

### California State University, San Bernardino CSUSB ScholarWorks

Electronic Theses, Projects, and Dissertations

Office of Graduate Studies

6-2015

# EVALUATION OF INTERVENTIONS USED IN THE TREATMENT OF VETERANS WITH CO-OCCURRING DISORDERS

Kelly F. Simon California State University - San Bernardino, simok300@coyote.csusb.edu

Meghan M. Frawley California State University - San Bernardino, frawleym@coyote.csusb.edu

Follow this and additional works at: http://scholarworks.lib.csusb.edu/etd

#### **Recommended** Citation

Simon, Kelly F. and Frawley, Meghan M., "EVALUATION OF INTERVENTIONS USED IN THE TREATMENT OF VETERANS WITH CO-OCCURRING DISORDERS" (2015). *Electronic Theses, Projects, and Dissertations*. Paper 169.

This Project is brought to you for free and open access by the Office of Graduate Studies at CSUSB ScholarWorks. It has been accepted for inclusion in Electronic Theses, Projects, and Dissertations by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.

# EVALUATION OF INTERVENTIONS USED IN THE TREATMENT OF VETERANS WITH CO-OCCURRING DISORDERS

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Social Work

by

Meghan Martha Frawley

Kelly Faith Simon

June 2015

# EVALUATION OF INTERVENTIONS USED IN THE TREATMENT OF VETERANS WITH CO-OCCURRING DISORDERS

A Project

Presented to the

Faculty of

California State University,

San Bernardino

by

Meghan Martha Frawley

Kelly Faith Simon

June 2015

Approved by:

Dr. Cory Dennis, Faculty Supervisor, Social Work

Dr. Rosemary McCaslin, M.S.W. Research Coordinator

© 2015 Meghan Martha Frawley and Kelly Faith Simon

#### ABSTRACT

This study was a qualitative assessment of the effectiveness of therapeutic interventions used in the treatment of co-occurring disorders, Posttraumatic Stress Disorder (PTSD) and substance abuse. The qualitative assessment was an interview with a number of open ended questions and scales for the respondents to report preference. Interviews were conducted through the Wounded Warriors Project. Participants were males between the ages of 18 and 40, and were of multiple ethnicities. The interview questions primarily addressed whether or not the respondents received services and which services they felt were most beneficial. The interviews were anonymous and confidential, in the interest of preserving the privacy of the respondents. The results yielded by the data revealed that a small minority received services through the Veterans' Association (VA), and were happy with the services they received. The majority of participants did not receive services through the VA for a variety of reasons which included long wait times, complicated administrative procedures, lack of transportation and lack of knowledge about which services were available. Veterans who did not receive services through the VA, received services through other venues, such as the Wounded Warrior Project (WWP). These services included medication, individual therapy, peer support groups and twelve step meetings. Data collected revealed that a combination of these services, used simultaneously, was more effective than one service or no services at all.

iii

#### ACKNOWLEDGEMENTS

Meghan: I want to thank my family for their unwavering support and love, without which I couldn't be here. I want to thank Kelly Simon for being the best thesis partner and friend I could have had during this time. I would not want to undertake this journey with anyone else. I want to thank Dr. Thomas Davis for sharing his truth, gently and with humor. I want to thank Dr. Mary Texeira for seeing strength in me that I did not, for pushing me when I was scared, and for standing by and supporting me all the way through. Dear Dr. Texeira, I will pay it forward.

Kelly: I would like to thank family, Julia Savoy, George Savoy, Eric Simon and Lendl Lyles. Thank you for your financial and emotional support. I wouldn't have gotten through this process without you. I would also like to thank my thesis partner and friend, Meghan Frawley. I cannot think of anyone else that I would have rather experienced this process with. I would like to thank Shareese Daniels, Lisa Donato, and Cynthia Garcia. Without your recommendations, I would not have been here. Finally, I would like to thank my professors from the MSW program. I have gained a great deal of knowledge that I will carry with me into the field.

Collaborative: We would like to thank our research advisor, Cory Dennis, for proving us with guidance and support while completing this project. We would also like to thank SSGT Natalie Daniels for granting us permission to conduct research through the Wounded Warriors Project. Finally, we would like to thank all those who participated in interviews. This project could not have been completed without you.

## DEDICATION

This project is dedicated to all of the brave men and women serving our country. Thank you for your service.

## TABLE OF CONTENTS

| ABSTRACT                                    | iii  |
|---|------|
| ACKNOWLEDGEMENTS                            | iv   |
| LIST OF TABLES                              | vii  |
| LIST OF FIGURES                             | viii |
| CHAPTER ONE:                                |      |
| INTRODUCTION                                |      |
| Problem Statement                           | 1    |
| Purpose of the Study                        | 3    |
| Significance of the Project for Social Work | 4    |
| Summary                                     | 5    |
| CHAPTER TWO: LITERATURE REVIEW              |      |
| Introduction                                | 6    |
| Theories Guiding Conceptualization          | 6    |
| Medication                                  | 9    |
| Therapeutic Interventions                   | 11   |
| Combining Interventions                     | 14   |
| Web-Based Therapeutic Interventions         | 15   |
| Summary                                     | 16   |
| CHAPTER THREE: METHODS                      |      |
| Introduction                                | 17   |
| Study Design                                | 17   |
| Sampling                                    | 18   |
| Data Collection and Instruments             | 19   |

|       | Procedures  | 19 |
|-------|---|----|
|       | Protection of Human Subjects                                  | 20 |
|       | Summary   | 21 |
| CHAPT | TER FOUR: RESULTS   |    |
|       | Introduction  | 22 |
|       | Presentation of the Findings                                  | 22 |
|       | Summary   | 35 |
| CHAPT | TER FIVE: DISCUSSION  |    |
|       | Introduction  | 36 |
|       | Discussion  | 36 |
|       | Limitations   | 40 |
|       | Recommendations for Social Work Practice, Policy and Research | 41 |
| 1     | Conclusions   | 42 |
| APPEN | NDIX A: INTERVIEW QUESTIONS                                   | 43 |
| APPEN | NDIX B: INFORMED CONSENT                                      | 46 |
| REFEF | RENCES  | 48 |
| ASSIG | NED RESPONSIBILITIES PAGE                                     | 51 |

## LIST OF TABLES

| Table 1. | Services Used by | Participants | 23 |
|----------|------------------|--------------|----|
|----------|------------------|--------------|----|

## LIST OF FIGURES

| Figure 1. Effectiveness of Individual Therapy   | 27 |
|---|----|
| Figure 2. Effectiveness of Twelve Step          | 28 |
| Figure 3. Effectiveness of Peer Support         | 29 |
| Figure 4. Effectiveness of Medication           | 31 |
| Figure 5. Participants' Perceptions of Services | 35 |

# CHAPTER ONE

This chapter explains the purpose of this study and what information went into refining the direction of the study. The problem is only growing larger and more complicated. If social workers gain better information about the most effective treatments for co-occurring PTSD and substance use disorder in veterans, they will be more adequately prepared for the task of effectively treating this population.

#### Problem Statement

This study sought to discover what was most effective when treating veterans who are dually diagnosed with PTSD and substance use disorder. These disorders typically occur together, especially in combat related PTSD. Recently this issue has been brought to the attention of the public more than it has been before. Combat related PTSD has been an issue since World War I, when it was commonly known as shell shock.

The problem is not new, and it is mushrooming due to the Iraq wars and the arrival of thousands of returning veterans. These veterans are not necessarily predisposed to ask for help, despite the intensity and duration of their psychological symptoms that spring up from the PTSD. Military Times conducted a survey with returning veterans and found that "more than half of survey respondents reported having problems with their appetite related to their injuries. About 40 percent reported sleep problems, and nearly 20 percent reported abusing alcohol" (Shane & Kime, 2014, p.1). The nightmares and hypervigilance produced from the disorder make it very difficult to sleep through the night. A common solution to not being able to sleep through the night is alcohol. This is a solution that is acceptable in the armed forces, to a degree. If someone drinks enough alcohol for long enough, they will become physically dependent on the substance.

The National Alliance of Mental Illness estimates that around 50 percent of individuals with a mental illness, such as PTSD, engage in substance abuse (Duckworth & Freedman, 2013). In addition to alcohol, substances most commonly used include marijuana, cocaine, and prescription medications (Duckworth & Freedman, 2013). The search for immediate relief from intense psychological symptoms results in additional and severe physical, emotional and mental issues. This results in more treatment being necessary. Many veterans are reluctant to receive this treatment due to social stigma and a need for self-sufficiency. "Despite the severity of their health problems, 28 percent of WWP members surveyed said they worried about the stigma of seeking mental health care to help address those issues" (Shane & Kime, 2014, p.1).

This problem requires solving, for both veterans and their families. They deserve better treatment. The typical path for an individual with comorbid mental disorders, especially if one of those disorders is substance related, is

incarceration or homelessness. In addition there are frequent emergency room visits, and an increased danger to public safety.

At this point there are different entities dealing with this issue. The VA provides group therapy, psychological services and encourages attendance of and affiliation with twelve step groups. There are also peer support based groups like Wounded Warriors that seem to use a social model of recovery for the treatment of their group members. "Nearly 40 percent of WWP members reported difficulty in getting physical care from VA doctors and 35 percent could not get mental health services in the last year, according to the group's annual membership survey...." (Shane & Kime, 2014, p.1).

The Mental Health Services Act, passed in California in 2004, is geared towards financially assisting those individuals afflicted with mental illness and their families (California Department of Mental Health Services, 2014). In addition to advocacy, social workers are involved in the treatment planning and provide support and counseling to individuals with mental illness and their families. Social workers also assist in developing theories regarding mental illness and "are the largest providers of mental health services, providing more services than all other mental health care providers combined" (National Institute of Mental Health, 1991, p.1).

#### Purpose of the Study

The purpose of this study was to determine what veterans believed to be the most effective intervention in the treatment of PTSD and substance

abuse. It has been revealed through literature reviews that a high percentage of veterans have been dually diagnosed. Other research has indicated that treatment is most effective when it addresses the symptoms of both disorders simultaneously. Attempting to treat one disorder first instead of both disorders at once typically leads to a dismal cycle of frustration, failure, and often death.

Veterans have an alarmingly high suicide rate. A 2012 study estimated that 5,000 veterans commit suicide annually (Kaplan et al., 2012). This may be attributed to the combination of psychological symptoms, substance abuse, and the stigma of mental health treatment in addition to slow moving, inaccessible treatment systems. Only about seven percent of individuals who have a dual diagnosis receive treatment for both disorders, while almost 60 percent receive no treatment at all (SAMSHA, 2009). In addition to high rates of suicide, veterans with a dual diagnosis also have a higher prevalence of medical illnesses, homelessness, incarceration, and premature death (SAMSHA, 2009).

#### Significance of the Project for Social Work

This study is needed in order to improve the efficiency of current mental health treatment available to veterans and their families. As previously mentioned, there is a great stigma associated with mental illness and many are apprehensive about receiving treatment. Through this study, valuable knowledge was gained about what treatments are most effective for dually diagnosed veterans. Social workers will be able to use information gained in

this study to make recovery treatment systems more fluid in addition to assisting in alleviating some of the apprehensions that veterans may feel about receiving treatment.

#### Summary

Through this study, the evaluation and engagement phase of the generalist intervention process were utilized. Through review of the literature, researchers examined the treatment modalities currently in use to assess their effectiveness, both short and long term. This was a qualitative study in which researchers posed the question: What is the most effective treatment for co-occurring PTSD and substance abuse from the perspective of veterans?

# CHAPTER TWO

#### Introduction

Scholarly, peer-reviewed articles were reviewed by the researchers. The articles explored different areas of the research question, including the perceived success of peer to peer support groups, measured outcomes of providing treatment for both disorders simultaneously, and veterans' attitudes towards receiving mental health treatment. Very valuable information was learned and helped to refine a direction for the study, and the formulation of the interview questions for the assessment tools.

#### Theories Guiding Conceptualization

"Most human behavior is learned observationally through modeling: from observing others, one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action" (Bandura, 1977). The Social Learning Theory applies to behavior in the armed forces just as it would anywhere else. The social pressure of conforming to military culture accounts for some behavioral changes within recruits. This seems to be part of why they are able to connect with each other so quickly and thoroughly. Additionally, age range, gender, and active duty generation will affect this. However, it seems that because of the intensity and time period of the shared experience among the soldiers, an ease of recognition materializes.

The theory of Symbolic Interactionism states that the behavior of individuals is the product of their relationships with each other and the symbolic environment humans are a product of (Segalman, 1978). The theory of Symbolic Interactionism also fits here because once again, soldiers learn how to be soldiers from each other and from their superiors. Human beings watch each other perform behaviors, analyze the outcomes of those behaviors and then decide if they want to engage in those behaviors themselves. This theory may have a large part in explaining the newest generation of veterans' attitude towards mental health treatment. Fellow soldiers were rewarded socially most likely for displaying attitudes of "self-sufficiency and stoicism" (Segalman, 1978, p. 467) when it came to being open and accepting help. All of these behaviors and mannerisms have been learned by observations and copying of behaviors with the desired outcome. In a social organization like the armed forces, social reward versus formal or informal social punishment (ostracism of an individual) have huge repercussions for the individual. Veteran's Views and Treatment Preferences

Before attempting to understand treatment options for veterans with cooccurring disorders, it is first important to understand their views on receiving treatment in addition to their treatment preferences. If veterans' treatment preferences are not understood, the treatment available will not be effective. Mental health workers will have more difficulty engaging the veterans and helping them and their families. Stecker and colleagues (2007) examined the beliefs of soldiers about receiving mental health services. Participants were 20 National Guard soldiers who had recently returned from deployment in Iraq (Stecker et al., 2007). Researchers interviewed participants via telephone and asked them an array of questions regarding their beliefs about the benefits and disadvantages of receiving mental health services. Information gathered through the interviews was then transcribed and analyzed through a coding system (Stecker et al., 2007).

The study found that the stigma associated with seeking treatment was believed to be a major factor as to why many veterans choose not to participate in mental health services in addition to pride and denial. However, most participants believed that seeking mental health services would be a positive experience and that it would help to diminish symptoms. From these findings, the researchers concluded that practitioners should use a positive, motivational approach when presenting the idea of seeking mental health services to veterans. A noted limitation included the fact that participants interviewed were all from the same branch of the military. Another limitation noted was the absence of important nonverbal cues that face to face interviews would have provided.

Back and colleagues (2014) conducted a study to determine veteran preferences about treatment of PTSD and substance use disorder. Thirty five veterans were selected for the study and given a questionnaire in addition to

conducting a face to face interview. The study found that most veterans believed there to be a strong correlation between PTSD and substance use disorder. In addition, it found that the veterans believed that improvement in PTSD related symptoms led to a decrease in substance use. Last, the study found that over half of the participants believed that a combination of treatments was more effective than one. These findings demonstrated that a combination of therapeutic interventions is more effective than one intervention.

#### Medication

Many interventions have been used in the treatment of PTSD and substance use disorder. One intervention is the use of medication. Morris and colleagues (2001) researched the use of Naltrexone in order to determine if it would be effective in the treatment of substance abuse. Participants in the study were all male veterans residing in an outpatient facility in Melbourne, Australia (Morris et al., 2001). Participants were randomly assigned, with 55 receiving 50 Mg of Naltrexone, and 56 receiving a placebo (Morris et al., 2001). Participants were treated daily for 12 weeks, while attending support groups weekly. Outcomes were measured by participants' ability or inability to remain sober. Although, only 16 of the participants completed treatment, the study found that those who were treated with Naltrexone had reduced instances of substance abuse. The findings indicate that while Naltrexone may

be successful in the treatment of substance abuse on a short term basis, more studies need to be conducted to determine the longevity of its effects.

Naylor and colleagues (2012) examined the efficacy of Paroxetine, an antidepressant, in the treatment of PTSD in Operation Iragi Freedom veterans in North Carolina. Twelve veterans who has participated in Operation Iraqi Freedom, five of which received Paroxetine and seven a placebo (Naylor et al., 2012). The study was conducted over twelve weeks. Participants receiving Paroxetine received it over a seven week period, with dosages ranging from 10 mg to 40 mg, depending on clients' level of tolerance (Naylor et al., 2012). Outcomes were measured by a decrease in PTSD related symptoms through the use of weekly assessments. Findings concluded that those taking Paroxetine experienced a decrease in depression and anxiety. Although the study indicates the efficacy of Paroxetine in the treatment of PTSD, it is limited in the fact that the sample size of this study is relatively small. In addition, clients received varying doses of the drug and it is unclear which dosage was the most effective in eliminating symptoms of PTSD. Further studies will need to be conducted in order to determine which dose of Paroxetine is most effective in addition to examining whether or not the symptom reduction is temporary.

#### Therapeutic Interventions

Another intervention used in treatment of PTSD and substance use disorder is Cognitive Behavioral Therapy (CBT). CBT is a short term therapeutic intervention meant to compulsive, negative behaviors that keep the clients in a dangerous and depressing cycle. Sannibale and colleagues (2012) conducted research in clinics throughout Sydney, Australia to examine its efficacy. The study was conducted using a randomized sample of 62 participants, 33 of which received CBT, and 29 of which met with a support group (Sannibale et al., 2012). Clients were given a blind assessment prior to beginning treatment and a follow-up assessment five months later (Sannibale et al., 2012). Outcomes were measured by a reduction in PTSD symptoms as well as a reduction in alcohol consumption. Findings of the study concluded that although both groups were shown to have improvements in PTSD symptoms, clients who received CBT exhibited greater changes in symptoms (Sannibale et al., 2012). These findings indicate that CBT is a beneficial intervention in the treatment of a comorbidity of PTSD and substance use disorder.

According to La Page and Garcia-Rea, the outcomes with previously homeless veterans were best and longest lasting when more therapy was provided. More success was defined as abstinence or fewer relapses and improved self-efficacy. The study was somewhat randomized, using a population that had been through the VA's program to assist homeless

veterans. The veterans were broken up into three groups. One group was given therapy which concentrated on healthy options for recreational habits, and healthy ways to interact with themselves and others, as well as emotional therapy (La Page and Garcia-Rea, 2012) .The second group was given only emotional therapy and the third group was not given any therapy. The group of veterans with the best outcome was the veterans who were given both therapies and options for their behavior. Outcome success was determined by prevalence of relapse into substance abuse.

La Page and Garcia-Rea discussed that those veterans who were given lifestyle coaching, or the ability to explore healthier behavior choices in a safe environment with a therapist fared better than those who did not. La Page and Garcia-Rea also discussed the experiment's weaknesses. Only 59 veterans were sampled altogether, and the small population used does not bode well for the generalizability of the conclusions of the experiment (La Page & Garcia-Rea 2012). Also, the population was only followed up with for six months after completion of the experiment. This leaves some room for how long the positive results lasted whether or not the veterans were successful at first (La Page & Garcia-Rea, 2012).

Worley and colleagues (2013) studied the outcome of veterans who had comorbid disorders of substance abuse and depression. The veterans either participated in Alcoholics Anonymous or CBT. Because Alcoholics Anonymous is an anonymous fellowship, the veterans using this intervention

were asked to self-report using questionnaires. The veterans participating in Alcoholics Anonymous did well immediately after treatment and for a time afterwards, but tended to fall away from meeting attendance and participation in the program. Their outcomes for relapse were worse than those who had been receiving CBT. It appeared that the researchers found that the twelve step program participation used in combination with the cognitive behavioral therapy would be more effective (Worley et al., 2013).

Mason and colleagues (2014) studied the outcomes of veterans who had a brief alcohol intervention, or BAI, approach to coping with their alcohol misuse and PTSD or depressive symptoms. A BAI can be completed in between ten and thirty minutes and is only done once. The article stated that this timing and completion in a single appointment made BAIs a good fit for primary care physicians (Mason et al., 2014). The researchers found that the introduction of new coping skills, or approach coping helped with both the problematic drinking patterns and PTSD symptoms. It was interesting that the researchers reported that those individuals who reported with higher drinking levels and higher approach coping capabilities at baseline reported fewer psychotic symptoms. The researchers also found that those individuals who had access to more or longer treatment and approach coping skills fared more successfully than those who did not. For these individuals, and anyone else, faring better means fewer psychotic symptoms or reactions to the symptoms and fewer relapses (Mason et al., 2014).

Forbes and colleagues (2008) did a study in which over one thousand veterans were analyzed for the level of intensity of their PTSD diagnosis and given the correlating treatment. The researchers found that the intensity level of programming must match the intensity level of treatment for the best outcome. It was stated that an individual with low level PTSD will not be successful if put through a high intensity program. However, they also revealed that a moderate intensity treatment will work when varying intensities of treatment are not available (Forbes et al., 2008). The treatment discussed was primarily CBT. Alcohol misuse (intensity and frequency of problem drinking) was measured before and after applied interventions.

#### **Combining Interventions**

Some researchers have found a combination of interventions is the most effective in the treatment of clients with a comorbidity of PTSD and substance use disorder. Van Dam and colleagues (2013) examined the efficacy of combining Structured Writing Therapy and CBT to treat clients with comorbidity of PTSD and substance use disorder. The study was conducted using 34 eligible participants from an outpatient facility in Amsterdam, 19 of which received both interventions, and 15 of which received CBT (Van Dam et al., 2013). Outcomes were measured by changes in symptoms of PTSD and reduced consumption of alcohol. A limitation in the study was its small sample size. Researchers concluded that although findings indicate that there may be benefits to incorporating structured writing therapy into treatment in addition to

CBT, there were no significant differences between the patients receiving only CBT. The findings indicate that more studies need to be conducted on the efficacy of a combination of interventions.

#### Web-Based Therapeutic Interventions

Most recently, researchers have examined technologically based interventions. Possemato and colleagues research a newly developing webbased program that is being used in the treatment of veterans with cooccurring disorders of PTSD and substance use disorder. The program teaches veterans techniques for managing symptoms of PTSD and substance use disorder through CBT (Possemato et al., 2014). Feedback about the program was provided by three expert clinicians, a focus group of 18 veterans who had been exposed to combat, and individual interviews with 34 veterans who had been exposed to combat (Possemato et al., 2014). Through the feedback researchers found that the veterans generally liked the program, had few difficulties using it, and found that it related to their experiences in combat. Researchers also found that veterans enjoyed the privacy of a web-based program. Researchers concluded that these findings will aid in the development of further web-based programs and will assist clinicians who intend to provide interventions that are technologically based.

### Summary

A large number of studies have pointed to a variety of interventions that have been effective in the treatment of co-occurring PTSD and substance use disorders. Interventions included the use of medication, web-based programs, and CBT, as well as a combination of these interventions.

.

#### CHAPTER THREE

#### METHODS

#### Introduction

This chapter addressed research methods used in the study. The study used a qualitative design in the form of anonymous and confidential interviews, which were conducted with thirteen participants. The participants were veterans. The researchers were awarded permission to interview veterans through the WWP. Additional interviews were conducted and completed through word of mouth.

#### Study Design

The specific purpose of the proposed study was to discover what therapeutic interventions were most effective for veterans who had been diagnosed with comorbid disorders of PTSD and substance use disorder. This was a qualitative study.

Data was collected via interviews with veterans from the WWP and by word of mouth. The interview method was chosen because it allowed participants to elaborate on their responses. Participants were asked a variety of open-ended questions regarding their treatment preferences and which they believe to be the most effective form of treatment, or combination of treatments.

#### Sampling

Data was collected from thirteen participants between the ages of twenty and forty. Participants served at least one tour of duty in Iraq or Afghanistan and have been diagnosed with the comorbid disorders of PTSD and substance use disorder. There was no discrimination according to race or gender. Additionally, participants were from different military branches. A snowball sampling was used. All the completed interviews were with male veterans.

The researchers specifically chose the sample of veterans because this population has always had difficulty readjusting to civilian life. Services made available to veterans through the VA are difficult to navigate and slow moving. Veterans were chosen instead of clinicians because the veterans are the actual recipients of the treatment. They had a better grasp on what worked for them and what made the treatment effective.

It was evident from the literature reviews that word of mouth and peer based support were both helpful in treatment for veterans and often dictated the success in outcomes. It also became apparent that the younger veterans were less likely to participate in treatment because they were more likely to hold the idea that they should be able to solve their own problems without any kind of assistance.

#### Data Collection and Instruments

The type of data anticipated includes information on what therapeutic interventions were most effective for veterans who have comorbid disorders of PTSD and substance use disorder. The study was conducted using an interview guide. The independent variable in the study is the therapeutic interventions being employed to lessen the severity of the symptomology of the comorbid disorders and the dependent variable is the participants' opinions of the effect that those therapeutic interventions have on the symptomology of the comorbid disorders. Ideally, there would be increased self-efficacy and alleviation of the most severe symptoms.

Data was measured by scaling individual responses in the interview. The interview asked the participants to evaluate the effectiveness of various therapeutic interventions based on their personal experience and resulting preference. In addition, participants were asked what interventions they have tried that were not mentioned, as well as why they found one treatment more effective than another.

#### Procedures

Data was gathered from the WWP and by word of mouth. Researchers interviewed any participants who were receptive to participating in the study. Interviews were treated as informal conversations in order to decrease the potential anxiety level of both interviewers and participants. Most participants were eager to share their experiences and inform the researchers about what

brought them to the point of needing treatment. Participation in the interviews was purely voluntary, and any questions that the respondents prefer not to answer did not require a response.

#### Protection of Human Subjects

Protection of human rights was upheld by the researchers. Approval to conduct the research was granted by the School of Social Work Subcommittee of California State University, San Bernardino Institutional Review Board. Participants were provided with papers explaining informed consents. The interviews were anonymous. Participation by respondents was voluntary. The data was protected because the interviews are both anonymous and confidential. The respondents were not asked for their names or any other identifying information. The style of the interview questions prevented identifiable information about the individual from being revealed. The information being asked of the respondents addressed preference in treatment, if any. Some information derived from answers about treatment preference may produce information that the respondents would prefer to keep private; however, all participants answered all questions.

#### Data Analysis

First, researchers became familiarized with the data that had been collected by thoroughly reading through the responses provided by participants. Once the data had thoroughly been read through, researchers will

begin the process of coding the data, using textual codes. Responses as to why one treatment was believed to be more effective than another was coded according to key terms used by the participants. Once the data had been coded, it was charted and analyzed for themes and patterns.

Respondents had either completed treatment or were currently in treatment. The researchers included a question at the conclusion of the survey where respondents were welcomed to provide feedback on why they picked what they picked or did not. This last question helped the researchers learn about the effectiveness of therapeutic interventions at this moment and for the future of mental health treatment for veterans.

#### Summary

In summary, this study was a qualitative study in which the researchers sought to understand which therapeutic interventions were most effective for treating PTSD and substance use disorder from the perspective of veterans. The researchers believed that it was important for the data to come from the veterans themselves. The data was collected via interview and was collected from the WWP in Camp Pendleton, California. Altogether, the researchers conducted thirteen interviews.

# CHAPTER FOUR

#### RESULTS

#### Introduction

The research question was "What are the most effective therapeutic interventions for veterans with comorbid diagnoses of PTSD and substance use disorder, from the perspective of veterans?" Coding of the data revealed that multiple therapeutic interventions performed simultaneously are more effective, both in the short and long term than one therapeutic intervention, or no treatment at all.

#### Presentation of the Findings

The sample was composed of veterans who volunteered to be interviewed on an anonymous and confidential basis. There were thirteen participants altogether; all were male between the ages of twenty and forty. Participants were of mixed ethnicity which included African American, Mexican American, and Caucasian. None of the participants were women.

#### **Roadblocks**

Table 1 displays which services were used by the veterans. The researchers were surprised to discover that only four of the thirteen participants had accessed services through the VA successfully.

#### Table 1. Services Used by Participants

Total sample size, N= 13

|                          |     | Services              |                |              |      |            |
|--------------------------|-----|-----------------------|----------------|--------------|------|------------|
|                          |     | Individual<br>Therapy | Twelve<br>Step | Peer Support | VA   | Medication |
| Participated in services | Yes | n= 10                 | n= 10          | n= 10        | n= 4 | n= 7       |
| 30111003                 | No  | n=3                   | n=3            | n= 3         | n= 9 | n= 6       |

The sections of the interview which address what roadblocks to services there were, and what suggestions veterans had for easing access to services supplied the researchers with valuable insights from veterans who either were denied access, or had overcome the trials and tribulations in front of gaining services. Many times over, interviewees stated that some of the main problems with access to services were transportation and surviving the wait for an appointment to get started. One participant stated,

The biggest roadblock for me when I first started seeking treatment was transportation. I often didn't have enough money to take the bus and was dependent on newfound friends in the twelve step fellowship for rides to the VA Hospital. Even when I could afford the bus, it was about an hour and a half ride in each direction, which was difficult (Participant

1, personal communication, 2015).

A second participant discussed the distance to services, while being unable to drive himself, saying, "Location of services. I can't drive and have to rely on

others to get me to my appointments" (Participant 2, personal communication, 2015).

When asked about the personal treatment received from the VA, a participant recounted, "I had to do my own research. No one tells you anything" (Participant 3, personal communication, 2015). Another participant stated, "No one told me what was available. My wife and I had to do our own research" (Participant 4, personal communication, 2015).

Other participants mentioned availability of services and the length of time it takes to receive services as hindrances to veterans' health and wellbeing. "How long it takes to receive services. People are dying because they are not receiving the services that they need in time" (Participant 5, personal communication, 2015). Another veteran made the following statement: "Availability. I didn't know where to go for services when I was finally ready to admit I had a problem. I had to do a lot of research" (Participant 6, personal communication, 2015).

There were also problems recorded with VA services in assisting veterans in returning to the civilian sector. Other challenges include families readjusting to each other and role changes that have taken place since deployment. Wives became accustomed to running households, and among other things. One participant noted the need for marriage counseling. "More information for veterans coming home from war. Check the box type of services offered and only one meeting required after ninety days of being

home. More peer to peer training should be offered. Marriage counseling should be required" (Participant 7, personal communication, 2015). Another participant reported,

I would change the way that it is presented to us and make it easier and friendlier for vets to get help. A lot of government agencies have miles of red tape that the vets have to go through and sometimes those vets don't get the help and treatment that they need (Participant 8, personal communication, 2015).

It became evident to the researchers quickly that not only were the veterans dealing with the roadblocks of getting to the VA Hospital, but once they were there, the process became even more difficult. Several participants weighed in on the aspect of dealing with the staff and lengthy government processes themselves. One participant reported, "The staff is not supportive. They are very unwelcoming" (Participant 9, personal communication, 2015). Another participant reported, "The length of time it takes for the VA to get back to you. I felt like I needed help right away and it wasn't there" (Participant 10, personal communication, 2015). Another participant, 2015).

When I got out in 2006, they didn't have a term for what we had really, so there wasn't a lot of services out there and if you don't have the money or the benefits, seeing or getting help can be hard and that's why a lot of vets do drugs and alcohol (Participant 11, personal communication, 2015).

The researchers found that the majority of reviews of access to services for veterans were negative. Unfortunately, part of discovering what effective treatment for veterans is includes an evaluation of what is ineffective. According to the interviewees, access to treatment, both in transportation and in administrative logistics are woefully ineffective. When answering the question about whether he had accessed services from the VA one interviewee stated, "No, I have not. Reason is because the administration and logistics becomes so taxing, I usually give up" (Participant 12, personal communication, 2015).

#### Individual Therapy

Figure 1 demonstrates the veterans' opinions about individual therapy. Eighty percent of the veterans interviewed found individual therapy to be either extremely helpful, or very helpful.

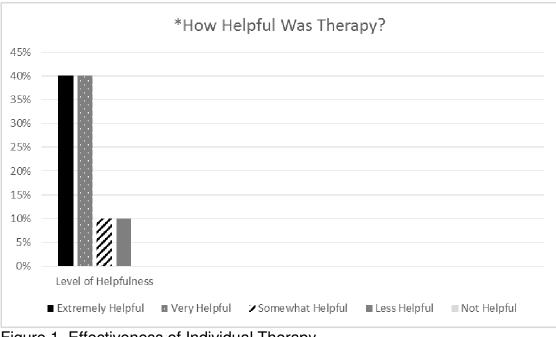


Figure 1. Effectiveness of Individual Therapy

One interviewee cited personal therapy as being most effective. "Personal therapy I think it worked best because I was able to speak one on one and cover more personal reasons why I am there. It creates a private environment to release issues" (Participant 13, personal communication, 2015). This interviewee stated he had had extensive individual therapy and indicated that without it, he was not sure where he would be. One veteran reported, "The therapist helped me to come up with techniques to manage my PTSD" (Participant 1, personal communication, 2015). A qualified therapist can help a veteran learn new cognitive-behavioral through demonstration, application and practice. These methods can be very effective in alleviating symptoms, especially in dealing with anxiety and depression symptoms. Cognitive redirection, deep breathing, progressive muscle relaxation, are all effective in alleviating these symptoms.

#### Twelve Step

Figure 2 demonstrates the veterans' perception on the effectiveness of twelve step programs. Veterans who were interviewed primarily attended and participated in Alcoholics Anonymous or Narcotics Anonymous. Over fifty percent of those veterans interviewed who had participated in twelve step programs found them extremely helpful. In some cases they attended and participated in both, in the interest of getting more meetings and contact with others in recovery. One interviewee stated, "For me, Twelve Step fellowship has been most helpful. The VA considers addiction a side effect of PTSD. After beginning Twelve Step, it was determined that other treatment was not necessary" (Participant 2, personal communication, 2015).



Figure 2. Effectiveness of Twelve Step

### Peer Support Groups

Figure 3 demonstrates the perceived effectiveness of peer support groups. Eighty percent of those interviewed who had participated in peer support groups found them to be extremely helpful. One interviewee stated,

When it comes to treatment, I have found that a group based treatment is better. It gives you people around you who have been in the same type or same circumstances as you have. It is hard to talk to someone about war and things like that if they have never served or seen (Participant 3, personal communication, 2015).

Another interviewee reported "Peer support groups. There is nothing wrong with getting help if you need it. It definitely helps to talk to those who have been through what you have" (Participant 4, personal communication, 2015).

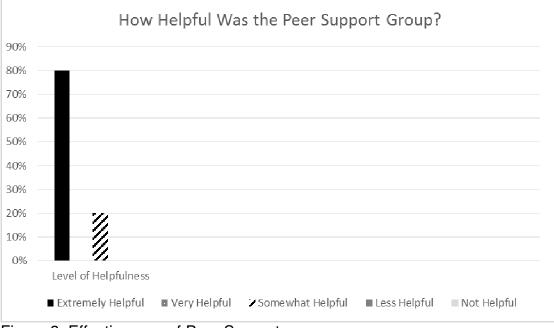


Figure 3. Effectiveness of Peer Support

This concept also became evident during the literature review. Many articles reviewed touted the benefits of peer led support groups, and the potential for both long and short term success when being consistently involved in one. A third interviewee stated, "Veteran support group. They have been through what I have. I feel like they understand me" (Participant 5, personal communication, 2015).

As was addressed in the literature review, one expectation was that there would be fewer stigmas attached to the treatment if there were others who were similar to other individuals seeking treatment having some success. Another interesting aspect of the peer related treatment was how PTSD symptoms were handled by veterans who were living successfully with some alleviation of symptoms. One interviewee recounted that, "All PTSD symptoms are not the same, one guy can have nightmares, and another guy will swerve out of the way if he sees a soda can on the side of the freeway; but it's the same diagnosis" (Participant 6, personal communication, 2015).

The veterans entering the PTSD group may not be expecting this level of familiarity with symptoms they were probably not telling anyone about, but once they learn that it exists, it is comforting to them. At least two veterans named PTSD groups as the most effective part of their treatment.

## **Medication**

Figure 4 displays that over 70% percent of veterans interviewed found medication either extremely helpful, or very helpful. Medication assisted in the

alleviation of symptoms like nightmares, and depression. One interviewee reported that he was prescribed Xanax for panic attacks while flying. This interviewee also stated that he had not accessed services from the Veterans' Association for fear of losing active duty status. He reported that the medication did nothing for him, and was not helpful whatsoever in alleviating his pervasive anxiety symptoms.

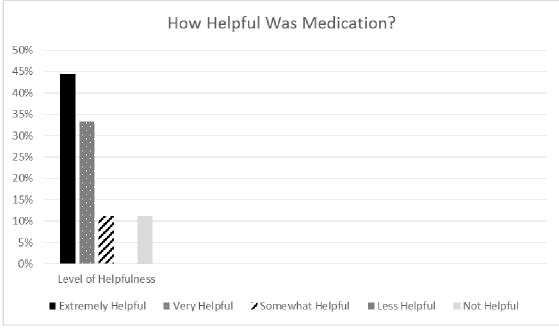


Figure 4. Effectiveness of Medication

Two veterans who reported that they had been and were currently medicated, stated "Medication helps with the nightmares" (Participant 6, personal communication, 2015) and "Medicine helps with the symptoms of PTSD" (Participant 7, personal communication, 2015). While medication is very helpful in balancing out biological symptoms, and changes in brain chemistry, it may not be effective as a solitary form of treatment. One interviewee stated, "Medicine and counseling, if they need it" (Participant 8, personal communication, 2015). All of the veterans who participated were either using multiple forms of treatment, or services, or none at all.

Another veteran felt he had been overmedicated at first and he reported, that if he could change something about the delivery of services, it would have been that he was given "too much medication at the beginning" (Participant 9, personal communication, 2015). He reported that the overmedication he experienced at the beginning of his treatment was just as difficult to deal with and as confusing as his PTSD and substance abuse was before treatment.

The four interviewees who did participate in services from the Veterans' Association were extremely grateful and satisfied with the services they had received. "I would recommend the VA addiction treatment program to any vet dealing with addiction and PTSD. I would also recommend veterans meet with a patient's advocate in the VA hospital or local community regarding disability or PTSD" (Participant 10, personal communication, 2015). Another participant reported, "I've had numerous one on one sessions with psychiatrists, social workers, addiction therapists, and psychologists" (Participant 11, personal communication, 2015).

The interviewee who made the following statement had somewhat special circumstances. This participant was in the VA hospital for over a month because of an infection that almost took his leg. The interviewee had had

access to services prior to his recent hospitalization because he had been able to persevere and get a disability rating that gave him almost full benefits. "I have participated in drug treatment through the VA and visited patient advocates on a few occasions. I recently applied for a vocational rehab and caregiver program" (Participant 11, personal communication, 2015).

However, this interviewee could have been receiving more benefits, like the caregiver program. According to the interviewee, the caregiver program gives financial benefits to a member of the veteran's household who is responsible for the veteran's full time care. The caregiver did not have to be a biological family member. If this interviewee had not been in the VA Hospital for a month he would not have had the time or ability to pursue the other benefits. This interviewee also reported that most of the other patients on his floor, which appeared to be long term, non-emergency care, were veterans from the Vietnam era. He stated that he tried to encourage other veterans to get benefits and services but had no takers. Another interviewee stated, "The addiction treatment program gave me a chance to string together some time off any substances while getting to the real cause of my situation" (Participant 12, personal communication, 2015). Often, without help, maintaining abstinence from substances is nearly impossible for anyone with substance abuse problems.

#### Perceptions and Roadblocks

Figure 5 summarizes the veterans' perceptions of the services received and roadblocks to services. Veterans who had experienced therapy found it to be useful because it was private and got to the root cause of their issues. They also found it useful because it was a neutral party. Veterans who participated in twelve step programs found it useful because they were active participants in their recovery. In addition, they felt it lead to a reduction in substance use. Veterans who had participated in peer support groups found being able to speak with peers to be useful. Veterans who did not participate in VA services indicated a lack of transportation, long waiting lists, and lack of accessibility as hindrances. However, those veterans who were successfully able to access services through the VA found them useful. Last, veterans who took medication found it useful in the reduction of symptoms such as tremors and nightmares, as well as anxiety and depression.

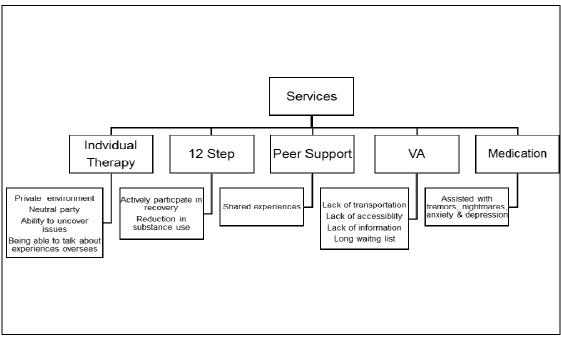


Figure 5. Participants' Perceptions of Services

### Summary

The data revealed that all thirteen participants found having multiple forms of treatment very helpful, if not required for a successful outcome. The services from the Veterans' Association Hospital that were most popular among the veterans included PTSD groups, inpatient treatments, vocational rehabilitation, caregiver services, Addiction Treatment Unit (ATU), and patient advocates. The PTSD groups were run by other veterans who had had success in adjusting back to civilian life, managing the symptoms of PTSD and managing the symptoms of their substance use disorder symptoms.

# CHAPTER FIVE

#### DISCUSSION

#### Introduction

This chapter will demonstrate why the research performed is both necessary and relevant to current social problems and potential routes for a solution. The researchers will outline the discoveries ascribed to the data findings, and why these findings are socially relevant.

#### Discussion

The researchers noticed several patterns in the data that are pertinent to the treatment of veterans and general social patterns that dictate how veterans are treated by the public. One pattern noticed by the researchers was that several modalities of treatment, utilized simultaneously, was most likely to bring about both short and long term success from the perception of the veterans. Another pattern was that the limited access to treatment resulted in lack of success for the veterans in need of treatment from the perception of the veterans. A third pattern recognized by the researchers was that veterans who had succeeded in getting treatment through the Veterans' Association were very satisfied with the treatment they received. However, only four of the thirteen participants had succeeded gaining access to treatment.

The first discovery made by the researchers about utilizing multiple forms of treatment simultaneously was most likely due to the fact that there

was more than one disorder occurring simultaneously. All thirteen participants reported being diagnosed with PTSD and substance use disorder. According to one participant, "The VA (expects) that people with PTSD will have an addiction problem, that's why meetings of some kind are required" (Participant 11, personal communication, 2015).

Individual therapy was an appreciated and utilized service because the literature review revealed an attitude that demonstrated a lack of open mindedness towards professional mental health treatment in two ways. First, it might be that the professional providing treatment to the veteran probably had not seen or experienced what the veteran had seen and experienced. These findings were supported by the study conducted by Sannibale and colleagues (2012), which stated that a combination of therapeutic interventions, including peer support was effective as a treatment system for veterans. Second, there is a stigma in the general population about receiving mental health treatment.

The general public sometimes views the need for mental health treatment as weak, something to be avoided instead of discussed. However, there are some skills and safety in working with a professional mental health worker. This is supported by the findings of La Page and Garcia-Rae's 2012 study, which indicated that individuals who actively seek professional mental health services fare better than individuals who receive no treatment.

Veterans with PTSD often use alcohol and other substances to alleviate symptoms like anxiety, depression and nightmares. Two studies referenced in

the literature review had some success with medications, including Paroxetine, (Naylor et al., 2012) and Naltrexone, (Morris et al., 2001). One study found that the veterans who took the medication showed decreased PTSD symptoms, which led to fewer instances of substance use (Morris et al., 2001). In the second study, the veterans who had access to the medication instead of the placebo showed decreased instances of anxiety and depression (Naylor et al., 2012). Many participants reported that medication was very helpful, in conjunction with other therapeutic interventions. One participant specified that medication was helpful as long as overmedication did not occur. The studies that were concerned about the effectiveness of medication had limitations which were addressed in the literature review, but overall supplied valuable information which was supported by the information produced from the interviews.

The second discovery was lack of access to services offered by the VA. Lack of access could be anything from not having a ride to the VA Hospital, to a year long wait for assessment or entry into a PTSD group or detox. It is understandable that the VA is flooded with veterans who need treatment. However, from the veterans' perspective, the VA is not forthcoming about available services. Many veterans reported on the interviews that they had to do their own research, no one advocated for them. A few respondents reported that the fact that they had to do their own research about available services was frustrating for them. The VA has patient advocates, but

knowledge about the advocates or what their role and purpose is, is not widespread.

The VA has services available both for the veterans, and for their families and caretakers. The participants who were interviewed and got services stated that the only reason they learned what services were available, or what they had to do to access the services was because a veteran who already got services walked them through the process. A few veterans offered suggestions about how to make services more accessible to others, including transportation services for veterans who do not drive or live far away from the Veteran's Association hospitals.

An interesting aspect of the data collected by the researchers was that most, if not all of the participants initially felt that they could handle their problems on their own. Research has found that veterans, as a population, feel that they should be completely self-sufficient and be able to repair themselves after coming home (Segalman, 1978). They do not want to admit to having mental health challenges and possibly needing outside help for a solution. Segalman (1978) found that there was a prevalent attitude of "selfsufficiency and stoicism" present in the veteran population. According to the perception of interviewed veterans, this attitude has not changed. According to an article in the literature review, most participants asked during telephone interviews supported the idea of getting mental health treatment. (Stecker et al., 2007). According to the reviewed study, most of the participants felt that

getting mental health treatment would lead to a decrease in symptoms, and the idea of a stigma preventing treatment was found to be untrue (Stecker et al., 2007).

Back and colleagues (2014), found that most of the participants interviewed in their study believed that a diagnosis of PTSD affected substance use, and that most of the participants believed that a combination of services would be more effective when treating PTSD and substance use disorder. This information correlates with the information produced from these researchers' interview results.

### Limitations

One of the limitations of the study was that the researchers employed a snowball sampling design of participants primarily formulated through word of mouth. The word of mouth style of reaching participants was very effective, and provided the researchers with more than enough collected data. However, most of the participants who were active in the study were linked together through twelve step groups. This common link between participants affected the collected data, and affected the generalizability of the findings. Most of the participants who were active in a twelve step group cited those programs as very beneficial.

Another limitation discovered by the researchers was that all the participants interviewed were male. There were thirteen participants

altogether. There was also a limitation of sampling design that directly affected data analysis outcome and generalizability of findings.

### Recommendations for Social Work Practice, Policy and Research

One recommendation from the researchers for further study would be interviewing veterans from the Vietnam era. Conducting further study in this area may be helpful in establishing what the older generation of veterans perceives as effective treatment. One veteran stated that he believed the older veteran population should have access to benefits and services first, because they have been living with the PTSD and substance abuse much longer than the newer generations of veterans have. Another area that could be studied further is the health and well-being of female veterans. It is reasonable to assume that female veterans have different treatment needs than male veterans.

As technology advances, more therapeutic interventions will become readily available. Research will need to be conducted in order to examine the efficacy of these interventions, both in the short and long term. Possemato and colleagues (2014) explored this option and found positive results because veterans who did not want to seek treatment publicly, could complete treatment in their own homes and at their own pace.

One suggestion the researchers would pose to future social workers would be to study substance abuse regardless of concentration. Substance

abuse is a pervasive and prevalent social problem that seems to only be expanding due to pharmaceutical dependence in an ever expanding portion of the population. Substance abuse will continue to affect the outcomes of social work, and complicate the process of therapy and referrals. Every individual has a predetermined attitude about substance abuse, and varying degrees of actual clinical knowledge. These attitudes can result in ineffective treatment for veterans.

### Conclusions

In conclusion, the researchers found that the veterans perceived the services available at the VA as very effective. The researchers also found that overwhelmingly, veterans who had difficulty accessing the services at the VA reported they were very dissatisfied with the wait times for appointments, the tangled components of administrative logistics, and the brusque manner in which the veterans were treated when they did attempt to pursue services. Multiple therapeutic techniques utilized simultaneously were perceived by the veterans to be more effective than a single therapeutic technique or no therapeutic techniques.

APPENDIX A

INTERVIEW QUESTIONS

Interview Questions

| 1.  | Have you ever atten groups.   | ded and participated   | and participated in peer support groups/mutual aid |                    |  |
|---|---|--|--|--------------------|--|
|   | YES   |  | NO   |                    |  |
| 2.  | On a scale of 1-5, he<br>1 2  | ow helpful was the p<br>3  | eer support/ mutu<br>4                             | al aid group?<br>5 |  |
| 3.  | Have you ever atten<br>YES  | lave you ever attended a 12 step group such as AA, NA, and CA…etc.?<br>ES NO |  |                    |  |
| 4.  | On a scale of 1-5, he<br>1 2  | ow helpful was the 1<br>3  | 2 step group?<br>4                                 | 5                  |  |
| 5.  | Are you currently taking medication? Have you ever taken medication?<br>YES NO  |  |  |                    |  |
| 6.  | On a scale of 1-5, he<br>1 2  | ow helpful has the m<br>3  | edication been fo<br>4                             | r you?<br>5        |  |
| 7.  | Are you currently or have you ever seen a therapist one on one as part of your treatment?<br>YES NO   |  |  |                    |  |
|   |   |  |  |                    |  |
| 8.  | On a scale of 1-5 ho<br>1 2   | w helpful was the or<br>3  | ne on one therapy<br>4                             | for you?<br>5      |  |
| 9.  | 9. Of all the different types of treatment you have participated in, which was the most helpful? Can you explain why? You may also indicate if you found a combination of treatments helpful. |  |  |                    |  |
| 10. What types of services have you received that were not mentioned in this survey                               |   |  |  |                    |  |
| 11. What were the biggest roadblocks between you and the services, what prevented the services from reaching you? |   |  |  |                    |  |

- 12. If you could change anything about the services being offered, what would you change? Why?
- 13. If you could change anything about how the services were delivered to you what would you change? Why?

- 14. Have you ever received services from or participated in services offered by the VA?
- 15. What was most useful about these services? What was least useful? Why?
- 16. What was the biggest roadblock in receiving services from the VA?
- 17. What services would you recommend to other veterans? Why?

Interview Questions were created by Meghan Frawley and Kelly Simon.

APPENDIX B

INFORMED CONSENT

### Informed Consent

This research has been approved by the School of Social Work Subcommittee of the Institutional Review Board of California State University, San Bernardino.

Outlined below is the purpose of this study, its risks and benefits, and how the study will be conducted. Please read thoroughly to ensure that you understand these before agreeing to participate. After you have thoroughly read this consent, please mark an "X" indicating your agreement to participate

**Researchers:** Meghan Frawley and Kelly Simon, Master's of Social Work graduate students at California State University, San Bernardino.

**Purpose of the Study:** This study is designed explore veterans' preferences about mental health treatment for PTSD and substance abuse.

**Expected Duration of Participation:** Participants will complete an interview, which should take no more than 30 minutes.

**Confidentiality and Anonymity:** Participant responses to the survey are anonymous. Data will be reviewed by the researchers. No confidential information will be disclosed in the presentation of the data. Data will be kept in a locked file box and destroyed upon completion of analysis.

Voluntary Participation: Participation in this survey is completely voluntary.

**Participants' Right to Withdraw:** Participants may withdraw at any time with no loss of benefits.

**Risks and Benefits:** There are no foreseeable risks associated with participation in this study. Information provided in this survey will assist mental health professionals in providing higher quality services to veterans and their families.

**Contact Information:** If you have any questions about this study, you may contact our faculty advisor, Dr. Cory Dennis at cdennis@csusb.edu. If you wish to obtain a copy of the results, you may contact Meghan Frawley at frawleym@coyote.csusb.edu or Kelly Simon at simok300@coyote.csusb.edu

I understand and agree to participate

Mark

Date

#### REFERENCES

- Back, S.E., Killeen, T.K., Teer, A.P., Hartwell, E.E., Federline, A., Beylotte, F., & Cox, E. (2014). Substance use disorders and PTSD: an exploratory study of treatment preferences among military veterans. *Addictive Behaviors* 39, 369-373.
- Bandura, A. (1977). *Social learning theory*. New York: General Learning Press.
- California Department of Mental Health Services (2014). Mental Health Services Act (MHSA). Retrieved from http://www.dhcs.ca.gov
- Duckworth, K. & Freedman, J.L. (2013). Dual Diagnosis: Substance Abuse and Mental Illness. National Alliance on Mental Illness. Retrieved from www.nami.org
- Forbes, D., Lewis, V., Parslow, R., Hawthorne, G., & Creamer, M. (2008).
   Naturalistic comparison of models of programmatic interventions for combat-related posttraumatic stress disorder. *Australian & New Zealand Journal of Psychiatry*, 42(12), 1051-1059.

Kaplan, M.S., McFarland, B.H., Huguet, N., & Newsom, J.T. (2012).
Estimating the risk of suicide among US veterans: how should we proceed From Here? *American Journal of Public Health*, 102(1), 21-23.

LePage, J. P., & Garcia-Rea, E. A. (2012). Lifestyle coaching's effect on 6month follow-up in recently homeless substance dependent veterans: a randomized study. *Psychiatric Rehabilitation Journal*, 35(5), 396-402.

- Mason, A. E., Boden, M., & Cucciare, M. A. (2014). Prospective associations among approach coping, alcohol misuse and psychiatric symptoms among veterans receiving a brief alcohol intervention. *Journal of Substance Abuse Treatment,* 46(5), 553-560.
- Morris, P. L., Hopwood, M., Whelan, G., Gardiner, J., & Drummond, E. (2001).
  Naltrexone for alcohol dependence: a randomized controlled trial.
  Society for the Study of Addiction to Alcohol and Other Drugs, 1565– 1573.
- National Institute of Mental Health (1991). Building social work for effective services and policies. Retrieved from http://www.socialworkpolicy.org
- Naylor, J. C., Dolber, T. R., Strauss, J. L., Kilts, J. D., Straumand, T. J., Bradford, D. W., Marx, C. E. (2012). A pilot randomized controlled trial with paroxetine for sub threshold PTSD in. *Elsevier*, 318-320.
- Sannibale, C., Teesson, M., Creamer, M., Sitharthan, T., Bryant, R. A.,
  Sutherland, K., Peek-O'Leary, M. (2011). Randomized controlled trial of cognitive behavior therapy for comorbid post-traumatic stress disorder and alcohol use disorders. *Society for the Study of Addiction*, 1397-1410.
- Segalman, R. (1978) Interactionist theory, human behavior social work and social work education. *Journal of Sociology & Social Welfare*, 5 (1), 467.

- Shane, L., & Kime, P. (2014, September 10). Army Times. Retrieved from http://www.armytimes.com/article/20140910/BENEFITS06/309100044/ Survey-40-percent-wounded-face-problems-getting-VA-care
- Stecker, T. Fortney, J.C., Hamilton, F., & Ajzen, I. (2007). An assessment of beliefs about mental health care among veterans who served in Iraq.
   *Psychiatric Services*, 58 (10).
- Substance Abuse and Mental Health Services Administration, Office of Applied Studies (2008). National Survey on Drug Use and Health. Retrieved from http://www.samhsa.gov
- Van Dam, D., Ehring, T., Vedel, E., & Emmelkamp, P. M. (2013). Traumafocused treatment for posttraumatic stress disorder combined with CBT for severe substance use disorder: a randomized controlled trial. BMC Psychiatry, 1-13.
- Worley, M. J., Tate, S. R., McQuaid, J. R., Granholm, E. L., & Brown, S. A.
  (2013). 12-Step affiliation and attendance following treatment for comorbid substance dependence and depression: a latent growth curve mediation model. *Substance Abuse*.

### ASSIGNED RESPONSIBILITIES PAGE

This was a two-person project where authors collaborated throughout. However, for each phase of the project, certain authors took primary responsibility. These responsibilities were assigned in the manner listed below.

1. Data Collection:

Assigned Leader: Meghan Frawley

Assisted By: Kelly Simon

2. Data Entry and Analysis:

Assigned Leader: Kelly Simon

Assisted By: Meghan Frawley

- 3. Writing Report and Presentation of Findings:
  - a. Introduction and Literature

Team Effort: Meghan Frawley and Kelly Simon

b. Methods

Team Effort: Meghan Frawley and Kelly Simon

c. Results

Team Effort: Meghan Frawley and Kelly Simon

d. Discussion

Team Effort: Meghan Frawley and Kelly Simon