

Kirmser Research Award Essay

Morgan Doane, Cate Alling, Symone Simmons, & Rylie Yoakum

Department of Sociology, Anthropology, and Social Work,

Kansas State University

April 24, 2025

Selecting and Refining the Topic

When deciding our group's topic, we looked at various ideas that aligned with our shared interests. All our group members are studying social work to some degree, and as future practitioners, we know that issues like PTSD, substance abuse, and homelessness are common areas of concern when working with clients. We began by brainstorming how these topics could be interconnected in a meaningful research question.

Before finalizing our topic, we conducted a pre-literature review to explore existing studies on these issues. This step helped us better understand the scope of current research, what connections had already been explored, and more importantly, where gaps existed.

As we reviewed the existing literature, we realized that “veterans” as a category was too broad. We wanted to ensure that our focus was specific, inclusive, and relevant to a population experiencing a unique combination of challenges. Through discussion and further research, we narrowed our topic to homeless war veterans, a group often underrepresented in research despite being highly vulnerable. This focus allowed us to look specifically at how PTSD and substance abuse intersect in this population, and the pre-literature review confirmed that there was a meaningful gap in studies that addressed all three aspects together-PTSD, substance abuse, and homelessness among war veterans.

Research Strategies

For our research proposal our overall strategy for finding information on our topic was to do some research on scholarly articles and databases that have already been conducted in similar studies. We made an excel sheet to help us stay organized when we found different quotes, key findings, authors, methods, theories, and more. This helped us keep track of different studies and helped us find key findings that would help to advance our known study. A resource that was

significantly helpful during our research process was the K-State Hale Library resource to find our DSM-5 checklist. This is a questionnaire that measures the individual and their substance abuse disorder. This was a significant part of our process because to conduct a proper research study there must be tools in which participants can respond so that the research can be relevant and accurate.

Library Research Tools

My research group got good at using the online tools of K-State's Hale Library which served as our main research catalog. A combination of the library's easy-to-use interface and access to extensive full-text databases was a key factor behind how we got to examine the subject through a multitude of perspectives. We used several databases extensively: The project benefited from unique contributions provided by PsycINFO and Academic Search Premier.

We depended on PsycINFO to find peer-reviewed research about mental health issues, trauma studies and diagnostic tools such as the PTSD Checklist for DSM-5 (PCL-5), which is used to evaluate the severity of clients' PTSD symptoms. Subject-specific filters enabled us to filter the search results to target studies involving veterans and clinical populations with substance use.

The range of Academic Search Premier made it essential for integrating social work and public health perspectives and gave the research group more overall clarity on what the gaps currently were. Our investigation established its basis in intervention strategies through sources found on this database and we shaped our research accordingly.

Finally, the team also reviewed the Research Guides from K-State Libraries that pointed out starting points for psychology, social work, and military studies topics. The research guides

directed the team to useful databases while also providing useful citation tools and search tutorials that enhanced everybody's research efficiency.

Finding Information

One challenge the literature review presented was separating correlation from causation. Although we found various studies that reported a "strong association" between PTSD and substance use among veterans, little research was able to determine whether PTSD was a cause for substance abuse or vice versa (substance abuse came before PTSD). Another possibility could be both issues developed at the same time because of shared risk factors and traumatic experiences. Our team focused on looking for mixed-method studies to better understand how PTSD and substance use disorders develop over time and whether one influences the other. Research using both self-report instruments like the PTSD Checklist for DSM-5 (PCL-5) and formal diagnostic criteria was relied upon for more dependable and unique data that the research team used.

The strategies we developed helped us tackle immediate challenges, and over time, the process of refining our research methods became an ongoing learning cycle throughout the project. Over time, the team increased the effective research that was discovered through proactive problem-solving and constantly learning new methods to conduct a literature review. For example, after struggling to find sources that directly connected substance abuse and PTSD among homeless veterans, we refined our search terms by using Boolean operators and used new databases like PsycINFO which led us to more targeted and high-quality studies.

Evaluation Information

Our group prioritized credibility during the entire process of compiling our sources. Before reading an article, we first checked if it had undergone a peer-review process and was

published in a scholarly journal. Using academic databases helped ensure that our sources came from credible academic journals.

We also emphasized reliability by carefully examining the research methods used in the studies we reviewed. We asked questions such as: Were the sample sizes adequate? Did the researchers use validated tools such as the PTSD Checklist for DSM-5 (PCL-5)? Did the authors acknowledge any limitations or potential biases in their study? Any article that did not reveal their methods clearly or showed signs of bias was obviously excluded from our review.

Equally important was our focus on relevance. At the beginning of the semester, our group included any academic article that appeared loosely connected to our topic or population. However, as we gained a deeper understanding of our research question, we became more selective in our selection. We only included studies that directly addressed the intersection of PTSD, substance abuse, and homelessness among veterans. This sharpened focus significantly and improved the quality of our literature review.

Our decision to prioritize relevance, reliability, and credibility allowed us to finalize a proposal that was evidence-based and aligned with the present-day needs in social work.

Conclusion

Throughout the time that it took for the research team to conduct a literature review and finalize the research proposal, everyone on the team can acknowledge personal growth and increased drive to be aspiring social workers and undergraduate researchers. Everyone on this team started this project without prior experience with conducting literature reviews or research proposal development. However, through this experience, we gained extensive knowledge about how to conduct effective library research. We moved beyond basic strategies by learning how to identify credible academic sources, navigate databases efficiently, and evaluate literature

critically to support our research focus.

One of the most valuable lessons from this experience came early on when our professor was teaching us how important academic research was to the field of social work. Without it, social work practitioners might as well be looking for needles in a haystack, because our biggest questions get answered through academic research. All research continues to influence practice, policy, our wealth of knowledge, and the health and wellbeing of our clients. Our group's experience working together also taught us how important communication and shared responsibility are to a team's effectiveness. Through our combined efforts, we achieved much more than any individual working alone could have with this research project.

Our research project this semester has motivated us to keep pursuing more research opportunities and further professional development. Meaningful research requires more in-depth questions and curiosity directed towards the needs of vulnerable groups like homeless veterans from the military for example. The most meaningful thing that the team experienced from this project was the newfound dedication to continual education, learning, and serving others.

PTSD and Substance Abuse among Homeless War Veterans

Morgan Doane, Cate Alling, Symone Simmons, & Rylie Yoakum

Department of Sociology, Anthropology, and Social Work,

Kansas State University

April 5, 2025

Abstract

This research study aims to understand the correlation between PTSD and substance abuse among homeless war veterans. By utilizing a mixed method design, this study focuses on how individuals that experience PTSD will also likely experience a substance abuse disorder at some stage in their lives. This study hypothesizes that homeless war veterans who have PTSD are more at risk of having a substance abuse disorder. We will recruit 200 participants for a 15-minute survey which will include the PCL- 5 questionnaire, examining the severity of PTSD and the Drug Abuse Screening Test (DAST-10) in addition to several socio-demographic questions. Around 20-30 participants will be invited to take part in in-depth interviews to provide further insights into their personal experiences and perceptions regarding PTSD and substance abuse. The findings from this study will provide a deeper understanding of the high rates of co-occurring PTSD and substance use disorders among homeless war veterans.

PTSD and Substance Abuse among Homeless War Veterans

Introduction

Veterans returning from military service experience various obstacles when regaining some sort of normal civilian life. All this distress is due to physical injuries and psychological trauma inflicted from service and makes it harder for veterans to readjust (Brewin, 2000; Hoge et al., 2004). Homeless veterans face especially severe difficulties compared to other veterans. Research spanning multiple decades has revealed that veterans face higher levels of homelessness than their civilian counterparts (Perl, 2015). Five distinct studies found consistent evidence that veterans face higher homelessness rates than nonveterans (Perl, 2015). About 610,000 people face homelessness in the United States with veterans making up almost 10% of this population (Dunne, 2020).

The existence of mental health disorders, particularly Post-Traumatic Stress Disorder (PTSD), acts as a connecting factor that makes individuals more susceptible to both homelessness and substance abuse problems. Veterans face nearly impossible recovery and stability due to PTSD compounded by limited access to mental health services and social reintegration difficulties after service (Sayer et al., 2010). Moreover, research conducted by (Seal et al., 2011) showed that veterans experience much higher levels of PTSD and substance abuse due to combat exposure, traumatic brain injuries, and psychological distress when compared to the general population of civilians and their physical and mental health records. The difficulties veterans experience deteriorates their overall well-being while also simultaneously raises the probability they experience other disorders (Seal et al., 2011).

This research that we will be investigating is understanding the correlation between substance abuse within the population of homeless war veterans. Social work practitioners

among other healthcare professionals serve as frontline responders to homeless veterans and need to develop a deeper understanding of this correlation. Social workers who tackle PTSD and substance abuse together create stronger trauma-informed interventions with patients while advocating for policy changes that expand veterans' mental health care options and provide better substance abuse treatment. This research will support practices, interventions, and policies which both decrease homelessness rates and help make lasting results for war veterans who face PTSD and addiction challenges.

Literature Review

PTSD, a common psychological outcome of military service, has been linked to substance abuse. PTSD will be defined as "a complex and chronic disorder caused by exposure to a traumatic event, is a common psychological result of current military operations" (Tang, year). Substance abuse disorders can be defined as "The problematic uses of alcohol, tobacco, or illicit drugs" (Mersey, 2003) other researchers have defined it as "A neuropsychiatric disorder characterized by a recurring desire to continue taking the drug despite harmful consequences" (Zou, 1970).

PTSD and Substance Abuse Disorders

Multiple studies have examined the correlation between substance abuse disorder and PTSD among homeless war veterans (Hoge et al., 2004; Tsai & Rosenheck, 2015; Sayer et al., 2010; SAMHSA, 2020). Military service members who battle with combat trauma usually develop PTSD because of the intense psychological and emotional stress they experience during active duty (Hoge et al., 2004). Veterans who suffer from both PTSD and SUDs often struggle to reintegrate into civilian life due to the combined effects of trauma and addiction, which frequently result in job loss, housing instability, and deteriorated relationships (Tsai &

Rosenheck, 2015). Transitioning from military to civilian life introduces numerous challenges such as managing finances, navigating healthcare systems, and assuming individual responsibility without the structured support of the military (Sayer et al., 2010). Homeless veterans in particular face multiple overlapping challenges. Research indicates that approximately 70% of homeless veterans are affected by substance use disorders, while nearly 50% experience mental health disorders, demonstrating a significant co-occurrence between these issues (SAMHSA, 2020). The dual impact of PTSD and substance use amplifies the risk of homelessness, as affected individuals often face difficulty securing employment or maintaining stable housing (O'Toole et al., 2016)

Studies have shown that PTSD severely disrupts both personal and social functioning. For example, a study by Brewin et al. (2000) found that individuals with PTSD demonstrated significantly lower levels of life satisfaction, increased social withdrawal, and difficulties maintaining relationships. Similarly, Smith et al. (2005) reported that veterans with PTSD were more likely to experience social isolation and report lower quality of life scores. Furthermore, a study by Fontana and Rosenheck (2005) demonstrated that the longer the duration of untreated PTSD, the more likely individuals were to experience chronic unemployment, increased substance use, and estrangement from family.

Self-Medication Theory

The Self-Medication Theory (Khantzian, 1985) offers health professionals an approach to understand PTSD's connection to substance abuse in homeless military veterans. The theory states that individuals with mental disorders, such as PTSD, resort to using an array of substances to manage their symptoms (Khantzian, 1997). The Self-Medication theory explains how substance use does not develop from impulsive actions or social environmental elements.

Instead, individuals with mental disorders intentionally consume these substances to improve their physical and mental distress. Over time, this substance use can develop into abuse (Khantzian, 1997). Veterans with PTSD often experience symptoms such as hyperarousal, intrusive thoughts, and emotional dysregulation which displays itself in general feelings of intense distress (Haller, 2020). The theory indicates that individuals suffering from these symptoms may use alcohol or drugs for short-term relief, greatly increasing the risk of developing substance use disorders (Vujanovic, 2023).

Research Question & Hypothesis

Research on PTSD and substance use disorders in veterans is extensive, but there are gaps in information about homeless military veterans. Most of the research examines the veteran population as a whole or those veterans who receive clinical treatment which results in lackluster information about PTSD and substance use disorder interaction within the veteran subgroup dealing with homelessness (Perl, 2015; Sayer et al., 2010). Research to date uses studies based off self-reported data that may have some bias or underreporting because of the stigma linked to mental health and substance use (Jacobsen et al., 2001; Seal et al., 2011). To fill this gap, our study investigates how post-traumatic stress disorder (PTSD), and substance abuse disorders (SUDs) interact among war veterans who currently live without homes. This research aims to answer the question: How does PTSD relate to substance abuse disorders in homeless war veterans? We hypothesize that homeless war veterans who suffer from PTSD have an increased chance of developing substance use disorders which worsens their ability to secure stable housing and jobs.

Research Methods

Research Design

Our research will utilize mixed methods to investigate how PTSD connects with substance abuse in homeless war veterans. Our research approach combined quantitative and qualitative methods to collect diverse data from study participants. The research's quantitative part will use a self-administered cross-sectional survey questionnaire to collect data about PTSD frequency patterns with substance use. The qualitative component of the research will carry out detailed interviews with selected participants to understand their personal experiences and obstacles connected to homelessness and PTSD combined with substance abuse.

Participants

The study will recruit 200 participants from war veteran support groups who have lived through homelessness and PTSD. Participants aged between 45 and 80 years will be randomly chosen to create a diverse sample. Participants will receive assurance about their confidentiality prior to participating in the study. Individuals who served in the military and have experienced homelessness at any time in their lives are eligible to participate. Participants need to disclose any PTSD history when participating in their veteran support group. In addition, in-depth interviews will be conducted with 20-30 participants. Those who meet these criteria will be invited to participate in one of the other quantitative and qualitative aspects of the study, or both if they would like.

Measurements

The research team will use the PTSD checklist using the PCL-5 assessment tool developed by the U.S. Department of Veterans Affairs (2025). The PCL-5 is a popular self-report tool which evaluates PTSD symptoms through the established DSM-5 diagnostic standards. Additional demographic questions will be included in the survey to gather information about participants' backgrounds for researchers to better understand the participant. The

participants of this survey will use a seven-point Likert scale to evaluate the severity of their PTSD symptom and its intensity from the previous month with "1" meaning "Strongly Disagree" and "7" meaning "Strongly Agree". The full PTSD assessment evaluates the 11 different domains of the test resulting in scores between 11 and 77 points with higher scores showing more severe PTSD symptoms (U.S. Department of Veterans Affairs, 2025). The tool does not offer an official PTSD diagnosis but if scores exceed 30 it shows severe symptoms needing professional assessment. Participants will get the self-report survey in paper format which they will only need within five to ten minutes to finish. The PCL-5 scores also exhibited strong additional psychometric properties that validated the consistency of the test with Cronbach's Alpha measuring internal consistency of .94, test-retest reliability of .82, a convergent of .74 to .85, and discriminant validity between .31 to .60 (Blevins et al., 2015). Some example questions on our questionnaire will be "in the past month, have you had nightmares about the event(s) or thought about the event(s) when you did not want to?" Also, "in the past month, have you been constantly on guard, watchful, or easily startled?"

The Drug Abuse Screening Test (DAST-10) developed by Skinner (1982) serves as our standardized and validated 10-item test to evaluate substance abuse. Participants must answer every item with either "yes" or "no" which results in a cumulative score that can be anywhere between 0 and 10. An increase in the test score indicates greater severity of drug use consequences. The DAST-10 functions as an ordinal measurement because it categorizes substance use severity through ranking while not having any consistent intervals between the scores. The measure displays strong internal consistency reliability since its Cronbach's alpha value reached .92 (Skinner, 1982). Participants should expect to complete this questionnaire section within 5 to 7 minutes.

The research team will also conduct interviews using a developed interview guide for the qualitative side of the study. The interview guide will use open-ended questions which investigate participants' experiences relating to PTSD along with their substance use and homelessness. The interviews will take place face-to-face or via video calls and will last for 30 to 45 minutes. Each interview session will be recorded with the participant's consent for research analysis.

Data Collection Procedures

After obtaining the IRB approval, we will recruit participants. We will reach individuals that are involved in the Veterans Association of America and Veteran support groups. We will contact these organizations via phone call and email. We will explain to the organizations that we are looking for individuals to fill out a survey questionnaire and to conduct interviews emphasizing the importance of confidentiality with regards to the research. To collect the data, we will administer an ethically approved self-administered survey questionnaire to a randomly selected sample individual from veteran support groups. Confidentiality will be ensured to all respondents by assigning them with identification numbers. Once these organizations show the interest from individuals, we will then be sending physical paper surveys for their screening. We will request that the surveys be sent back to us within a week and signed with a pen to ensure quality and to avoid any identity falsification. Interested eligible participants and the ones who volunteer to fill out the survey will then be asked to do an in-person interview, with no pressure to the participants, giving them the choice to take part. We will gather more information on their personal story with substance abuse and PTSD. Trained interviewers will meet with these individuals where they feel comfortable such as the public library, organizations community rooms, etc. We will explain that the involvement in this study will help improve veteran support

overall and will lead to more resources and help that is necessary. A semi-structured interview questions will be prepared and shared with the participants.

Expected Results

As we hypothesize, we expect to see that PTSD will have a positive correlation with substance abuse in homeless war veterans. Previous research shows that PTSD patients develop substance use disorders because they use substances to handle their traumatic experiences. War veterans often use alcohol or drugs to cope with PTSD-related flashbacks and anxiety as well as emotional numbness (Ouimette, 1998; Jacobsen, 2001). The Self-Medication Theory also supports this (Khantzian, 1997). Therefore, applying healthier coping strategies for PTSD will decrease substance reliance and support long-term recovery. The relationship between these factors will show that veterans with PTSD are more susceptible to developing SUDs which together lead to higher rates of homelessness among them.

Discussion

The research addresses a vital topic on examining how PTSD and substance use disorders interact among war veterans who experience distinct challenges like homelessness. Data collection encounters specific challenges when working with veterans suffering from PTSD and SUDs. The study faces recruitment challenges because veterans might avoid participation due to the associated stigma and fear of being judged at all during the process. This research study offers the benefit of being both anonymous and fully elective for participants. The study's confidentiality and voluntary nature should help diminish participation reluctance and promote transparent and truthful answers from participants. Sadly, this condition is quite common but makes it easier to discuss and be open when taking part, knowing it is comforting to know these individuals are not alone throughout these specific struggles. When everyone is filling out our

questionnaire, they will be able to really reflect their specific emotions and how the insignificant details are there to help acknowledge their symptoms and the intensity of their PTSD. A large strength of this study is filling important research gaps by linking PTSD with substance abuse specifically within veterans. The result of this study allows the understanding and connection of the dots between PTSD and drug abuse specifically within veterans. Which then, can contribute to this targeted population and using specific strategies as well as resources to help this issue.

Conclusion

This research examines how PTSD and substance use disorders correlate among homeless war veterans who face added vulnerability and remain underrepresented in academic studies and policymaking. The current body of research examines trauma and substance abuse connections yet pays limited attention to this group. The research question guiding this study is: This study investigates the relationship between homeless war veterans who suffer from substance abuse disorders and PTSD. We believe that PTSD-diagnosed veterans tend to develop substance use disorders because they use substances to manage their symptoms obtained from service. Our research will use a mixed-methods strategy that combines quantitative surveys for PTSD and SUD prevalence assessment with qualitative interviews to explore veterans' individual experiences. Our approach provides an all-encompassing grasp of the issue. The investigation depends on voluntary and anonymous participation to both keep ethical integrity and increase the quality and richness of the collected data. We expect to discover a committed relationship between PTSD symptoms and substance usage among homeless veterans. Results from this research show opportunities to enhance policy through the implementation of trauma-informed care and dual-diagnosis treatment methods that tackle both PTSD and substance abuse prevention or treatment. This research can inspire early development of intervention methods as

well as more support resources that are specifically designed for veterans of all backgrounds and their needs. Even though our data's scope may be influenced by self-reporting biases, our study will still provide significant information about a critical field of study. Our study supports veterans by addressing research gaps from earlier literature and expanding on current data that will hopefully influence policy, and in turn help the veterans' health and wellbeing.

References

- Back, S. E., Killeen, T. K., Teer, A. P., Hartwell, E. E., Federline, A., Beylotte, F., & Cox, E. (2014). Substance use disorders and PTSD: An exploratory study of treatment preferences among military veterans. *Addictive Behaviors*, 39(2), 369–373. <https://doi.org/10.1016/j.addbeh.2013.09.017>
- Blevins, C. A., Weathers, F. W., Davis, M. T., Witte, T. K., & Domino, J. L. (2015). The Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5): Development and Initial Psychometric Evaluation. *Journal of Traumatic Stress*, 28(6), 489–498. <https://doi.org/10.1002/jts.22059>
- Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology*, 68(5), 748–766. <https://doi.org/10.1037/0022-006X.68.5.748>

- Dunne, E. M., Burrell, L. E., Diggins, A. D., Whitehead, N. E., & Latimer, W. W. (2015, October). Increased risk for substance use and health-related problems among homeless veterans. *The American Journal on Addictions*.
<https://pmc.ncbi.nlm.nih.gov/articles/PMC6941432/>
- Dunne, G. (2020). Veterans and homelessness in the United States: Current statistics and challenges. National Coalition for Homeless Veterans. <https://nchv.org/>
- Farris, S. G., Vujanovic, A. A., Bartlett, B. A., Lyons, R. C., & Haller, M. (2022). Post-traumatic stress disorder and substance use disorder comorbidity: A review of recent findings. *European Journal of Psychotraumatology*, 13(1), 2258312.
<https://doi.org/10.1080/20008066.2023.2258312>
- Fontana, A., & Rosenheck, R. (2005). The role of war-zone trauma and PTSD in the etiology of antisocial behavior. *The Journal of Nervous and Mental Disease*, 193(3), 203–209.
<https://doi.org/10.1097/01.nmd.0000154830.70090.e4>
- Griffin, J. B., & Jr. (1990, January 1). Substance abuse. *Clinical Methods: The History, Physical, and Laboratory Examinations*. 3rd edition.
<https://www.ncbi.nlm.nih.gov/books/NBK319/>
- Haller, M., Norman, S. B., Cummins, K., Trim, R., Xu, X., Cui, R., & Tate, S. R. (2020). Integrated cognitive behavioral therapy versus cognitive processing therapy for adults with depression, substance use disorder, and trauma. *Journal of Substance Abuse Treatment*, 46(2), 166–173. <https://doi.org/10.1016/j.jsat.2013.08.012>
- Hoge, C. W., Castro, C. A., Messer, S. C., McGurk, D., Cotting, D. I., & Koffman, R. L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *New England Journal of Medicine*, 351(1), 13–22. <https://doi.org/10.1056/NEJMoa040603>

- Jacobsen, L. K., Southwick, S. M., & Kosten, T. R. (2001). Substance Use Disorders in Patients with Posttraumatic Stress Disorder: A Review of the literature. *American Journal of Psychiatry*, 158(8), 1184–1190. <https://doi.org/10.1176/appi.ajp.158.8.1184>
- Khantzian, E. J. (1997). The self-medication hypothesis of substance use disorders: A reconsideration and recent applications. *Harvard Review of Psychiatry*, 4(5), 231–244. <https://doi.org/10.3109/10673229709030550>
- Mersy, D. J. (2003, April 1). Recognition of alcohol and substance abuse. *American Family Physician*. <https://www.aafp.org/pubs/afp/issues/2003/0401/p1529.html>
- Nina A. Sayer, Ph. D., Siamak Noorbaloochi, Ph. D., Patricia Frazier, Ph. D., Kathleen Carlson, Ph. D., Amy Gravely, M. A., Maureen Murdoch, M. D. (1970, June 1). Reintegration problems and treatment interests among Iraq and Afghanistan combat veterans receiving VA Medical Care. *Psychiatric Services*. <https://psychiatryonline.org/doi/10.1176/ps.2010.61.6.589>
- Ouimette, P. C., Finney, J. W., & Moos, R. H. (1999). Two-year posttreatment functioning and coping of substance abuse patients with posttraumatic stress disorder. *Psychology of Addictive Behaviors*, 13(2), 105–114. <https://doi.org/10.1037/0893-164x.13.2.105>
- Perl, L. (2015). Veterans and homelessness (CRS Report No. RL34024). Congressional Research Service. <https://sgp.fas.org/crs/misc/RL34024.pdf>
- Seal, K. H., Cohen, G., Waldrop, A., Cohen, B. E., Maguen, S., & Ren, L. (2011). Substance use disorders in Iraq and Afghanistan veterans in VA healthcare, 2001–2010: Implications for screening, diagnosis, and treatment. *Drug and Alcohol Dependence*, 116(1-3), 93–101. <https://doi.org/10.1016/j.drugalcdep.2010.11.027>

- Sayer, N. A., Carlson, K. F., & Frazier, P. A. (2010). Reintegration challenges in U.S. service members and veterans following combat deployment. *Social Issues and Policy Review*, 4(1), 213–233. <https://doi.org/10.1111/j.1751-2409.2010.01022.x>
- Smith, M. W., Schnurr, P. P., & Rosenheck, R. A. (2005). Employment outcomes and PTSD symptom severity. *Mental Health Services Research*, 7(2), 89–101. <https://doi.org/10.1007/s11020-005-3780-2>
- Substance Abuse and Mental Health Services Administration. (2020). Veteran homelessness facts and figures. U.S. Department of Health and Human Services. <https://www.samhsa.gov>
- Tsai, J., & Rosenheck, R. A. (2015). Risk factors for homelessness among US veterans. *Epidemiologic Reviews*, 37(1), 177–195. <https://doi.org/10.1093/epirev/mxu004>
- U.S. Department of Veterans Affairs. (2025). PTSD Checklist for DSM-5 (PCL-5). (2018, September 24). <https://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp>
- Vujanovic, A. A., Farris, S. G., Bartlett, B. A., Lyons, R. C., & Haller, M. (2023). Post-traumatic stress disorder and drug use disorder: A comprehensive review. *European Journal of Psychotraumatology*, 14(1), 2258312. <https://doi.org/10.1080/20008066.2023.2258312>
- Xue, C., Ge, Y., Tang, B., Liu, Y., Kang, P., Wang, M., & Zhang, L. (n.d.). A meta-analysis of risk factors for combat-related PTSD among military personnel and Veterans. *PLOS ONE*. <https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0120270>
- Zou, Z., Wang, H., Uquillas, F. d'Oleire, Wang, X., Ding, J., & Chen, H. (1970, January 1). Definition of substance and non-substance addiction. SpringerLink. https://link.springer.com/chapter/10.1007/978-981-10-5562-1_2

**Appendix A:
INFORMED CONSENT FORM**

PROJECT TITLE:

Substance abuse and PTSD among war veterans

**PROJECT
APPROVAL DATE:****PROJECT
EXPIRATION DATE:****LENGTH OF
STUDY:**

1 Year

**PRINCIPAL
INVESTIGATOR:**

Dr. Sim Jun

CO-INVESTIGATOR(S):

Symone Simmons, Morgan Doane, Cate Alling, Rylie Yoakum

**CONTACT DETAILS FOR
PROBLEMS/QUESTIONS:**

Emails can be sent to Rylie Yoakum at rayoakum@ksu.edu

**IRB CHAIR CONTACT
INFORMATION:**

comply@k-states.edu

PROJECT SPONSOR:**PURPOSE OF THE RESEARCH:**

Our research aims to explore the challenges faced by homeless war veterans dealing with PTSD and substance abuse. It seeks to understand the connection between trauma, addiction, and housing instability, evaluate current support services, and recommend more effective, targeted interventions. The goal is to inform policy and improve care for this vulnerable population.

PROCEDURES OR METHODS TO BE USED:

This study proposes to use a mixed-method approach to survey and interview 200 homeless war veterans who have experienced substance abuse and/or PTSD. Bilingual researchers will conduct survey interviews, and the collected data will be audio recorded and analyzed by these researchers with the consultation of other professionals. Interested participants will be contacted by the researchers to check eligibility and to make an appointment to conduct the survey interviews. Participants will choose a private, safe, comfortable place such as a class, conference room of a church, the library, or the participants home to meet and conduct the interviews. Researchers will explain the purpose and procedure and ask participants if they voluntarily sign the consent form. Then, the survey questionnaire will take around 15 minutes regarding background history, and your feelings from the past month. Then, 20-30 participants will be invited for in-depth interviews regarding perceptions, and more about what they've experienced after their time served. This will take about 30-45 minutes. After completing the interview surveys, each participant will receive \$50 to compensate for their time and effort.

BIOLOGICAL SAMPLES COLLECTED (Describe procedure, storage, etc.):

N/A

ALTERNATIVE PROCEDURES OR TREATMENTS, IF ANY, THAT MIGHT BE ADVANTAGEOUS TO SUBJECT:

N/A

RISKS OR DISCOMFORTS ANTICIPATED:

Participants may start to feel overwhelmed and anxious talking about their past trauma. To reduce this, the survey interviews will be conducted at the participants' preferred and comfortable place. Also, participants can take breaks if they want and may stop the interview at any point in time.

BENEFITS ANTICIPATED:

This study will ultimately provide evidence and information to allow preventive measures to be developed to combat homelessness in war veterans, but more specifically, those who deal with PTSD and substance abuse.

EXTENT OF CONFIDENTIALITY:

To protect confidentiality of participants, no identifying information will be collected in the survey interview. Only the assigned identification number will be shown on the survey. Any information about participants will be kept strictly confidential and be stored on a password-protected computer and secured in a safe file cabinet after completion of this project. After analyzing the interview data, audio recordings will be permanently deleted. The data will be available to only researchers, and only the overall results will be presented after the data analysis.

Identifiers might be removed from the identifiable private information, after such removal, the information could be used for future research studies or distributed to another investigator for future research studies without additional informed consent from the subject or the legally authorized representative, it this might be a possibility.

The information that will be collected as part of this research will not be shared with any other investigators.

This study will not collect biospecimen.

IS COMPENSATION OR MEDICAL TREATMENT AVAILABLE IF INJURY OCCURS? ☒ Yes ☐ No

**PARENTAL APPROVAL FOR
MINORS:****PARENT/GUARDIAN APPROVAL
SIGNATURE:**

--

DATE:

--

Terms of participation: I understand this project is research, and that my participation is voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time, and stop participating at any time without explanation, penalty, or loss of benefits, or academic standing to which I may otherwise be entitled.

I verify that my signature below indicates that I have read and understand this consent form and willingly agree to participate in this study under the terms described, and that my signature acknowledges that I have received a signed and dated copy of this consent form.

(Remember that it is a requirement for the P.I. to maintain a signed and dated copy of the same consent form signed and kept by the participant).

PARTICIPANT NAME:

**PARTICIPANT
SIGNATURE:****DATE:**

--

**WITNESS TO
SIGNATURE: (PROJECT
STAFF)****DATE:**

--

Appendix B: Survey Questionnaire Background and History Questions

1. What is your biological sex?
 1. Male
 1. Female
 1. Nonbinary
 1. Other
 1. Prefer not to say
2. Date of birth?
 _/ _/ _
3. Ethnic Background?
 1. White/Caucasian
 2. Asian
 3. Native Hawaiian or Pacific Islander
 4. Hispanic or Latino
 5. African American
 6. Native American/ Alaskan Native
 7. Other
4. What is your employment status?
 1. Employed Full-Time
 2. Employed Part-Time
 3. Self-employed
5. What is your socioeconomic status?
 1. Lower
 2. Middle
 3. Higher
 4. Other
 1. Explain:
6. Are you currently or have you ever struggled with any substance abuse?
 1. Yes
 2. No

Please read the following statements. Below each, you will find seven numbers, ranging from “1” (Strongly Disagree) to “7” (Strongly Agree). Circle the number that best indicates your feelings about that statement.

In the past month, have you....

1. Had nightmares about the event(s) or thought about the event(s) when you did not want to?

1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = Neither
 5 = Slightly Agree 6 = Agree 7 = Strongly Agree

2. Tried hard not to think about the event(s) or went out of your way to avoid situations that reminded you of the event(s)?

1 = Strongly Disagree	2 = Disagree	3 = Slightly Disagree	4 = Neither
5 = Slightly Agree	6 = Agree	7 = Strongly Agree	

3. Been constantly on guard, watchful, or easily startled?

1 = Strongly Disagree	2 = Disagree	3 = Slightly Disagree	4 = Neither
5 = Slightly Agree	6 = Agree	7 = Strongly Agree	

4. Felt numb or detached from people, activities, or your surroundings?

1 = Strongly Disagree	2 = Disagree	3 = Slightly Disagree	4 = Neither
5 = Slightly Agree	6 = Agree	7 = Strongly Agree	

5. Felt guilty or unable to stop blaming yourself or others for the event(s) or any problems the event(s) may have caused?

1 = Strongly Disagree	2 = Disagree	3 = Slightly Disagree	4 = Neither
5 = Slightly Agree	6 = Agree	7 = Strongly Agree	

6. Any reminder brought back feelings about it?

1 = Strongly Disagree	2 = Disagree	3 = Slightly Disagree	4 = Neither
5 = Slightly Agree	6 = Agree	7 = Strongly Agree	

7. Had trouble staying asleep?

1 = Strongly Disagree	2 = Disagree	3 = Slightly Disagree	4 = Neither
5 = Slightly Agree	6 = Agree	7 = Strongly Agree	

8. Feeling irritable and angry often?

1 = Strongly Disagree	2 = Disagree	3 = Slightly Disagree	4 = Neither
5 = Slightly Agree	6 = Agree	7 = Strongly Agree	

9. I avoid my thoughts and emotions when I think about it or am reminded of it?

1 = Strongly Disagree	2 = Disagree	3 = Slightly Disagree	4 = Neither
5 = Slightly Agree	6 = Agree	7 = Strongly Agree	

10. I felt as if it hadn't happened or wasn't real

1 = Strongly Disagree	2 = Disagree	3 = Slightly Disagree	4 = Neither
5 = Slightly Agree	6 = Agree	7 = Strongly Agree	

11. Pictures about it popped into my mind

1 = Strongly Disagree	2 = Disagree	3 = Slightly Disagree	4 = Neither
5 = Slightly Agree	6 = Agree	7 = Strongly Agree	