSD and depression among war veterans" (Morissette et al. 2011). This is particularly concerning because, without treatment, long-term overall well-being could be harder to accomplish. "Persistent neurobehavioral sequelae of TBI (e.g., memory problems, headaches) may lead to worse long-term functional outcomes (e.g., occupational, social) among returning war veterans. For example, they may contribute to poorer treatment outcomes by leading to increased symptoms of psychopathology (e.g., impaired concentration, irritability)" (Morisette et al., 2011). In the Morisette research (2011), the researchers found that the life satisfaction rate over the next five years declined after the onset of TBI. Much of the literature goes on to explain that depression plays a vital role after the beginning of TBI. Thus, indicating that after said impact, the risk of onset depression dramatically increases. It is also essential to consider the other more physical symptoms that are mentioned above.

2.4 Conclusion

With the thousands of families who suffer from the devastating effects of TBI, it is has become pertinent that researchers consider a holistic view of the population. These individuals have put their life on the line for their country, and it is more important than ever to make sure that care providers take care of them and their loved ones. Traumatic Brain Injury can go on to ruin the lives of all individuals involved with the victim. TBI has

this potential because the symptoms span from and beyond the physical, emotional, and psychosocial (Morisette et al., 2011). Thus, disrupting each aspect of the sufferers' life. Soldiers have lost family, friends, and themselves post TBI, and it is pertinent that we figure out better ways of treating this.

CHAPTER 3

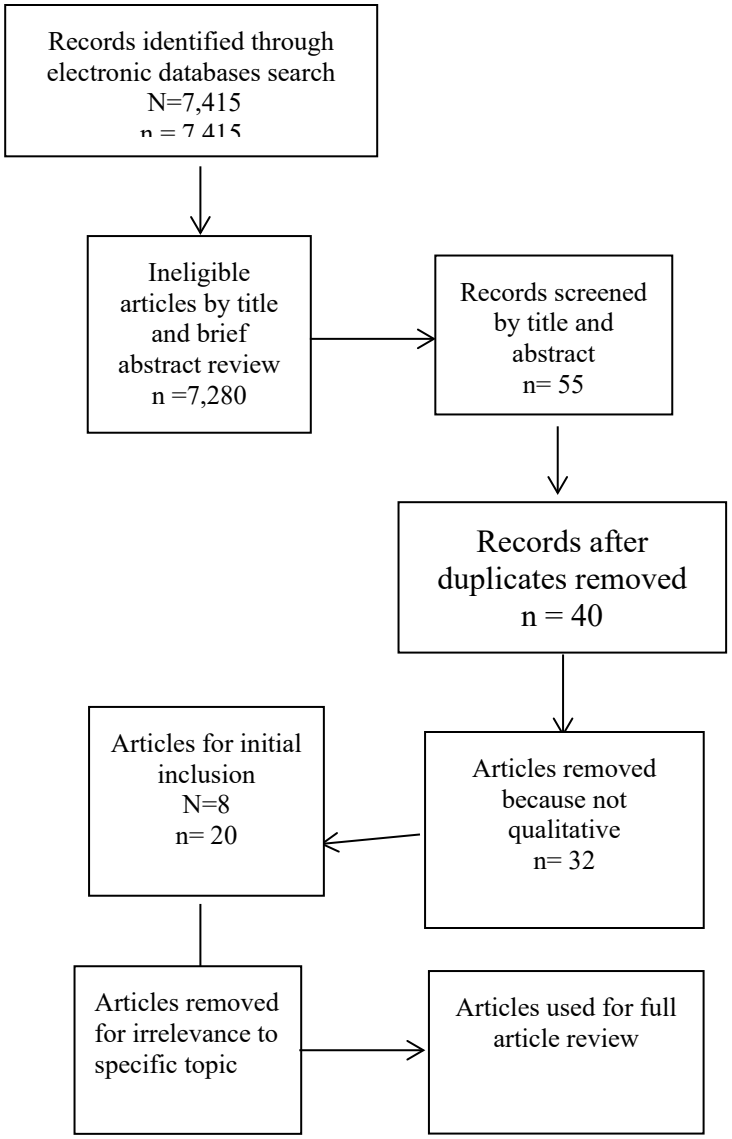
METHODOLOGY

This research used a Qualitative Interpretive Meta-Synthesis, otherwise known as a (QIMS) design. QIMS is an in-depth synthesis of published qualitative research. It is accomplished by systematically examining specific human experiences from multiple individual published literature and then cross-examined together. QIMS achieves this by systematically analyzing the already published literature, finding the themes that unfold within the particular research, and comparing and contrasting these themes to other similar studies. QIMS is a relatively new method that is specifically designed for Social Work. QIMS is designed to help professionals in the field to gain a greater sense of understanding of the holistic needs of a population (Aguirre & Bolton, 2013). The beauty of QIMS is that it turns individualized knowledge from a single source into a web of knowledge that creates greater validity, a more profound sense of understanding, and brings forth a set of shared experiences from a particular phenomenon.

There are five steps identified in a QIMS study. To see a visual representation constructed by the creator of QIMS, see Appendix A. The first step is to develop a research question by looking at published qualitative research on a specific topic (Aguirre & Bolton, 2013). The overarching or, in other words, the main question is: What are the changes in military family reintegration when the service member who has been diagnosed with TBI? Next, a large sample of qualitative articles that were relevant to this topic was selected. Eighty-four databases were utilized. In addition to the databases, websites that included

other forms of search engines that used outside sources include EBSCOhost, VA.gov, and Google scholar. The articles were reviewed and eliminated based on their relevance to the topic if they were Quantitative Studies, their bias, relevance in age, or if there were other fatal flaws as set forth by (Aguirre & Bolton, 2013). The remaining articles were then sent to the overseeing faculty advisor. After the advisor read the materials, it was then discussed to decide if the studies were appropriate for the study. Other methods of gathering sources were to go through many of the usable article's citations. Of the workable publications, three of the eight were discovered through citations. One was in Google scholar. Three studies that are used are in one dissertation that was unearthed in Ebscohost along with one other source.

Figure 3.1: Quorum Chart



Next, demographics and themes from each of these articles were recorded in a data table (see tables 1 and 2 below). To see the demographics chart from their original literature, see Appendix B. After reading these articles a few times, new, overarching themes from the cross-study analysis were derived. Finally, triangulation was completed with the faculty advisor and colleagues to ensure that personal biases did not lead to misinterpretation of the results (Aguirre & Bolton, 2013). Some of these biases include

being close to a service member with Traumatic Brain Injury, being a family member and spouse to a service member and having a long generational line of service members in the family. Witnessing and hearing about the reintegration experiences of multiple service members and their families. Other personal biases include seeing the unique struggles of each individual and coping with the challenges of being the spouse of a service member. Having had personal involvement with the population, the learning process of separating my own experiences from what is considered the average experiences of other service members and their families. This unknown bias can be especially true for the families who are in branches other than that of the Army, Army National Guard, and Airforce.

Table 3.1: Demographics of Studies Included in QIMS

Authors and publication year	Tradition and data collection method	(N)	Demographics Tables in Appendix B	Setting	Discussion in Source
Freytes, et al., 2017	McMaster Model of Family Systems; Interview Method. The use of the Family Assessment Device Semi-Structured Interview Guide was employed.	12 veterans with their significant others	See Table 3.3 and 3.4	In-depth 1.5 hours of interviews in a private VA office.	Descriptions of current relationships and changes in relationships pre and post deployment with TBI injury.
Kyong Suk Hyatt, 2015	Collection of literature via PubMed online medical database of English language publications.	19 usable articles	TBI sufferers and family	N/A	mTBI effects on individuals, effects of the family, and factors of the effects on family, future implications for research on the topic.
Kyong Suk Hyatt, 2015	Strauss and Corbin's grounded theory; primary method is face-to-face, semi structured interviews. Tools utilized in addition to primary include: Hospital anxiety and depression scale (HADS), Locke &	9 military service members and their spouses	See Table 3.5	Not Specified	Items analyzed were homing from deployment, managing unexpected changed, managing mismatched expectations,

	Wallace's Marital Adjustment Test, and Post-traumatic Stress Disorder Checklist Military Version (PCL-M)				and adjusting to new expectations.
Kyong Suk Hyatt, 2015	Strauss and Corbin's grounded theory; use of face-to-face, semi-structured Interviews employed.	9 service members and their spouses	See Table 3.6	Not Specified	Items discussed include Becoming aware of the issue, advocating for care, obtaining the care, and sharing the responsibility for care.
Alexander, Scholten, Dromerick, Magruder, Danford, Cichon, Bruner, Zapata, and Blackman, 2017	Phenomenographic, interviews, and focus group	8 service members	See Table 3.7	Not Specified	Items discussed are Relationship with the military and the "break-up," Relationship with civilian society, relating to family, "protecting freedom" justification to wartime acts, productivity and self-worth, and Relationship with VA
Elnitsky & Kilmer, 2017	Literature and finding the gaps	30 published literature	Service members post deployment with war-related mental wounds	N/A	Reintegration needs, challenges, and strategies with PTSD and or TBI service members and families.
Voris & Stienkopf, 2019	semi-structured interview methodology	Seven service members' wives.	Age Range- 30-47 Married to service members who served post 9/11. 2 spouses are married to active-duty soldiers 2 are widows 3 are married to non-active-duty veterans. Deployments of service members	Not Specified	The research discussed experiences and feelings about the military community, family readiness groups, the civilian community, work, and careers.

			varied from 1 to 6.		
Walker, et al., 2017	systematically analysis of a large database of narrative and masks made by individuals suffering from PTSD and TBI by way of "art therapy" and grounded theory	370 military service members	Participants (n = 370) age range 20 to 50 years. 97.5% were men. 89.1% Caucasian 4.2% Hispanic, 3.6% African American, 2.2% Asian or Pacific Islander 0.8% who identified as "other." Time in service ranged from 1.5 to 33 years. Participants came from all five military service branches, with the most frequently serving in the Navy (45.1%; n=167). The most frequent participant pay grade was E7(21.6%;)n=80; E7 titles vary across service branches— Army, Sergeant First Class; Marine, Gunnery Sergeant; Navy, Chief Petty Officer; Air Force, `Master Sergeant).		Topics for discussion include Physical Injuries, Psychological injuries and challenges, relationships-recognizing support and mourning loss, military and community identity, cultural metaphors, mask as a life story and conflicted sense of self. *See Table 3.8*

Table 3.2: Themes Extracted from Original Studies

Author and Year	Original Themes
Freytes et al., 2017	Theme 1: Individual Changes (Deficits related to PTSD and TBI) • Personality changes • Memory Loss • Inability to perform activities that they could do in the past • Inability to make decisions

	• Guilt due to change • Inability to be the primary breadwinner • Change in Coping strategies' • Isolation Theme 2: Loss • Loss of connections • Loss of sense of self • Loss of familiarity • Loss of Relationship dynamic • Struggle to let go • Loss of intimate involvement Theme 3: Relationship changes • Forced Growth • Change in established patterns • "Finding a New Normal" • A disconnect of "what once was" • Change in communication • Change in level of involvement • Change in understanding family members • A shift in awareness of family perspective • Change in coping strategies • Change in partnership and belonging
Hyatt, 2015 (Literature Review)	Theme 1: mTBI post-Injury Effects on Family • Family Psychological stress • Increased negative interaction between family and injured ind. • Longer reintegration periods • Deterioration in romantic marital relationships • Poor coping skills Theme 2: Response to Functional changes in mTBI individual • Assuming the caregiver role • Unmet physical, emotional, and mental needs • Perceived Burden • Resentment Theme 3: Reactions to changes in mTBI sufferer • Family functions decline due to showing personality and psychological changes in sufferer • Resentment towards spouse post changes in mTBI individual • Changes in coping behaviors • Uncertainty in Relationship
Hyatt, 2015 (Finding the New Normal	Theme 1: unexpected reintegration outcomes Due to TBI • A higher level of anxiety • Less predictable loved one (TBI sufferer) • Delayed bonding due to changes in the service member • Family rejection due to rage, sudden irritability and mood changes, avoidance, or isolation from mTBI person. • Inability to resume family role and responsibility post-TBI • Financial, emotional, and mental insecurity in reintegration • Excluding TBI victim • Compensating for memory loss Theme 2: Assuming the caregiver role Theme 3: Marital changes

	• Lack of education about TBI • Mismatched expectations • The feeling of being a burden • Inability to make each other happy • Impact on intimacy • Impact on communication • Diminished marital satisfaction • Advocate • A changed course of future • Spouses tolerance with changes in TBI spouse Theme 4: Adjusting to new expectations • New Normal • Acceptance of the change • Growth • Incorporating new expectations • Constantly evolving • Reintegrating service member back into the family • Renegotiate roles • Rebuilding a new normal for family
Hyatt, 2015 (Chasing the Care)	Theme 1: Spouses Advocating for Care For Servicemember • Lack of understanding about TBI • Spouses taking the role as an advocate • Spouses take the role as caregiver • Spouses felt unwelcome in making rehabilitation plan • Lack of empathy from care providers • Felt like an inconvenience to VA • Hard to access care for loved one
Libin et al., 2017	Theme 1: Relating To Family Members • The feeling of "nobody understands." • Unable to relate post deployment with TBI • Isolating from family • Desire to be productive Theme 2: Unkind Separation from Military Post-Injury • Abandonment Upon Discharge • Loss of self-esteem with involuntary discharge
Elnitsky & Kilmer, 2017	Theme 1: Reintegration Challenges • Navigating Disruptions • Caregiver Burden • Poor mental health • Learning coping mechanisms Theme 2: Finding a "new normal." • Family experience with meaningful challenges • Growth • Resilient adaptation
Voris & Stienkopf, 2019	Theme 1: Experiences of wives with Combat Veterans with TBI • Community Abandonment • Isolation from Civilian World • Struggling with expectations • Misunderstood by Civilians • Loss of Community

	• Challenges of coping with PTSD/TBI • Grieving the husbands' own losses • Abandonment of social support • Loss of military support/community Theme 2: Emotions following TBI and Combat Veterans • Feelings of disrespect • Feelings of disregarded • Feelings of embarrassment for seeking care • Husbands loss of identity and self-worth
Walker et al., 2017	Theme 1: Self in Relationship • Recognizing support • Accepting support • Mourning Loss of relationships • Mourning difficult relationships • Guilt for having the injury • Guilt for changes caused by TBI • Guilt for impairments due to injury • Survivors guilt • Challenges of Identity

CHAPTER 4

RESULTS

4.1 Giving Their Voice Back

The QIMS produced six significant themes: 1. Grieving the loss of the loved one. 2. Learning to love the stranger 3. Growth in destruction 4. Forced evolution in family unit 5. Service Member Dumping 6. Finding a new Sense of Belonging. Grieving the loss of the loved one and learning to love the stranger is a metaphorical representative of the post-injury, post deployment individuals who come home and the life-changing symptoms associated with Traumatic Brain Injury (TBI). Growth in destruction, forced evolution in the family unit are related in that families have to learn to cope, grieve, rebuild, and the many other changes and losses that take place amid destruction that TBI has been known to do. "Service member dumping" and "finding a new sense of belonging" are the themes associated with the struggles that service members and their families must learn to navigate. A new sense of belonging is the effects of the injury and how it shifts every individual involved in individuals, the family, and place in society. It represents the finding of their purpose, responsibility, and roles as the person-in-environment.

Table 4.1: New Overarching Themes with Original Themes Noted

New, Overarching Theme	**Original Themes that Aligned with New Theme with Reference Number**
Grieving the Loss of the Loved One	• Loss of sense of self [1] • A disconnect of "what once was" [1] • Family functions decline due to showing personality and psychological changes in sufferer [2, 3, 6] • Mourning Loss of relationships [8] • Mourning Difficult relationships [8] • Unable to relate post deployment with TBI [5] • Resentment towards spouse post changes in mTBI individual [2] • Delayed bonding due to changes in the service member [3] • Inability to perform as they could do in the past [1, 3, 5, 8] • Unmet physical, emotional, and mental needs [1, 2, 3, 5, 8]
Learning to Love a Stranger	• A changed course of future [3] • Spouses tolerance with changes in TBI spouse [3] • Acceptance of the change [3] • Reintegrating service member back into the family [3] • Renegotiate roles [3, 1] • Rebuilding a new normal for family [3, 1] • Resilient adaptation [6] • Change in understanding family members [1]
Growth In Destruction	• Forced Growth [1, 6] • Change in coping strategies [1, 2, 6] • Incorporating new expectations [3] • Constantly evolving [3] • Spouses taking the role as an advocate [4] • Spouses take the role as caregiver [4, 3, 2, 6] • Family experience with meaningful challenges [6] • Resilient adaptation [6, 3, 1]
Forced Evolution In Family Unit	• Incorporating new expectations [3] • Constantly evolving [3] • Renegotiate roles [3, 1] • Rebuilding a new normal for family [3, 1, 6] • Resilient adaptation [6, 3, 1] • Recognizing & Accepting support [8]
Service Member Dumping Part A: Military Services Part B: Mental/ Emotional	Part A: • Loss of connections [1] • Lack of understanding about TBI [4, 3] • Hard to access care for loved one [4] • Loss of military support/community [7, 5] • Lack of empathy from care providers [4] • Abandonment Upon Discharge [5, 4, 7] • "Chasing the Care" [4]

	• Spouses taking the role as care advocate[4] • Spouses take the role as caregiver[4, 3, 2, 6] Part B: • Loss of sense of self[1] • Loss of familiarity[1] • Spouses felt unwelcome in making rehabilitation plan[4] • Felt like an inconvenience to VA[4] • Feelings of disrespect[7, 4] • Feelings of disregarded[7, 4] • Feelings of embarrassment for seeking care[7]
Finding a New Sense Of Identity	• Change in coping strategies[1, 2, 6] • Incorporating new expectations[3] • Constantly evolving[3] • Spouses taking the role as an advocate[4] • Spouses take the role as caregiver[4, 3, 2, 6] • "Finding a New Normal" [3, 1] • Challenges of Identity[8, 7] • Renegotiate roles[3, 1] • Rebuilding a new normal for family[3, 1, 6] • Resilient adaptation[6, 3, 1] • Changes in partnership and belonging[1]

Notes: (Freytes et al., 2017) [1], (Hyatt,2015) [2, 3, 4] (Libin et al.,2017) [5], (Elnitsky & Kilmer, 2017)[6], (Voris &Stienkopf, 2019) [7],(Walker et al.,2017)[8]

4.2 Grieving the Loss of a Loved One

When service members come home from deployment, the family begins reintegration. Families must adjust to the service member being home after the extended absence. With any military deployment comes with the risk of being injured. So, when the service member comes home with an unseen injury like TBI, it sets forth a different set of circumstances leading to a potentially extended reintegration period. As one soldier states in the interview, "[This time], it seemed to take a little longer for me to reintegrate" (Hyatt, 2015, p. 58). The changes in the service member begin showing face leading to havoc in the families' lives. The consequences of TBI result in a wide array of personal and emotional changes like irritability and uncontrollable anger, less physical abilities, a higher risk of substance abuse, and the task of resuming family roles ("Traumatic Brain Injury

[TBI] and Suicide," n.d.). "In the words of a SO: "He's just like...depleted...like he doesn't do that. He's, of course, less affectionate than he was before. Emotionally connected, communication, those things are things that have just disappeared" (Freytes et al., 2017, p. 154). Some soldiers report that due to these changes, it had led to delayed bonding and family rejection. Many veterans report that many of them have caused their spouse to walk around on eggshells (Hyatt, 2015; Freytes et al., 2017). Others report that they came home with an inability to communicate with their families that they know that they have become isolated and withdrawn. One service member speaks about how this has affected his life since the return from deployment. "I think my wife cannot understand the reason why I was so withdrawn, and what I was going through, so our sex life pretty much went out the window" (Freytes et al., 2017, p. 153). This transition into the effects of TBI has resulted in a disconnect in the family "One SO[Significant Other] said, “If I had to use just one word, we’re disconnected’”(Freytes et al., 2017,p.153.).

After a delayed reintegration and the effects of TBI took place, many of the families go through a mourning phase of the loss of the loved one they once knew. (Walker et al., 2017) One veteran explains it as, “she knew that I was not well, that I was not the same person. I was not the same person that I was before I went to Iraq.’” (Freytes et al., 2017p.154) Most service members and their significant others in this situation have a difficult time letting go of what once was and what it ought to be. (Freytes et al. ,2017) A veteran speaks on this “ ‘I know she misses the me that used to be there and she keeps, she’s always hoping that guy shows back up . . . but I think she really does know that that guy died over there, and he’s never coming back”(Freytes et al., .2017, p.153). When a

person describes the metaphorical death of someone, it can suggest that they are grieving the person they once were.

4.3 Learning to Love A Stranger

The next phase that many service members and their families face the process of acceptance or tolerating the changes in the solider (Hyatt, 2015). And begin to genuinely reintegrate the veterans back into their "new" family. Final reintegration often looks like a change during the family's future (Hyatt, 2015). Acceptance begins with understanding family members and their perspectives on how they see themselves in the family unit (Freytes et al.,2017). The spouse often takes on the role of the caregiver (Hyatt, 2015, p.56; Elnitsky & Kilmer, 2017). Next, the family negotiates their roles and routines within the family (Hyatt, 2015), (Freytes et al. ,2017). Finally, the family slowly begins to accept these changes in the family and implement new coping strategies. One Significant other describes this phase as "'modifications had to be made and still have to be made... I would imagine that it [will] always be this way. . . but no, I would say we came through it! We survived it!'" (Freytes et al., .2017 p.155). Just like every family, change is inevitable. Families adjust and readjust; this particular adjustment has a lot more growing pains as the solider is reintegrating after being gone for a significant period of time. They come back as a significantly different person. (Freytes et al., 2017; Hyatt,2015; Libin et al.,2017; Elnitsky & Kilmer, 2017).

4.4 Growth in Destruction & Forced Evolution in the Family Unit

To move on from the destruction of TBI, families are forced to grow and evolve in the family unit. Families find ways of coping with the changes that come with the reintegration. They find these coping skills out of love for the partner. As one spouse

describes this commitment: "'I think, and part of the reason I think that we have, quite frankly, stuck it out and persevered is that at the end of the day we really do love each other.. . . We will give it everything we have.'" (Freytes et al., 2017, p.154). The families often cope by finding a 'new normal.' (Elnitsky & Kilmer, 2017; Hyatt, 2015; Freytes et al., 2017). "All participants described their personal new normal as a constantly changing phenomenon." (Hyatt, 2015, p.65)

Many Couples find ways of adapting to the complications that come with TBI by figuring out each other needs even if the other person may not completely understand why the spouse may be feeling that way. One spouse describes this: "'He likes it when I touch him because I felt for a while, he didn't want me, didn't need me, he didn't want our family. It was so, okay, I'm just here. Well, now, he wants me to touch him, and even sometimes, I have to consciously tell myself to touch him when I pass by. '" (Hyatt, 2015, p.65). A large portion of growth comes with veterans recognizing and accepting support from those around them. One veteran describes this growth by ". . . it takes two, not one person can do it. It can't be, the weight can't be put on her shoulders, all of it can't be put on my shoulders, to make the family unit, it's us.'" (Freytes et al., 2017, p.154). One can see the resilient approaches that begin the evolution in military families. Families succeed in problematic times by building on each other's strengths. Family commitments to one another tend to be the most influential ingredient for the sustainment of families. Despite the strenuous amount of challenges that come with TBI included reintegration has resulted in the resiliency that ultimately leads to evolution and positive growth. (Freytes et al., 2017)

4.5 Service Member Dumping

Many families and service members themselves experience a sense of service member dumping shortly after the veterans' discharge. In the literature, there are two distinct sub-themes within the service member dumping. These sub-themes showed themselves both as an original pronounced theme and more subtly put in all but one of the articles. The theme became more evident as the repeated cries of frustration and other negative feelings towards the loss of military accumulated within the words of the service members and their spouses. It was also stated in the discussion pieces written by the authors and researchers. The first sub-theme is the military services and the actions, or lack thereof, that come forth when a military member is discharged. The second part is the mental and emotional aspect that comes along with the loss of the military.

4.5.1 Military Services

Service member describes this dumping by: "… you spent all this time and energy to get trained and learn to do your job and then when the time's done they're just like, here's some books to read on how to readjust. Hopefully, you'll figure it out, get out the door'" (Libin et al., 2017, p.135). A spouse of service member describes this sudden loss of community connections: "For many veterans, it's all they've known since they were 18 years old. They go to the gym on post. They swim on post. They shop on post. And then, all of a sudden, they're not active duty. If they don't retire, that's just gone." (Voris & Stienkopf, 2019, p. 499) Many families express their challenges with TBI is largely due to the Lack of education they receive after the service member receives their diagnosis with TBI. (Hyatt, 2015) (Elnitsky & Kilmer, 2017). If they did not receive a diagnosis before the service members returned home, many families expressed that they had to "chase the

care." (Hyatt, 2015, p.80). Many families, seven out of nine, in Hyatt's research expressed that they had to prove that there was something wrong, that they felt unwelcome at care providers, and that the care providers portrayed that the spouses were an inconvenience.(Hyatt, 2015) On the service member side, "Over 50% of participants (six soldiers and three spouses) indicated that they had experienced conflict or disagreement about the soldier's care plan (Hyatt, 2015,p. 83). A soldier recalled their experience with a care provider: "Lack of empathy from providers, my biggest issue with mental health. I have actually had a mental health professional up there tell me to stop being a pussy and suck it up. It was his exact words to me, and after that, I kind of just stopped dealing with them.'" (Hyatt, 2015, p.84). Soldiers and their families began to feel disregarded by the military community and others that were once their support system and a sense of identity.

4.5.2 Mental and Emotional

The mental and emotional portion of feeling "dumped" or "broken up with" by the military. One spouse openly discusses this: "'You want an answer as to do I feel respected? Yes or no. I can say I don't feel disrespected. I feel disregarded, which is different. I mean, you know, to be disrespected would be acknowledging me where disregarding is Lack of acknowledgment. I feel unacknowledged. If you're not acknowledged, how can you be disrespected? I'm disregarded.'" (Voris & Stienkopf, 2019, p.505). Many of the service members express that they feel like they have lost a sense of identity and a place in this world post-military. In the research conducted by Libin et. Al. Of the eight service members who interviewed all but one characterized the military separation as traumatic.

Furthermore, here is one of the last voicemails to a spouse left by service member before he took his own life "…I just want to talk to you. I feel like I'm losing control of

my life! And that the army wants to leave me and you want to leave me and… sometimes I hurt myself just trying to make myself feel more alive …" (Voris & Stienkopf, 2019, p.501) The voicemail describes the pain, loss of identity, loss of familiarity, and much of what the service members feel when discharged without choice. In Voris and Stienkopf, the author pointedly describes that the women often expressed their "grievances due to their husband's loss of career and/or identity post-service." (Voris & Stienkopf, 2019, p.501) Each article describes the struggles and battles that the families with wounded warriors fight years past the onset of TBI. Each time the voices of those families are clear. The battle lies beyond the family reintegration, the battle wounds, and the symptoms of TBI. Furthermore, family members are suddenly faced with having to move on without the military, while still facing the destruction that the military career left behind.

4.6 Finding A New Sense of Identity

After any career, there is an adjustment period. The adjustment period is especially true for the military as many of the soldiers begin their careers as early as 18, and a family is heavily involved in many of the service members' life." (Voris & Stienkopf, 2019, p.499) "'once you're a soldier, you're always a soldier.'" (Libin et al., 2017, p.133) Active-duty soldiers a family may be moved several times to bases across the world. When a veteran has completed their service member duties and is discharged with TBI, an adjustment and reformation period take place. Parts of the family's Identity are inevitably adjusted too. As seen in table 4.2, located in Appendix C created by (Walker et al., 2017, p.5), a sense of identity is broken up into five distinct person-in-environment parts. The five parts are Self as Individual, Self in Relationships, Self in Community, Self in Society, and Self Over Time. At first glance, it may be hard to see how a job and a concussion could have a

weighted impact on personal identity. However, In the table, one can see how the military impacts the sense of identity in multiple categories, and without the military being a part of one's life, it can significantly disrupt the identity of the sample populations' life in varying capacity. “Several service members referred to the challenges of identity, pain, and personal and relational struggles sustained as a result of combat experiences.” (Walker et al., 2017, p.7) Once the service member is discharged and sustains a TBI, the person goes through a recreation of sorts of what it means to be them and who they are in this world. During this same time, the family is also finding its new sense of identity. Each member has an adjustment of roles within the family (Voris & Steinkopf ,2019). The individuals within the family also must shift their identities to evolve with the changed family member.

4.7 Discussion

The words of families who have lived through these injuries give evidence that more research is needed to be done. It is incredibly clear to see just how much TBI has affected and will continue to affect the family. Through their words, they show how families have been abandoned once the deployment is done. Qualitative studies have given voices to those who desperately need to be heard by care providers, and it shows how much still needs to be done. It is a journey through mourning to growing and trying to build a new life from the ashes of the old one. The families who transform with forced growth and find positives in the experience show relentless resilience. The families show a genuine commitment to each other time and time again. The soldiers who come back as the wounded and accept the support from their loved ones as they overcome their guilt and pride have learned the strength of the families who surround them. It is an incredible journey to see the lives through the words of these soldiers and see just how impactful this

injury is more so than if they were to be just physically hurt. Calls to research have been blatantly voiced in all but one of the provided articles that were found. Finding qualitative research on this topic is incredibly scarce, and it provides its own set of data that there isn't enough out there on military families with TBI.

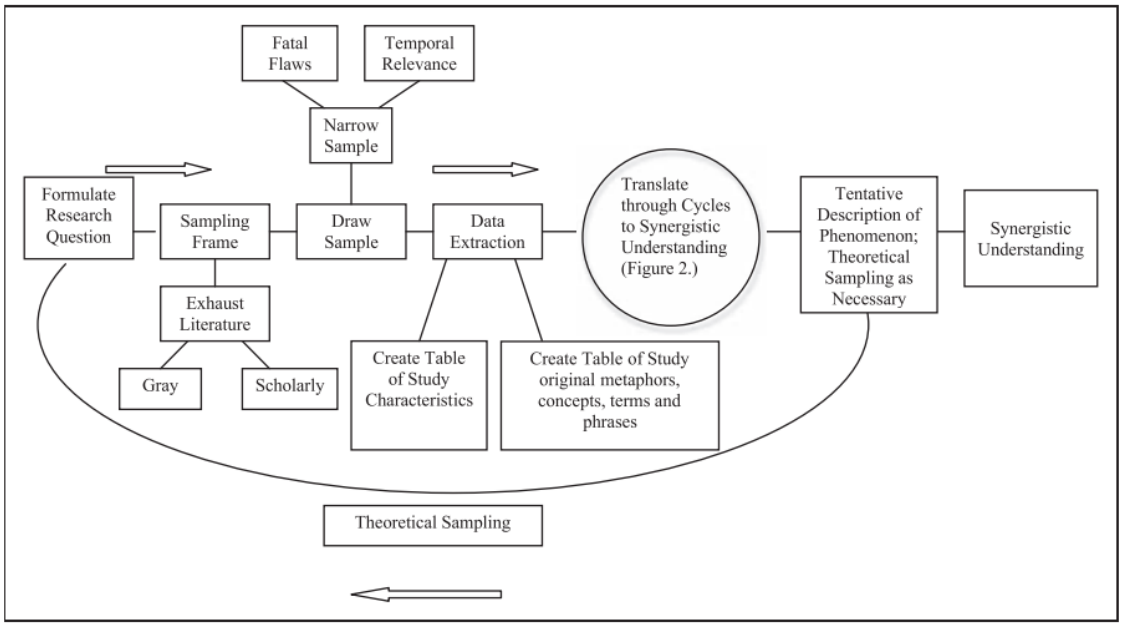
4.8 Study Limitations

With any research, qualitative, and quantitative alike, there are limitations. QIMS is no different. As both types of research, the cost of researching humans and their persona experiences is that bias may happen. QIMS tries to eliminate that, and in this particular research, triangulation was done between fellow Social Workers and a faculty advisor. Close examination of personal bias has been taken earnestly to eliminate bias as much as possible. However, due to the specificity of the topic and the limited material available, misinterpretation is possible. Another inherent limitation of QIMS is that because it is an examination of published literature integrating human subjects, so there is no way to receive any clarification on topics that further questions may arise.

APPENDIX A

QIMS METHODOLOGY

Figure A.1: Qualitative Interpretive Meta Synthesis (Aguirre & Bolton, 2013)



APPENDIX B

DEMOGRAPHICS

Table B.1: Demographics For (Freytes et al., 2017)

Table 1. *Veteran/SO Demographics*

Veterans ($N = 12$)	*N*	%
Race		
White	4	33.3
Black	5	41.7
Hispanic/Latino	3	25.0
Ethnicity		
Puerto Rican	3	25.0
Education		
High school graduate or GED	3	25.0
Some college/Vocational school	4	33.3
Completed college degree	3	25.0
Graduate degree	2	16.7
Mental Health Diagnoses		
Post-traumatic Stress Disorder (PTSD)	12	100.0
Brain Injury (i.e. TBI)	3	25.0
SOs ($N = 12$)	***N***	**%**
Race		
White	4	33.3
Black	5	41.7
Hispanic/Latino	3	25.0
Ethnicity		
Puerto Rican	2	16.7
Central/South American	1	8.3
Education		
High school graduate or GED	1	8.3
Some college/Vocational school	8	66.7
Completed college degree	2	16.7
Graduate degree	1	8.3
Mental Health Diagnoses		
Depressive disorder	1	8.3

1

Table B.2: Demographics For (Freytes et al.2017) Cont.

Table 2. *Dyad Demographics*

Dyads (N = 12)	N	%
Income		
$0-$5,000	1	8.3
$25,001-$35,000	1	8.3
$35,001-$45,000	2	16.7
<$45,000	8	66.7
Relationship Length		
≤5 years	1	8.3
5–10 years	1	8.3
10–15 years	3	25.0
15–20 years	2	16.7
<20 years	5	41.7
Times Veteran Deployed		
1	3	25.0
2	2	16.7
3	4	33.3
4	2	16.7
≥5	1	8.3
Years Since Return from Last Deployment		
2–3	3	25.0
4–6	4	33.3
7–9	4	33.3
≥10	1	8.3
Number of Children		
0	3	25.0
2	4	33.3
3+	5	41.7
Number of Children Living at Home		
0	5	41.7
1	3	25.0
2	2	16.7
3	2	16.7

Table B.3: Demographics for "Finding The New Normal" (Hyatt, 2015, p. 50)

Table 6: Soldier and Spouse Characteristics

	Characteristics	Mean (SD)	Median	Range	n (%)
Soldier	Age	33.4 (7.5)	33	21-44	
	Education	14.4 (2.4)	14	12-18	
	Race				
	White				5 (56)
	Black				1 (11)
	Hispanic				2 (22)
	Other				1 (11)
	Rank				
	Enlisted				2 (22)
	NCO				4 (44)
	Officer				3 (33)
	Deployment time	9.0 (3.7)	11	3-12	
	HADS Depression	9.7 (3.6)	10	3-14	
	HADS Anxiety	9.1 (3.3)	9	2-13	
	MAT Score	92.1 (35.4)	99	41-130	
	PCL-M Score	52.0 (11.3)	56	30-67	
Spouse	Age	33.9 (9.2)	35	20-49	
	Education	13.3 (1.7)	13	12-16	
	Race				
	White				7 (78)
	Black				1 (11)
	Hispanic				1 (11)
	HADS Depression	4.1 (2.8)	3	1-9	
	HADS Anxiety	7.0 (3.7)	7	2-15	
	MAT Score	116.4 (17.9)	121	90-148	
Marital Dyad	Time in marriage	9.7 (8.8)	8	1-25	
	Children				
	0				2 (22)
	1				3 (33)
	3				3 (33)
	4				1 (11)

Age = in years; Children = number of children at home; Deployment time = length of deployment in months; Education = in years; Enlisted = E1-E4; NCO (Non-Commissioned Officer) = E5-E9; Officer = CW1-O6; Time in marriage = in years

Table B.4: Demographics for "Chasing the Care" (Hyatt, 2015, p. 79)

Table 9: Soldier Characteristics

ID	Gender	Age	Race	Deployment	T injury	PCL-M	Dep	Anx
SO1	M	31	H	1	6 mon	54	11	10
SO2	M	22	B	3+	16 mon	67	8	12
SO3	M	39	W	2	6 mon	56	7	9
SO4	F	44	H	3+	23 mon	62	10	13
SO5	M	43	O	3+	18 mon	47	12	9
SO6	M	30	W	3+	9 mon	56	14	7
SO7	M	21	W	1	7 mon	56	14	12
SO8	M	33	W	3+	8 mon	40	8	8
SO9	M	33	W	3+	4 mon	33	3	2

Anx = Anxiety score from Hospital Anxiety and Depression Scale (HADS); B = Black; Dep = Depression score from HADS; Deployment = Number of deployments since 2001; F = Female; H = Hispanic-non White; M = Male; PCL-M = PTSD Checklist military version; O = Other race; T injury = Time since injury; W = White

*HADS sub scores = 11 or greater is clinically significant; MAT scores = less than 100 indicate maladjustment; PCL-M scores = 50 or greater is considered clinically significant

Table B.5: Demographics for (Alexander et.al.2017, p. 132)

Table 1. *Demographics and Other Characteristics of Participants in Follow-On Interviews*

Variable	Veteran (pseudonym)							
	Bailey	Dale	Gale	Harper	Lee	Morgan	Parker	Terry
Sex	M	M	F	M	M	F	M	M
Race/ethnicity	White	White	White	White	Black	White	White	White
In focus group?	Yes	Yes	No	Yes	No	No	No	Yes
Phone/FTF	Phone	Phone	FTF	FTF	FTF	FTF	FTF	Phone
Age at interview	36	29	28	44	47	32	40	27
Age at TBI event	26	23	23	34	19	30	36	22
Age at TBI diagnosis	26	28	27	39	46	30	39	23
Age at separation	26	27	27	41	20	30	37	23
Service	Army	Navy	Air Force	Army	Army	Army	Army	Army
Military role characterization	Not specified	Not specified	Joint Command	Not specified	Airborne Ranger	Journalist	Medic	Not specified
Paid employment	No	No	No	Yes	No	Yes	No	No
In school (current/planned)	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes

Note. M = male; F = female; FTF = face to face; TBI = traumatic brain injury.

APPENDIX C

IDENTITY

Table C.1: Representation of Self for (Walker et al., 2017, p.5)

Table 1. Number of participants related to types of representation of self (n = 370).

Type of representation of self	Number of participants
Self as individual	
Physical injuries	116
Psychological injuries	106
References to positive attributes of self and interests	13
Self in relationships	
Recognizing support	29
Mourning loss (lost or difficult relationships)	28
Self in community	
References to belonging in military identity/division/unit	102
References to regional/ethnicity/teams etc.	42
Self in society	
Cultural metaphors	77
Existential reflections	26
Self over time	
Mask representing life story	51
Questions and transitions	24
Conflicted or split sense of self	
Representing two selves from any of the above categories	84

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BIOGRAPHICAL INFORMATION

Janise C Miescke is a senior undergraduate student at the University of Texas at Arlington. Janise majors in social work, where she is focused on international social work with a focus on the military population. She began her journey at North Lake College, where she studied abroad on a Global Citizenship Seminar in Austria. There she became focused on micro international care. When Janise became an honors student at the University of Texas at Arlington, after earning her associate Degree at North Lake College, she began her research on Traumatic Brain Injury in service members. She gradually began to focus on the person in the environment leading to the care of military service members and their families. Janise is grounded in her advocacy for non-traditional families. Janise demonstrated her advocacy work on The Hill in Washington, D.C., when she advocated for college students who were military spouses and the battle with Federal Student Aid. It was there she spoke in advocacy directly with Congressmen for the state of Texas, Senator John Cornyn, and The Department of Education. Janise begins her graduate work starting in the Fall of 2020 and plans to earn her Clinical Social Work License (LCSW) after that. She plans to continue her research and become an international crisis intervention therapist with a focus on service members.