

What Influences Mental Health Treatment among Military Veterans?

by

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Abstract

The purpose of this research is to determine what influences Veterans and their mental health treatment. This topic matters on a personal level for me as I am a Veteran and have had friends commit suicide. This topic matters on a much broader level for the many families out there losing their loved ones on a daily basis. It matters for those Veterans who sacrificed so much. Others in the past have focused on combat, PTSD/mental health, quality of care, self-medicating and the effect each had on the Veteran. The theory guiding this project was that once the influencers are identified in the Veteran's mental health treatment, it would then be possible to use those, in such a way, to influence future Veterans and current Veterans who need the treatment but choose not to. This thesis uses a secondary data analysis research design with 1,888 Veterans from the 2013 National Survey of Drug Use and Health (NSDUH). The results showed that there was no correlation with mental health treatment and age, gender, race, combat pay, income, and drug and alcohol abuse. The correlations were with medication for mental health treatment and mental illness severity. Future focus should be more personal as in surveys or direct interviews as the information will address issues that were beyond the scope of this thesis. This will allow better acknowledgement of some of the outside influences, like age, income, marital status or roles that family and friends may play. This could also determine whether Veterans feel that medication helps or if they simply take it because they are told to.

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Chapter I

Introduction

Military personnel leave for war; they come back changed in many ways. For some these changes are seen by the human eye, such as amputations, gun-shot, or shrapnel wounds. For many others, their injuries are much deeper and are unable to be seen by the human eye. Their injuries come in the form of mental disorders and could be one of the most dangerous or frightening injuries to have. How do we help those who have seen and done things that many have never experienced? How do we attempt to understand? First, there must be a diagnosis of what their mental condition is and a recovery program that lines up with that disorder. The severe limitation with this is that one program may work with one individual with a specific diagnosis but may hinder another individual with the same diagnosis. The mental health clinics at the Veterans Affairs (VA) have a very difficult task in determining all these things. Second, how do we maintain commitment to that recovery program? What will influence or help Veterans want to continue treatment? The influencers in a person's recovery can be a range of things or maybe just a few things. Can medication be used as a proposed catch-all? Will medication work for everyone as an influencer? Some of the possible outcomes if treatment is not continued could range from severe depression, isolation, loss of job, substance-abuse(self-medicating) or homelessness and violence which could result in criminal activity. The worst possible outcome of course being suicide or the hurting of others. The third step in this process is combating the constant backlog in the VA system to get these Veterans the help they need, in a timely manner and not have to wait months for their appointment dates. If one begins treatment but must wait two months for their next appointment, what effect does that have on the results of the mental health treatment.

One of the goals of this thesis is to find some of those determining factors, the central key to influence the best possible way to get the Veterans the mental health treatment they need and maintain that treatment.

With the vast number of military operations over the last decade and beyond there is a back-log at the Veteran's Affairs office in terms of disability claims. Consequently, Veterans are now given the opportunity to seek medical care at local offices in place of waiting two months for an appointment at the local VA through the Veterans Choice Program. Some of the biggest issues Veterans who served in Iraq/Afghanistan campaigns must deal with are traumatic brain injury, PTSD and pain (Cifu, 2013). With the Iraq and Afghanistan Campaigns spanning well over eight years, the amount of soldiers who have gone overseas is large; some having multiple tours. As of 2006, there was an estimated 133,000 American troops sent to war; upon returning home, "one-third of veterans from Iraq and Afghanistan have sought mental health care-including care for issues of post-traumatic stress disorder (PTSD), drug abuse, depression, and alcohol abuse-within a year of returning home" (Chadwick, 2006, pg. 45).

I am one of the Veterans who has had multiple tours; three to Iraq and one to Afghanistan and with each deployment there was a new or different experience. There is no doubt that I have come back a changed individual. Many of the things mentioned will be witnessed or experienced first-hand by myself. Many Veterans remain untreated for a wide variety of reasons but many feel that they have it under control or use other methods to treat themselves, to escape or dampen their pain, such as drugs and alcohol (Brady, 2004). This thesis will explore the question of what influences Veterans' use of the mental health treatment. One of several items that will be investigated in this thesis is

how does combat experience influence the likelihood that Veterans partake in mental health treatment. Could they suffer some sort of issue due to being “so close” but never getting to be a part of the combat?

There are a few categories that a Veteran may fall under in regards to the Mental Health Disorder. These include but are not limited to, Depressive Disorders, Anxiety Disorders, Trauma-and Stressor-Related Disorders, which covers PTSD (Post-Traumatic-Stress-Disorder) and even Sleep-Wake Disorders (DSM-5). From the outside looking in some people may even go to lengths to stay away from a person with PTSD, because they may be afraid of the possibilities. This may take place many times in a marriage. A returning soldier may no longer be the person that the spouse married. The person may be so changed mentally s/he is almost unrecognizable emotionally. Some are able to adapt to this and understand it, while others are unable to do so. It especially depends on the severity of the PTSD that a person may be able to handle and work through. This can have many effects on a marriage, as the person whom they married is no longer there. The act of divorce could also play a vital role in the mental state of a returning Veteran.

This topic was chosen because there is a large amount of Veterans who need help. “As of 2008, over 830,000 Iraq and Afghanistan veterans have become eligible for VA services. Of those, 320,000 have sought VA health care and over 100,000 have been diagnosed with posttraumatic stress disorder (PTSD) or have other mental health issues” (Fairweather, 2008, pg. 2).

Giving this topic the attention it needs and deserves is one way to reach out to Veterans and get them to the treatment they need. Sometimes the hardest battle is not the

one fought on the front lines, it is the battle of returning home and having everyone expect everything to return to normal again. With the specific training that goes into getting one ready for war, it is nearly impossible to train them mentally, especially for returning. Things happen, things become out of their control and brain takes over, possibly changing them for the rest of their lives. With so many soldiers who have gone overseas, there has been a huge increase in Veteran suicides. In an article written by Rob Hotakainen, the severity of the problem is described. “With veterans now accounting for one of every five suicides in the nation, the Department of Veteran Affairs is under pressure from both the courts and Congress to fix its mental-health services in an attempt to curb the death toll” (Hotakainen, 2011). The article goes on to talk about the lack of national awareness and that very few programs are effective at all. One of the focus areas of this thesis will be to explore the effectiveness of these national awareness efforts. Military suicide is a difficult subject, as with any suicide. There can only be so much help and treatment given to people; before it is ultimately their decision to live or die. People can receive treatment their whole life but end up still committing suicide. The type of effort that goes into helping prevent suicide is constant. Mental illness or a history of substance abuse is found in 90% of all suicides and 80% of those have a mood disorder (D’Orio, 2004).

Many of today’s warriors are not old enough to drink but are old enough to fight in a war. Sending immature minds, in life experience, can have a huge effect on people, more so than that of older people’s minds. People’s environment plays a huge rule in who they are and in an older mind they have had more experiences in different environments,

therefore young minds will be effected differently than older ones, that are more experienced (Plomin, 2004).

Having these young men and women go fight a war and have them come back with little to no help, or delayed help could be one of the biggest reasons that combat Veterans are more likely to commit suicide than those who have not been in battle. Many scared, but willing to do the necessary so that others don't have to is an honorable task but a detrimental one. Going beyond the psychological aspects of the task itself; the physical aspects of experiencing combat are almost just as bad. For example, an 18-year-old boy goes to war and loses a leg. Not only does the combat in itself change his world forever, now he is given the task to live the rest of his life with only one leg. The amount of physical willingness and mental fortitude needed to continue life as it once was, is astronomical. This is not to take away from the older more experienced Veterans who may lose a limb; they too have a battle ahead of them. The difference is the amount of time spent on earth, the amount of time they had to live a full life. The similarity between these two is that they cannot face it alone. They need help from the medical facilities and clinics-along with friends and family if they are to continue on and live life.

The things experienced overseas, especially combat, may be read about in books or portrayed through movies. Although not every base or location overseas is known for combat, many are bombed or mortared daily, receive random attacks of gunfire, sniper fire and even attacks with VBIEDs (Vehicle Born Improvised Explosive Devices). Many convoy routes are exposed to IEDs (Improvised Explosive Devices) more so than others. Many attacks on convoys use tactics such as using a child to stop the convoy so it can be ambushed, or even have an injured or dying child in the road, with many civilians asking

for the soldiers help. Soldiers must choose whether to pass that dying child without helping, thinking about their children back home but understand that child may in fact be an IED and they must pass, for everyone's safety

(www.globalsecurity.org/military/intro/ied-iraq.htm).

In the most recent wars, Iraq and Afghanistan, there are no soldiers wearing uniforms where our soldiers can simply identify the enemy. Many soldiers, including myself were exposed to hundreds and possibly even thousands of local civilians at any given moment and anyone of them could be the enemy. One of the numerous psychological effects this may have on a person is hypervigilance. According to the Diagnostic and Statistical Manual of Mental Disorders or the DSM-5, hypervigilance is a condition that falls under PTSD, alongside irritable behavior and angry outbursts, reckless or self-destructive behavior, exaggerated startle response, problems with concentration and sleep disturbance. In regards to the hypervigilance, it can and will most likely carry over to the civilian world. Concerts, football games and even simple trips to Wal-Mart can be something a soldier may not simply be able to manage anymore due to the hypervigilance and overwhelming anxiety these places can cause (C. Sagnimeni, 2016, personal communication). Having to sit in a specific area, a specific seat in a restaurant in reaction to the hypervigilance is a common behavior.

Many Veterans react "accordingly" to loud noises, having flash backs to gun fire or mortar fire and may become embarrassed that they are now lying face down on the ground at a local park after someone set off a round of fireworks. With time, some Veterans may move pass this and come back to reality, but for many, this is and will always remain their reality. For some, it may not be that they were in combat on a daily

basis, if ever. There are many aspects of war that entail many different jobs. Veterans who were in Iraq serving food to the others, may also have to work the morgue which entails experiencing the bloodied vehicles that are bringing the almost non-stop body bags onto the base. One does not have to work the morgue to witness this. Standing at attention on a flight line, saluting the fallen soldiers as they are being loaded on the plane for their “last flight home” is not only saddening but also something that a Veteran will never be able to forget. Add in the fact that some of those fallen soldiers could have been their friend they were eating chow with the night before.

With regard to physical injuries attained during combat, if Veterans were already mentally unstable for the things they had done, seen and been through, this may push them over the edge. Veterans who experienced combat will likely have stressors, or triggers that will likely effect the Veteran as the rest of their life. Dealing with the stressors and the triggers while trying to live normal every-day life can be very challenging for Veterans without the proper help. Veterans may feel that they are managing them, but the question remains if so, how. It is difficult to know if it is a healthy method, like a support group or going to a house of worship or is it damaging, like drugs and alcohol. After getting Veterans to seek medical treatment for their conditions, the next issue is to manage them. We cannot simply just give them medication and expect their hypervigilance or problems falling asleep to go away. The first step needs to be addressing the stressors for Veterans, understand what triggers their actions and address them.

The idea behind this research is how to get the Veterans to treatment, continue that treatment and ask whether medication for mental health problems will aid in that

process. Taking medication is not for everyone and some feel that it only does them more harm (Brown, 2005). Some medications, although they help in one way, may have adverse side effects which in turn may make it worse for the person taking them. For example, Celexa is used in treating depression but one of the common side effects while taking Celexa within the first few weeks to even months, is depression and suicidal thoughts (<http://www.drugs.com/sfx/celexa-side-effects.html>). This can be detrimental to a person who needs treatment for depression and in the beginning they are worse off. This is just one example of how people who need help shy away from the treatment because they may not feel better. Others may shy away from treatment possibly because they self-medicate and feel they have it under control. Once they lose control this can lead to substance-abuse and drug-abuse, which can cause homelessness and even criminal activity.

Recently, there has been a struggle to better understand PTSD and the effects of war on an individual. The amount of research is so large that the more data made available, not only to the medical staff, but to the Veterans themselves, can be a stepping stone to getting the Veterans the help they need. Using the data from the National Survey of Drug Use and Health (2013) is a very important piece to this research as the data cover a very broad list of variables, many of which play a vital role in this research.

Determining whether Veterans with mental health issues, abuse alcohol or drugs or if they receive medication for their condition can answer other questions. No matter how many Veterans learn from this, helping one can have a snowball effect into helping many others. In the following chapter, a synopsis of the research completed on factors that

influence the mental health treatment of Veterans will be presented. In doing so, the context regarding the five hypotheses being tested in this thesis will be provided.

Chapter II

Literature Review

In this chapter, a summary of prior work is presented in five general areas that reflect the core of the hypotheses that are tested in this thesis: 1) Combat, 2) Mental Health, 3) Quality of Care, 4) Self-Medicating and 5) Suicide. These are important aspects to look at when it comes to determining the influences on a Veteran's mental health treatment. In providing this summary, the goal is to give a proper context to the contribution this thesis makes to what we know about Veterans and their mental health treatment.

Combat

For some, the military life can be a simple one. Going to work 8am to 5pm, Monday through Friday, living what some may call a normal life. For others, it is not so simple. Based on experience and prior work, combat is not simple. A study in 2007 completed by Alair MacLean and Glen H. Elder Jr. relates to the combat focus within the proposed thesis. This article reached back 15 years and states that veterans who have experienced combat had the worse life outcomes than those who have not been exposed to combat. They include health, criminal, socioeconomic and marital outcomes and also include the timing of the service, ranging from World War II to the more recent campaigns. Combat experienced veterans are more at risk for many "life" problems, which could range from fitting in at any civilian "style" job to having difficulty attending crowded events such as concerts, and are more likely to get divorced which influences mental health issues within Veterans.

With combat comes traumatic events. With traumatic events often comes PTSD. (DSM-5) With PTSD, comes the possibility of "irritable behavior and angry outbursts

(with little or no provocation) typically expressed as verbal or physical aggression toward people or objects” (DSM-5). A study conducted by Chris Rohlf (2010) reviewed the effects of combat exposure on Vietnam Veterans and the likelihood of violent behavior following. The conclusion was positive for combat exposure leading to violence or violent acts. This does not mean that every person exposed to combat becomes a violent person. This also does not mean that a person exposed to combat who is violent when returning will still be violent years down the road. Violence or irritability is not the only issue with PTSD but can and will most likely have some effect on a person’s marriage.

In 1994, Cynthia Gimbel and Alan Booth conducted a study which examined the relationship between military combat experience and marital relationship issues.

Although this study is dated, it is a very important piece of information due to the amount of detail put into the research measures. As stated previously, one can be in a combat zone but never experience combat. Gimbel and Booth cover this possibility with a 48-point scale with 12 items, with scores ranging from 0 to 4. A few of the categories are: “flew aircraft over South or North Vietnam”, “Stationed at a forward observation post” (noncombat) and others like “unit patrol was ambushed” and “killed someone or thought had killed someone”. Gimbel and Booth report that Through their analysis they concluded that combat increased violent and unlawful behavior which also affected marriages. People whom experienced combat became antisocial. PTSD was known as other names in the past but all truly had the same effects of war on an individual. From Shell Shock after World War I; World War II and Korean War known as Battle Fatigue; the Vietnam War which produced the Vietnam Syndrome to the current name, PTSD. In this study, the possible relationship- between combat and marital adversity will also be

explored. Although not every combat experience is the same, there are many connections between all aspects of combat and mental health issues.

Mental Health

When speaking about any health treatment, the health belief model is an important aspect to understanding why people use health services and some choose not to. This health belief model was produced by Godfrey Hochbaum in 1958. “According to the model, two types of beliefs motivate people to take preventative health measure: (1) readiness to take action, and (2) modifying factors that help or hinder action” (Hayes, 1987, pg. 120). This thesis’ main focus is of the latter; the direct influences Veterans have that either help or hinder their mental health treatment.

The research conducted in 2007 by Mark S. Kaplan, Nathalie Huguet, Bentson H. McFarland and Jason T. Newsom. This study took 320,890 persons aged 18 or older and followed their lives for 12 years in regards to mortality and revealed that veterans are twice as likely to die by committing suicide as non-veterans. Many other variables were included in this study, like education, region of residence, marital status, age, body mass index and psychiatric conditions. This is not breaking news by any means but shows the importance of veterans receiving the best care and treatment they can due to their exposure to certain events. This ties into this thesis because of the comparison between psychiatric events in veterans and non-veterans and also includes the military service era.

Transitioning from one job to another can be a difficult task. It can be even more difficult if the new job doesn’t issue the same sense of purpose or the standards of work are completely relaxed and far less. This can result in the Veteran feeling like they do not

fit in. Research conducted by Kathryn H. Anderson and Jean M. Mitchell (1992) focuses around the Vietnam War era but can be directly correlated to the most recent campaigns. It speaks about the transition from military to civilian world and how most of the Veterans report depression after being discharged from the military. This can be a result of many things to include, not feeling that they have a purpose in life anymore and no direction in life due to military experience not transitioning to civilian jobs, minus the specialty jobs, like doctor, lawyer. With the introduction of medication into the treatment of veterans this can allow for a reduction of depression which can lead to a better feeling of working a job that might not have the same admiration, which could lead to better work behavior. The struggle is in determining how much of an effect the medication has.

PTSD or Post Traumatic Stress Disorder plays a major role in this research and with that the research by Michael P. Atkinson, Adam Guetz and Lawrence M. Wein (2009) is part of the main reason this problem was selected. I have experienced multiple deployments and have been a part of organizations where people I knew were killed in combat and others who have taken their own life. I have not experienced PTSD to the extreme that others have but it is a problem. This article emphasizes the length of time spent overseas in Iraq and the correlation with PTSD following. Although this does not directly relate to the treatment aspect of the research, knowing contributing factors play a huge part. PTSD is a mental health issue and brings on the depression, anxiety and other items such as flashbacks that need treatment.

The DSM-5 (Diagnostic and Statistical Manual of Mental Disorders) is a large amount of information related to the mental disorders associated with Veterans, combat and possibly even non-combat. Depressive orders include areas such as “disruptive mood

dysregulation disorder, major depressive disorder (including major depressive episode), persistent depressive disorder (dysthymia), premenstrual dysphoric disorder, substance/medication-induced depressive disorder, depressive disorder due to another medical condition, other specified depressive disorder, and unspecified depressive disorder (DSM-5, pg. 155). There has already been mention of the substance/medication-induced depressive disorder with regards to medications like Celexa. In regards to the depressive disorder due to another medical condition; the possibilities are endless. Traumatic events, such as seeing your best friend killed in action, losing a limb or becoming severely injured in war or even going overseas but not being able to engage in combat could all be reasons for depression are just a few examples. Depression is a very emotional and touchy subject for anyone involved and with depression, many other factors can follow, like substance-abuse, violent or even self-destructive behavior and of course, suicidal tendencies. Another type of mental health condition directly relates with Veterans and combat is anxiety disorders. Anxiety disorders involve fear and anxiety but “Fear is the emotional response to real or perceived imminent threat, whereas anxiety is anticipation of future threat” (DSM-5, pg. 189).

As mentioned previously, there are many Veterans who may have an issue with going to Wal-Mart because of the anxiety it creates with the vast amount of people around and the potential it could turn into a panic attack. In the DSM-5, there is also an area for substance/medication-induced anxiety which could wreak havoc for a Veteran who is already suffering from anxiety issues. In any combat situation, trauma and stressors will play a major role in Veterans lives and each different experience will add to the lot of problems.

Trauma- and Stressor-Related Disorders are among the top-most issues when it comes to problems a combat Veteran may face. Trauma- and Stressor-Related Disorders include “reactive attachment disorder, disinhibited social engagement disorder, posttraumatic stress disorder (PTSD), acute stress disorder, and adjustment disorders. I am currently diagnosed with adjustment disorder, because I met a few criteria of PTSD but not the minimum. Although I recently had a re-evaluation for PTSD, I by no means have it in some of the worst ways like many others I have come to know or read about, but I do have certain quirks, that have to be addressed, maintained and kept in check. In combat, there are an unlimited amount of stressors that take place and the Veteran may not be in direct combat but could be on an installation (Balad, Iraq) that receives rocket/mortar fire on a daily basis and the thought of hearing the alarms and waiting for the explosions can be a huge stressor, which can in turn make fireworks back home also a stressor. One of the last sections of Trauma- and Stressor-Related Disorders are the Sleep-Wake disorders which encompasses 10 disorders, with insomnia and narcolepsy to name the more common ones. This is very important to understand as “Sleep disorders are often accompanied by depression, anxiety, and cognitive changes that must be addressed in treatment planning and management. Furthermore, persistent sleep disturbances (both insomnia and excessive sleepiness) are established risk factors for the subsequent development of mental illnesses and substance use disorders (DSM-5, 2013).

Getting people to admit they have a problem may be the hardest part of if they can acknowledge this, it is a small step towards help. The research by Tracy Stecker, John C. Fortney and Cath D. Sherbourne highlights the beliefs that Veterans have when it comes to mental health treatment. They used Army soldiers who served a 1-year deployment in

OIF and screened them for things such as PTSD, panic disorder, alcohol abuse and depression and those who screened positive were eligible to participate in the intervention (Stecker, 2011). One of the issues with dealing with Veterans and mental health treatment is that many feel they do not have it or have it under control with self-medicating. In this study they came across four themes. They include people believing their problem wasn't bad enough for treatment, believing they had control over it, denying the problem was happening to them and those who questioned whether treatment would even work. Many of those Veterans self-medicate with alcohol. This study found that every Veteran who stated they did not believe they had a problem, was found positive for at-risk alcohol use and many of them were found positive for both at-risk drinking and PTSD. Some Veterans have very difficult times falling asleep without the aid of alcohol; self-medicating. This article states that alcohol is the most likely culprit for Veterans feeling that they do not need treatment and due to all the non-treatment seeking Veterans, there is a critical need for more interventions to bring light to the needs of the Veterans they may not be aware of.

Many medications are prescribed to Veterans for sleeping problems, pain and mental health issues. The article by Alaa Hamed, Austin Lee, Xinhua S. Ren, Donald R. Miller, Frand Cunningham, Huan Zhang and Lewis E. Kazis. Because this research used VA patients from October 1, 1998 to September 30, 2000 the volume of Veterans mentioned will be less than is now, because of the Iraq/Afghanistan campaigns conducted after 2000. Nonetheless, the authors used data from 92,537 Veteran patients and prescribed them three different types of antidepressants, then tracked the number of visits for a year, and categorized them by the medication they were on. The authors concluded

that the reduction in visits to the VA clinic differ by the class of antidepressant they were taking, with a reduction in the range of six to ten visits (Hamad et al, 2000).

In a study conducted by Mark J., John C. Fortney, Christina M. Reaves, Jeffery M. Pyne and Dinesh Mittal the effects of medication for depression from a patient standpoint is examined. The authors focus on how the patients believed they had depression and if they believed the medication was helping their depression. This ties into the variable of medication used for treatment and shows that continued treatment may in fact be from the use of medication. This study sampled 24,882 veterans over the course of 12-18 months. Nearly three out of four studied (73%) believed they had depression and 66% believed the medication would help their depression. This is a key piece of the puzzle in regards to determining whether medication helps maintain treatment (Edlund et al, 2008).

In the article by Stephen T. Chermack, Kara Zivin, Marica Valenstien, Mark Ilgen, Karen L. Austin, John Wryobeck and Frederic C. Blow (2008), 41,412 patients were studied from the Veterans Affairs and it was determined which type of treatment they received, to include Medication Treatment, Psychotherapy and Combined Treatment, which is a combination of both. The study also includes substance abuse disorders, PTSD, depression with both substance abuse disorders and PTSD and which treatment they were given. The outcomes state that the majority of veterans are put on a medication treatment, while very few were given psychotherapy and combined treatment. The fact that the majority of Veterans are simply given medication needs to be included in the study due to the vast number of health issues and the link to PTSD, combat

veterans and the suicide rates that have crept up in veterans over the past few years. Perhaps simply giving out medication does not help in the big picture.

Quality of Care

The article by Many N. Fairweather, is a short research article but speaks in volumes of the length of time it takes for a veteran to file a claim, get a response, and then begin to receive treatment. From personal experience, my VA claim took nine months to go through but recently has been improved to 1 to 4 months-time. This can be detrimental to those in urgent need for mental health treatment and have to wait or are denied all together. This article is used to compare treatment and quality of the care in regards to length of wait before treatment and the actual treatment and the programs available to help make treatment better. “Iraq and Afghanistan veterans seeking treatment for PTSD or other mental health conditions report waiting months for professional care. When they receive it, the quality and continuity is dependent on whether they live near a VA facility that provides mental health care. These shortfalls have reached a crisis point; with substance abuse, homelessness, family dissolution, and suicide at unacceptable levels” (Fairweather, 2008, pg. 4). Times have changed since 2008 and there are crisis lines and programs like the Veterans’ Choice Program that will allow treatment sooner but this is still an ongoing issue and a sensitive one. (www.va.gov/opa/choiceact/)

One problem that many Veterans share is pain. Pain can be in many forms, physical and mental. For those Veterans who seek treatment, it can still be a daily struggle. Medication can become addicting. I am missing over an inch of my collarbone and one VA told me I was too young to do anything about it and so when I could call to

make an appointment, they wouldn't make me an appointment, they would simply send me another bottle of Percocet. I chose to stop calling simply because I did not want to become addicted. Some Veterans are not so fortunate. "In 2003, the Department of Veterans Affairs (VA) implemented the "5th vital sign"-a rating also known as the Numeric Rating Scale (NRS to assure routine pain assessment and improve management" (Zubkoff. 2010, pg. 900). The NRS asks veteran patients to rate current pain on a scale from zero to ten.. The research conducted by Lisa Zubkoff, Karl Lorenz, Andy Lanto, Cathy Sherbourne, Joy Goebel, Peter Glassman, Lisa Shugarman, Lisa Meredith and Steven Asch investigated this "5th vital sign" to see the effects it had on the quality of care for the Veterans and the results dictated that after a decade of research there was no effect from the NRS and gave a few examples as to why but offer no solid evidence. One reason for this could be that the Veterans have specific injuries and their pain is always constant, so the NRS simply does not get acknowledged. Determining pain is a vital part of quality of care and if it is not being done correctly the results will most likely be self-medicating, which can lead to the other issues, like depression, unemployment and being homeless.

One of the more detailed research articles available is that by Juliette Spelman, Stephen Hunt, Karen Seal and Lucile Burgo-Black titled "Post Deployment Care for Returning Combat Veterans". Not only does it address the issue with mental health issues but expands into the physical, or combat injuries, the occupational exposures such as sand storms, extreme temperature ranges from day to night, issues with pain, sleep disturbances, PTSD and TBI (Traumatic Brain Injury). The study connects service members exposed to combat to having an increased risk of heavy drinking, alcohol-

related problems, substance abuse, anxiety, suicide, sleep disturbances and irritability issues. Their recommendation for offering the best possible mental health treatment is to address the barriers with support and ways to overcome them. Once the barriers are down the chances of successful mental health treatment are much higher and the focus can be turned to daily function and reintegration.

Self-Medicating

In regards to self-medicating Veterans the study published in 2000 by John W. Finney, Mark L Willenbring and Rudolf H. Moos sheds some light on the fact that there are many veterans who “handle” things themselves, which usually involves some sort of substance abuse to self-medicate. Although some veterans may go to the VA for routine medical issues like a common cold, there are many that go there for much more severe items, such as lost limbs, PTSD, substance abuse. With the most recent wars, coming to somewhat of a close, and possibly another kicking off, this is a very important time to determine the best way to continue treatment for these individuals and this article does just that. Depression is found in 25%-30% of substance-use patients at the VA and 20% of them have PTSD. Finding out if continued treatment works is key, continuing and expanding that treatment is just as important.

The research in 2004 by Kathleen T. Brady, Sudie E. Back and Scott F. Coffey speaks volumes about the conditions that come with PTSD and how substance abuse usually follows due to the individual using it to escape whatever ails them. This is not directly related to veterans but will give a better understanding of the symptoms of PTSD and some of the medications used to treat it, compared with a placebo. Mental health,

including PTSD has been a huge topic in recent years and there has been a lot of research and money put into it, but there is still a lot of work to be done due to the men and women still suffering, sometimes a little too much, which results in death. All these articles will help the research in finding what treatments are out there, which help the most and do they enable veterans to return for further treatment. If someone feels they are not getting better with treatment, they most likely will not return for more.

One way to deal or “manage” with chronic pain, PTSD, TBI, depression, anxiety and just life burdens in general is to self-medicate. Some may choose alcohol as their self-medicating tool. Many people after a long day at work will say “I need a drink” and the purpose of that drink is simply to relax. Where it becomes a major issue is when that drink turns to six. Six turns to ten. Some people cannot relax and cannot sleep without alcohol use. Veterans who have experienced combat and have some sort of mental illness such as PTSD or an anxiety disorder will suffer from a substance abuse disorder more than the general population. Ismene Petrakis, Robert Rosenheck and Rani Desai (2011) examine the substance abuse issues among Veterans. In “Substance Use Comorbidity among Veterans with Posttraumatic Stress Disorder and Other Psychiatric Illness” they examine over 1 million Veterans spanning from Vietnam Era to the current Iraq and Afghanistan campaigns and associate mental illness and PTSD with substance abuse. The results of the study suggest that Veterans diagnosed with selected mental illnesses there are higher rates of substance abuse disorders, high rates of comorbidity among those with bipolar disorder and schizophrenia and the rates of comorbidity are different among Veterans from different war eras. They suggest that current era Veterans who are diagnosed with mental issues, they may also be in need of help for a substance use

disorder. Again, the challenge is getting the Veteran to seek help, continue help and ensure they are getting the right treatment necessary. Each Veteran will be slightly different in regards to their needs.

Suicide

Military suicide is something that has been ongoing for some time now. The degree of combat and stress of being away from the United States and their family with regards to the recent military campaigns in Iraq and Afghanistan can have consequences. Military suicide does not always take place overseas either. Some people come back and can live a normal life for a while before the factors of depression become too much. PTSD is also a huge factor that can be attributed to many military suicides.

There are many things that can cause PTSD, such as Military Combat, Rape, Domestic violence, Assault, Sexual molestation, Sexual abuse, Kidnapping, Child abuse, Severe verbal abuse, Terrorism, Torture, Auto accident, Airplane accident, Fire, Hurricane, Tornado, Animal attack, or violent encounter like being robbed (Suicide.org). Someone could lose a pet and have a degree of PTSD due to the fact that animal was a member of their family. There are also many varying degrees of PTSD that a person can obtain. It can be as low as just having problems sleeping to having full blown nightmares and flashbacks, self-medicating and isolating oneself to their house and the worst degree, being suicide.

Many factors play into a person being afraid of society or not feeling welcome in society because of the things they experienced. “When, therefore, [due to “excessive

individualism”] we have no other object than ourselves we cannot avoid the thought that our efforts will finally end in nothingness, since we ourselves disappear. But annihilation terrifies us. Under those conditions, one would lose the courage to live...” (Lopreato, 1979, pg. 116). This is referred to as Egoistic Suicide. Military suicide can even be caused by the aforementioned statement long after a person gets out of the military. They feel like they do not belong to society, they do not fit in and have nothing and no one and they can't take their lives because of it. Anomic suicides can also take place for a military member which is related to when societies experience rapid social change and people lose their purpose in traditional ways of life. “Having the stability of the military and then suddenly over the course of one day, it is all gone and you are supposed to start over in the civilian world can be an insurmountable task.

According to the 2012 Suicide Data Report published by the Department of Veteran Affairs, 8,000 Veterans commit suicide each year along with 11,000 non-fatal suicide attempts a year. With any suicide or even suicide attempt there is a huge effect on the surrounding people. Those people or even institutions have to cope, mourn and bereave that death and for some it may take a long time. Some may develop PTSD because of it and in some cases commit suicide themselves later down the road. Many institutions take a huge effort into figuring out ways to prevent suicide. Military organizations have shut down for a day to talk about suicide prevention and address some of the issues that cause it. There is also a heightened sense of awareness during holiday times for supervisors overseas. They have to keep a closer watch on their troops and interact with them more to ensure they are mentally healthy. Every deployment overseas that I have gone on, there has been a minimum of one person commit suicide, while other

deployments there would be six in one month. These higher spikes of suicide were usually during the holidays.

In a 2010 study conducted by Bagley, Munjas and Shekelle the suicide prevention programs in military branches and also those available to Veterans are reviewed. “A Systematic Review of Suicide Prevention Programs for Military or Veterans” shows reductions in the amount of suicide attempts once the individual attends the suicide prevention programs available. The issue with this is that when you are in the military you have much more supervision; you have a place to be almost every day. Even though people may live off base they usually have contact with someone on a daily basis. This does not mean that suicides will not continue to happen as they still do almost on a daily basis. The problem is once a person experiences combat and removes themselves from the military, there is no “organization” checking in on them on a daily basis or even every other day. Many Veterans choose to isolate themselves and do not seek treatment for anything after getting out of the military so the only people who can “buddy check” them is their family or close friends. This study did not include any Veterans from the current Iraq and Afghanistan conflicts which is a huge limitation but needs to be shown that there is help for everyone but the people must want the help, it usually doesn’t go looking for you, especially in the case of Veterans.

Military suicide is a difficult subject, as with any suicide. There can only be so much help and treatment given to people, before it is ultimately their decision to live or die. People can receive treatment their whole life but end up still committing suicide. The type of effort that goes into helping prevent suicide is constant. There has to be constant

communication and evaluation of a person to ensure an open forum, “someone to talk to” and love and support from all available. But even then, it may not be enough. People commit suicide because they have found, what they believe to be the answer to all their problems, something to make the pain and suffering stop. That is where the issue lies with suicide prevention and treatment, trying to relieve that pain and suffering naturally and over time.

All types of cultures commit suicide but there are some that have very high numbers and some that have very low numbers. The reason for this can be narrowed down to religious beliefs. Some cultures will not commit suicide because it goes against their religious beliefs and they will not have a “heavenly” afterlife if they do. Some cultures see suicide as an honorable way to go. Self-Immolation is a huge favorite for some cultures and their beliefs.

Military suicide will always be an issue, especially during wartime situations due to the long periods away from family and the norm. With that, there have been many steps to prevent suicide both during and after active military status. However, the fight is a huge one and still ongoing. This is one war that may never end.

With this research, there is a beginning to the problem of understanding the help that Veterans need but it is nowhere finished. The main point of Combat is one of the most significant determining factors that affect a Veterans health; usually in regards to the big picture of their life. The Mental Health of the Veterans is drastically affected by Combat and the Quality of Care is the only way to pinpoint and facilitate a manageable lifespan. Without good Quality of Care the Veteran will most likely revert to Self-

Medicating which can lead to a number of issues; one possibly being Suicide. The next chapter will show how the data were gathered and the design that will be used in this research.

Chapter III

Methods

This chapter will go into the details of the research design, sampling, sample and measures pointing out the dependent and independent variables. At the end of this chapter, the four stages of analysis will be presented. The goal of this chapter is to present the details of how the data for this thesis was selected and how the data are organized.

Research Design

This thesis uses a secondary data analysis research design. This is mainly due to the ease of access to the data. Having the data readily available to be ran through the computer programs saves an enormous amount of time and money, with regards to finding the individuals; creating and presenting the survey and then analyzing the data. Another reason for choosing the secondary analysis data is fact that this data was collected and analyzed by professionals through a government organization.

To begin this research, data were gathered from the National Survey of Drug Use and Health (2013) by Dr. Richard Rogers, which was distributed in a college class taken previous to this. This dataset was used to examine the possible relationship among the items in the analysis. The Substance Abuse and Mental Health Services Administration, (SAMHSA), an agency in the United States Department of Health and Human Services, funds the National Survey on Drug Use and Health. The 2014 National Survey on Drug Use and Health was not completely ready at the time of this research, therefore the 2013 survey is the best data set available. Also, this research uses unweighted data. Given the focus of this thesis, the depth of information on substance abuse and mental health variables are ideal.

The Department of Veteran Affairs estimates that there are currently over 22 million Veterans within the United States as of September 2014 (VetPop2014). The 2013 NSDUH obtained 67,838 interviews for the data set randomly selected from 24.6 million Americans. The surveys were conducted sporadically over the years, with the first survey being conducted in 1971. “The 2013 NSDUH is the 33rd in a series, the primary purpose of which is to measure the prevalence and correlates of drug use in the United States. This survey series provides information about the use of illicit drugs, alcohol, and tobacco among members of the noninstitutionalized U.S. civilian population aged 12 or older” (NSDUH, 2013, pg. i-2).

Sampling

The NSDUH has used a 50-state design since 1999, while setting target sample sizes of 3,600 for the eight bigger states which include California, Florida, Michigan, Illinois, New York, Ohio, Texas, and Pennsylvania. The other 42 States and the District of Columbia had sample sizes of about 900. “The design also oversampled youths and young adults, so that each State's sample was approximately equally distributed among three major age groups: 12 to 17 years, 18 to 25 years, and 26 years or older” (NSDUH, 2013, pg. i-3). The cases used in this research are the military Veterans only.

Sample

The sample size used in this research is 1,888 Veterans, taken from the 2013 NSDUH. As displayed in Table 1, out of the 1,888 Veteran respondents, 24.85% (469) of them are between the ages of 35 and 49. The next two categories in this variable make up

the bulk of the age group categories with the respondent being between 50 and 64 years old, at 22.58% (426) and the respondent 65 years old or older at 30.95% (584). The other categories range from .05% (1), being 18, to 6.25% (118) being between 30 and 34 years old. The gender of the respondents is predominantly male with 87.44% (1,650) being male, and the females at 12.56% (237). One of the biggest influencers being tested in the thesis is whether the Veteran has been in a combat zone. The Veterans who have combat experience totals nearly 600, with 825 who have not.

Measures

Dependent Variable

The dependent variable determines whether the respondent has had any mental health treatment within the past year. The concept of this is to determine what, if anything, influences this treatment.

Independent Variables

Demographics

The first of five demographic variables for this thesis is age, which consists of eleven categories. The respondent being 18 years old, 19 years old, 20, 21, 22 or 23, 24 or 25, respondent is between 26 and 29 years old, respondent is between 30 and 34 years old, respondent is between 35 and 49 years old, respondent is between 50 and 64, and the respondent is 65 years old or older. The variable of sex determines whether the respondent is male or female. Ethnicity consists of seven categories which include: white, black/Afr Am, Native Am/AK Native, HI/Other Pac Isl, Asian, more than one race and Hispanic. The income variable consists of four categories which include: less than

\$20,000, \$20,000 to \$49,000, \$50,000 to \$74,000 and \$75,000 or more. With the marital status variable there are five categories which include: never married, first marriage, remarried, divorced/separated, and widowed.

Other

This includes combat pay, alcohol abuse, drug abuse and mental health severity. Combat pay is determined by those who served “on active duty in the United States Armed Forces or Reserve components in a military combat zone or an area where you drew imminent danger pay or hostile fire pay” (NSDUH, 2013, pg. 657). A person was deemed abusing alcohol if they responded positively to one or more of the following criteria: serious problems due to substance use at home, work or school, reports using substance regularly and then did something where substance use might have put them in physical danger, substance use causing actions that repeatedly got them in trouble with the law and having problems caused by substance use with family or friends and continued to use substance even though it was thought to be causing problems with family and friends (NSDUH, 2013, pg. 294). The drug abuse variable uses data that is calculated and any respondent who said yes to using cocaine, hallucinogens, heroin, inhalants, marijuana, pain relievers, sedatives, stimulants or tranquilizers falls under this category. The mental health severity variable is determined by the intensity of the mental health issues. The possibilities that fall under this variable include, no mental health issues in the past year, mild mental health issues within the past year, moderate and then severe. The last variable determines whether the respondent has used medication for mental health illness in the past 12 months.

With the Combat variable it must be noted that someone could receive combat pay for being in a combat area but never see combat. There are many aspects of being in a war zone and a chow hall worker may never see anything that others outside the wire see or experience on a daily basis but they will still receive combat pay for being in the combat zone. This does not mean that chow hall workers or others will never see combat but simply because they received combat pay does not mean they have seen combat but is a high possibility. It must also be noted that although alcohol abuse is a great variable to use in determining mental health issues but it has to be understood that there is a possibility of individuals non-reporting alcohol or drug abuse on the surveys for any number of reasons.

Research Question

The research question, simply asks, what influences Veterans and their Mental Health Treatment. In other words, how do we get Veterans to go to mental health treatment if they need it, while looking past the stigma and the negative status it can have. This thesis will look at 1. Age, 2. Gender, 3. Ethnicity 4. Marital Status, 5. Income, 6. Combat Pay, 7. Mental Illness Severity, 8. Medication for Mental Health, 9. Drug Abuse and 10. Alcohol Abuse. If someone goes to mental health they must be crazy, but in fact there are many reasons to need to go to mental health, most of which do not mean you are crazy. Once we get the Veterans to go to mental health treatment, what influences them to keep going. It could be many factors ranging from family and friends, religious beliefs, current medications and even fear. Fear of what will happen if they do not go, whether that is abusing a drug or alcohol for pain or to sleep, or even relapsing from previously abusing drugs or alcohol. I have chosen this research question due to the vast number of

Veterans needing help and with many in the past already losing the battle with mental illnesses resulting in suicide. I have had friends/fellow Veterans who have lost this battle and with proper help, they might still be alive today. No one could predict the difficulty Veterans would have after returning from war and it has taken sometime for the Veterans Affairs to get caught up. Although Veterans are getting quicker and more detailed help there is still much work to be done and many things understood.

Analysis

The analysis includes four stages. The first stage summarizes the sample selected on the particular items selected from the NSDUH dataset using descriptive statistics (counts and percentages). In this research the significance level throughout all the analyses is P-value 0.01. However, if that significance was changed to P-value 0.50 the results could produce much more significant results.

The second stage of the analysis focuses on certain comparisons reflected in the hypotheses. This is tested through comparing the means of each variable with the means of the medication for mental illness variable through Independent Samples Tests.

The third stage of the analysis centers on highlighting the correlations that exist among the selected items. These correlations also are guided by the hypotheses at an elemental, bivariate level. The coefficients used in this correlation will be the results of each independent variable related to the dependent variable Mental Health Treatment in the Past Year.

The fourth and final stage of the analysis involves Logistic Regression explaining mental health treatment. This will explain the relationship between the independent variables and the dependent.

The analysis of the 2013 National Survey of Drug Use and Health will be accomplished through the use of the computer program PSPP. The aforementioned variables will be examined using a Pearson's correlation coefficient. Individuals who have received mental health treatment will be compared to whether or not they abuse drugs or alcohol and whether they have received combat pay or not and also the severity of the mental illness. The individuals age, gender, income, ethnicity and marital status will also be tested.

In using the data from the 2013 NSDUH, finding the biggest influencers in regards to Veterans' mental health treatment will be accomplished. In doing so, the information gathered will help medical professionals in the future with their approach to treatment and the treatment itself. Through the statistical research combined with previous research like the above mentioned (Chermack et al, 2008) there is no doubt that there will be a strong correlation between medication and mental health treatment. The results will show that Veterans who use medications are more likely to continue medical treatment and more "well-equipped" both physically and mentally to live a more manageable life in the civilian world.

This chapter includes the research design, the sample size of 1,888 Veterans and the measures used. Also included are the dependent and independent variables and the research question of what influences Veterans and their mental health treatment along

with the four stages of analysis were also. The next chapter will show the results from the variables through the four stages of analysis.

Chapter IV

Results

In this next section, analysis of the variables in regards to the hypothesis will be described. There are four stages to the analysis which include the profile of the variables, the comparisons, Pearson's r, and Logistic Regression. The reason for this is to determine the influence these variables play on Veteran mental health treatment.

Stage 1 - Profile

In the first stage of the analysis, the counts and percentages for the demographic profile of the sample as well as the combat pay and mental health-related variables are provided (see Tables 1 and 2). The majority of the Veterans are male and are over the age of 34 years old. This could be partly related to the females only recently being allowed to partake in combat zones and missions. In the past females did not play as big a role in the military as they do now, so the results could stem particularly from the age of the majority of the Veterans; it was a different time. A little over $\frac{3}{4}$ of the Veterans are white at 1,440 (76%) with 448 (24%) being another race. As far as income, 266 (14%) Veterans make less than \$20,000 a year, while 705 (36%) of the Veterans make \$20,000 - \$49,999 a year. The number drops heading into the \$50,000 - \$74,999 range with 353 (19%) Veterans. For the \$75,000 or more range there are 564 (30%) Veterans. The majority of the Veterans are married at 1,137 (60%) leaving 750 (40%) Veterans either not married, divorced or widowed. Just under $\frac{1}{3}$ of the Veterans (600) have been paid for being in a combat zone. With that being said 284 (15%) of them has received mental health treatment within the past year and 249 (13%) has taken medication for mental health treatment. The severity of the mental illness is broken up into four categories with 1,569

(83%) having no mental illness, 139 (7%) having a mild mental illness, 88 (4%) having a moderate mental illness, and 91 (4%) having a serious mental illness. The alcohol and drug abuse results are low with 67 (3.6%) Veterans abusing alcohol and 10 (.5%) Veterans abusing drugs. I personally believe from personal experience, and talking with friends and fellow Veterans that these numbers seem unrealistically low, particularly on part of the alcohol.

Stage 2- Comparisons

Stage 2 of the analysis includes the demographic, combat pay and mental health-related comparison to medication used for mental health treatment. This will continue the testing of what influences the Veterans and their mental health treatment and show us which variables have influence. The following statistics are for those who stated yes they have received medication for mental health treatment within the past year. As presented in Table 3, the initial results concerning the age of the Veterans taking medication is relatively consistent throughout. Out of 1,008 Veterans, 18-49 years old, 16% (161) of them said yes to using medication, in comparison with 11% (96) of 874 Veterans, 50 years and older admitted to using medication. With regards to race; 12% (54) of 448 White Veterans said yes, with 14% (201) of 1,434 Non-White Veterans saying yes. The results concerning income among Veterans does not show a statistical significance with those who received medication. With Veterans who made \$49,000 or less, 14% (135) of the 967 said yes, while 12% (110) of the 915 Veterans making over \$50,000 said yes. With regards to Veterans who were in a combat zone there is a significant statistical difference concerning those Veterans who were and were not in a combat zone. Of those Veterans who were in a combat zone, 14% (83) of 597 said they received medication

within the past year. Surprisingly, 12% (99) of the 825 Veterans who were not in a combat zone said yes to receiving medication for mental health treatment. This means that 16 more non-combat Veterans received medication than combat Veterans. There could be a few reasons for this which I will address in the next chapter. Of the 284 Veterans who received mental health treatment, 88% (250) said they received medication. This shows that medication is a common ingredient in the treatment process for mental health. However, it seems that medication is mainly used in the less severe cases of mental illness as 46% (146) of the 318 Veterans categorized as zero to minor severity, said yes to using medication, while 7% (109) of the 1,564 Veterans categorized as major to severe said yes to medication. Out of 1,817 Veterans, who said they did not abuse alcohol, 13% (213) said they received medication. 65 Veterans said they abused alcohol and 14% (9) said they received medication. 1,872 Veterans said they did not abuse drugs with 13% (243) saying yes to receiving medication for mental health treatment. 10 Veterans admitted to abusing drugs with 20% (2) stating they received medication for mental health treatment.

Stage 3 – Pattern Searching using Pearson’s r Correlations

With regards to Pearson’s r , the significance of any correlation will be measured at the level $P < .01$. In this study, there is no statistically significant correlation between Mental Health Treatment and age, race, income, combat, drug abuse and alcohol abuse. Marital status had no relationship and was significant at .007. Mental Health Treatment and gender have a weak relationship (.20) and is significant at $P < .001$. Mental illness severity has a moderate to strong relationship with mental health treatment (.50) and is

significant at $P < .001$. There is a strong relationship between medication and mental health treatment (.93) and is statistically significant at $P < .001$.

Stage 4 – Attempting to explain mental health treatment using Regression

With regards to age, there is a negative relationship (.919), determining older individuals use less mental health treatment and is not significant at .055. Females are 3.857 times more likely to use mental health treatment than males and is significant at $P < .001$. The minority status plays no significant role at .317 and minorities are less likely to use mental health treatment (.832). With regards to marital status there is no significance at .028 and those not married are less likely to use mental health treatment (.691). Income plays no major role (.252) and the more income the less likely mental health treatment is used (.913). Combat pay is not significant at .024 and those who have not been in a combat zone are 1.439 times more likely to use mental health treatment. Drug abuse is not significant at .537 and those who do not abuse drugs are 1.711 times more likely to use mental health treatment. Lastly, alcohol abuse is not significant at .304 and those who do not abuse alcohol are 1.502 times more likely to use mental health treatment. Mental Illness Severity and Medication for Mental Health Treatment were not included in this analysis due to the strength of the correlation producing multicollinearity. The power of explanation of the model, or the Nagelkerke's R squared is 8.4%.

In this chapter there were very few relationships found when it came to the demographics of the respondents. There were 600 respondents who said they have been in a combat zone. However, there were more individuals receiving mental health treatment who were not in a combat zone, as opposed to those who were, which may explain why there is no relationship between mental health treatment and combat. Again

there were 466 (24%) respondents who skipped this question. Medication has the strongest relationship out of every variable and supports the idea that medication is a large part of the mental health treatment process.

Chapter V

Conclusion

In this next section, the limitations of this research are mentioned along with the recommendations for future research. There are a multitude of ways a study on this topic could be done. The recommendations listed are a start. Lastly, the importance of this research for present and future Veterans is brought forth.

With regards to the hypothesis, there was no true relation between the variables such as age, race, gender, income, and only a slight relation with marital status. Also with drug abuse, alcohol abuse and even combat pay there was no correlation. Medication for mental health treatment and mental health severity were, understandably, the only two variables that correlated with mental health treatment. With that, we can safely assume that medication does have an effect on Veterans and their mental health while most of the other variables do not. There could be some explanations for this.

One limitation with both the drug abuse and alcohol abuse variable is the chance of non-reporting. Some can downplay or leave out completely their actual count of alcohol intake just for personal reasons, mainly making themselves feel better, like they have it under control. Another limitation is the research on the combat variable. The question about if the respondent was paid for being in a combat zone was skipped 466 times. That is 25% of the 1,888 Veterans. This can easily skew some numbers as the true results are not in the data. The results showed that more Veterans who had not been paid for combat took medication for mental health treatment than Veterans who did see combat. Perhaps this is in part to many Veterans being in a combat zone but never seeing

combat. Lastly, the limitation of the married variable simply being yes and no. There is no variable defining the strength of the family or significant other as a support system. One can be married but not communicate with the other half, which could result in lack of support and influence.

If this research was to be done again, the addition of unstructured personal interviews or focus groups would be a great addition to the data. Numbers tell a story but might not possibly get the whole picture. As mentioned before many people may alter their answers for personal reasons or could possibly interpret the question in a different way than others. In these interviews or focus groups, the in-depth nature may examine the alcohol abuse and drug abuse, with both prescription and illegal needing to be added. Also with many of the Veterans in this research being of an older age, targeting a lower age group would bring into account more of the more recent war campaigns which could possibly lead to different results all together.

In an attempt to get the Veterans, the help they need and reduce the difficulty in living everyday life and most importantly reduce the suicide rates, all this research must be taken seriously and used in a way to reach the Veterans in need. This is a very important step towards finding a way to get the correct treatment, in a timely manner and reduce the number of self-medicating Veterans and replace that with treatment that works.

Recommendations for Future Research

With the vast number of Veterans needing help and the very long process to get that help there are limitations in getting the most current information in the eyes of the

Veterans and also the important medical individuals to help the Veterans. There is still so much unknown about the mental health aspect of depression and PTSD within Veterans due to the vast number of different degrees of each condition. With that, one must realize that there is still so much potential for expansion in research and treatment and this simply a mid-way point in where the research should be.

If many Veterans choose to not self-report mental health issues due to possible repercussions in future employment there needs to be a program or incentive to address this. Second, there is also the Veterans who choose to self-medicate, whether through drugs or alcohol, and do not report that behavior and Veterans who report mental health but are non-reporting in regards to the drug and alcohol abuse are issues as well. An anonymous survey may not solve these things but they may help as there is no correlation between the Veterans and information given. Third, targeting a younger age group may bring different results and focusing more on drug and alcohol abuse could be vital. Alcohol and drug abuse could be a direct influence on Veterans not choosing to receive mental health treatment. Determining how to dig deeper into drug and alcohol abuse is a battle in itself. Fourth, although the numbers do not correlate marriage and income with the receiving of mental health treatment there has to be some correlation with relationships with both family and significant others having an effect on Veterans choosing to go to mental health treatment or not. Possibly speaking with family members can determine whether there was pressure from them for the Veteran to receive treatment. Fifth, I would recommend that focus groups for the Veterans are attended as a huge amount of information could be gathered by observing their actions, behaviors and emotions. There are quite a few focus groups from World War II, Vietnam War and

Iraq/Afghanistan campaigns at the local VA and there are VA clinics spread all over the place. Lastly, I believe that the mental health medical professionals do the best they possibly can but one protocol that I would put into place would be for Veterans to receive a phone call or schedule a visit, once every six months as a welfare check. This does not seem like much but could be huge for someone who might not be doing so good mentally. Obviously Veterans can make appointments, and there are 24 hour hotlines but it is a completely different story knowing someone took the time, picked up the phone and called them. Some individuals on Facebook have started pages such as #buddycheck, #22UntilNone and #Project22. These pages promote the calling or texting your military buddies once a month, usually the 22nd to ensure they are doing OK. This is a huge step towards reducing Veteran suicides.

Many Veterans need help and many are receiving it while others are still sitting on the back burner deciding what to do, or have already decided they do not need it and can handle everything themselves. Understanding that with this research it shows there isn't much that influences the Veterans and their mental health treatment, it makes the battle of getting the appropriate individuals the help they need even more daunting. Finding a way to reduce the non-reporting individuals, the Veterans who downplay their abuses or behaviors and influence the Veterans for healthier choices is a major task, but could open up the door to many more ideas and influencers.

Contributions

Through this research, it shows that there are many things that do not influence the Veterans seeking mental health treatment who need it. I still have to believe that if a Veteran is married and needs mental health treatment but is not seeking it there would be

some sort of influence from their significant other for them to get the treatment they need. Perhaps the cases of this are too small to be recognized, just like the cases of drug and alcohol abuse. I know many Veterans who drink on a nightly basis, some for pain and others to be able to fall asleep and for that not to have an influence on mental health treatment is surprising. I definitely expected more variables to play a role in the mental health treatment correlations. This research is important because, as it stands, there is little to no influence from anything besides medication for mental health treatment and the severity of that mental illness. This is important to know and understand so we can move forward and determine what may serve to help Veterans.

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Appendices

Table 1. Demographic Profile of Entire Sample, N=1,888

Variables Percent	n
Age	
18-21 years old 2.38%	45
22-29 years old 12.98%	245
30-34 years old 6.25%	118
35-49 years old 24.85%	469
50-64 years old 22.58%	426
65 years old or older 30.95%	584
Gender	
1 = Male 87.44%	1650
2 = Female 12.56%	237
Race	
1 = NonHisp White 76.26%	1,440
2 = NonHisp Black/Afr Am 10.86%	205
3 = Asian 1.01%	19
4 = Hispanic 6.78%	128

5 = Other/More than one race	96
5.09%	
Income	
1 = Less than \$20,000	266
14.10%	
2 = \$20,000 - \$49,999	705
36.36%	
3 = \$50,000 - \$74,999	353
18.71%	
4 = \$75,000 or more	564
29.84%	
Married	
1 = No	750
39.75%	
2 = Yes	1,137
60.20%	

Table 2: Military and Mental Health-Related Profile of the Sample, N=1,888

Received Combat Pay for being in a Combat Zone	
0 = No	826
43.8%	
1 = Yes	600
31.80%	
99 = Legitimate Skip	456
24.2%	
Mental Health Treatment in Past Year	
0 = No	1,598
84.68%	
1 = Yes	284
15.05%	
Mental Illness Severity in Past Year	
0 = No Mental Illness	1,569
83.15%	

1 = Mild Mental Illness 7.37%	139
2 = Moderate Mental Illness 4.66%	88
3 = Serious Mental Illness 4.82%	91
Medication for MH Treatment in Past Year	
0 = No 86.54%	1,633
1 = Yes 13.20%	249
Alcohol Abuse	
0 = No 96.45%	1,821
1 = Yes 3.55%	67
Drug Abuse	
0 = No 99.50%	1,878
1 = Yes .50%	10

Table 3. Demographic Comparison of Medication for Mental Health Treatment, N=1,888

Variable	Medication for Mental Health	
	Percent Who Said Yes	n
P-Value		
Age		

18-49 years old	16%	1008
.001		
50+ years old	11%	874
Gender		
Male	11%	1645
<.001		
Female	28%	237
Race		
Whites	12%	448
.246		
Non-Whites	14%	1434
Income		
\$0- \$49,000	14%	967
.273		
\$50,000+	12%	915
Married		
No	17%	747
<.001		
Yes	11%	1135

***P< 0.10 **P< 0.50 ***P<0.01**

Table 4. Military/Mental Health-Related Comparison of Medication for Mental Health Treatment, N=1,888

Medication for Mental Health		
Variable P-Value	Percent Who Said Yes	n
Received Combat Pay/Combat Zone		
No .161	12%	825
Yes	14%	597
Mental Health Treatment in Past Year		
No <.001	0%	1598
Yes	88%	284
Mental Illness Severity in Past Year		
Zero to Minor Severity <.001	46%	318
Major to Severe	7%	1564
Alcohol Abuse		
No .882	13%	1817
Yes	14%	65
Drug Abuse		
No .527	13%	1872
Yes	20%	10

*P< 0.10

**P< 0.50

***P<0.01

Table 5. Pearson's r Correlations

	r	Sig. (2-tailed)
Mental Health Treatment/Age 1882	-.05	.033
Mental Health Treatment/Gender 1882	.20	<.001
Mental Health Treatment/Race 1882	-.02	.311
Mental Health Treatment/Marriage 1881	.06	.007
Mental Health Treatment/Income 1882	-.06	.012
Mental Health Treatment/Combat 1422	.03	.274
Mental Health Treatment/Mental Illness Severity 1882	.50	<.001
Mental Health Treatment/Medication 1882	.93	<.001
Mental Health Treatment/Drug Abuse 1882	.05	.030
Mental Health Treatment/Alcohol Abuse 1882	.01	.675

***P< 0.10 **P< 0.50 ***P<0.01**

Table 6. Logistic Regression Explaining Mental Health Treatment, N=1,888

Variables in the Equation Significance	Odds Ratio
Age .055	.919
Gender (2=Female, 1=Male) <.001	3.857
Minority Status (1=Yes, 0=No) .317	.832
Married (1=Yes, 0=No) .028	.691
Income .252	.913
Combat (1=Yes, 0=No) .024	1.439
Drug Abuse (1=Yes, 0=No) .537	1.711

Alcohol Abuse (1=Yes, 0=No) 1.502
.304

Nagelkerke R Square = .084 (8.4% “explained variance”)

***P< 0.10 **P< 0.50 ***P<0.01**

May 2, 2016

Dr. John Hazy, Principal Investigator
Mr. Lawrence Reents, Co-investigator
Department of Criminal Justice & Forensic Sciences
UNIVERSITY

RE: HSRC Protocol Number: 183-2016
Title: What Influences Mental Health Treatment among Military Veterans?

Dear Dr. Hazy and Mr. Reents:

The Institutional Review Board has reviewed the abovementioned protocol and determined that it is exempt from full committee review based on a DHHS Category 5 exemption.

Any changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the IRB.

The IRB would like to extend its best wishes to you in the conduct of this study.

Sincerely,

Mr. Michael A. Hripko
Associate Vice President for Research
Authorized Institutional Official

MAH:cc

c: Atty. Patricia Wagner, Chair
Department of Criminal Justice & Forensic Sciences

