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Most Effective Treatment for Veterans with PTSD and Whether it is Implemented in Veteran Organizations Across New York State

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ABSTRACT

I started off by emphasizing the importance of veterans with post-traumatic stress disorder (PTSD) and how much of the U.S. population is negatively affected by the increasing mental health symptoms. Thus, by thematically analyzing the effectiveness of the three most prevalent mental health treatments, I sought to fully comprehend both the positive and negative effects of each treatment. Through a comparative data analysis with qualitative and quantitative data, I sought to determine the most effective treatment using two table charts. I collected various studies from credible science database sources to overall influence my work. An interview was then used to determine to what extent the most effective treatment from my data results was being utilized in veteran organizations across New York. This paper was written with the initial assumption that cognitive behavioral therapy is the most prevalent treatment due to its cost-effectiveness and for being the most funded therapy by the US Veterans Affairs, a department of the federal government charged with healthcare services to military veterans. However, the findings of my research discovered that just because a treatment is most widely being used in society currently, it doesn't mean that it is the most effective treatment in the long run for veterans experiencing a high range of symptoms from PTSD. This study concluded that eye movement desensitization and reprocessing therapy (EMDR) is specifically the most effective mental health treatment for post-traumatic stress disorder. Therefore, this research study can be used in order to determine the most effective treatment for increasing the mental well-being of veterans with post-traumatic stress disorder (PTSD).

I. Introduction

In the aftermath of the 9/11 attack, 83% of United States veterans, and active duty service men and women experienced post-traumatic stress disorder (PTSD) as a result of their military service. PTSD was the second most frequently reported deep cognitive injury acquired during service, among veterans and active-duty service members who participated in the survey (Cumberland Heights, 2021). Existing treatment of these individuals for PTSD may not be adequate or effective, and thus further research on other possible treatments is necessary. While current studies produce a myriad of information on PTSD, the most effective treatment for veterans hasn't been specifically discerned. A study that gathers data analysis and interview results from qualified professionals knowledgeable about treating PTSD will help to derive a clear conclusion by evaluating the possible positive and negative outcomes of the three most prevalent treatments used on patients with post-traumatic stress disorder (PTSD): cognitive behavioral therapy (CBT), exposure therapy, and eye movement desensitization and reprocessing therapy (EMDR).

II. Literature Review

Post-Traumatic Stress Disorder (PTSD) on Veterans in the U.S.

Approximately 5% of Americans, or more than 13 million people, suffer from PTSD (Single Care Team, 2022). Post-traumatic stress disorder (PTSD) is one of the many mental health conditions that is triggered by a terrifying event, whether an individual witnesses or experiences it (Mayo Clinic, 2022). Cumberland Heights, the first treatment center in Tennessee, found that high rates of PTSD have been highly prevalent in veterans who have served in recent wars and conflicts. The National Library of Medicine affirms this by explaining that PTSD is the most prevalent mental health condition among veterans, compared to bipolar disorder and obsessive-compulsive disorder (Inoue et al, 2022). This is due to the fact that veterans tend to experience war zone deployment, training accidents, and military sexual trauma, which puts them at higher risk for PTSD (U.S. Department of Veterans Affairs, 2022). In addition, a 2017 study that interprets the analysis involving 5,826 United States veterans, within one year found that 12.9% were diagnosed with PTSD (Freespira Inc, 2021). Clearly, PTSD has affected over half of US veterans that strive hard in serving the United States every day with 58% battling PTSD in their daily lives (Freespira Inc, 2021).

How PTSD is Currently Being Treated

Currently, PTSD is being treated through various medications and talk therapies. Psychotherapies, also known as talk therapies, are the primary method to treat PTSD. Out of the many talk therapies, there are three most known to be effective treatments for PTSD. These include cognitive behavioral therapy,

exposure therapy, and eye movement desensitization and reprocessing therapy (Stanborough, 2021). With the exception of therapies, there are also medications available for veterans who may be uncomfortable with attending sessions with therapists. The American Psychological Association (APA), the largest scientific and professional organization of psychologists in the United States, claims that the current medications to treat PTSD symptoms include paroxetine, fluoxetine, and sertraline. This further justifies the importance of medications currently available for patients right now. Although these treatments have proven effective, perhaps more research may reveal the most efficient treatment, which would not only raise the aforementioned therapy success rate but also reduce funding for less effective methods.

Recovery Rates of Veterans with PTSD

According to a recent survey, only 9% of veterans surveyed stated that they have fully recovered from PTSD compared to the 58% of veterans with PTSD who still struggle with symptoms after treatment (Freespira Inc, 2021). This is a critical issue because a large portion of the military community encounters comparable limitations when attempting to obtain mental health care. Despite being provided with medications and therapy, veterans still continue to be faced with challenges in battling the many symptoms of PTSD. This is demonstrated by a study stating that 10% of the medication group and 7% of the therapy group felt fully recovered from the condition (Freespira Inc, 2021). Both of these studies confirm that medication and psychotherapy are effective for some but not all veterans who suffer from PTSD as stated by Robert Cuyler, Ph.D., Chief Clinical Officer of Freespira. Evidently, recovery rates remain significantly low, even with the multiple efforts being taken into consideration.

History of the Current Three Most Prevalent Treatments

Cognitive Behavioral Therapy

Cognitive Behavioral Therapy (CBT) is a form of mental health treatment focusing on the cognitive processes that produce feelings. A greater comprehension of people's thoughts, pictures, beliefs, and attitudes facilitates modifying their behavior and attitudes. The treatment originates from behaviorist John B. Watson, who in 1913 laid the foundation for later advancement in the field. Cognitive behavioral therapy is an older form, so as this practice became more robust over time, new expansions and developments in the field began to emerge (Miller, 2019). It is also well-known for its rapid outcomes within a shorter period of time compared to other therapies that may require months or even years of consistent sessions (Riopel, 2019).

Exposure Therapy

In the 1900s, exposure therapy was created. The therapy was studied extensively by Ivan Pavlov, who discovered that behavior could be changed or improved using conditioning. According to Careers in Psychology, a source organized by an American multinational publishing company that offers detailed information about psychology careers and education, the discovery came from psychologist Mary Cover Jones, who used conditioning to help to get rid of his fear of rabbits. The therapy was demonstrated to reduce anxiety through relaxation techniques like exposure therapy. It is essentially a form of mental health treatment where a person is exposed to a situation, event, or object that triggers anxiety or fear (Saripalli, 2021). Over a period of time, controlled exposure to a trigger by a trusted person in a safe space lessens the anxiety or panic.

Eye Movement Desensitization and Reprocessing Therapy

Eye movement desensitization and reprocessing therapy (EMDR) is a form of mental health treatment that involves moving your eyes in a specific way while one processes traumatic memories. It was created by Francine Shapiro, who while walking in a park in 1987 noticed a specific effect of saccadic eye movements on certain disturbing thoughts. The emotional component of these thoughts rapidly and spontaneously decreased. She was determined to investigate this effect in others. Her first discovery proved that others had difficulty generating sufficient saccadic eye movements to achieve this effect (Springer Publishing, 2016).

The EMDR Institute, an organization founded by Dr. Francine Shapiro in 1990, offers quality training in the EMDR therapy methodology and agrees by stating that a case study and a controlled study were conducted to test the effectiveness of EMDR. In the controlled study, she randomly assigned 22 individuals with traumatic memories to two conditions: half received EMDR, and half received the same therapeutic procedure with imagery and detailed description replacing the eye movements. Afterward, she reported that EMDR resulted in significant decreases in ratings of subjective distress and significant increases in ratings of confidence in a positive belief. Compared to other well-known treatments such as cognitive behavioral therapy and exposure therapy, this specific mental health treatment is newer, which causes more people to avoid it.

GAP

Although various studies have clearly shown that there are multiple treatments for PTSD, there hasn't been a single study that has deeply looked into what the most effective treatment is for the long-term benefits of veterans. In a study by Discovery Mood and Anxiety Program and WebMD, they include both positive benefits of the treatments, but they do not show comparisons between the three. Although there have been comparisons between EMDR and exposure therapy through their positive and negative effects, the most effective treatment has not yet been proven in the study (Discovery Mood and Anxiety Program, 2021). Similarly, a source by WebMD, an American corporation known primarily as an online publisher of news and information pertaining to human health and well-being, provides only general information about exposure therapy. Additionally, the article only presents limitations, which is not enough information to identify whether a treatment is effective or not. Thus, further research would fill the gap of there being no current information within the body of knowledge that compares the effectiveness of the three most prevalent treatments.

III. Conclusion

No study in the current body of knowledge was able to determine the most effective treatment by comparing cognitive behavioral therapy, exposure therapy, and eye movement desensitization and reprocessing therapy on veterans. This led to the formulation of a comparative data analysis consisting of quantitative and qualitative data regarding the three most prevalent treatments, which would allow me to compare the positive and negative effects and determine which one is the most effective in treating veterans with PTSD. The interview that I will also be conducting will help me to get professional opinions on whether or not the most effective treatment is currently being utilized in organizations across New York. These research methods would help to answer the research question: Of the three most prevalent mental health treatments, what is the most effective treatment for veterans with PTSD, and to what extent is that treatment currently utilized in organizations across New York?

Methodology

In order to continue with this study, a multimethod consisting of a comparative data analysis and an interview was conducted. My research focused on the accumulation of quantitative and qualitative data analysis results resulting from the collection of various studies tested on veterans as well as patients with PTSD. Comparative data analysis was used to analyze the ways the three treatments (cognitive behavioral therapy, exposure therapy, and eye movement desensitization and reprocessing therapy) have had an impact on patients experiencing the challenges of combating PTSD symptoms. The purpose of this method was to compare the efficaciousness of the three most prevalent mental health treatments for veterans with PTSD. Furthermore, the study method gathered the collection of data through a comparative data analysis, which was then verified with an interview. Afterward, the interview was used to determine the extent to which the most effective treatment is currently being utilized by therapists and representatives of veteran organizations through obtaining professional opinions across New York State. This was the most probable way because a naturalistic observation, experiment, questionnaire, and survey approach would not be ethical to give or be done to military veterans as it would invade their privacy. Thus, a comparative data analysis consisting of a collection of sources and an interview consisting of professional therapists is the most appropriate for the benefit of my research.

Instruments

Before collecting data for the comparative data analysis and interview, I had to take into account the use of various instruments utilized. As for the comparative data analysis, I made sure to use scientific online database sources such as Gale Databases, the American Psychological Association, the National Library of Biotechnology Information, and multiple other peer-reviewed, academic sources. As for the interview, I created a Google Doc on a computer to keep a record of the interview responses as well as a phone to conduct the interview and communicate with individuals. Furthermore, I used "123APPS", an app consisting of a browser and internet service including Voice editors in order to voice record interviewees' responses. This helped to ensure that no information was missed and that the responses were anonymous.

Exclusion & Inclusion Criteria

Through gathering both qualitative and quantitative data for my comparative data analysis and interview, there were certain sources that I had to include and exclude to collect the most reliable data. Specifically, through the process of searching sources for the quantitative approach of my comparative data analysis, I excluded unreliable scholarly sources such as health blogs as they tend to lack professionalism and are opinionated, which would negatively affect the results of my research. The Science Daily, a news media source and one of the Internet's most popular science news Websites, further justifies this by stating that statistical analyses of student questionnaires of both health topics were seen as significantly more reliable when attributed to a doctor and featured on a website rather than on a blog, individual homepage, or a bulletin board and that additional use of expert sources could help online bulletin boards gain greater credibility after a study was conducted on 555 college students. In addition, for the qualitative approach of the data analysis, I excluded sources with general information about how a certain treatment works. The APA stated that exposure therapy is exposing people to stimuli that cause distress in a safe environment (APA, 2017). However, I didn't need information about how the treatments function but rather, their effectiveness.

For my interview, I excluded therapists and representatives that didn't have much experience with treating specifically veterans with PTSD. This is because the motive of my research is for the benefit of military veterans and what is being utilized to help best reduce PTSD symptoms. Thus, interviewing therapists who only work with children, adults, and couples would not be able to partake in my interview. Rather, I focused on interviewing therapists that had past experience working with veterans and offered evidence-based talk therapies for PTSD. The following factors I looked for in my interviewees best align with my research and were greatly helpful to my paper.

Comparative Data Analysis Findings

In order to compare the various studies and previous research, I conducted comparative data analysis. For reference, quantitative data analysis shows emphasis on the measurement and relationships through variables. On the other hand, qualitative data analysis shows an emphasis on understanding human behavior and presenting findings through words instead of numbers (West Coast University, 2022). The comparative data analysis utilized is the comparison of two or more processes, documents, data sets, or other objects (Teradata, 2023). This was able to determine the most effective mental health treatment through a comparison of the three most prevalent treatments. The analysis achieved this by identifying a therapy treatment that had high success rates with little to no dropout rates with moderated side effects. Specifically, the data analysis consisted of two separate graphics. The first graphic, a table, was organized to juxtapose adverse side effects and positive outcomes for the three treatments for comparison purposes. The second figure, a bar graph, was used to compare the recovery rates and frequency of use of the three treatments.

Table 1

Three Most Prevalent Treatments	Positive Outcomes	Adverse Side Effects
Cognitive Behavioral Therapy	- Skills can be incorporated into everyday life to help cope better with future stresses and difficulties (CBT Clinic).	- May feel physically drained as it requires one to confront situations rather than avoid which can lead to temporary anxiety (Mayo Clinic).
Exposure Therapy	- Empowers Veterans to work through painful memories in a safe, supportive environment, enabling them to participate in activities (Make The Connection).	- Difficult to work that causes people to feel and confront situations that they have worked hard to avoid, which may make symptoms worse especially when dealing with PTSD (WebMD).
Eye Movement Desensitization and Reprocessing Therapy (EMDR)	- Diminishing of emotionally charged reactivity, the enhancement of positive self-referencing thoughts, and the clearing of somatically experienced body sensations associated with the targeted memory (NCBI).	- Side effects: increase in distressing memories, heightened emotions or physical sensations during sessions, lightheadedness, vivid dreams, and the surfacing of new traumatic memories.

The qualitative table chart compares the positive outcomes vs. adverse side effects for the three most prevalent treatments of PTSD.

Table 2

Three Most Prevalent Treatments	Recovery Rates	Frequency Rates
Cognitive Behavioral Therapy (CBT)	- Regarding loss of diagnosis, 61% to 82.4% of participants treated with CBT lost their PTSD diagnosis and 26% more CBT participants than waitlist or supportive counseling achieved loss of PTSD diagnosis (NCBI, 2018).	- Approximately 68% of participants dropped out of treatment. Younger war Veterans were more likely to drop out from treatment than older veterans. Additionally, patients with negative attitudes toward mental health treatment were also more likely to drop out of treatment (Beck Institute for Cognitive Behavioral Therapy, 2021).
Exposure Therapy (ET)	- Researchers were assigned 234 veterans with combat-related PTSD to one of two groups. One received 90-minute PE therapy sessions, five days a week, for three weeks. The other study group also had daily PE sessions, plus various "modules" that extended the treatment to a full day. In the end, the trial found, both groups fared equally well. More than 60% of patients saw a substantial reduction in their PTSD symptoms soon after therapy ended, and the improvements were largely maintained for six months (US News).	- The problem with prolonged exposure is that it has a dropout rate that some researchers put at more than 50 percent, the highest dropout rate of any PTSD therapy that has been widely studied so far (Slate, 2015).
Eye Movement Desensitization and Reprocessing Therapy (EMDR)	- More than 30 controlled outcome studies on EMDR therapy have shown that it has positive effects as 90% of trauma survivors appeared to have no PTSD symptoms after just three sessions (EMDR Institute).	- There was a 0% dropout rate in the intensive treatment group. These findings are consistent with those of a meta-analysis reporting that EMDR therapy had a lower dropout rate than any other trauma-focused treatment that was evaluated.

The quantitative table charts consist of a comparison between the recovery rates and frequency of the treatments.

Discussions

After collecting qualitative and quantitative data, I had to compare the information from both of the tables. I specifically collected information from a total of eighteen sources for both qualitative and quantitative data. As for Table 1, I used a total of eight sources. When I was searching for sources, I evaluated them based on both short-term and long-term positive outcomes and adverse side effects. Side effects ranged from minor effects of being emotionally uncomfortable to a major effect of suicidality. I came to the conclusion of EMDR since the major positive effect was the diminishing of emotional charge reactivity and enhancement of positive thoughts, which would ultimately help to alleviate the increase in distressing memories, vivid dreams, new traumatic memories, and more of the negative effects of PTSD.

As for the second table, I used a total of seven sources. When I was looking for sources to use for the recovery rates, I utilized statistics that focused on the reduction of PTSD symptoms after going through the treatment sessions in order to best determine which is the most effective treatment. Most of the studies I included in my chart were from previous experiments and analyses. In addition, each of the different studies I utilized had different time frames. For instance, as for the recovery rates of exposure therapy, one study in 2018 found that the National Center for Biotechnology Information stated that exposure therapy achieved a loss of PTSD diagnosis at the end of the treatment. However, the US News consisted of 90-minute therapy sessions for five days a week stating that more than 60% of patients saw a reduction in PTSD symptoms after six months. Using sources from different timelines was beneficial for my research because this helped allow me to better measure the extent to which the treatment is beneficial both in the short term and long term. Based on the evaluation, I chose the treatment based on which statistics showed the largest recovery rates and a larger population for success rates. In the end, eye movement desensitization and reprocessing therapy had a 0% dropout in the given study group and the population that benefited from the treatment with more than 7 million people being treated successfully worldwide. As compared to cognitive behavioral therapy and exposure therapy, the NCBI states that EMDR therapy had a lower dropout rate than any other trauma-focused treatment that was evaluated.

A. Interview

After collecting data for the data analysis, the research moved on to the second step of the study - the interview. The interview is a qualitative research method involving two or more people asking questions to collect data (George, 2022). For the purposes of this study, this method was used to further validate my point on the extent to which the most effective treatment is currently being used across the New York State population. Throughout the interview process, there were multiple steps to be taken into consideration before starting the interview. First, I started off by contacting multiple veteran organizations across NYS such as the Veteran's Affairs and Veterans Health Alliance. However, due to not receiving responses, I contacted veteran therapists as well. Some key search terms used included: "Therapists", "PTSD", "Talk therapies", "Veterans", "New York State", "Cognitive Behavioral Therapy", "Exposure Therapy", and "EMDR". These search terms helped me to find therapists on PsychologyToday, the world's largest portal to psychotherapy; it includes free access to hundreds of thousands of professionals. Furthermore, once I was able to schedule an interview with the interviewee, I sent the Informed Consent Forms. I then had to use Voice Recording through the Voice Memo app via my computer to ensure all information was secured as well as Google Docs to type all the information gathered. This was the most efficient method to be able to best receive current information on treatments from professional veteran therapists and representatives. It also helped to best justify and support my ending result.

The interview part consisted was followed in a specific chronological order. The following individuals were given online consent forms via Google Docs for the participant's signature before conducting the interview with them. Furthermore, the inquiry did not cite the names and organizations of any participants in order to protect user anonymity. As shown in Figure 1, I asked a structured set of questions in order to gather additional qualitative data for veteran organizations in New York.

Figure 1

Figure 1 represents an image of six interview questions that I asked participants during my interview.

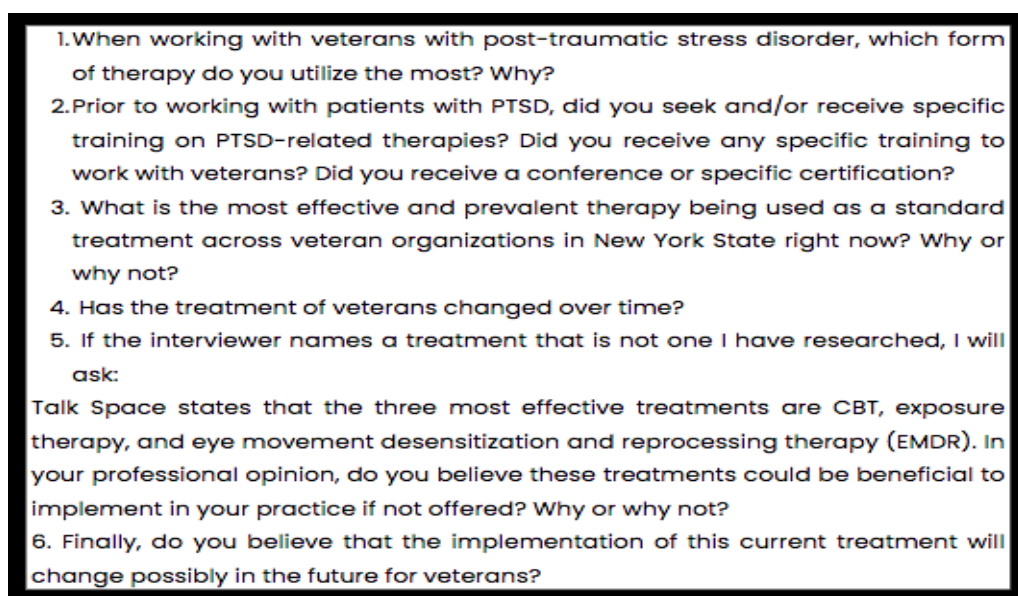
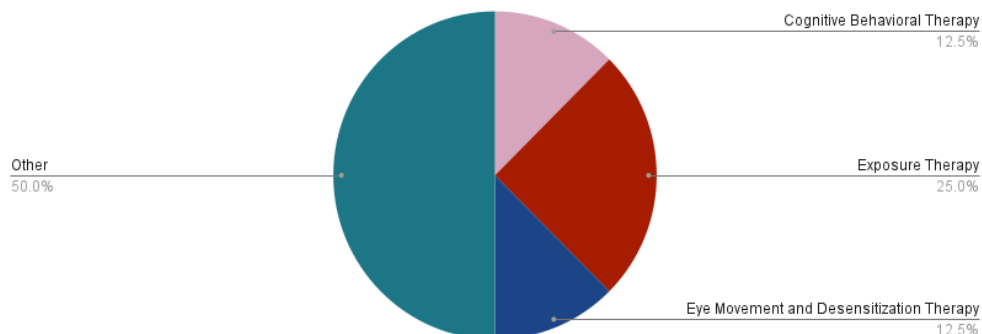


Figure 2

Figure 2 presents a pie chart with interview questions: (Cognitive Behavioral Therapy - Pink, Exposure Therapy - Red, Eye Movement and Desensitization Therapy - Blue, and Other - Green.)

Figure 2



The pie chart is presented to help visualize the researcher's interview responses based on the question: "When working with veterans with post-traumatic stress disorder, which form of therapy do you utilize the most? Why? (Figure 1)" All four sections are color-coded in chronological order from right to left. This consisted of cognitive behavioral therapy, exposure therapy, eye movement desensitization therapy, and other (multiple therapies or another therapy treatment). The interview consisted of 8 interviews in total. I utilized descriptive statistics to best describe, show, and summarize the basic features of a dataset found in a given study, presented in a summary that describes the data sample and its measurements (Simplilearn, 2023). Out of the 8 interviews, 12.5% stated that they would utilize cognitive behavioral therapy the most when dealing with veterans with PTSD. 25% stated that they would utilize exposure therapy the most. Finally, 12.5% stated they would utilize eye movement and desensitization therapy the most. However, some stated a therapy treatment that was not part of my research as one that they would utilize the most, which was put into the category of 'Other'. Thus, 50% of the participants stated a treatment either consisting of the combination of 2 or more treatments and other than the three most prevalent treatments of my research. Specifically, Participant 3 stated integrative psychotherapy, Participant 4 stated emotional talk therapy, Participant 7 stated cognitive processing therapy, and Participant 8 stated a combination of cognitive behavioral therapy and exposure therapy. With treatments other than the three most prevalent treatments I researched having the highest rates of utilization and popularity among the various therapists interviewed, this pattern in my interview results was beneficial for my research.

Results of Study

Therefore, the results of this study suggest that eye movement desensitization and reprocessing therapy (EMDR) is the most effective mental health treatment for veterans with PTSD. Through the examination of the data analysis, both qualitative and quantitative data indicate that EMDR had the highest success rates and little to no dropout rates with moderated side effects thus, suggesting that it is most beneficial for the mental well-being of veterans with PTSD.

Future Considerations

There are multiple implications for the future of veterans with PTSD as well as veteran therapists and representatives of organizations in the field that want to be knowledgeable in what the most effective long-term treatment may be. The first implication is that the results from the interview show that with half of the participants stating a treatment other than the three researched, there is not enough information to educate those that may not be aware of EMDR with only one participant stating they utilize it the most. Additionally, interview results further prove that more research may help to lead to EMDR getting more recognition and thus an increase in therapists recommending this specific treatment. Participant 6 stated, "The treatment I utilize the most in my practice is the prolonged exposure therapy because the Veterans Affairs has a whole center for it and their research recommends this however, I am not trained in EMDR to use it." This further proves that a factor behind some therapists not implementing or recommending EMDR is because they are not fully knowledgeable about it and due to the Veterans Affairs not funding this specific treatment, many in New York State do not have the access to get the necessary training and conferences needed. Additionally, the initial hypothesis was that cognitive behavioral therapy is the most effective treatment available to treat post-traumatic stress disorder (Veterans Affairs, 2015). Based on the results, this hypothesis was disproved thus, it can be concluded that with there being a high number of experienced severe side effects regarding cognitive behavioral therapy, this particular treatment may not be the most practical solution in increasing the mental well-being of veterans with PTSD. In fact, a 2014 study by NCBI, stated that EMDR is more effective than CBT for treating trauma that comes along with PTSD. With there being more people benefiting than suffering through eye movement desensitization and reprocessing therapy, this should be better utilized in mental health centers, practices, and hospitals that offer evidence-based talk therapies as interview responses did not say this particular treatment being the most utilized across New York State as well as an increase in awareness for the better well being of society.

Limitations of my Research

There were a few limitations obtained following the research I had gathered. The first main limitation was the small sample size of the interview part of my study. I have contacted a total of 8 veteran organizations and therapists experienced with evidence-based talk therapies, via email and phone calls. It was difficult to get responses from interviewees as most organizations do not offer evidence-based talk therapies. Instead, they tend only to offer non-clinical peer support to veterans. For instance, many of the veteran organizations with one being the Suffolk County United Veterans aimed to offer non-clinical peer support to veterans served through the Joseph P. Dwyer Veterans Peer Support Project (Suffolk County United Veterans). In addition, very few veteran therapists offered most or all three therapies in their private practices. Thus with there currently being a substantial lack of research and awareness on this particular mental health condition as well as the three most prevalent treatments, I have chosen to examine it. The second limitation was that there may be bias in the interview responses obtained. Although I asked credible individuals knowledgeable in the area of the topic, not all therapists and representatives of these organizations have been fully aware of the functions of all three most prevalent mental health treatments. So, this leaves the possibility of the interviewee choosing the treatment they offer at their own practice as the treatment they believe is the most currently utilized for veterans with PTSD. Thus, having more interviews would have strengthened my findings and possibly developed a more precise conclusion on the extent to which the most effective treatment is currently being utilized in veteran organizations across New York State. However, because I only collected professional opinions from individuals, it didn't affect the results section of my paper.

Works Cited

Admin. (2021, August 16). Exposure therapy vs. EMDR therapy. Retrieved January 16, 2023, from <https://discoverymood.com/blog/treating-trauma-exposure-therapy-vs-emdr/>

Cost-effectiveness of cognitive-behavioural therapy for mental ... Cost-Effectiveness of Cognitive-Behavioural Therapy for Mental Disorders: Implications for Public Health Care Funding Policy in Canada. (n.d.). Retrieved April 25, 2023, from <https://journals.sagepub.com/doi/pdf/10.1177/070674370605101006>

EMDR therapy: What it is, Procedure & Effectiveness. (n.d.). Retrieved January 23, 2023, from <https://my.clevelandclinic.org/health/treatments/22641-emdr-therapy>

Exposure therapy - type of therapy. (2021, September 04). Retrieved January 17, 2023, from <https://careersinpsychology.org/exposure-therapy/>

Freespira, I. (2021, November 10). Survey: 58% of veterans with PTSD still struggle with symptoms after treatment, only 9% feel fully recovered. Retrieved January 17, 2023, from <https://www.prnewswire.com/news-releases/survey-58-of-veterans-with-ptsd-still-struggle-with-symptoms-after-treatment-only-9-feel-fully-recovered-301420644.html>

Goodpath. (n.d.). *Does cognitive behavioral therapy (CBT) actually work?* Goodpath. Retrieved April 25, 2023, from <https://www.goodpath.com/learn/does-cbt-work>

Grossman, H. (2021, June 14). *Pretreatment predictors of dropout in war veterans receiving CBT for PTSD*. Beck Institute. Retrieved May 1, 2023, from <https://beckinstitute.org/blog/pretreatment-predictors-of-dropout-in-war-veterans-receiving-cbt-for-ptsd/>

Healthday. (2023, January 5). *3-week program effective in helping to ease combat-linked PTSD - US news*. Retrieved May 2, 2023, from <https://www.usnews.com/news/health-news/articles/2023-01-05/3-week-program-effective-in-helping-to-ease-combat-linked-ptsd>

History of EMDR. (n.d.). Retrieved January 17, 2023, from <https://www.emdr.com/history-of-emdr/>

Hurley, E. C. (2018, August 24). *Effective treatment of veterans with PTSD: Comparison between intensive daily and weekly EMDR approaches*. Frontiers in psychology. Retrieved May 1, 2023, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6117416/#B41>

Kelly Miller, B. (2022, December 28). CBT explained: An overview & summary of CBT (incl.. history). Retrieved January 17, 2023, from <https://positivepsychology.com/cbt/>

Mayo Foundation for Medical Education and Research. (2019, March 16). *Cognitive behavioral therapy*. Mayo Clinic. Retrieved May 1, 2023, from <https://www.mayoclinic.org/tests-procedures/cognitive-behavioral-therapy/about/pac-20384610#:~:text=You%20may%20cry%2C%20get%20upset,to%20temporary%20stress%20or%20anxiety.>

Morris, D. J. (2015, July 21). *The "Gold Standard" treatment for PTSD makes many people's symptoms worse*. Slate Magazine. Retrieved May 1, 2023, from <https://slate.com/technology/2015/07/prolonged-exposure-therapy-for-ptsd-the-vas-treatment-has-dangerous-side-effects.html#:~:text=The%20problem%20with%20prolonged%20exposure,been%20widely%20studied%20so%20far.>

Pros & Cons of CBT therapy. The CBT Therapy Clinic - Nottingham - West Bridgford. (n.d.). Retrieved May 1, 2023, from <http://www.thebctclinic.com/pros-cons-of-cbt-therapy>

PTSD statistics: How many veterans have PTSD? (2021, November 09). Retrieved from <https://www.cumberlandheights.org/blogs/ptsd-statistics-veterans/> Springer Publishing Company. (2021, January 13). *The history and evolution of EMDR therapy*. Springer Publishing. Retrieved May 1, 2023, from <https://connect.springerpub.com/content/book/978-0-8261-3117-1/part/part01/chapter/ch01>

Suffolk County united veterans. Mental Health and Wellness. (n.d.). Retrieved May 1, 2023, from <http://mhaw.org/programs/scuv/>

Va.gov: *Veterans Affairs*. How Common is PTSD in Veterans? (2018, July 24). Retrieved May 1, 2023, from https://www.ptsd.va.gov/understand/common/common_veterans.asp

Veterans on prolonged exposure therapy for PTSD. Make the Connection. (n.d.). Retrieved May 1, 2023, from <https://www.maketheconnection.net/read-stories/prolonged-exposure-therapy/>

Watkins, L. E., Sprang, K. R., & Rothbaum, B. O. (2018, October 15). *Treating PTSD: A review of evidence-based psychotherapy interventions*. *Frontiers*. Retrieved April 25, 2023, from <https://www.frontiersin.org/articles/10.3389/fnbeh.2018.00258/full>

WebMD. (2021, April 12). *Exposure therapy: What it is, how it can help, and more*. WebMD. Retrieved May 1, 2023, from <https://www.webmd.com/mental-health/what-is-exposure-therapy#:~:text=Some%20professionals%20believe%20that%20exposure,have%20worked%20hard%20to%20avoid.>

What is EMDR? EMDR. (n.d.). Retrieved May 1, 2023, from <https://www.emdr.com/what-is-emdr/>