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POSTTRAUMATIC STRESS DISORDER: COMPARING SHORT-TERM, INTENSIVE THERAPY TO TRADITIONAL, LONG-TERM THERAPY

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POSTTRAUMATIC STRESS DISORDER: COMPARING SHORT-TERM, INTENSIVE THERAPY TO TRADITIONAL, LONG-TERM THERAPY

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

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ABSTRACT

Posttraumatic Stress Disorder (PTSD) is a mental health diagnosis that occurs following a traumatic event, and military veterans are at higher risk of exposure to hazardous or life-threatening situations that may result in psychological trauma. PTSD sufferers experience symptoms such as distressing memories, nightmares, flashbacks, hypervigilance, and heightened arousal. Individuals with PTSD also experience higher rates of depressive and substance use disorders, involvement with the justice system, and self-harm and suicide. Many agencies, such as the Department of Veteran's Affairs (VA) provide treatment PTSD, however most programs experience dropout rates as high as 36%. Recent studies have shown that intensive, short-term, evidence-based treatment is both a desired option, and one that exhibits success rates of nearly 92%. What had not yet been documented at the time of this writing was the long-term efficacy of these programs. Through use of online survey distribution and collection and data analysis, the authors were able to preliminarily demonstrate that both treatment modalities demonstrate very similar symptom reduction. This data, coupled with the aforementioned higher completion rate of short-term treatment would indicate that this newer treatment model is the more effective option. The authors also make recommendations to future researchers and describe the potential impact of this research on the social work profession.

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CHAPTER ONE

INTRODUCTION

Problem Formulation

Posttraumatic Stress Disorder (PTSD) is a mental health diagnosis that occurs following a traumatic event. Combat, natural disasters and sexual or physical assault are just a few examples of ordeals that can leave the sufferer with psychological wounds after the immediate danger (real or perceived) has passed (American Psychiatric Association, 2013). These psychological wounds may manifest in the form of distressing memories, recurring dreams/nightmares, flashbacks (re-experiencing the event as if it were happening in the present moment), hypervigilance and heightened arousal, and sleep disturbances (American Psychiatric Association, 2013). Military veterans, by the nature of their profession, are at particular risk for exposure to hazardous situations that may result in psychological trauma. For veterans of Operation Iraqi Freedom and Operation Enduring Freedom (OIF, OEF), estimates of PTSD are as high as 23% (Held et al., 2020).

In addition to the difficulties associated with the symptoms described above, many with PTSD experience comorbidities such as depressive and substance abuse disorders, which, if untreated or unresolved, place the individual at increased risk of negative involvement with the justice system (Tossone & Baughman, 2020), self-harm, and social or occupational dysfunction

(American Psychiatric Association, 2013). Additionally, those with PTSD are 5% more likely to die from suicide than the general population, with an estimated 1.1% successfully taking their own lives (Rapaport, 2019).

Many agencies, such as the Department of Veteran's Affairs (VA) Healthcare System, provide treatment programs for PTSD sufferers. These programs experience dropout (unsuccessful completion) rates as high as 36% (Szafranski et al., 2017). Reasons for this rate of attrition are not entirely clear, although correlations have been observed between dropout rates and patient age, severity of symptoms, and overall physical health (Smith et al, 2019). In addition to these factors, current treatment approaches and lengthy program durations may lead to disinterest, impatience with slow results, and, in the case of some programs, frustration with lack of a clearly delineated completion point may also contribute to incomplete/unsuccessful treatment. Another hindrance is treatment in a group therapy setting; many participants describe discomfort in discussing symptoms in a social setting, as well as a lack of individual attention one would get from one-on-one therapy (Goetter et al., 2015).

Recent studies have shown that intensive, short-term evidence based treatment is not only appealing to those seeking treatment, but has a successful completion rate as high as 91.6% (Held et al., 2020). At this time however, there are no longitudinal studies of the long-term effectiveness of this approach. Validation of the efficacy of an Intensive Treatment Program ITP (i.e. reduction of

symptoms beyond one year following successful completion of treatment) has the potential to reduce social worker caseloads and enable service provision to more clients. This can be particularly helpful to social workers who are employed at agencies that are understaffed or underfunded. For example, there are approximately 49,000 vacancies within the VA healthcare system alone (Cohen, 2020).

Purpose of this Study

The purpose of this study is to compare the long-term efficacy of both traditional and short-term therapy for veterans suffering from PTSD. As previously discussed, intensive, short-term therapy for PTSD is feasible, desirable to clients, and has a successful completion rate of 91.6 - 98% (Held et al, 2020, Foa et al., 2018). What is not yet known however is the long-term efficacy of treatment, due to the recency of the initial studies. This study will seek to determine the lasting impact of treatment at six months or longer after successful program completion. This will be a quantitative study, and will rely primarily on client surveys. Long-term efficacy will be measured using the National Stressful Events Survey PTSD Short Scale (NSESSS). NSESSS was developed and distributed by the American Psychiatric Association in 2013 to measure PTSD symptom severity at assessment and at various intervals during treatment. For this study, NSESSS will be administered six or more months post-treatment. This study will compare the NSESSS scores of two groups. The first

group will be clients who have attended a traditional treatment program of 8-12 weeks, while the second group will have attended a short-term (three to four weeks) intensive therapy group.

Significance of the Project for Social Work

The current approaches and outcomes should be of interest to all clinicians who treat PTSD. A dropout rate of over one third of clients (Szafranski et. al., 2017) means that many of these individuals will return to the maladaptive coping mechanisms that brought them into treatment to begin with. Therapists should share a common goal of exploring why treatments are failing one in three clients, as well as whether more effective approaches are available. Additionally, the National Association of Social Worker's (NASW) Code of Ethics includes "Competence", which involves constant effort to build upon current knowledge in order to provide adequate service to their clients (NASW, 2017). Social worker's core competencies include "engage in practice-informed research and research-informed practice" and "evaluate practice with individuals, families, groups, organizations, and communities" (CSWE, 2015). Respectively, this means that social workers are obligated to provide the most current and effective service to clients and to constantly evaluate the outcomes of service provision.

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are no longitudinal studies into the long-term effectiveness of this approach. Validation of the efficacy of ITP (i.e. reduction of symptoms beyond one year following successful completion of treatment) has the potential to reduce social worker caseloads and enable service provision to more clients. This can be particularly helpful to social workers who are employed at agencies that are understaffed or underfunded. As noted previously, there are currently approximately 49,000 vacancies within the VA healthcare system alone (Cohen, 2020).

Research Question

Does short-term, intensive therapy for PTSD demonstrate equal or better long-term success compared to traditional treatment options?

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter consists of an examination of the research relevant to the topic of the therapy approaches that are utilized on veterans with PTSD. The beginning subsections will include the prevalence of PTSD and the symptoms of PTSD among veterans. The middle subsection will examine the short term and traditional treatment options for PTSD. The final subsection will discuss theories guiding conceptualization.

Prevalence

According to the DSM 5, the twelve-month prevalence among adults in the U.S. is approximately 3.5% (American Psychiatric Association, 2013). Depending upon service era (Vietnam, Operation Iraqi Freedom /Operation Enduring Freedom, or peacetime), the prevalence of PTSD among veterans ranges from 13.5% and 30% (Herzog, Whitworth, & Scott, 2020). Among veterans of the Iraq and Afghanistan wars, estimated prevalence is 23% (Fulton et al., 2015). However, service era not only plays a role in prevalence, but in symptoms as well. In one study, Kinney (2012) found that service era seems to affect severity and manifestation of symptoms. For example, this study shows that Vietnam era veterans are more likely to have a substance use disorder (SUD) at some point in their lives to cope with PTSD symptoms, while OIF/OEF veterans are more

prone to acts of violence. Vietnam veterans are also more likely to have had negative involvement with the justice system, including incarceration (Kinney, 2020).

Another significant difference between these two eras is the ratio of female service members. Although the total number of military personnel has decreased between these two wars, the number of enlisted women has grown from 42,278 in 1973 to 166,729 in 2010 (Patten & Parker, 2019). While the rate of female enlistment increases, the incidence of Military Sexual Trauma (MST) also increases. As high as 25% of female veterans experience sexual assault, while as many as 80% are subjected to sexual harassment (Averill et al., 2015).

Symptoms

In addition to the higher prevalence rate of PTSD among veterans, Vincenzes (2013) found higher symptom severity than what is seen among civilians, as well as expressions that are unique to this demographic such as hypervigilance, and compulsive checking. This same study attributed the severity of symptoms to compound trauma and repeated exposure: multiple tours and recurring traumatic experiences; during a single hostile encounter, one may experience risk of death/injury, the death of a comrade, and killing enemy troops, all occurring within seconds.

In addition to the struggles associated with PTSD, comorbidities are extremely common, with over 80% of veterans meeting diagnostic criteria for conditions such as Substance Use Disorders (SUDs), Major Depressive Disorder (MDD), and anxiety disorders (American Psychiatric Association, 2013, Trivedi et al., 2015). Alcohol Use Disorder (AUD) alone has a lifetime prevalence of 55 to 68% in veterans with PTSD (Weiss et al, 2020), and PTSD has been positively correlated with drug overdose, both fatal and non-fatal (Lee et al., 2020). Among males, conduct disorders (i.e. Intermittent Explosive Disorder) are also common (American Psychiatric Association, 2013), often resulting in arrest and incarceration (Tossone & Baughman, 2020).

As knowledge about PTSD has evolved and developed over the last 40 years, so has diagnostic criteria. DSM-III and DSM-III-R refer to dissociative states and avoidance symptoms, the latter of which was required for diagnosis (Ericsen, 1980). Although DSM IV made no major changes to diagnostic criteria for PTSD, Acute Stress Disorder (ASD) was recognized as a condition with similar symptoms to PTSD, but with onset occurring more immediately after the traumatic event and frequently resolved more quickly than PTSD (American Psychiatric Association, 1994). DSM 5 recategorized several conditions previously referred to as avoidance symptoms: persistent and exaggerated negative beliefs, erroneous self-blame, negative mood states, reckless/maladaptive behavior, and aggressive behavior (American Psychiatric Association, 2013).

Traditional Treatment Methods

Despite the advances in diagnosis and treatment of PTSD, Benítez et al (2012) estimate a recovery rate of only 38%, leaving thousands of veterans at elevated risk of substance abuse, social ostracization, legal involvement, and suicide. Researchers have sought to isolate the causes of unsuccessful treatment and have identified symptom severity, co-occurring physical limitations, and client age as predictors of treatment outcomes (Smith et al., 2019). Many clients also report social anxiety as a hindering factor; traditional treatment is typically administered in a group setting, where some fail to fully participate for fear of judgement by their peers (Goetter et al., 2015).

Another barrier to treatment was recently explored as to whether traditional treatment programs are simply too lengthy and impersonal for many participants. Most treatment programs involve weekly, 1-hour sessions and are between two and four months in length, requiring many clients to sacrifice familial and financial obligations in order to complete treatment (Held et al., 2020).

Intensive Short-Term Therapy

Intensive Short-Term Therapy is treatment that is delivered in a relatively small window of time. Rather than participating in weekly one-hour sessions for several months, treatment would be delivered intensively within a shorter time frame. The treatment is usually compressed into 2-3 weeks. Short term treatment

can be easier for veterans to complete due to convenience since regular treatment attendance may be easier during briefer periods of time. Shorter treatment interferes less with other aspects of life, for example, taking time off work. Lastly, shorter treatment can be completed before motivation wanes.

Held et al (2020) conducted a study to determine whether a short-term, intensive treatment program (ITP) was not only feasible, but also desirable to veterans. This study also explored whether an appropriate volume of treatment could be administered in a short period (Four weeks), as previous studies have correlated positive outcomes with number of sessions provided and completed. Participants in this study were provided Cognitive Behavioral Treatment (CBT)-based treatment, as the authors speculated that low success rates were not due to the treatment methods currently being used, but rather the method of delivery. Participants in the study also received mindfulness-based stress reduction, yoga, and multiple psychoeducational classes.

A similar study offered Prolonged Exposure Therapy (PET) and social rehabilitation for a period of just two weeks and resulted in a dropout rate of just 2% (Beidel et al., 2017). A randomized control trial (RTC) compared the results of PET administered in 10 sessions over two weeks and PET delivered in 10 sessions over 8 weeks concluded that PET therapy delivered over 2 weeks had similar outcomes on PTSD symptoms as PET delivered over 10 weeks (Foa et al., 2018). However, dropout rates of traditional treatment are significantly higher;

Kehle-Forbes et al (2016) and Szafranski et al (2017) estimate that between 36 and 38.5% of participants do not successfully complete treatment.

Theories Guiding Conceptualization

Cognitive Behavioral Therapy (CBT)

CBT has been proven to be one of the most effective forms of therapy for treating combat- related PTSD (Butler, Chapman, Forman, & Beck, 2006). According to Beck's basic model, CBT is a psychosocial treatment method that allows the client to recognize and challenge cognitive distortions that have historically led to maladaptive coping mechanisms (i.e. substance abuse) and behaviors (Beck, 1970). CBT is based on both the cognitive theory of psychopathology and learning theory (Behaviorism). The cognitive model defines how people's perceptions, observations, and spontaneous thoughts about situations effect their emotional, behavioral, and physiological responses (Mcleod, 2019). This treatment approach is rooted in the work of Albert Ellis' Rational Emotive Behavior Therapy (REBT), which focused on irrational thoughts and beliefs, and how these can be challenged by the client in order to resolve unwanted behaviors and emotions (Ellis, 1962).

Treatment typically consists of the therapist and client collaborating to help the client identify the inaccurate perceptions and beliefs that are causing distress and learning to challenge these thoughts which enables the client to respond

appropriately to external stimuli. Homework is also frequently used to allow the client to practice these techniques between sessions (Dobson & Dobson, 2009). CBT can be further broken down into subsets of practice; Cognitive Processing Therapy (CPT), Prolonged Exposure Therapy (PET), and Stress Inoculation Training (SIT) are all rooted from CBT theory, each having unique approaches to the same theoretical framework (Watkins, Sprang, & Rothbaum, 2018).

Learning Theory

From the perspective of the learning approach, symptoms of PTSD stem from maladaptive learning that occurs during and after a traumatic event (Lissek & van Meurs, 2015). Learning theory is based on the works of Ivan Pavlov and B.F. Skinner, and proposes that behavior is a learned response to punishment and rewards (classical and operant conditioning) (Mcleod, 2017). Unfortunately, some behaviors that result in short-term rewards (i.e. substance use to alleviate anxiety) may ultimately lead to greater harm than the conditions that the individual was initially attempting to avoid.

Summary

The prevalence of PTSD among veterans is estimated to be as high as 30 percent. The number of female veterans has been increasing while the rate of Military sexual Trauma has also been on the rise. Comorbid diagnosis is especially common among veterans with PTSD. Traditional methods of delivery

can possibly be contributing to a high dropout rate. When veterans drop out of therapy early, they do not gain benefits from treatment. High intensity, short-term treatment can be used to prevent high dropout rates among veterans with PTSD. The two theories that are used to conceptualize this study is Cognitive Behavior Theory and Learning Theory. This study explores the benefits of short-term treatment delivery of therapy compared to the traditional delivery of therapy when treating veterans with PTSD.

CHAPTER THREE

METHODS

Introduction

This study compared traditional, long-term PTSD treatment program success rates with those of short-term, intensive therapy. For the purpose of this study, “long-term” treatment referred to programs of eight or more weeks in length, while short-term referred to programs of four or less weeks. “Success rate” referred to successful program completion, as well as reduction of negative symptoms in patients, as measured by NSESSS. Study design, sampling and data collection methods, procedures, and data analysis will be discussed below, as well as protection of human subjects involved in this study.

Study Design

The objective of this study was to identify which is the more effective method of treatment, short-term therapy or long-term therapy, for PTSD among veterans. Although short-term therapy has been shown to yield higher completion rates, long-term efficacy has not yet been documented, as the foundational study conducted by Held and associates was published less than one year prior to this writing. This study was quantitative and explanatory, with the goal of ascertaining lasting efficacy of this new approach to treatment compared to traditional methods.

The design of the study is a cross-sectional survey design implemented online. The researchers chose a quantitative approach for several reasons. For

many, discussing mental health diagnoses, even anonymously, is difficult and potentially re-traumatizing; allowing subjects to participate anonymously via online survey helped minimize these risks. Additionally, this study seeks only to discover correlation between treatment methods and recovery rates. Any causality of success vs. failure rates will be the subject of future studies. Finally, at the time of this writing, social-distancing requirements related to the COVID-19 pandemic creates difficulty in any study design that includes in-person interviews or focus groups, while an online survey format allows the greatest number of participants while minimizing risks to health.

An added strength to this research approach lies within the method distribution of the survey instrument. Not only do participants tend to be more forthcoming when completing anonymous surveys, but the risk of bias on the part of either the participant or researcher was limited by the type of data collected. No in-person interaction between subjects and researcher occurred.

Sampling

This study utilized a convenience sampling method seeking voluntary participants through online veteran's groups/organizations. Requirements for participation in this study was to be service in the United States armed forces and successful completion of a PTSD-focused therapy group at least six months prior to participation. The lower limit for number of participants was to be 50, while the upper limit was to be 300 contributors. Although no rewards or

incentives were offered for participation, study contributors were informed that their involvement may contribute to and enhance future treatment approaches.

Data Collection and Instruments

Data collection was obtained through a three-part online survey package. Volunteers who choose to participate gained online access to an informed consent document, followed by a brief survey. This survey determined whether prospective study subjects meet criteria for full participation/inclusion in study results. Those who meet study criteria were directed to complete the National Stressful Events Survey PTSD Short Scale (NSESSS), which is a tool approved by the American Psychiatric Association (APA) to measure PTSD symptom severity. APA has determined that NSESSS is reliable and clinically useful, provided that the client responds to at least seven of the items provided. LaBeau et al (2014) evaluated the psychometric properties of the NSESSS-PTSD in a trauma exposed non-clinical sample and observed convergent validity and internal consistency. In this study, the Cronbach's alpha for the NSESSS-PTSD, the reduced 9-item scale, was 0.901.

NSESSS asks the subject to rate nine items on a five point scale (0 = Not at all, 1 = A little bit, 2 = Moderately, 3 = Quite a bit, and 4 = Extremely), with a possible range of results from 0 – 36. APA recommends the clinician then use the average total score for review and analysis. The instructions read, "How much have you been bothered during the *past seven (7) days* by each of the following problems? Please select one answer per item". Two items on the

NSESSS are “Feeling very emotionally upset when something reminded you of a stressful experience?” and “Trying to avoid thoughts, feelings, or physical sensations that reminded you of a stressful experience?”

Procedure

Researchers gathered participants from a pool of veterans diagnosed with PTSD who have participated long-term CBT therapy for treatment of symptoms. Researchers also gathered participants who have participated in short-term intensive therapy for the treatment of PTSD Symptoms. Participants were recruited from various veteran organizations such as AMVETS Post 77, Veteran 2 Veteran Info, I Am a Woman Veteran, SERVICE: Women Who Serve, Disgruntled Veterans of America, Inland Empire Veterans Connection, MCRD SAN DIEGO ALUMNI, and Save the Barstow Veterans Home. A link was created to email participants a survey, which the participants completed online. Once the surveys are completed, participants completed the National Stressful Events Survey Short Scale. The scale assessed the severity of PTSD symptoms 6 months post therapy. Once the data was collected, the researchers analyzed the data and compared the effectiveness of therapy according to the results.

Protection of Human Subjects

The identity of the participants of the study was kept confidential, although confidentiality was affirmed in the informed consent document, identifying information such as name, date of birth, or address was not requested or gathered by the researchers at any time. The researchers informed participants

that they were permitted to refuse to participate or to terminate their participation in the study at any time without consequence or reprisal. The informed consent document also contained a summary explaining the purpose of the study, which was only to be viewed by the participant and researchers for the purpose of the study. The data was be saved in safe location, only accessible to the researchers. The study protocol was approved by the Institutional Review Board (IRB) at California State University San Bernardino.

Data Analysis

The study used an online survey to collect data. The data gathered from the survey included demographic information such as gender, ethnicity, age, marital status, and veteran status. The data also included the type of treatment that was received by the participant (short-term therapy or long-term therapy). The SPSS tool was utilized to analyze the data gathered. The independent t-test was used to compare the PTSD symptom severity scores of the two groups (short term therapy participants and long-term therapy participants).

Summary

The study compared the benefits of short-term therapy and long-term therapy with veterans that have been diagnosed with PTSD. Quantitative measures were used to gather data for this study. PTSD symptoms post therapy was measured using a survey and the National Stressful Events Survey PTSD Short Scale. Results determined which kind of therapy yield the most desirable outcomes for veterans being treated for symptoms of PTSD.

CHAPTER FOUR

RESULTS

This chapter provides an overview of the results of the data gathered through the survey provided to participants using Qualtrics regarding their experience with PTSD treatment. Researchers recruited participants from December 20, 2020 to March 23, 2021 to take part of the study. Data from the survey were uploaded onto SPSS for analysis. This chapter includes an overview of participant demographics, tables of participant data related to PTSD symptoms and treatment, and findings. Specifically, the findings will compare the severity of PTSD from participants that received long-term therapy to the participants that received short-term therapy.

Participants

The survey link for the study was sent to veteran online groups such as AMVETS Post 77, Veteran 2 Veteran Info, I Am a Woman Veteran, SERVICE: Women Who Serve, Disgruntled Veterans of America, Inland Empire Veterans Connection, MCRD SAN DIEGO ALUMNI, and Save the Barstow Veterans Home. After analyzing the data, it was discovered that 108 of the participants did not answer all the questions on the survey. Many of the participants answered some of the questions on the survey and skipped or declined to answer other questions, resulting in some missing values. When asked, “Are you a veteran of the United States Military?” approximately half of the participants answered yes.

This question was an essential question to answer because participants were required to be a veteran diagnosed with PTSD to participate in this study. Out of the 108 recruited participants, only 59 participants claimed to be a military veteran, yet 72 participants answered the question regarding the identification of their gender. Additionally, an estimated 70 percent of participants when the survey asked the participants to identify their ethnicity. Valid responses per question varied from 18 to 65.

Table 1 displays the demographic characteristics of the surveyed participants. The most common age group of the participants was 46 and older with 50 percent of the participants falling in this category. The least common age group in the study was between the ages of 18 and 30. Less than 2 percent of participants declined to give their age.

The majority of participants identified as being Caucasian. Table 1 displays the ethnicity of participants identified which includes Caucasian (37.3 percent), Hispanic (12.7 percent), Black (8.2 percent), Multi-Racial (5.5 percent), Native American (4.5 percent), Pacific Islander (2.8 percent), and one participant declined to answer. Displayed in Table 1 is also the marital status of the participants. Fifty percent of the sample were unmarried. Of the other participants, 27.8 percent were divorced, 12.9 percent were never married, 6.5 percent were separated, and 2.8 percent were widowed. The majority of the participants were female (65.3%) while only 34.7 percent of participants identified

as male. The ethnicity and age of the participants mirrors the usual population that is most likely to receive PTSD treatment, which is older married Caucasian veterans. However, male veterans are usually more likely to receive PTSD treatment than female Veterans.

Table 1. Demographics

Demographic Categories	**Frequency**	**Percentage**
Age		
18-30	5	6.9
31-45	30	41.7
46 and Older	36	50
Declined to Answer	1	1.4
Ethnicity		
Caucasian	41	37.3
Hispanic	15	12.7
Black	9	8.2
Multi-Racial	6	5.5
Native American	5	4.5
Pacific Islander/Asian	2	1.8
No Answer	1	.9
Marital Status		
Married	36	50
Divorced	20	27.8
Never Married	9	12.9
Separated	5	6.5
Widowed	2	2.8
Gender		
Female	47	65.3
Male	25	34.7

Key Findings

Table 2 demonstrates the number of participants that received short-term therapy (4 weeks or less) versus the number of participants that received long-term therapy (5 weeks or more). According to the table, a large majority of participants received long-term therapy while less than 15 percent received short-term therapy. Table 2 also displays the type of treatment that participants received. A large majority of participants received individual and group therapy while less than 10 percent claimed to have received only group therapy.

Table 2. Treatment

Treatment	**Frequency**	**Percentage**
Treatment Length		
4 Weeks or Less	7	14.3
5 Weeks or More	42	85.7
Treatment Type		
Group and Individual Therapy	16	88.9
Group Therapy Only	2	11.1

The National Stressful Events Survey PTSD Short Scale (NSESSS) included in the survey measured the severity of PTSD symptoms of the participants that completed therapy for PTSD. The survey is a 9-item assessment of the severity of post-traumatic stress disorder in individuals 18 and older that have experienced traumatic events. Each item asks the individual to rate the

severity of his or her posttraumatic stress disorder during the past 7 days. Each item on the measure is rated on a 5-point scale (0=Not at all; 1=A little bit; 2=Moderately; 3=Quite a bit, and 4=Extremely). For our sample, the use of the NSESSS yielded an alpha reliability score of .940.

The researchers created a new variable that was a mean score for all nine NSESSS items. Each response of the 5-point scale rating from the nine items on the NSESSS was added and divided by 9 to get the mean severity score for each participant. Then the mean NSESSS score for the whole sample was calculated. The overall mean score for PTSD symptoms after treatment was .09 and the median was 3. This indicates that after any treatment, over half of the participants still had moderate to more severe PTSD symptoms.

Long Term versus Short Term Therapy Effectiveness

A commonly used statistical procedure called the *t* test, examines the means and variances of two separate groups of scores to determine if they are statistically different from one another. It is characterized by having a dependent variable at the interval or ratio level of measurement, and an independent variable, at either the nominal or the ordinal level of measurement. The independent t test is used for scores of two groups that have no relationship to each other. Our analysis compared the average NSESSS score of participants that received short term therapy (4 weeks or less) to the participants that received long term therapy (5 weeks or more).

Table 3 displays the mean score of the valid responses that received short-term therapy and long-term therapy, which can be rounded 3.33 and 3.4, respectively. When rounding the mean score of both groups to the nearest tenth, short-term therapy participants scored only 0.1 higher than the long-term therapy participants. The t-test of these differences also indicated there was no statistically significant difference in the mean score of the two treatment type groups. This means that short-term therapy was as effective as long-term therapy, for the participants of this study.

Table 3. Mean Symptom Severity Score

Mean PTSD Symptoms (Only those who had Short Term versus Long Term Therapy)	**N**	**Mean**	**Std. deviation**	**Std. Error Mean**
4 weeks or less	6	3.3333	1.19050	.48602
5 weeks or longer	38	3.4357	1.00396	.16286

Summary

Researchers recruited participants by distributing a survey link to veteran Facebook groups known by researchers. Researchers recruited 108 participants, however many of the participants did not answer all the questions. Of those participants recruited, many were not veterans and even fewer participants received treatment for PTSD leaving 18 to 65 valid responses per question. Most

of the participants in the study were older than 30, Caucasian, and women. Approximately 60% of the sample experienced PTSD symptoms of at least moderate severity. Analysis compared the PTSD symptom severity scores of the valid responses of participants that received short-term therapy versus the participants that received long-term therapy. A t-test found no significant difference between the PTSD severity symptoms of participants that received short-term therapy and participants that received long tern therapy.

CHAPTER FIVE

DISCUSSION

Introduction

The purpose of this study was to compare the long-term reduction in symptoms between traditional PTSD treatment regimens and newer, short-term programs. This chapter will review this study's findings, significance to future research, and the program and policy implications of these findings. The authors will also discuss the limitations of this study and provide recommendations for future research.

Discussion

Study participants were largely over 30, with less than 10% reporting themselves to be either younger than 30 or declining to disclose their age. Nearly 40% self-identified as Caucasian, with the next largest ethnicity being Hispanic, at just over 10%. These findings are consistent with the ethnic diversity United States Armed Forces (cfr.org, 2020), although ethnic minorities are represented in higher numbers than in the general population of the United States (Kane, 2005), indicating that the results of this study may not be applicable to the general population. Exactly 50% of the participants were married and over 25% reported being divorced, with the remaining participants falling into the categories "Never Married", "Separated", or "Widowed". Although it is difficult to determine the cause of this gap between married and unmarried participants, one possibility

is that many might have sought treatment at the request of or under pressure from a significant other.

An unexpected yet understandable finding during analysis of the survey results was that over 65% of respondents identified as female, despite the fact the United States military is predominantly male (84%). However, approximately 25% of female service members report having been a victim of MST, and 47% report sexual harassment or unwanted sexual attention (vawnet.org, 2021). Additionally, it is estimated that as many as 67% do not report sexual assault or harassment due to fear of reprisals within their chain of command (vawnet.org, 2021). Due to the personal and intimate nature of these offenses, the likelihood of developing treatment-resistant PTSD is particularly high, possibly explaining the greater rate of female survey respondents. This discrepancy between the percentages of female military members vs. that of survey respondents also raises the question of whether the survey results are applicable to the experience of male Veterans.

This study did not determine a significant difference in symptom severity between Veterans who completed long- vs. short-term PTSD treatment programs; the mean symptom severity scores were 3.34 for short-term treatment and 3.43 for long-term treatment, with a total symptom severity mean score of 3.38. Among Veterans who have completed one of these treatment modalities, over half report symptom severity as “moderate” or lower, while pre-treatment

symptom severity has been reported as “moderate” to “severe” in as many as 85% of Veterans (Bryan et al, 2018).

A significant finding was that between both groups, symptom severity was still significantly high, despite successful program completion; nearly half of the respondents reported being “Extremely” or “Quite a bit” bothered by their symptoms. Because the authors are unable to access the respondents pre-treatment symptom severity rating, comparing respondents baseline and post-treatment symptom severity was not possible.

This study is significant because although the newer treatment method has demonstrated a higher rate of successful completion than that of traditional treatment, long-term reduction in symptoms were not previously known, and this is the key determinant of whether a program is truly successful. Although follow-up studies are needed, the results of this study are promising; both treatment methods showed similar symptom severity ratings, however the higher rate of successful program completion found in prior studies would indicate that short-term intensive treatment is the more valuable and effective option.

As previously discussed, short-term treatment has a dropout rate of only 8.4%, while traditional programs lose over one-third of their participants. Although as of this writing the short-term program has only been provided in limited venues, the initial data shows that this option may potentially result in significantly higher rates of successful treatment, which for the purpose of this

study is defined as substantial reduction in symptoms lasting six months or longer post-treatment. Additionally, reducing treatment time by more than half allows many more patients to receive treatment, which is also significant, as many programs have waiting lists, which is an important consideration given the elevated rates of substance use, suicide, and incarceration exhibited by this population.

If implemented nationally, successful treatment could be provided to 26.7% more Veterans every year. As previously discussed, nearly one in four OIF/OEF Veterans meet diagnostic criteria for PTSD, and if it is possible to provide treatment to over 25% more of these service members, that alone warrants further academic study. Additionally, successfully treating more Veterans allows these individuals, when applicable, to seek and obtain further treatment for co-occurring disorders such as depression and substance use.

Incorporating such a program into clinics such as those found within the VA Healthcare System and other agencies would be a relatively easy undertaking; clinicians currently treating for PTSD are already trained in cognitive-behavioral therapy, which is the modality utilized in the intensive program. Additionally, the blueprint for this new treatment has already been provided in the 2020 study by Held et al, which was the impetus for this academic undertaking; the authors believe that the results of both studies should

be further explored and that new programs should be implemented if those future studies show consistent results.

Limitations

The primary limitation of this study lies in the social conditions in effect during the Covid-19 Pandemic; locating study participants and distributing study materials was done entirely online. The investigators were unable to explain the survey process or provide real-time feedback to participants who might have misunderstood questions. For this reason, several surveys were incomplete or provided inconsistent data (i.e. subjects not indicating treatment program type or length) and had to be discarded. Many participants also failed to disclose Veteran status, which was a disqualifying question to participants who indicated that they had never been a member of the armed forces. Although this survey was only distributed to Veterans and it was explained that this was the target population of this study, the authors do not assume that Veterans are the only individuals who had access to the survey.

Another limitation of this study is that the data collected was quantitative, preventing the researchers from providing context and insight into the answers provided. Future studies would benefit from incorporating subject interviews into their research.

Recommendations for Social Work Practice, Policy, and Research

Social Workers providing clinical therapeutic service to sufferers of PTSD would benefit from delving further into this study and participating in or following up on future related studies. Knowledge of newer and better practices is essential to providing efficacious treatment to individual as well as for advocating for institutional and social change, and for fulfilling the core competency of engaging in “practice-informed research and research-informed practice.”

Researchers following up or expanding upon this study would benefit from conducting in-person research versus the online survey distribution and collection as conducted by the authors. This would allow researchers to clarify or expand upon any questions which participants find unclear. Additionally, the inclusion of open-ended survey questions might provide more insight into respondent’s experiences with treatment and how the individual experiences of respondents may affect treatment outcomes and symptom reduction.

Given the unexpectedly high number of female respondents, a follow-up study, which pertains solely to the experience of women Veterans, may be beneficial in the creation of treatment regimens targeted toward this population. VA is providing women-only SUD treatment programs in many locations, however there are not yet sufficient long-term studies to determine whether this approach is more effective than coed treatment regimens, although research has shown that many women would prefer this option if offered (Green, n.d.). As

PTSD stemming from MST is, as previously mentioned, such an intense, personal experience, female only treatment options are likely the preferable option for many Veterans.

Conclusion

Treatment for PTSD is an ever-growing and evolving field of practice; in only a few decades, what was once viewed as a personal shortcoming or deficiency is now recognized as a diagnosable and treatable mental health condition. Stigma surrounding PTSD has been significantly reduced through education and awareness campaigns, and treatment modalities continue to evolve. Despite this progress however, many of those in need are still suffering, and with the cost of untreated PTSD being as high as it is (incarceration, SUD, and suicide) treatment must continue to evolve and adapt. Short-term, intensive treatment, as described in this writing represents a small, but potentially significant step in this evolution, and future studies should endeavor to build upon the work already done.

APPENDIX A

INFORMED CONSENT

CSUSB

WE DEFINE THE *Future*

School of Social Work

CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO
5500 University Parkway, San Bernardino, CA 92407
909.537.5501 | fax: 909.537.7029
http://socialwork.csusb.edu

INFORMED CONSENT

The purpose of this study is to compare Post-Traumatic Stress Disorder (PTSD) treatment programs provided to Veterans of the United States Armed Forces. This study is being conducted by Laura Gonzalez and Sean Kruckenberg, both graduate students at California State University, San Bernardino (CSUSB), under the supervision of Dr. Laurie Smith, Assistant Professor in the School of Social Work. This study has been approved by the Institutional Review Board (IRB) at CSUSB.

PURPOSE: The purpose of the study is to examine and compare treatment outcomes for different formats of treatment for PTSD.

DESCRIPTION: Participants will complete a brief, multiple-choice survey regarding Veteran status, participation in PTSD treatment, and current experience of symptoms (if any).

PARTICIPATION: Your participation in the study is totally voluntary. You can refuse to participate in the study or discontinue your participation at any time.

CONFIDENTIALITY: Your responses will remain confidential and no identifying or personal information will be collected or stored.

DURATION: This survey should take 5 to 10 minutes to complete.

RISKS: The researchers do not anticipate any risk, however answering some questions may act as triggers (reminders) for those with PTSD. You are not required to answer any questions and you may terminate participation at any time.

BENEFITS: Participants will not receive any direct benefit or compensation. However, study findings will contribute to the general knowledge of PTSD treatment and may serve to benefit those who receive treatment in the future.

CONTACT: If you have any questions about this study, please feel free to contact Dr. Smith at (909) 537-3837.

RESULTS: Results of the study can be obtained from the Pfau Library Scholarworks database (http://scholarworks.lib.csusb.edu/) at California State University, San Bernardino after July 20XX.

****

I understand that I must be 18 years of age or older to participate in this study and affirm that I have read and understand the consent document and agree to participate.

_____ _____

Place an "X" on this line Today's Date

APPENDIX B

SURVEY

Part 1: Study Eligibility

1. Are you a Veteran of the United States Military?
    a. Yes
    b. No (disqualifying answer)
2. Have you ever been diagnosed by a clinician as having Post-Traumatic Stress Disorder (PTSD)?
    a. Yes
    b. No (disqualifying answer)
3. Have you ever been enrolled in and successfully completed treatment for PTSD?
    a. Yes
    b. No (disqualifying answer)
4. What type of treatment did you receive?
    a. Individual therapy (disqualifying answer)
    b. Group therapy
    c. Both group and individual therapy
5. How long (in weeks) was the program in which you were enrolled?
    a. 3 weeks or less
    b. 4 – 7 weeks (disqualifying answer)
    c. 8 weeks or longer
6. How long ago did you complete this treatment program?
    a. Less than 6 months (disqualifying answer)
    b. 6 – 11 months
    c. 12 months or longer

Part 2: Demographics and Background

1. What is your age?
    a. 18 – 30
    b. 31 - 45
    c. 46 or older
    d. Prefer not to answer
2. What is your gender?
    a. Male
    b. Female
    c. Other
    d. Prefer not to answer
3. What is your Ethnicity?
    a. African-American
    b. Asian or Pacific Islander
    c. Caucasian
    d. Hispanic or Latino
    e. Native/Indigenous American
    f. Other/Prefer not to answer
4. What is your marital status?
    a. Married
    b. Single/divorced
    c. Other/Prefer not to answer

Part 3: Survey of Symptom Severity

Instructions: People sometimes have problems after extremely stressful events or experiences. How much have you been bothered during the *past seven (7) days* by each of the following problems? Please select one answer per item.

A. Having “flashbacks,” that is, you suddenly acted or felt as if a stressful experience from the past was happening all over again (for example, you re-experienced parts of a stressful experience by seeing, hearing, smelling, or physically feeling parts of the experience)?

    1. Not at all
    2. A little bit
    3. Moderately
    4. Quite a bit
    5. Extremely

B. Feeling very emotionally upset when something reminded you of a stressful experience?

    1. Not at all
    2. A little bit
    3. Moderately
    4. Quite a bit
    5. Extremely

C. Trying to avoid thoughts, feelings, or physical sensations that reminded you of a stressful experience?

    1. Not at all
    2. A little bit

3. Moderately
4. Quite a bit
5. Extremely

D. Thinking that a stressful event happened because you or someone else (who didn't directly harm you) did something wrong or didn't do everything possible to prevent it, or because of something about you?

1. Not at all
2. A little bit
3. Moderately
4. Quite a bit
5. Extremely

E. Having a very negative emotional state (for example, you were experiencing lots of fear, anger, guilt, shame, or horror) after a stressful experience?

1. Not at all
2. A little bit
3. Moderately
4. Quite a bit
5. Extremely

F. Losing interest in activities you used to enjoy before having a stressful experience?

1. Not at all
2. A little bit
3. Moderately

4. Quite a bit
5. Extremely

G. Being “super alert,” on guard, or constantly on the lookout for danger?

1. Not at all
2. A little bit
3. Moderately
4. Quite a bit
5. Extremely

H. Feeling jumpy or easily startled when you hear an unexpected noise?

1. Not at all
2. A little bit
3. Moderately
4. Quite a bit
5. Extremely

I. Being extremely irritable or angry to the point where you yelled at other people, got into fights, or destroyed things?

1. Not at all
2. A little bit
3. Moderately
4. Quite a bit
5. Extremely

APPENDIX C

IRB APPROVAL

December 18, 2020

CSUSB INSTITUTIONAL REVIEW BOARD
Administrative/Exempt Review Determination
Status: Determined Exempt
IRB-FY2021-63

Laurie Smith Sean Kruckenberg, Laura Gonzalez
CSBS - Social Work
California State University, San Bernardino
5500 University Parkway
San Bernardino, California 92407

Dear Laurie Smith Sean Kruckenberg, Laura Gonzalez:

Your application to use human subjects, titled “Post Traumatic Stress Disorder: An Investigation Into Non-Traditional Treatment Options” has been reviewed and determined exempt by the Chair of the Institutional Review Board (IRB) of CSU, San Bernardino. An exempt determination means your study had met the federal requirements for exempt status under 45 CFR 46.104. The CSUSB IRB has not evaluated your proposal for scientific merit, except to weigh the risk and benefits of the study to ensure the protection of human participants. Important Note: This approval notice does not replace any departmental or additional campus approvals which may be required including access to CSUSB campus facilities and affiliate campuses due to the COVID-19 pandemic. Visit the Office of Academic Research website for more information at https://www.csusb.edu/academic-research.

You are required to notify the IRB of the following as mandated by the Office of Human Research Protections
(OHRP) federal regulations 45 CFR 46 and CSUSB IRB policy. The forms (modification, renewal, unanticipated/adverse event, study closure) are located in the Cayuse IRB System with instructions provided on the IRB Applications, Forms, and Submission webpage. Failure to notify the IRB of the following requirements may result in disciplinary action. The Cayuse IRB system will notify you when your protocol is due for renewal. Ensure you file your protocol renewal and continuing review form through the Cayuse IRB system to keep your protocol current and active unless you have completed your study.

- Ensure your CITI Human Subjects Training is kept up-to-date and current
- throughout the study.
  Submit a protocol modification (change) if any changes (no matter how minor) are
- proposed in your study for review and approval by the IRB before being implemented in your study.
- Notify the IRB within 5 days of any unanticipated or adverse events are experienced by subjects during your research.
  Submit a study closure through the Cayuse IRB submission system once your study has ended.

If you have any questions regarding the IRB decision, please contact Michael Gillespie, the Research Compliance Officer. Mr. Michael Gillespie can be reached by phone at (909) 537-7588, by fax at (909) 537-7028, or by email at mgillesp@csusb.edu. Please include your application approval number IRB-FY2021-63 in all correspondence. Any complaints you receive from participants and/or others related to your research may be directed to Mr. Gillespie.

Best of luck with your research.

Sincerely,

Nicole Dabbs

Nicole Dabbs, Ph.D., IRB Chair
CSUSB Institutional Review Board

ND/MG

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ASSIGNED RESPONSIBILITIES STATEMENT

This project was the result of a collaborative process by both authors, each of whom contributed equally to its completion. Each author contributed equally to the completion of chapters one through five. Both authors distributed the survey, analyzed results, and interpreted data.