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SOCIAL WORK GRADUATE STUDENTS SELF-REPORTED KNOWLEDGE OF TREATMENT OPTIONS FOR POST TRAUMATIC STRESS DISORDER

KERRY MORGAN

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SOCIAL WORK GRADUATE STUDENTS SELF-REPORTED KNOWLEDGE OF
TREATMENT OPTIONS FOR POST TRAUMATIC STRESS DISORDER

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
Kerry David Morgan

June 2020

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ABSTRACT

Students who study to obtain the Master of Social Work (MSW) degree will undoubtedly serve clients with histories of family violence, chronic or terminal illness, immigration, racism, mass violence/terrorism, or even natural disasters. With the theme of trauma being ever prevalent in their internships and work, it is important to consider the perceptions that MSW Students have about PTSD treatment modalities and exploring their interests in expanding their knowledge about PTSD. A selection of MSW students were asked questions about their knowledge and interest in treatment options for PTSD. The results showed a diverse variation of knowledge for the seven treatment modalities studied and a high interest among all groups in learning more about all treatment types. Additionally there was a large difference in knowledge of the various treatment modalities between students who are veterans and those who had no military background. Recommendations include increased curricular content on emerging PTSD treatments and continued research on gaps in MSW student knowledge of alternative treatment modalities for PTSD and other mental health issues.

Keywords: PTSD, treatment modalities, Agri-therapy, Cannabis treatment, Equine therapy, Eye Movement Desensitization and Reprocessing Therapy (EMDR), 3,4 methylenedioxymethamphetamine (MDMA) therapy, Medical Nutritional Therapy (MNT), Virtual Reality Exposure Therapy

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CHAPTER ONE

INTRODUCTION

Problem Formulation

According to the National Institute of Mental Health (NIMH), Post Traumatic Stress Disorder (PTSD) is a psychological disorder that may develop after one has been exposed to an event whose scope is beyond that of a typical stressor (The National Institute of Mental Health, 2017). This may include a violent or non-violent event. Additionally the person with PTSD does not have to be the one who underwent the traumatic event; he or she may have learned that the event happened to a family member or close friend (American Psychiatric Association, 2013). People who experience a traumatic event may suffer from feelings of anger, shock, fear, guilt or anxiety. Some of these people may expand this experience into PTSD where the condition cultivates into a stronger, more debilitating condition. The issue with PTSD is that these feelings do not fade over time, instead they gain in strength to the point where they become overwhelming (The Refuge, 2020). The NIMH further estimates that over half of all adults in the U.S. have experienced or will experience a traumatic event, thus millions of people are at risk of developing PTSD.

The National Institute for Health suggests that there is no age parameter between which PTSD can occur (National Institute of Mental Health, n.d.). However, there are possible risk factors such as gender, with females more likely

to experience PTSD than males (National Institute of Mental Health, n.d.). A study which included 200,000 participants supports a genetic theory of PTSD vulnerability noting that a genetic component may be a contributing factor like other psychiatric and behavioral disorders (Buschman, 2019).

While it is important to focus on both veterans and civilians due to the overall prevalence of PTSD, there is a heightened risk for service members. On March 4, 1865 Abraham Lincoln first spoke the words that would later become the motto of the Veterans Administration (VA) “*To care for him who shall have borne the battle and for his widow, and his orphan.*” With these words Lincoln made the government responsible for those who were injured in war defending American values around the world (The Origin of the VA Motto, n.a.). The military has long had a history of its service men and women suffering from Post-traumatic stress disorder (PTSD), which has led to the VA has taking the role of leader in the fight against PTSD. Numerous studies have been undertaken to comprehend what it is, how it affects the person and how to treat it.

Regarding Veterans, there are a limited number of therapists with trauma training, and the Veteran Administration Center for PTSD is willing to train clinicians in this skill area. There is also a patient education application called PTSD Coach which can be accessed by anyone’s telephone, to assist individuals who may be experiencing symptoms. The provider consultation service offered by the VA National Center for PTSD is available to clinicians who work with

veterans, in or outside of the VA system; they can obtain supportive consultation through the Center (Covington, 2019).

According to the National Institute of Mental Health more than 1.7 million veterans are receiving treatment for mental health issues from the VA (U.S. Department of Veterans Affairs, 2019). While not all of them are diagnosed with PTSD, it has been one of the most highly recognized illnesses for veterans and has been publicized on television and through multiple organizations. There are multiple treatment options available for social workers in the field of mental health from which to choose. Some of the more common modalities used include Exposure Therapy (ET), psychopharmacology, Eye Movement Desensitization and Reprocessing (EMDR) and complementary and alternative medicine. While all of these have some form of success, the actual success varies depending upon the client's commitment to treatment and level of dysfunction (Fogger, Moore, & Pickett, 2016).

The National Institute of Health suggests that Exposure Therapy and Prolonged Exposure Therapy are deemed effective but underutilized for PTSD (Zoellner, et al., 2012). An additional modality is psychopharmacology. According to Natt (n.d.), patients diagnosed with PTSD who are prescribed the drug MDMA are prevented from reliving traumatic memories because it reduces activity in the hippocampus and the amygdala. EMDR helps to integrate and adapt information so that the trauma is placed in perspective and not utilized dysfunctional (Beauvais, McCarthy, Norman, & Hamblen, 2019). Other

promising yet little used treatments include, Medical Nutrition Therapy (MNT), Cannabis, Equine Therapy and Agri-Therapy. Practitioners may not know about these treatment options or may know about them but be uninterested in learning about them as the treatments may be considered unusual or even stigmatized.

Purpose of the Study

The Council on Social Work Education (CSWE), their Educational and Policy and Accreditation Standards (EPAS) indicate that a trauma-informed social work education is an ethical obligation (Council on Social Work Education, 2012). MSW students are likely to work in settings in which they will likely encounter multiple clients whose adverse life experiences have resulted in trauma. To this end, the purpose of the study is to evaluate the Master of Social Work graduate students' knowledge of and interest in an array of treatment modalities for PTSD.

Significance for Social Work. In a recent guide entitled, *Specialized Curricular Guide for Trauma-Informed Social Work Practice*, it stated on page two that: "Standards for competent practice in response to trauma are an ethical obligation of the profession, because the likelihood of encountering survivors of trauma in every practice setting is very high" (Council on Social Work Education, 2015). In the general population there is sometimes a stigma involved when talking about a mental illness and individuals being treated for these illnesses. Additionally, those individuals who are active duty military or veterans show an additional stigma as people in this profession may link mental illness to

weakness. Giving students who are about to enter the work place as qualified social workers more information on the issue and treatment options will allow this information to be used by both the general and veteran population which may help diminish the stigma.

Relevance to Veterans. During the Vietnam War it was estimated about 15% of those deployed to the region suffered from PTSD. Those serving in Operation Desert Storm had about a 12% chance of returning with this issue while those who served in Operations Iraqi Freedom (OIF) and Enduring Freedom (OEF) had a rate between 11-20% (U.S. Department of Veterans Affairs, 2018). While it is estimated that between 50–60% of Americans will experience trauma during their lifetime only about 7-8% of the civilian population will suffer from PTSD (U.S. Department of Veterans Affairs, 2018).

Relevance to Civilians-Individuals and their Families. The findings from this paper will document the extent to which social workers know about and are interested in learning about alternative treatment options for their clients. This information can be used in both the micro and macro level. When looking at the micro level, the information in this paper will contribute to greater understanding of social workers knowledge of, and interest in PTSD and the complementary and alternative treatment options available (Libby, Pilver, & Desai, 2012). If new and experienced social workers can broaden their understanding of the options available for their clients, this will allow their clients the best chance at finding the treatment that works for them. On the macro level the information will provide

students or social workers, suggestions on the types of treatment they are able to offer write grants for and to lobby for. Additionally the information documented in this paper will allow agencies and institutions information relevant to continued education of social workers who are currently working within the profession.

With the numbers of veterans and civilians who suffer from PTSD remaining high, this paper will attempt to answer the following question: “What is Social Work Graduate Students knowledge of and interest in the array of treatment options for PTSD?”

CHAPTER TWO

LITERATURE REVIEW

Introduction

There are multiple therapeutic modalities available to social workers and therapists for the treatment of PTSD. While some may be used with mild cases, others would only be used with severe cases or cases where those who may benefit from an additional treatment modality. The purpose of this section is to distinguish the primary and lesser known options for the treatment of PTSD and their effectiveness. The importance of knowing multiple treatment options is that it gives the social worker/therapist more options for the treatment of their clients. One of the best ways to learn these treatment options is to be exposed to them in the classroom and during internships. This type of learning falls directly under Social Learning Theory (SLT). SLT was first brought about by Albert Bandura. The primary focus of SLT is that a person learns through observation, imitation and modeling (Nabavi, 2012). For a student to be able to understand and use treatment options using this theory they must first be introduced to it in the classroom, then watch it being done (either in the classroom or at their internship), then using it on their clients while supervised (internship).

The VA, like all mental health providers, requires all social workers to have a minimum of a Master of Social Work (MSW) degree and to be licensed to conduct therapy as a Licensed Clinical Social Worker (LCSW) in the state where

they work (National Association of Social Workers, 2005). With the increase in the amount of veterans and civilians being diagnosed with this disorder, students who are in internships or who are shortly expected to graduate are at an increased likelihood of treating clients with PTSD. Those students who are interested in obtaining their clinical license are almost guaranteed to see some clients with this disability.

Types of Treatment Options and their Effectiveness

Exposure Therapy (ET). ET is commonly broken down into two main areas, Cognitive Behavior Therapy (CBT) and Cognitive Processing Therapy (CPT). These two forms of therapy along with Psychopharmacology are the backbone of treatment options used within the VA system (Sharpless & Barber, 2011). The purpose of ET is to repeatedly expose the client to the traumatic event using psychoeducation and exposure in various forms so that the client can discuss the feelings and emotions and work through the issue (Fogger, Moore, & Pickett, 2016). With repeated interaction, it is expected that the client will separate the memory of the trauma from the reaction to it. While the memory of the trauma remains, the reaction becomes less significant as the trauma becomes an everyday event. CBT uses behavioral methods such as coping strategies that, along with conversation, decrease symptoms that the client would associate with the traumatic event(s). CBT usually uses a 12 week, weekly or biweekly process and is geared to train the client on how to change dysfunctional thoughts or remove points where the client is stuck (Reisman, 2016).

A relatively new form of ET is the use of Virtual Reality Exposure Therapy (VRET). VRET offers options within the veteran community called Virtual Iraq, and Virtual Afghanistan (Goncalves, Pedrozo, Coutinho, Figueira, & Ventura, 2012). Once the client has communicated with the therapist, what they believe may be their issue; the technician is able to translate that into a scenario within the virtual world. The client places a headset over their head which allows for visual and auditory stimulation. They stand on a platform that may vibrate to give extra stimulation and smells may be introduced to round out the experience. The client controls their movement through a small joystick. While the client controls their movement within the virtual environment the therapist controls everything else such as time in the system and intensity of stimulation (Kurz, 2015). Due to the intensity of stimulation and shortened time scale, this treatment may be easier for some clients to complete. This type of therapy may also be more acceptable to a younger generation of clients who are more used to technology and video games.

In a study of how neuroscience influences emotions like fear, Dr. Andrew Huberman, of Stanford Medicine, who administers sessions of VRET to patients, explains that fear is healthy and it keeps us safe, but when that fear is pathological it is of no service to one's quality of life (Huberman, 2017). In the study, he explains, the brain and heart are monitored to gain a visual understanding of the client's overall stress responses. The brain has "presence" believing one is in the virtual environment. Therefore VRET is probing the

relationship between emotion and visual perception. The study of VRET has become an important mediator of PTSD, that it is offered by various companies to assist clinicians in their work with clients. The company called Psious offers an extensive clinical guide to their virtual reality program prior to the purchase, so that clinicians can gain insight on the advantages, disadvantages, as well as case studies of individuals with whom the program has been used (Psious, n.d.).

Borenstein (2018) noted that ET is an effective treatment for PTSD, noting its efficacy is about 50%, for patients who decide to engage in this form of treatment (Borenstein, 2018). A study of VRET where the subjects were mostly military males demonstrated efficacy in the reduction of various symptoms. It was suggested that a wider range of subjects might produce a different picture of efficacy.

Cognitive Processing Therapy works along the same timeline however there are differences in the process. During the intervening time between sessions clients are asked to write about the traumatic event(s) in as much detail as possible. These writing assignments are expected to include the client's memories, thoughts and feelings about the traumatic event(s). This information is used during individual or group sessions as the client reads them out loud and the therapist helps with labeling specific emotions or highlighting where the client is stuck (Sharpless & Barber, 2011).

CPT and CBT are considered primary forms of treatment for clients with PTSD. Dr. Nilimadhad Kar (2011) suggests CBT has an efficacy rate of around

50% when treating this particular issue (Kar, 2011). While these therapy techniques require specific training they are seen to have success across ethnic, gender and age boundaries. Considering the modality of CPT, an article in the Cognitive Behavioral Therapy Journal, indicated lasting positive effects which ranged from 80 percent to 90 percent (Asmundson, et al., 2019).

Psychopharmacology. Psychopharmacology is the use of prescribed medication to lessen or remove the symptoms associated with PTSD. While the medication is not expected to remove PTSD, it aids the client by removing some of the symptoms such as lack of sleep, depression and anxiety. Medication alone may not be enough to aid the patient, medication combined with therapy has been demonstrated to be more effective (Kurz, 2015) and allows the client the opportunity to see immediate results. Pharmacotherapy is widely used by the VA as a first line approach to PTSD (Reisman, 2016). Some of the benefits of this form of therapy are that it may be less time consuming and the medication is self-administered so there is no need for a non-mental health professional.

The VA uses several reuptake inhibitors (Selective serotonin reuptake inhibitors and selective norepinephrine reuptake inhibitors) in combination with therapy (Kurz, 2015). Other medications are prescribed for sleep and appetite issues. It has been noted that there is a high rate of remission of symptoms after discontinuing prescribed medication, unlike ET (Fogger, Moore, & Pickett, 2016).

Newer forms of medication are being researched around the world and within the borders of the United States. 3,4-methylenedioxymethamphetamine

(MDMA) has become a noteworthy member of this group as research continues to grow over the use of this drug which many believed had no medical purpose (Sessa & Nutt, 2015).

Two psychopharmacology approaches to PTSD symptoms include sertraline and paroxetine. In a study of the use of sertraline for PTSD, 80% of the subjects reported improved response to prior treatment (Brady, et al., 2000). While there are many different types of medications prescribed for PTSD, clinical trials have shown the effectiveness of pharmacotherapy in PTSD is still considered unsatisfactory (Kozarić-Kovačić, 2008)

Eye Movement Desensitization and Reprocessing (EMDR). EMDR is used to desensitize any anxiety the client may be experiencing. When a client undergoes EMDR they are asked to recall an image from the trauma(s) and all associated negative thoughts and/or sensations. While they do this, they are also asked to follow irregular eye movements. The eye movements coexist with a lowering of emotional arousal and affects the working memory so that the trauma can be resolved (Fogger, Moore, & Pickett, 2016).

EMDR was classed as “*efficacious*” (successful) by the International Society for Traumatic Stress and the VA has recommended it since 2010 (Reisman, 2016). The study indicated a reduction in PTSD symptoms, but the small sample sizes and limited follow-up. More study is needed to prove the efficacy of the treatment (Wilson, et al., 2018)

Agri-Therapy. Agri-Therapy or as it is sometimes called horticulture-therapy is the act of growing vegetables for physical and mental well-being (University of California Agriculture and Natural Resources, 2019). Professor Lee Altier is currently serving as the Professor of Organic Vegetable Director at Chico State University; he suggests that there is restorative value in the presence of plants. This researcher describes the act of farming as therapeutic and those who engage in it feel the presence of something powerful (University of California Agriculture and Natural Resources, 2019).

Afghanistan War Veteran, Sonia Kendrick, became an Agri Therapy activist after her serving her country. She stated “I believe plows are greater than swords, and these are words by which, I have lived.” At the same time two other combat veterans stated that they found relief from some of their PTSD symptoms through Agri Therapy. Kendrick stated that military people are mission oriented, and they want to be of service. She shared that growing food is a mission, and that a farmer is a servant to the people (Northern AG Network, 2015).

Horticulture educator Candace Hart expands on benefits of Agri Therapy, noting that it occurs in hospitals and rehabilitation centers; neurobiological recovery centers; nursing homes and assisted living facilities; day and drop-in programs; schools (vocational and/or curriculum enrichment); social programs and group homes (University of Illinois Extension Horticulture, 2017).

A study conducted by the VA involving a farm to market initiative run by veterans concluded that veterans who were involved in this initiative reported improvements in physical and mental health, better sleep, decreased anxiety, depression and pain as well as a decrease in substance use (Besterman-Daha, Chavez, & Njoh, 2017).

Medical Nutrition Therapy (MNT). Food functions as fuel for the brain and the body. It can promote or reduce inflammation and oxidation. 95% of serotonin is produced in the intestinal tract, which means the neurons are going from one's intestinal tract to one's brain. This will ultimately promote or reduce inflammation, subsequently affecting one's emotions (Selhub, 2015).

While there have been practically no research completed to understand the statistical influence that food has on PTSD, studies have been done on other disorders such as depression and anxiety. A large scale study conducted in Australia found that increased fruit and vegetable consumption may help reduce psychological distress among middle aged and older adults (Nguyen, Ding, & Mhrshahi, 2017). More recently a trial conducted in Australia found that after 12 weeks and several meetings with dietitians a group of people showed that a marked decrease in costs for the treatment of depression from both the health and societal perspective (Chatterton, et al., 2018).

Cannabis Therapy. Dr. Matt Hill, PhD, during a discussion hosted by the University of Calgary School of Medicine, led a discussion entitled, "Your Brain on PTSD: The impact of cannabis." He discussed two studies. One study

administered cannabinoid and THC prior to showing disturbing images to participants. The study was conducted to test stress responses without THC and in the presence of THC. Typically stress inducing images were shown to study participants who were administered THC, while others were not. Evidence showed that THC seems to reduce the firing of neurons in the amygdale in response to stress. Cannabinoids also seemed to have the same affect by reducing excitatory chemicals in the amygdale according to the brain imaging.

The next study involved veterans diagnosed with PTSD in which one of the main symptoms they had in common was nightmares. Some were administered Nabalone, the synthetic form of THC and they reported no or a reduction in nightmares. The other group was administered a placebo and saw no change in their symptoms. The researchers then began administering the Nabalone to the group initially receiving the placebo, and their symptoms improved as well.

Dr. Hill reported that the results from the study did not lead him to conclude that cannabis should be utilized as a form of PTSD treatment; however, with science contributing to medication formulations that include THC or cannabinoid, science may be on the road to formulating some form of support to relieve PTSD symptoms (Hill, 2015).

The study of cannabis therapy is still in the early phase of understanding however there have been several studies completed on this form of therapy. it has been found that 5 mg of THC twice a day has been linked to better sleep,

reduced nightmares, and reduced PTSD hyper arousal severity (Abizaid, Merali, & Anisman, 2019).

Equine Assisted Therapy. According to Military Medical Research, 29 participants were selected for the process of participating in Equine Therapy. Researchers administered a PTSD Checklist, Coping Self-Efficacy Scale, Difficulties in Emotional Regulation Scale, and the Social and Emotional Loneliness Scale. After 3 weeks of therapy there was a reduction in their PTSD scores (Johnson, et al., 2018). While this study is geared towards PTSD there is evidence that Equine Assisted Therapy may be useful for other disorders such as anxiety. This form of therapy may be beneficial as it improves the client's mindfulness (Earles, Vernon, & Yetz, 2015). Other issues that use this form of therapy involve depression and sexual abuse. With such a wide variety of conditions using this form of therapy, knowledge of the effectiveness and disorders that benefit from this treatment will be beneficial to all social workers.

Equine assisted therapy is effective when dealing with anxiety, depression, self esteem issues, self acceptance, communication skills and boundaries. Some or all of these may be part of the clients PTSD. Research conducted in the United Kingdom found that people who rode horses for a period of three weeks had a 66% lower PTSD score than they had previously had and after six weeks this percentage had risen to 87% (PTSDUK, 2020).

Challenges in Providing a Given Treatment Option.

Most therapists were educated on the traditional treatment options that are evidence based. If efficacy levels are acceptable and the practice has been integrated within the mental health community, councils on education and licensing are likely to embrace and incorporate these treatment modalities into their curriculum. If the treatment modality will be one that insurance companies will reimburse, it will likely be one that is used by a clinician. The challenges in providing alternative treatment options are if efficacy levels are unacceptable or the practices have not been widely integrated within the therapeutic community.

Another simplistic explanation is that if one works for a clinic or an organization that embraces or advertises a specialized therapy, then it may be the case that other treatment modalities are simply not embraced by that agency. Some of the reasons may include liability issues, licensing concerns, or the modality may be culturally inappropriate for the community which that particular clinic services. According to a Global Health Action article, the need for cultural sensitivity in PTSD treatments, the potential of alternative ways of treatment delivery, and the involvement of non-professional volunteers are proposed as directions for future developments in the field (Kazlauskas, 2017).

Cost of Treatment. In 2012 it was estimated that the average cost of treatment for a member of the military diagnosed with PTSD was \$8,300 per year (Reisman, 2016). Reisman also noted that at the time there were over 572,000 veterans seeking treatment or compensation for PTSD, the third highest disability

in the VA system and that costs for treatment for veterans with PTSD were 3.5 times greater than those without the disability.

Inability to Provide Certain Treatment Options. Some of the newer forms of Psychopharmacology are unavailable within the VA system and elsewhere. Research on marijuana and MDMA have shown great promise however because the federal government still has both substances classed as schedule one drugs, this prohibits the VA from administering them (Perry, 2016). For civilians there are some of the same restrictions. While some states allow medical marijuana, other states still do not. For MDMA, the FDA has approved stage three trials for the drug which is expected to conclude in 2021. If successful this treatment option could be available for use as early as 2022 (Multidisciplinary Association for Psychedelic Studies, 2020)

There are limitations to both CPT and CBT. Due to the length of time it takes to complete these courses some clients may drop out before completing all the desired sessions. Neither treatment option is useful if the client is showing a moderate to severe abuse of substances (Fogger, Moore, & Pickett, 2016).

New clinicians have a sufficient body of knowledge from their graduate programs, which they have acquired in their classroom settings and in practical application through rigorous internships, however, there is still much to learn. Continuing education is required for clinicians who are on the path of acquiring supervision hours for the purpose of being evaluated for licensure. The training for therapeutic techniques can be obtained. A lack of knowledge and training, if

not pursued, inhibits clinicians from their ability to provide certain treatment options to clients who so urgently need these services.

Theory Guiding Conceptualization.

The theory being conceptualized in this study will be Social Learning Theory. This theory which came into effect by combining behavioral learning theory with cognitive learning theory was created by Psychologist Albert Bandura in the early 1960's (Turner, 2017). Bandura identified three requirements for learning. These requirements were observation, retention, and reproduction. Observational learning in this case is done by the student when he or she takes classes at the university to gain knowledge of the mental conditions and therapies used to combat them. Retention is seen by the use of midterm and final exams as well as papers completed by the student and the use of vignettes during classes. Reproduction occurs while the student is attending their internships. During this phase observation and retention are repeated as the student, now an intern, is shown how to diagnose a client and decide on the treatment options to process.

Social Work Practitioner's will be able to learn new therapeutic treatment modalities for PTSD if they are made aware of them and are able to observe them as a step to learning.

Summary.

While there are many different forms of treatment for PTSD, these treatment options will not be available to the client without the practitioner's

knowledge and singular abilities to implement them or refer clients to those who are able to conduct them. It is important to know what social work students knowledge of and interest in treatment options for PTSD are so that schools are able to tailor their classes to ensure the students are fully prepared for a future as social workers..

CHAPTER THREE

STUDY DESIGN

Introduction

Data was collected by means of a self-administered survey using the online Qualtrics system. The survey consisted of a total of 22 close-ended questions. Prior to starting the survey an informed consent statement was shown to the individual and they were required to select that they give consent prior to starting the survey. Questions on the survey were broken down into demographics and technical knowledge and interest in different PTSD treatment modalities. This chapter addressed how the data was collected, the strengths and limitations of the methods used and how the data was stored and managed.

Data Collection and Instruments.

The first five questions of the survey were demographic questions. This information was gathered to see if there was any significant difference in treatment knowledge or interest based on age, gender, veteran status and family history involving PTSD. These questions were all close-ended answers with the exception of question two which gave the participant the option to inform the researcher of a gender preference other than male or female. In the case of the subjects age, age ranges were broken down into groups starting with 18-25, then 26-35, 36-45, 46-55, and finally 56 and older. The next three questions were about the student's education. These questions were designed to see if there was a difference between knowledge based on the students type of training (two

year or three year), if the student was trained solely within the United States or had some of their education in another country and what stage of their MSW training they were in. These questions were asked to evaluate if there was a treatment option known by one group and not known by another based on the group's level and location of education. These questions were all confined to a close-ended answer.

The final fourteen questions name the seven treatment options; Eye Movement Desensitization and Reprocessing (EMDR), Virtual Reality (VR), Equine Therapy (ET), 3, 4 methylenedioxyamphetamine (MDMA), Cannabis treatment, Medical Nutrition Therapy (MNT), and Agri-Therapy. Participants were asked about their knowledge of the treatment option followed by their interest in obtaining more knowledge of the treatment option. These questions used an ordinal scale with three or four options. For questions on knowledge of treatment options the students had the choice of "*No knowledge, Heard of it, or Practiced it*". The questions pertaining to interest in obtaining more knowledge of the previous treatment option was broken down into four answers. These included "*Not at all interested, Somewhat interested, Interested, and Very interested*".

All questions were reviewed by a third party (MSW Social Worker not affiliated to the university) for validity and reliability. This researcher collected and collated the responses to attempt to understand social work student's knowledge and interest of treatment options for PTSD.

Strengths. Quantitative methods of data collection provide a snapshot of what a specific group thinks about an issue. It captured the degree to which the student feels they have learned about treatment options for PTSD. This collection type allows for the collection of information from multiple participants in a short period of time. This collection style also gives the participants a feeling of anonymity allowing them to answer without feeling pressured to choose a specific answer.

Limitations. There are a number of limitations to collecting data using quantitative means. While this collection method allows researchers to gather information quickly it does not allow for descriptive interpretation. The participants are unable to articulate why they choose the answers they do and the level of their understanding. Some data may be misinterpreted without the guidance of an experienced researcher. Some responses can provide a range of reasons why the student answered the way they did, however, without an interview or conversation, the interpretive aspect remains absent.

Procedures. This researcher drafted a survey that was approved by the California State University San Bernardino (CSUSB) School of Social Work Institutional Review Board (IRB). Once approval was obtained, an email was sent to the target population. The email was sent to an estimated 269 students in the on-campus and on-line programs of an MSW program. In the email was a brief description of the study, information on confidentiality, and expectations for

the survey (risk to person, expected duration of questions, benefits to individual). Participants were asked to take the survey and the results were collected using the online Qualtrics survey software system. Prior to taking the survey all participants had to indicate their willingness to participate in the study by completing an informed consent form.

Protection of Human Subjects. Confidentiality was maintained according to the National Association of Social Workers (NASW) guidelines (National Association of Social Workers, 2019). While informed consent was required, no names were collected and individual anonymity will be maintained. Informed consent was required before participants took the survey. In the informed consent participants were given a brief summary of the research and informed that they could refuse or discontinue the survey at any time. Additionally, they were informed about the risks and benefits of completing the survey and given contact information if they wanted any further information prior to starting the survey or about its results. Participants were required to select the “I give consent to use this information for research” button before being allowed access to the survey. A copy of the informed Consent is attached as Appendix B. The guidelines for the collection of this information were approved by the CSUSB Institutional Review Board (IRB).

Storage and Management of Data. At the time of this writing, the researcher is required to confidentially and safely store and maintain data for a period of 5 years. Data was collected using Qualtrics and then transferred to a

Google drive where it was password protected. Information was then inputted into the IBM Statistical Package for Social Sciences (SPSS) where it was used to evaluate the statistical information.

Data Analysis Plan. Frequencies were run on all demographic questions as well as all knowledge of and interest in the seven treatment modalities. The demographic data is to describe the sample. The frequencies related to knowledge of and interest in different treatment modalities were examined to determine the level of knowledge and interest in each.

Summary.

This chapter provided a summation of the actions taken to complete this study. Both the design method and informed consent were discussed, and a copy of both the survey and informed consent forms were attached as Appendix A and B. Quantitative data was gathered using an approved survey. This study was conducted to discover social work student's knowledge of, and interest in, treatment methods for clients with PTSD.

CHAPTER FOUR

RESULTS

Introduction

The results section of this paper reports the demographics of the students who took part in this research and the findings about knowledge of treatment options and interest in information pertaining to treatment options. Areas included veteran status, type of learning environment (on campus, part-time, distance learning) and personal interaction with someone who has PTSD. The survey was sent out to approximately 269 students and 43 responded. The sample population consisted of forty females (n=40) and three males (n=3) making a total of forty three students. All students were in a MSW program. Data will be presented on the statistical frequency of information self reported by the subjects.

Participant Demographics.

The following participant demographic data was recorded by the researcher: gender, age, veteran status, PTSD in the family, level of education, and intern activity with clients who have PTSD.

The participants of this study were primarily female (93%). The age range was broken down into five main groups. These groups started at age 18. The first age group consisted of 18-25 year olds, then 26-35, 36-45, 46-55, and finally 56+. The two largest groups were the 26-35 year olds (48.8%), followed by the 18-25 year olds (30.2). There were only five students who indicated they were veteran, three females and two males. The information on prevalence of PTSD

within the students' family showed that about two thirds had no family members with PTSD (67.4%) compared with those who either had PTSD or a family member with PTSD (32.6%).

The students in the MSW program have the option of a two year course, a three year part-time on campus course or a three year distance learning option. When requests for participation were sent out to all MSW students the two year, on campus students participated six times greater than the distance learning or part-time students (86% compared to 14%). There were only two students who stated they had received social work training outside the United States. The students in the MSW program, either on campus or distance learning, are required to complete internships as part of their school curriculum. The students were asked if they had interaction with clients at their internship who were diagnosed with PTSD. Over half of the remaining students stated that they had no clients with PTSD (46.5% overall). The students who stated they had a client at their internship with PTSD comprised of 37.2% of the total number of students.

The breakdown of the veteran group was five students, two male and three female. All the veterans were in the on campus program and all of them had only received their education within the United States. The non-veteran group was made up of 37 females and one male. All the distance learning/part-time students were in this group and two had received education outside of the United States. The information on PTSD in the family showed that for veterans, 80% either had PTSD or had someone in the family who had this condition

compared to only 26.3% for non-veterans. The graph below labeled Figure 1 displays a breakdown of this information.

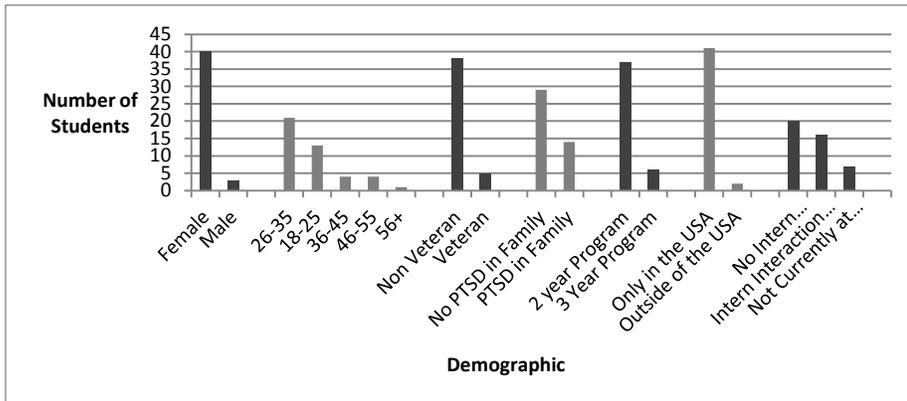


Figure 1. Student Demographics, Education and PTSD Contact

Presentation of Findings.

Treatment, Knowledge and Interest Levels. The students were asked two specific questions about seven different treatment options for PTSD. The list of treatment options included Eye Movement Desensitization and Reprocessing (EMDR), Virtual Reality (VR), Equine Therapy (ET), 3, 4 methylenedioxymethamphetamine (MDMA), Cannabis Treatment, Medical Nutrition Therapy (MNT), and Agri-Therapy (AT). First they were asked to indicate their knowledge of each treatment option (Yes/No) then they were asked to indicate the degree of their interest in learning more about each treatment option.

Knowledge Levels. The treatment option students indicated they had the most knowledge on was Eye Movement Desensitization and Reprocessing. Three quarters of the students stated they had knowledge of this treatment option (32, 74.4%). The second most known treatment option was Cannabis. Cannabis was only slightly less well known than Eye Movement Desensitization and Reprocessing and in this case 26 (60.5%) students stated they knew of the treatment compared with 17 (39.5%) who did not. The final treatment option where more students knew of the treatment than did not was Equine Therapy. This was almost equal as 23 (53.5%) students knew of this treatment compared to 20 (46.5%) who stated they did not.

Virtual Reality was the first treatment option where fewer than half the students knew of the treatment (18, 41.9%). For 3, 4-methylenedioxymethamphetamine showed an almost polar opposite to the Eye Movement Desensitization and Reprocessing where only 11 (25.6%) students indicated their knowledge of the treatment compared to 32 (74.4%) who stated no knowledge. Medical Nutrition Therapy was a comparatively unknown treatment option as only three (7%) students had any knowledge of this form of treatment. Finally the least known treatment option was Agri-Therapy. This option was only known by two of the 43 students (4.7%). The graph below labeled Figure 2 displays a visual representation of the information stated above.

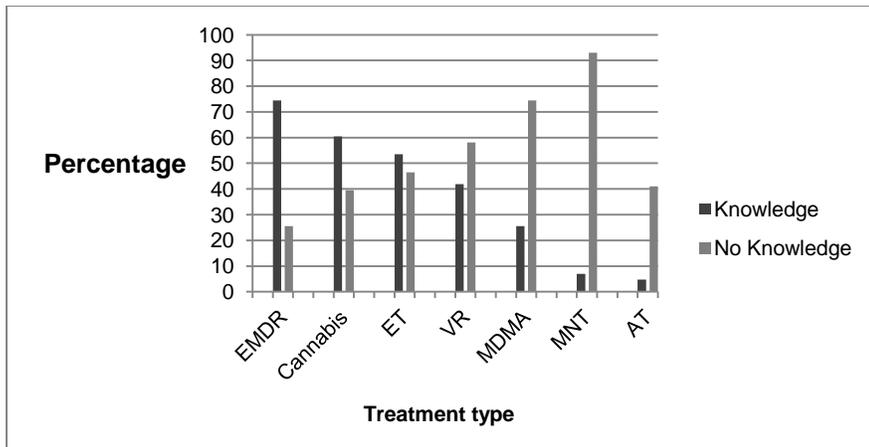


Figure 2. Knowledge of Treatment Options

Treatment Option Interest Levels. Interest levels were initially broken down into four sections, “*Not at all Interested, Somewhat Interested, Interested, and Very Interested.* The three sections indicating an interest in the treatment options were combined to evaluate the overall interest level. There was a high interest in all of the treatment options available to the students. The students indicated the treatment options they were most interested in learning more about were Eye Movement Desensitization and Reprocessing and Medical Nutrition Therapy. Almost all students (41, 95.3%) wanted to learn more about both treatment options. 3, 4 methylenedioxymethamphetamine was the next treatment option that students showed an interest in. Here 40 (93%) of the 43 students stated they would like more information on the treatment option.

Virtual Reality and Equine Therapy both had 39 (90.7%) students who were interested in learning more about the treatment option with only four students indicating no interest. Agri-Therapy had a slightly lower number

interested in learning more as only 38 students were interested. Finally Cannabis was the treatment option with the fewest numbers of students interested in learning more about the treatment option. Yet even this option had 36 (83.7%) students interested in the treatment. The graph below labeled Figure 3 displays a visual representation of the information stated above.

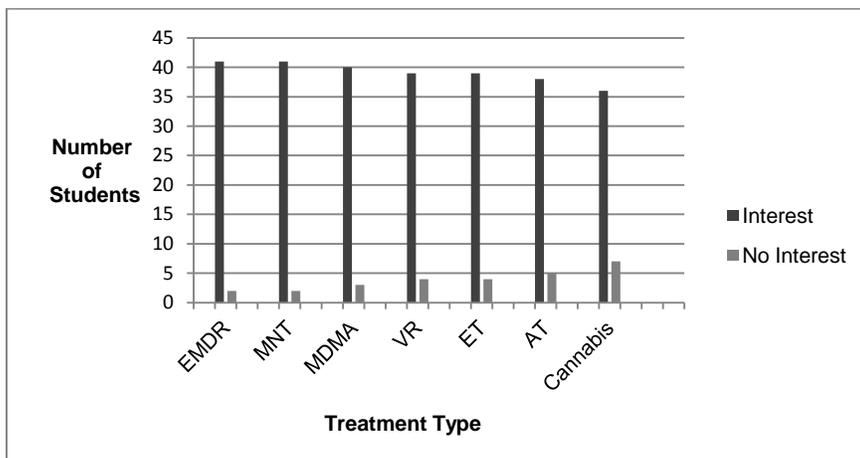


Figure 3. Interest in Treatment Options

While PTSD is not an issue that solely affects veterans it is a diagnosis that the veteran community shows a high propensity. With that in mind the information gathered in this survey was separated into veteran and non veteran groups to evaluate the differences in knowledge in and interest of treatment modalities for PTSD

Veterans Knowledge versus Non-Veterans Knowledge. When looking at the different treatment methods the veteran group was more likely to have

knowledge of almost all treatment modalities than the non veteran group. Veterans had a higher knowledge of Eye Movement Desensitization and Reprocessing (100%), compared to non-veterans (71.1%), Virtual Reality (80%), compared to non-veterans (36.8%), Equine Therapy (60%), compared to non-veterans (52.6%), 3,4 methylenedioxyamphetamine (40%), compared to non-veterans (23.7%), Medical Nutrition Therapy (20%), compared to non-veterans (5.3%), and Agri-Therapy (20%), compared to non-veterans (2.6%). The non-veteran group stated a slightly higher knowledge of only one treatment modality, Cannabis treatment (60.5%), compared to the veterans group (60%). The graph below labeled Figure 4 displays a visual representation of the information pertaining to knowledge of PTSD treatment modalities stated above.

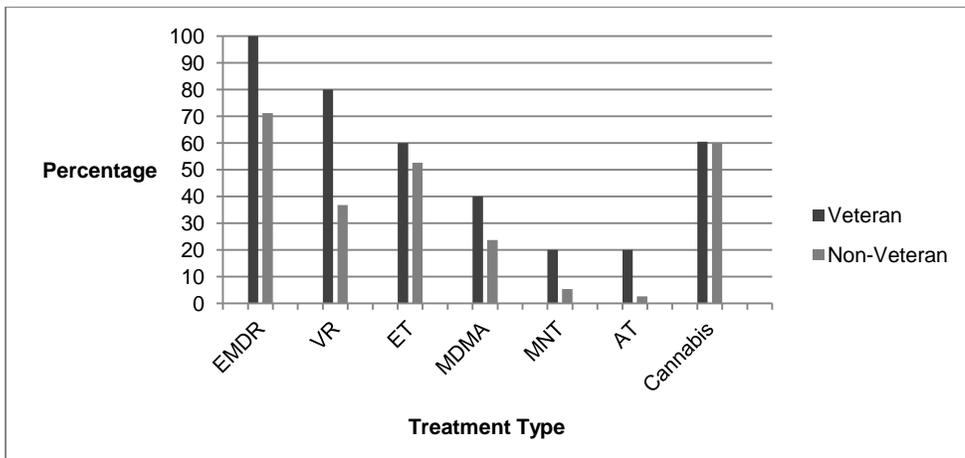


Figure 4. Veteran versus Non-Veteran Knowledge

Veterans Interest versus Non Veterans Interest. When looking at the different treatment methods the veteran group was more likely to have more interest in almost all treatment modalities than the non veteran group. Veterans had a higher interest in Eye Movement Desensitization and Reprocessing (100%), compared to non-veterans (94.7%), Virtual Reality (100%), compared to non-veterans (89.5%), Equine Therapy (100%), compared to non-veterans (89.5%), 3,4 methylenedioxyamphetamine (100%), compared to non-veterans (81.6%), Cannabis treatment (100%), compared to the veterans group (92.1%). The non-veteran group stated a slightly higher interest in two treatment modalities. Medical Nutrition Therapy (80%), compared to non-veterans (97.4%), and Agri-Therapy (80%), compared to non-veterans (89.5%). The graph below labeled Figure 5 displays a visual representation of the information pertaining to interest in PTSD treatment modalities stated above.

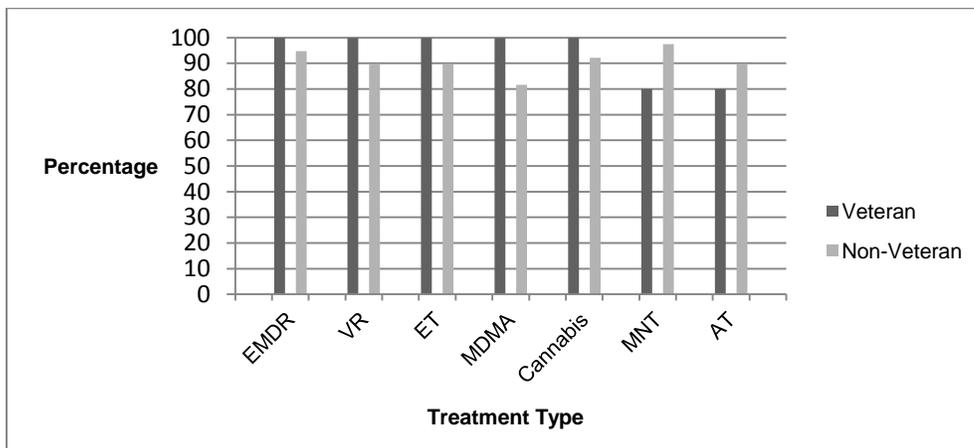


Figure 5. Veteran versus Non-Veteran Interest

Two-Year Students Knowledge versus Three-Year Students Knowledge.

When looking at the different treatment methods the distance learning/part-time group was slightly more knowledgeable of the treatment modalities than the on campus group. The distance learning/part-time group stated a much higher knowledge of Virtual Reality (100%), compared to the on campus group (48.6%), 3,4 methylenedioxyamphetamine (100%), compared to the on campus group (29.7%), Medical Nutrition Therapy (100%), compared to the on campus group (8.1%), and Agri-Therapy (100%), compared to the on campus group (5.4%). The on campus group stated a higher knowledge of Eye Movement Desensitization and Reprocessing (78.4%), compared to the distance learning/part-time group (50%), Equine Therapy (54.1%), compared to the distance learning/part-time group (50%), and Cannabis Treatment (62.2%), compared to the distance learning/part-time group (50%). The graph below labeled Figure 6 displays a visual representation of the information stated above.

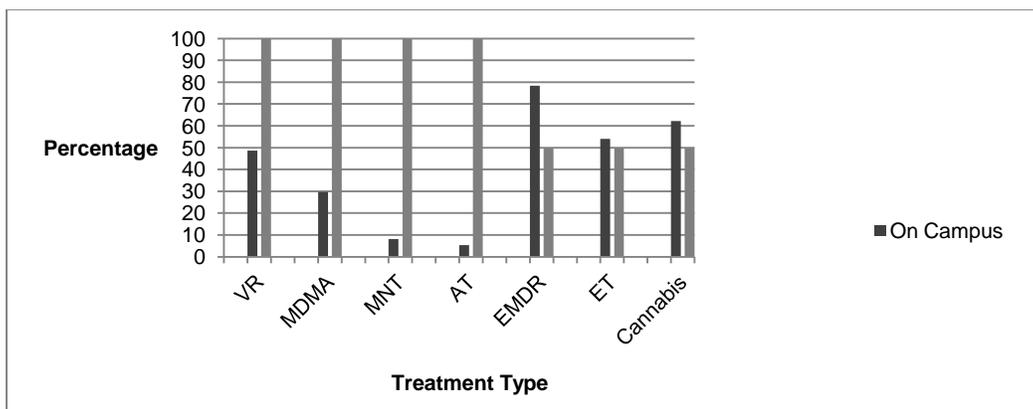


Figure 6. Two-Year versus Three-Year Students Knowledge

Two-Year Students Interest versus Three-Year Students Interest. When looking at the different treatment methods the distance learning/part-time group showed more interest in almost all the treatment modalities compared to the on campus group. The distance learning/part-time group stated a higher interest in Eye Movement Desensitization and Reprocessing (100%), compared to the on campus group (94.6%), Virtual Reality (100%), compared to the on campus group (89.2%), Equine Therapy (100%), compared to the on campus group (89.2%), 3,4 methylenedioxyamphetamine (100%), compared to the on campus group (81.1%), Medical Nutrition Therapy (100%), compared to the on campus group (94.6%), and Agri-Therapy (100%), compared to the on campus group (86.5%). The on campus group stated a higher interest in Cannabis Treatment (94.6%), compared to the distance learning/part-time group (83.3%). The graph below labeled Figure 7 displays a visual representation of the information stated above.

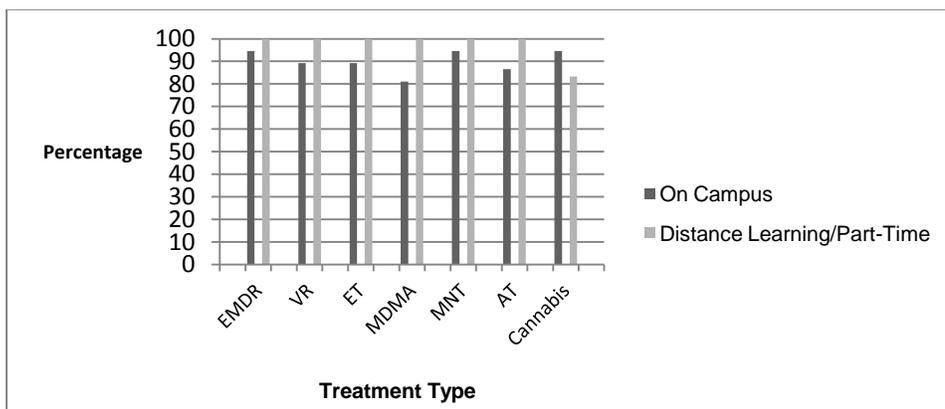


Figure 7. Two-Year versus Three-Year Students Interest

Summary.

This chapter provided a summation of the results of the information collected. Comparisons on knowledge of and interest in PTSD treatment modalities were made for all students, veteran versus non-veteran and two-year on campus students versus three-year distance learning/part-time students. Looking at the student numbers as a whole we see that the range of knowledge is quite large. While three quarters (32, 74.4%) of the students stated they know about Eye Movement Desensitization and Reprocessing only two of the 43 students (4.7%) stated any knowledge about Agri-Therapy. This was a vast difference than the students' interest in learning about treatment options which only varied by five students (11.6%). The students showed the most interest in Eye Movement Desensitization and Reprocessing and Medical Nutrition Therapy, both at (41, 95.3%) and the least interest in Cannabis (36, 83.7%).

In the case of veteran versus non-veteran students the veteran students showed a much greater knowledge of six of the seven treatment modalities, Eye Movement Desensitization and Reprocessing (EMDR), Virtual Reality (VR), Equine Therapy (ET), 3, 4-methylendioxyamphetamine (MDMA), Medical Nutrition Therapy (MNT), and Agri-Therapy (AT). When looking at the interest of these treatments the veterans showed a higher interest in five of the seven, Eye Movement Desensitization and Reprocessing (EMDR), Virtual Reality (VR), Equine Therapy (ET), 3,4-methylendioxyamphetamine (MDMA), and Cannabis treatment. The three-year distance learning/part-time students

overall showed a higher knowledge of four of the seven treatment methods, Virtual Reality (VR), 3, 4 methylenedioxyamphetamine (MDMA), Medical Nutrition Therapy (MNT), and Agri-Therapy (AT). These students also had a higher interest level in six of the seven treatment methods, Eye Movement Desensitization and Reprocessing (EMDR), Virtual Reality (VR), 3, 4 methylenedioxyamphetamine (MDMA), Equine Therapy (ET), Medical Nutrition Therapy (MNT), and Agri-Therapy (AT).

CHAPTER FIVE

RESULTS

Introduction

The purpose of this study was to gain a better understanding of the knowledge of and interest in treatment options available for Post Traumatic Stress Disorder (PTSD) from the viewpoint of Masters Level Social Work. The students were asked their levels of knowledge regarding seven specific treatment options and then their level of interest in learning more about these treatment options. The treatment options included in this study were Eye Movement Desensitization and Reprocessing, Virtual Reality, Equine Therapy, 3,4 methylenedioxymethamphetamine , Cannabis treatment, Medical Nutrition Therapy; and Agri-Therapy.

Discussion.

Of the seven treatment modalities the students were asked about, only one is currently mentioned during classes at the university, Eye Movement Desensitization and Reprocessing. Eye Movement Desensitization and Reprocessing is a well established process that was known to three quarters of the students who completed the survey. The students may have felt more comfortable with this treatment option because they have had academic instruction on it during their time with the university. The second most well known treatment option was Cannabis treatment. Cannabis has been well publicized

over the last few years, especially in states like California where it is now legal. This may account for the student's knowledge of this treatment option.

There are numerous options for bringing in more specialists to instruct students on new treatment options. Assignments could be given where the students were required to research new treatment modalities for different mental issues and the students could give presentations to their classes. Another option could be visiting lecturers. This may be difficult if the individual does not live locally however, with students and universities knowledge of distance learning, Zoom or Skype video presentations may be possible. This would allow individuals to present their information and give the students the opportunity to ask the experts questions about the treatment option they present on. If this option was to be used guest lecturers could video conference from social work agencies or other universities.

Despite the students lack of exposure to a number of the treatment options, when asked if they were interested in learning more about options available the students overwhelmingly showed an interest. With the exception of Agri-Therapy and 3, 4 methylenedioxymethamphetamine, the students had over a 90% interest in learning more about each treatment modality. Agri-Therapy had an 88.4% interest rate and 3, 4 methylenedioxymethamphetamine had an 83.7% interest rate. These statistics show that the students were interested in broadening their knowledge base when it comes to treatment options they may be able to use in their future careers. For some of these students there will be

the option for continued education to become Licensed Clinical Social Workers (LCSW). While knowledge of every treatment option and the ability to carry them out may be impractical, a broad overview of new treatment options can only be a benefit to the students.

The Virtual Reality treatment may be more practical for clients who grew up with video games and the technology that created Virtual Reality. The vast majority of students who will be coming through the social work schools over the next few years fall into this age category. Despite this, less than 50% of the students currently going through the programs had any knowledge of this treatment option. With the advances in technology this treatment option is only going to become easier to install in treatment facilities and these systems are going to need knowledgeable, experienced operators to ensure the client gets the best possible results.

Limitations. The primary limitation of this research was the sample size. Due to difficulties in administration and logistics the sample was collected from only one university within the California State University system. Given additional time and resources, this survey could be administered to all 23 California State Universities allowing for greater data collection. More females than males took the survey, additionally, more on-campus two-year students than distance learning/part-time students also took the survey. Online surveys have their own set of limitations. It is difficult to confirm who is taking the survey due to the need for confidentiality. While the survey was sent out to an estimated 269

MSW students, only 43 (16%) completed the survey. These issues may be overcome in the future by administering the survey in the classroom or in the case of the distance learning students asking their online instructors for the opportunity to address the students during one of their online classes. Further, the measurement tool was designed by the researcher, and due to time constraint, it had limited testing for reliability and validity. Future research in this area may require more time to construct a more reliable measurement tool that encapsulates all students' needs regarding learning about PTSD treatments.

Recommendations for Social Work Practice and Education Policy. As the roles and responsibilities of social workers continue to evolve, so should their training. Students leaving the masters program should be knowledgeable on the most up to date treatment options available in their field. This will not only benefit the students but also the school that they come from as this will promote that school as a forward thinking institution. New social workers, entering the work environment for the first time, are able to talk to their peers about these treatment options and may bring new knowledge that the companies they work for can then be used with their clients. For those students who wish to continue as a macro social worker, knowledge of these treatment options may be beneficial as it will allow them to use this information when writing applications for grants or when lobbying for future issues involving the social work field. For those interested in the micro social work role, a broad knowledge of treatment options will benefit them and ultimately their clients as it gives them options for treatment or referral.

Further research should be conducted on the knowledge and interest of treatment options for numerous mental health issues. PTSD is a well known mental health issue; it has been publicized and presented on many academic and social platforms. Research on the knowledge and interest of future therapists on this subject or other mental health issues will allow academic institutions the option to tailor their programs to the interest of their current and future students while maintaining their accreditation. Additionally research on this subject will be invaluable to organizations such as the National Association of Social Workers (NASW) and the Council on Social Work Education (CSWE) as it will give them firsthand knowledge on the educational understanding of the social workers who will shortly become accredited in the field.

Conclusion.

Given these findings there is ample evidence to show that there is a distinct difference between the MSW students' knowledge of treatment modalities and their interest in learning about them. The very fact that so much interest is shown to multiple treatment modalities is indicative of student thirst for knowledge going unanswered.

There was a markedly higher level of knowledge among veteran students and two-year on campus students. The veteran students may be more inclined to research this topic as PTSD is so prevalent within the veteran community. Veterans and other students with current knowledge of PTSD treatments may be a strength that can be used to infuse more up-to-date content in the curriculum.

While this research was only administered to MSW students at one university, the results show that there is a gap between students' knowledge and their interest in learning more about the treatment modalities. A larger scale research project utilizing multiple universities will confirm if this information is localized or more-wide spread. Universities may look at supplementing their instruction to students about treatment options for PTSD and other mental health issues. This may be accomplished by engaging professors with a wide treatment knowledge, varying the professors who teach the class or bringing in more guest lecturers. Additionally there is the option of tasking the students to research a different treatment modality for each quarter/semester they are in their universities and having those students present their findings to their class. The findings indicate that more attention should be focused on alternative treatment modalities for PTSD and possibly other mental health issues.

Consistently upgrading the curriculum by incorporating new treatment modalities will ensure that the rigorous standards incorporated into the training of social workers remains relevant. The constant revitalization of treatment modalities taught will also ensure that schools maintain both their standards of excellence and relevance to the social work community.

APPENDIX A
INFORMED CONSENT

Informed Consent

The study in which you are asked to participate is designed to examine the student's knowledge of treatment options for people with Post Traumatic Stress Disorder (PTSD). This study is being conducted by Kerry Morgan, a graduate student, under the supervision of Professor Laurie Smith, Professor in the School of Social Work at California State University, San Bernardino (CSUSB). The study has been approved by the Social Work Sub Committee of the Institutional Review Board at CSUSB.

Purpose: The purpose of the study is to examine student's knowledge of treatment options for clients with PTSD.

Description: Participants will be asked a series of questions on demographics, education and therapy choices.

Participation: Your participation in this study is totally voluntary. You can refuse to participate in the study or discontinue your participation at any time without any consequences. Your decision to participate will in no way affect your educational standing in the school of social work at CSUSB.

Confidentiality: Your responses will remain confidential and data will be reported in group form only.

Duration: It will take approximately five minutes to complete the survey.

Risk: Although not anticipated, there may be some discomfort in answering some of the questions. You are not required to answer and can skip the question or end the participation.

Benefit: there will not be any direct benefits to the participation.

Contact: If you have any questions about this study, please feel free to contact Professor Smith at (909) 537-5501 ext 73837.

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 2020.

.....
I understand that I must be over 18 years of age to participate in your study, have read and understand the consent document and agree to participate in your study.

Place an X mark here

Date

APPENDIX B
TREATMENT MODALITY SURVEY

TREATMENT MODALITY SURVEY

1. What is your gender?
 - Male
 - Female
 - Other (if you answered "other" please state your preferred gender option in question 2)

2. What is your preferred gender option? (if you answered male or female in the previous question please print N/A for this question)
 - _____

3. What is your age?
 - 18-25
 - 26-35
 - 36-45
 - 46-55
 - 56+

4. Are you a veteran?
 - Yes
 - No

5. Have you or a close member of your family been diagnosed with PTSD?
 - Yes
 - No

6. What is your highest level of education?
 - First year of a 2 year MSW program
 - Second year of a 2 year MSW program
 - First year of a 3 year MSW program
 - Second year of a 3 year MSW program
 - Third year of a 3 year MSW program

7. Did you receive all your social work education in the United States
 - Yes
 - No

8. At your internship do you treat people diagnosed with PTSD?
 - Yes
 - No

9. What level of knowledge do you have of Eye Movement Desensitization and Reprocessing (EMDR) therapy for a person with PTSD?
- None
 - Heard of it
 - Practiced it
10. How interested are you in learning more about Eye Movement Desensitization and Reprocessing (EMDR) therapy for a person with PTSD?
- Not at all interested
 - Somewhat interested
 - Interested
 - Very interested
11. What level of knowledge do you have of Virtual Reality (VR) therapy for a person with PTSD?
- None
 - Heard of it
 - Practiced it
12. How interested are you in learning more about Virtual Reality (VR) therapy for a person with PTSD?
- Not at all interested
 - Somewhat interested
 - Interested
 - Very interested
13. What level of knowledge do you have of Equine Therapy for a person with PTSD?
- None
 - Heard of it
 - Practiced it
14. How interested are you in learning more about Equine Therapy for a person with PTSD?
- Not at all interested
 - Somewhat interested
 - Interested
 - Very interested

15. What level of knowledge do you have of 3, 4 methylenedioxymethamphetamine (MDMA) for a person with PTSD?
- None
 - Heard of it
 - Practiced it
16. How interested are you in learning more about 3, 4 methylenedioxymethamphetamine (MDMA) for a person with PTSD?
- Not at all interested
 - Somewhat interested
 - Interested
 - Very interested
17. What level of knowledge do you have of Cannabis treatment for a person with PTSD?
- None
 - Heard of it
 - Practiced it
18. How interested are you in learning more about Cannabis treatment for a person with PTSD?
- Not at all interested
 - Somewhat interested
 - Interested
 - Very interested
19. What level of knowledge do you have of Medical Nutrition Therapy (MNT) for a person with PTSD?
- None
 - Heard of it
 - Practiced it
20. How interested are you in learning more about Medical Nutrition Therapy (MNT) for a person with PTSD?
- Not at all interested
 - Somewhat interested
 - Interested
 - Very interested

21. What level of knowledge do you have of Agri-Therapy for a person with PTSD?

- None
- Heard of it
- Practiced it

22. How interested are you in learning more about Agri-Therapy for a person with PTSD?

- Not at all interested
- Somewhat interested
- Interested
- Very interested

Developed by Kerry Morgan

APPENDIX C
REVIEW BOARD APPROVAL



January 10, 2020

**CSUSB INSTITUTIONAL REVIEW BOARD
Administrative/Exempt Review Determination
STATUS: Determined Exempt
IRB-FY2020-151**

**Kerry Morgan Laurie Smith
CSBS – Social Work
California State University San Bernardino
5500 university Parkway
San Bernardino, California 92407**

Dear Kerry Morgan Laurie Smith

Your application to use human subjects, titled “Social Work Students knowledge of Treatment Options for Post Traumatic Stress Disorder” has been reviewed and approved by the chair of the Institutional Review Board (IRB) or California State University, San Bernardino has determined that your application meets the requirements for exemption from IRB review Federal requirements under 45CFR 46. As the researcher under the exempt category you do not have to follow the requirements under 45 CFR 46 which requires annual renewal and documentation of written informed consent which are not required for the exempt category. However, exempt status still requires you to attain consent from participants before conducting your research as needed. Please ensure your CITI Human Subjects Training is kept up-to-date and current throughout the study.

The CSUSB IRB has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to the potential risk and benefit. This approval notice does not replace any departmental or additional approvals which may be required.

Your responsibilities as the researcher/investigator reporting to the IRB Committee the following three requirements highlighted below. Please note failure of the investigator to notify the IRB of the below requirements may result in disciplinary action.

- **Submit a protocol modification (change) form if any changes (no matter how minor) are proposed in your study for review and approval by the IRB before implemented in your study to ensure the risk level to participants has not increased,**
- **If any unanticipated/adverse events are experienced by subjects during your research, and**
- **Submit study closure through the Cayuse IRB submission system when your study has ended.**

The protocol modification, adverse/unanticipated event, and closure forms are located in the Cayuse IRB System. 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 identification number (listed at the top) in all correspondence.

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 identification number (listed at the top) in all correspondence.

Best of luck with your research.

Sincerely,

Donna Garcia

**Donna Garcia, Ph.D., IRB Chair
CSUSB Institutional Review Board**

DG/MG

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