



Mental Health and Substance Use >

Volume 7, 2014 - [Issue 1](#)

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# Empirical examination of a Venn diagram heuristic for understanding the relationship between addiction, psychiatric comorbidity and trauma

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Pages 84-91 | Accepted 31 Jan 2013, Published online: 04 Mar 2013

Cite this article <https://doi.org/10.1080/17523281.2013.775959>



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## Abstract

Addiction, psychiatric comorbidity and trauma are common among patients and associated with a more complex course and poorer prognosis. The lack of a framework for understanding these chronic, complex conditions creates difficulties for clinicians and patients. A Venn diagram heuristic was previously proposed to conceptualize the relationship between addiction, psychiatric illness and trauma ([Rojas, J. I. (2012). A Venn diagram heuristic for working with co-occurring disorders and trauma. *Mental Health and Substance Use, iFirst Article*, 1-10. doi:10.1080/17523281.2012.712050]). We were interested in examining the relationship between addiction, psychiatric illness and trauma via retrospective chart reviews among the participants evaluated in our outpatient program for impaired professionals. The current study sought to empirically

examine the Venn diagram heuristic by using objective psychological test results from the Personality Assessment Inventory (PAI). Specifically, we sought to determine the degree to which addiction, psychiatric illness and trauma contributed to global distress. Using the PAI-Alcohol and PAI-Drug Scales to represent addiction, the PAI-Depression and Anxiety Scales to represent psychiatric illness, the PAI-Anxiety-related Disorder-Traumatic Stress subscale to represent trauma and the PAI-Stress scale as an indicator of global distress, we were able to determine that approximately 40% of the variance in global distress can be explained by addiction, psychiatric illness and trauma. However, most of the 40% is accounted for by the shared relationship between psychiatric illness and trauma (18%), and psychiatric illness (12%). Implications for diagnosis and treatment are proposed.

Keywords:

co-occurring disorders

trauma

Venn diagram

Personality Assessment Inventory

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