Final Project Submission: Research Proposal

Anger and Post Traumatic Stress Disorder Among Military Veterans

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Introduction/Problem

Military veterans and PTSD associated with anger is an issue today. Veterans are not given adequate assistance with readapting to life after combat and experience with trauma associated with military life. Military veterans and their families are directly affected by PTSD and the associated anger. Some suffer from PTSD, and some are affected by the ones who are suffering. Stakeholders are the veterans, health care providers, family members, and those who develop the care plans for the veterans. These are all the people who are affected by those with anger and PTSD that need to be heard. Addressing the issues of PTSD among military veterans will help to develop an intervention. Exploring and identifying triggers and ways to cope with and identify PTSD and the associated with anger would be at the forefront. More importantly, ensuring that veterans and their families know when they need help, feel safe to do so, and that help is accessible. Anger, suicide, and drug addiction are all connected to PTSD.

There was a study led by Sudie E. Back, conducted on 81 military veterans being treated for PTSD, as well as substance use disorders, using psychotherapy to reduce feelings of anger and guilt. Participants were United States military veterans ranging from 18 to 65 years of age, predominately male (90.1%), and having served an average of 9.8 years in the military. Of the participating military veterans, 60.5% were White, 37% were African American, and 2.5% were more than one race or identified as being a part of another racial group. Participants were tested for currently having PTSD and substance use disorder using the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) and scored ≥ 50 and used alcohol or drugs within the last 90 days. The participants were given random COPE or RP treatments. COPE is a treatment that combines imaginal and in vivo exposure-based treatment for PTSD. RP is a cognitive based

intervention that helps patients learn how to manage substance use cravings and urges to prevent a relapse. The study found that, regarding anger and PTSD, anger is a result of suffering from PTSD. If PTSD symptoms are reduced, then anger is reduced. Anger was also found to make PTSD symptoms worse. Research limitations were the lack of attention to the emotional reaction to trauma (Saraiya, et. al., 2023).

Another study was approved by the Durham VA Health Care System and Duke University Medical Center Institutional Review Boards to test the use of the Mobile Anger Reduction Intervention (MARI) on military veterans with PTSD and ≥ 12 for elevated anger on the Dimensions of Anger Reactions (DAR-5). Military veterans with PTSD often become angry when they are in the belief that someone is behaving with hostility towards them, which the article refers to as hostile interpretation bias. MARI is meant to be a mobile way to help the military veteran to make favorable interpretations when in different situations. The study group consisted of 13 participants (11 by completion), divided into two groups. One group contained 5 participants, and the other group had 8 (6 by completion) participants. 10 participants were male and 3 were female between 40 and 74 years of age. There were 7 African American participants, 6 White participants, and 1 participant identifying as belonging to more than one racial group. 2 participants had a highest education level of high school, 3 had some college, 3 had an associate's degree, 2 had a bachelor's degree, and 3 had a graduate degree. 7 participants were employed and 6 were unemployed. The average score for participants for DAR-5 was 17. The study was conducted over the course of 4 weeks. The mobile application for MARI consisted of 20 ten-minute sessions with 42 training scenarios that allowed participants to monitor their own progress. Participants were required to complete a daily log at the end of their day to log if they used MARI, ease of use of the mobile application, possible barriers to using MARI, stress levels,

and how angry the felt. At the end of the 4-week study, 90% of the participants adhered to the completion of the treatment sessions with reports of decreased anger and hostile interpretation bias. There are limitations with such a small sample size (Dillon, et. al., 2024).

This resource is not related to military veterans, but those suffering from PTSD correlating to anger and other emotions. This study was approved by the local Bureau of Education and the Ethics Committee of the School of Psychology, Jiangxi Normal University and conducted in China from November 5, 2019, through December 24, 2019. The study participants consisted of 65 males and 86 females ranging from 18 to 63 years of age. 51% of the participants lived in rural areas and the remaining 49% lived in urban areas. 18.5% completed elementary school, 53.6% completed junior high school, 19.2% completed high school, and 8.6% had a college education or higher. Participants were screened for PTSD using the DSM-5 and other assessment tools for measuring PTSD. The study showed that anger is correlated to PTSD (Zhan, et. al., 2024).

Literature Review

Research Question

This literature review contains peer-reviewed scholarly resources that support the correlation between post-traumatic stress disorder (PTSD) and anger with military veterans. The purpose of the literature review is to use applied research in finding out if there is a correlation between PTSD and anger when it comes to military veterans. I propose an intervention that will address the societal problems that exist with military veterans that suffer from PTSD and anger. Whether there is a correlation between anger and PTSD in military veterans is the research question. The resources collected are current as they have been published within the last 5 years.

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Evaluate Topic Fit to Field

PTSD is a psychological disorder that can be found in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). PTSD is usually a possible cognitive impairment resulting from trauma. PTSD is not just based on military experience but can come from any trauma laden event within an individual's life. PTSD fits into the area of cognitive psychology. The cognitive processes are altered when experiencing symptoms of PTSD which can produce an adverse reaction, such as anger, in those suffering from PTSD.

Synthesize Research Findings

Sudie E. Back, of the Department of Psychiatry and Behavioral Sciences at the Medical University of South Carolina and the Ralph H. Johnson VA Medical Center in Charleston, South Carolina (Saraiya et al., 2023) was the lead for curating data and funding, investigation, methodology of the research study, project administration, and supervision for a study on whether guilt and anger are reduced by using COPE for military veterans diagnosed with PTSD and substance use disorder. COPE is a treatment that combines imaginal and in vivo exposure-based treatment for PTSD. Imaginal treatment is repetitiously reliving and reprocessing a traumatic experience to process the trauma to learn how to control emotional reactions, while in vivo exposure-based treatment involves revisiting the situation or place where trauma occurred to lessen triggers to regain normalcy.

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participating military veterans, 60.5% were White, 37% were African American, and 2.5% were more than one race or identified as being a part of another racial group. Participants were tested for currently having PTSD and substance use disorder using the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) and scored ≥ 50 and used alcohol or drugs within the last 90 days (Saraiya et al., 2023).

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Synthesize Research Findings

The study led by Sudie E. Back and the study using the MARI mobile application both used intervention methods that successfully decreased anger in military veterans which reduced PTSD symptoms. The studies focused more on the symptoms of PTSD and not just the trauma for military veterans. Increased anger was also found to worsen the symptoms of PTSD. The cause of anger was also explored in the Durham VA study. Perceived hostile acts caused anger in military veterans. Using MARI, military veterans learned a different way to look at situations other than automatic perceived hostility. Both studies provided for periodic treatment that taught military veterans coping mechanisms that reduced anger which was a direct correlation with their PTSD.

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Address Research Gaps

The limitations that were present in the research studies involving the correlation of PTSD and anger in military veterans are the lack of research when it comes to emotional reactions to trauma. Other research gaps are the possibility of PTSD diagnoses concealing other possible mental disorders. This can occur in military veterans having experienced violence and war since PTSD is prominent due to the possibility of related trauma. Exploring the background beyond military enlistment and experience may reveal trauma associated with childhood or other traumatic events.

The MARI intervention can be researched more to ensure effectiveness. The sample size being small and with only 90% of the remaining participants presents a limitation. The length of the study, being 4 weeks, does not procure enough data to measure the realistic effectiveness of

the mobile application. The MARI can be improved upon to use as a resource for military veterans managing PTSD and anger.

Research Design

Research Methods

Research methods that will be used are current research utilizing content analysis and case studies. The qualitative research method will be more suitable for gathering data on whether there is a correlation between PTSD diagnosis and anger in military veterans. PTSD is a psychological disorder that can be found on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). PTSD is usually a possible cognitive impairment resulting from trauma. PTSD is not just based on military experience but can come from any trauma laden event within an individual's life. PTSD fits into the area of cognitive psychology. The cognitive processes are altered when experiencing symptoms of PTSD which can produce an adverse reaction, such as anger, in those suffering from PTSD.

Support of Methods

The qualitative research method of using existing research is best for the research topic and intervention evaluation because prior studies have been implemented with military veterans. Existing research and data are geared towards assisting veterans and services implemented within the Veterans Administration as a result.

Qualitative research is valuable as it facilitates a comprehensive understanding of intricate human experiences, motives, and viewpoints by gathering rich contextual information through methods such as interviews and observations. This approach offers insights that are often

challenging to quantify with numerical data by itself, making it essential for investigating why and how questions rather than just identifying what is present. In essence, it amplifies the voices of participants' lived experiences, allowing researchers to modify their methods as new insights come about throughout the research process.

Strengths and Weaknesses

Using qualitative research may provide more details that will assist in developing new theories and the potential to further research. Weaknesses that exist in qualitative research is the possibility of bias in data interpretation and data analysis being complex. Qualitative research is very detailed and flexible. This method of research also can help uncover the "why' behind certain behaviors and experiences which can be useful for sensitive topics like PTSD and anger in veterans. Qualitative research also creates an opening into areas that have not yet been explored in research by presenting new possible research questions that would not have been answered before. In addition to bias and qualitative research as a weakness there also exists the amount of time that it may take to interpret data which can make qualitative research very time consuming. In addition to the consumption of time being relative to a weakness in qualitative research it is also hard to copy the research in a way that can be understood which can pose a challenge. What this means is that the research could not be reenacted. Additionally, the interpretation of the data could vary among researchers which would lead to different conclusions from the exact same data.

Data-Collection Tools

Data-collection tools that will be used will be content analysis of existing research and case studies. Text analysis will also be utilized. The PCL-5, which is the PTSD checklist for

DSM-5, is a 20 item self-reported measure assessment which assesses the 20 DSM-5 symptoms of PTSD. This assessment tool is used for monitoring symptoms during and after treatment for PTSD. Another tool that will be used is similar. The CAPS-5 is another reliable instrument for PTSD symptom assessment. The CAPS-5 is known for demonstrating strong consistency, validity, and reliability after a veteran has experienced a traumatic event.

Population and Sampling Procedures

When examining military veterans diagnosed with PTSD, the group typically consist of individuals who have served in the military and have received a diagnosis of post-traumatic stress disorder (PTSD). Sampling methods could incorporate approaches such as stratified random sampling based on variables like the era of service, military branch, level of combat exposure, and demographic factors, often utilizing easily accessible sources such as Veterans Affairs (VA) medical records or veteran registries. Attention must also be given to mitigate potential biases related to the behavior of those seeking treatment and their willingness to engage in research.

The focus group consists of military veterans who have received a PTSD diagnosis, which can be categorized further according to variables such as gender, age, era of service, and degree of combat exposure

Data Collection

Data will be relevant to PTSD and anger with military veterans as the population. There will be data on populations that experience PTSD and anger to provide further research into the

correlation between the two. Data may include case studies, focus group data, or articles that are relevant to the subject matter.

The resources collected will be from peer-reviewed scholarly resources that support the correlation between post-traumatic stress disorder (PTSD) and anger with military veterans. The purpose of the resources is to use applied research in PTSD and anger with military veterans to propose an intervention that will address the societal problem and ways to solve it. The resources collected are current as they have been published within the last 5 years. When gathering information about military veterans that are experiencing PTSD and anger through applied research, typical methods include clinical interviewing, self-reported assessments, psychological assessments, qualitative interviews, and longitudinal research, frequently employing established instruments while taking into account variables like exposure to combat, social and family support, and accessibility to healthcare with the VA to fully grasp the veteran's experiences and treatment requirements. The demographic data, PTSD symptom evaluation, symptoms, co-occurring mental health conditions, functional consequences, and qualitative data gathering are included.

Data-Analysis Process

Each data source will be categorized based on relevancy and interpretation. The data will then be compared and relevant information included in the overall content analysis of the data. The data analysis process for military veterans suffering from PTSD will include gathering comprehensive demographic and military service data, utilizing standardized PTSD measurement tools such as the PCL-5 (PTSD checklist for DSM-5), examining the severity and patterns of symptoms, detecting possible risk factors through correlations with demographic

information, and applying statistical techniques to assess treatment efficacy or factors linked to PTSD intensity. It would also help to emphasize the use of suitable instruments to capture veteran's distinct experiences, including details of any trauma they were exposed to and any co-occurring mental health issues, such as anger management.

The key components of the data analysis process would include data gathering, PTSD evaluation, co-occurring conditions, descriptive statistics, bivariate analysis, multivariate analysis, and treatment effectiveness evaluation. In data gathering the demographic details such as age, gender, race, ethnicity, branch of service, rank, deployment experience, and any details regarding possible combat exposure would be included. The PTSD evaluation would be the PCL-5 which is a self-reported questionnaire that gauges the severity of PTSD symptoms across various domains such as intrusion, avoidance, and negative changes in cognition and mood. CAPS-5, which is the Clinician-Administered PTSD scale for DSM-5, would be included as a clinician-led interview for a more thorough assessment of PTSD symptoms. Co-occurring conditions will evaluate depression, anxiety, substance misuse, or any other possible mental health issues such as anger. As far as descriptive statistics are concerned, this area would compute means, standard deviations, and frequencies of demographic variables and PTSD symptom scoring. Descriptive statistics would also explore symptom severity trends across different clusters of PTSD symptoms. And bivariate analysis there would be an investigation of correlation between demographic elements such as length deployment and or combat experience and PTSD symptom intensity which will study the association between PTSD symptoms and anger. In multivariate analysis there will be a regression analysis which would determine which factors like deployment, or social support, or coping strategies would be deemed the most significant predictors of PTSD severity associated with anger. With logistic regression the

likelihood of being diagnosed with PTSD would be assessed based on demographics and clinical variables. With treatment effectiveness being evaluated PTSD symptom scores will be compared before and after treatment for participants undergoing specific interventions such as MARI. This will help to identify factors that could forecast improved treatment results with continued use and improvement of the MARI application.

Justification of Statistical Analysis and/or Qualitative Analysis

PTSD, being correlated with anger in military veterans needs to be understood in a subjective and scientific way justified by research. Qualitative analysis allows research to provide a deeper exploration into the topic seeking out comparisons and further developments that may influence current or future research.

Limitations and Assumptions

The limitations of the research studies addressing the association between PTSD and rage in military veterans include a lack of study into emotional reactions to trauma. Other research gaps include the likelihood that PTSD diagnosis disguise other potential mental problems. This can happen to military veterans who have encountered violence and battles, since PTSD is common owing to the probability of connected trauma. Exploring history beyond military enlistment and experience may uncover trauma from childhood or other traumatic occurrences.

Obstacles in studies with veterans with PTSD are social stigma linked to mental health issues. Certain veterans might hesitate to engage in research because of this stigma that is associated with PTSD. Veterans currently looking for treatment for PTSD may be more inclined to take part in studies, which could introduce a bias. This is indicative of treatment seeking

behavior. Another obstacle is access to information. Acquiring precise and comprehensive data about veteran populations can be difficult due to the limitations of available records and regulations surrounding patient privacy.

Dissemination of Findings

The link between PTSD and fury in military veterans might create familial problems. Reducing PTSD can help military veterans minimize their anger, allowing them to connect with their families and society in a healthy manner. Findings will be disseminated to relevant stakeholders, users, and interested parties by publication. The MARI intervention is one technique for war veterans to alleviate their PTSD symptoms and anger. MARI has been tested on military veterans to develop and get input from the mobile application's intended users (Dillon et al., 2024). Continued research and focus groups can further the development and implementation of MARI.

Ethical Considerations

Informed consent, confidentiality, anonymity, potential for harm, responsible interpretation, data privacy, and making sure the research is not used to exploit or discriminate against individuals or groups are all important ethical considerations when conducting qualitative analysis using content analysis. It is also important to be aware of the power dynamics between the researcher and participants, particularly when analyzing sensitive topics.

Other important considerations are cultural sensitivity and collaboration with VA healthcare providers. Recognizing the unique experiences and cultural nuances of different veteran groups applies to cultural sensitivity. Partnering with VA clinicians can facilitate access

to a diverse veteran population and ensure appropriate screening and referral processes which are applicable to collaboration with VA healthcare providers.

Conclusion

The correlation between PTSD and anger in military veterans can cause family issues. Reducing PTSD can reduce anger in military veterans so that they are able to interact with family and society in a healthy way without feeling angry. The MARI intervention is one way that military veterans can improve their PTSD symptoms and their anger. MARI has been tested on military veterans to improve and to glean feedback from the targeted users of the mobile application (Dillon et al., 2024).

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