

Syracuse University

## SURFACE at Syracuse University

---

Institute for Veterans and Military Families

Institutes, Research Centers, and Campus  
Groups

---

5-29-2015

### Research Brief: "Alcohol Use and Craving among Veterans with Mental Health Disorders and Mild Traumatic Brain Injury"

Institute for Veterans and Military Families at Syracuse University

Follow this and additional works at: <https://surface.syr.edu/ivmf>



Part of the [Mental Disorders Commons](#), [Military and Veterans Studies Commons](#), and the [Substance Abuse and Addiction Commons](#)

---

#### Recommended Citation

Institute for Veterans and Military Families at Syracuse University, "Research Brief: "Alcohol Use and Craving among Veterans with Mental Health Disorders and Mild Traumatic Brain Injury"" (2015). *Institute for Veterans and Military Families*. 321.

<https://surface.syr.edu/ivmf/321>

This Brief is brought to you for free and open access by the Institutes, Research Centers, and Campus Groups at SURFACE at Syracuse University. It has been accepted for inclusion in Institute for Veterans and Military Families by an authorized administrator of SURFACE at Syracuse University. For more information, please contact [surface@syr.edu](mailto:surface@syr.edu).



## Alcohol Use and Craving Among Veterans with Mental Health Disorders and Mild Traumatic Brain Injury

### AUTHORS:

Amy A. Herrold, Ph.D.  
 Neil Jordan, Ph.D.  
 Walter M. High, Ph.D.  
 Judi Babcock-Parziale, Ph.D.  
 R. Andrew Chambers, M.D.  
 Bridget Smith, Ph.D.  
 Charlesnika T. Evans, Ph.D.  
 Xue Li, Ph.D.  
 Trudy Mallinson, Ph.D.  
 Shonna Jenkins, M.S.  
 Theresa Louise-Bender Pape, Dr.P.H.,  
 M.A., CCC-SLP/L

### DATE:

2014

### PUBLICATION:

*Journal of Rehabilitation Research & Development*; 51(9), 1397-1410.

### PUBLICATION TYPE:

Peer-Reviewed Journal Article

### KEYWORDS:

alcohol, Alcohol Use Disorder Identification Test, anxiety, craving, depression, mild traumatic brain injury, Penn Alcohol Craving Scale, posttraumatic stress disorder, psychometrics, veteran

higher among AUDIT-C positive Veterans with MHDs with and without mTBI versus AUDIT-C positive combat comparison Veterans (pairwise comparison,  $p < 0.001$ ). Rates of hazardous alcohol use are high among Iraq and Afghanistan conflict Veterans and suggest that alcohol craving is elevated among those with MHDs with and without mTBI.”

### RESEARCH HIGHLIGHTS

- Probable alcohol use disorder rates are high among Iraq and Afghanistan veterans including those with mental health disorders (MHDs) such as PTSD, anxiety, depression, and mild traumatic brain injury (mTBI). Though there is some research suggesting that alcohol craving is more severe in individuals with MHDs, no studies have investigated alcohol craving among veterans with co-occurring MHDs, mTBI, and AUD. The current study compared self-reported alcohol craving in veterans with and without MHD symptoms and found that veterans with MHDs reported higher alcohol craving than veterans without MHDs.
- The researchers found that there is a significant increase in alcohol craving severity for veterans with co-occurring mental health disorders (with and without mild traumatic brain injury) and alcohol use disorder compared with veterans that screened positive for alcohol use disorder without mental health disorders or mTBI. There was also a significant increase in alcohol craving severity for veterans that screened positive for alcohol use disorder without mental health disorders or mTBI relative to veterans that screened negative for alcohol use disorder without mental health disorders or mTBI.
- Findings indicate that increased alcohol use and a history of MHDs with and without mTBI among veterans is associated with more severe and frequent alcohol cravings. Since the co-occurrence of AUD and MHDs with/without mTBI increases alcohol craving among veterans, these diagnoses may serve as risk factors for AUD relapse and detract from rehabilitation efforts. Accordingly, veterans’ alcohol cravings, especially for veterans with MHDs, should be assessed.

### ABSTRACT

“Mental health disorders (MHDs), mild traumatic brain injury (mTBI), and alcohol use disorder (AUD), are endemic among recent veterans, resulting in a population with heterogeneous, co-occurring conditions. While alcohol craving negatively affects rehabilitation and leads to relapse, no studies have examined alcohol craving among Veterans with co-occurring MHDs and mTBI. The purpose of this preliminary cohort study is to describe alcohol craving in a convenience sample of Iraq and Afghanistan Veterans ( $n = 48$ ), including those exposed to traumatic events and experiencing active symptoms. Veterans completed weekly telephone interviews that included the Alcohol Use Disorder Identification Test, consumption questions (AUDIT-C) (week 1) and the Penn Alcohol Craving Scale (PACS) (weeks 1-6). Sixty percent of the sample screened positive on the AUDIT-C for probable AUD. Using Rasch analysis, the person separation reliability of the PACS was strong (0.87) among AUDIT-C positive veterans. Higher PACS scores were reported among AUDIT-C positive versus AUDIT-C negative Veterans (mixed effects analysis,  $p < 0.001$ ). PACS scores were



## IMPLICATIONS

### FOR PRACTICE

Since frequent and severe cravings for alcohol are risk factors for alcohol use disorder and alcohol use disorder relapse, veterans and their families should view alcohol craving as a serious risk for alcohol use disorder, particularly for veterans with MHDs with or without mTBI. Veterans should seek treatment for alcohol craving and co-occurring conditions; veterans' families should encourage their veteran to seek treatment. Families should offer to attend treatments with their veteran if the veteran desires family support. Veterans and their families should seek educational information on alcohol craving and use, as well as skills or tactics to combat alcohol craving and avoid AUD relapse. Clinicians should assess alcohol craving in veterans returning from Iraq and Afghanistan. Clinicians should consider using the PACS rating scale because it is only 5 items and can be administered through multiple mediums, including telephone, recording system, and face-to-face.

### FOR POLICY

The DoD might incorporate information on alcohol craving and alcohol use in Transition Assistance Programming. The VA and DoD might provide information or education on the risks of co-occurring conditions, like MHDs and AUD, to veterans and their families. The VA might consider mandating the assessment of alcohol use disorder and alcohol craving to find veterans who might be at risk for relapse and/or MHDs. The VA might explore the effects of MHDs, mTBI, and alcohol use on alcohol cravings (and subsequent AUD relapse) in larger, more diverse samples of veterans. The VA might use the PACS rating scale to assess alcohol craving among veterans returning from Iraq and Afghanistan, in addition to the assessment of AUD, MHDs, and mTBI. Policymakers might allocate funds to further research the impacts and outcomes of co-occurring conditions on veterans and their families.

### FOR FUTURE RESEARCH

To improve reliability and generalizability, future researchers should conduct this study in a larger and more heterogeneous population. Future researchers should identify the individual effects of mTBI, depression, anxiety, and/or PTSD symptoms on alcohol craving. A limitation of this study is that the sample was predominantly young, white, male veterans. Future researchers should expand the sample to include veterans of all age groups, ethnic and racial backgrounds, and who are female. The participants were recruited through the VA, indicating that these veterans had been referred to, requested, or received treatment. Future studies should recruit from addiction treatment centers to include veterans who did not receive or seek treatment at the VA. Recruiting from addiction treatment centers might also introduce veterans with more severe AUD. Another limitation of this study is that PACS requires self-reporting. Though the PACS rating scale was found to be reliable and valid for these samples, self-reported results might have resulted in some bias in the reporting, especially regarding sensitive topics like addiction, alcohol abuse, and craving. Future research should involve veterans' families in measures of alcohol use and even alcohol craving; this might provide a more unbiased report of alcohol use and craving. Future researchers should use automated telephone technology to administer PACS rather than staff to increase perceived anonymity. Future research should include additional covariates on alcohol craving, such as time since injury and other sociodemographic factors.

## AUTHOR INFORMATION

**Amy A. Herrold, Ph.D.** <sup>1, 2</sup>

**Neil Jordan, Ph.D.** <sup>2</sup>

**Walter M. High, Ph.D.** <sup>3</sup>

**Judi Babcock-Parziale, Ph.D.** <sup>4</sup>

**R. Andrew Chambers, M.D.** <sup>5</sup>

**Bridget Smith, Ph.D.** <sup>6</sup>

**Charlesnika T. Evans, Ph.D.** <sup>6</sup>

**Xue Li, Ph.D.** <sup>7</sup>

**Trudy Mallinson, Ph.D.** <sup>8</sup>

**Shonna Jenkins, M.S.** <sup>9</sup>

**Theresa Louise-Bender Pape, Dr.P.H., M.A., CCC-SLP/L** <sup>6</sup>

<sup>1</sup> amy.herrold@va.gov; amy.herrold@northwestern.edu

<sup>2</sup> Center for Innovation for Complex Chronic Healthcare, Edward Hines, Jr. Department of Veterans Affairs (VA) Hospital; Department of Psychiatry and Behavioral Sciences, Northwestern University Feinberg School of Medicine

<sup>3</sup> Cardinal Hill Rehabilitation Hospital and Department of Physical Medicine and Rehabilitations, University of Kentucky College of Medicine; Departments of Neurosurgery and Psychology, University of Kentucky College of Medicine; Lexington VA Medical Center

<sup>4</sup> Southern Arizona VA Health Care System

<sup>5</sup> Indiana University School of Medicine

<sup>6</sup> Center for Innovation for Complex Chronic Healthcare, Edward Hines, Jr. Department of Veterans Affairs (VA) Hospital

<sup>7</sup> Cooperative Studies Program Coordinating Center, Edward Hines, Jr. VA Hospital

<sup>8</sup> The George Washington University

<sup>9</sup> University of Kentucky College of Medicine; Lexington VA Medical Center