

# An Overview of the Connection between Hoarding Disorder and Substance Use Disorder

*Yibo Wang, Tian Tian<sup>†</sup>*

Beijing National Day School, Beijing, 100039, China

Email: yibowang9030@gmail.com

## **Abstract**

This essay explores the connections between Hoarding Disorder and Substance Use Disorder, two distinct mental health conditions with clear diagnostic criteria in the DSM-5. Hoarding Disorder, marked by excessive possession accumulation and difficulties in letting go, affects 2-6% of the global population, leading to severe consequences. Potential causes include genetic predisposition, neural issues, and traumatic experience. Substance Use Disorder is influenced by more societal factors. Both disorders share a comorbidity in Attention-Deficit/Hyperactivity Disorder (ADHD). Network analysis shows a strong direct relationship between Hoarding Disorder and ADHD, while social influences increase ADHD prevalence in Substance Use Disorder individuals. Moreover, both disorders benefit from Cognitive Behavioral Therapy (CBT). Exposure and Ritual Prevention effectively address hoarding symptoms, while CBT for Substance Use Disorder focuses on the interplay between thoughts, emotions, and actions. Despite being classified as a mental illness in DSM-5, Hoarding Disorder receives less attention than Substance Use Disorder. This essay aims to raise awareness of Hoarding Disorder by highlighting its commonalities with Substance Use Disorder in terms of causes, comorbidities, and treatment approaches.

**Keywords:** *Hoarding Disorder; Substance Use Disorder; ADHD; Cognitive Behavioral Therapy; Comorbidity*

## 1 INTRODUCTION

Hoarding disorder and substance use disorder are two distinct mental issues with connections to each other. Both present threats that interfere with individuals' daily lives and having clear diagnosis criteria in the DSM-5. This essay aims to delve into the similarities of these two disorders from the viewpoints of their causes, comorbidities, and treatment approaches.

## 2 CAUSES OF HOARDING DISORDER

Hoarding is a condition marked by an excessive accumulation of items and ongoing challenges in letting go of possessions, presenting a global prevalence of about 2-6%. This behavior leads to negative emotional, physical, social, financial, and legal consequences for both individuals afflicted with the disorder and their families, potentially presenting a substantial public health concern. Hombali and team<sup>[1]</sup> used the following electronic databases to gather information about the potential causes of hoarding disorder: Medline through Ovid, EMBASE and PsycINFO. Through these databases, the team was able to gather information from relevant articles published from January 2000 to November 2018 and form a narrative synthesis of the possible factors that are likely to be the causes of hoarding disorder. The team only scrutinized research articles published in English and two reviewers, which are two possible deficiencies of this review. Still, the total number of 396 references indicates the dedication of Hombali and team, forming the results: people exhibiting hoarding tendencies might possess a genetic predisposition; furthermore, there have been observations of unusual neural patterns within the brain's frontotemporal, para-hippocampal gyrus, and insular regions among such individuals; experiencing traumatic life events is another possible factor.

### 3 CAUSES OF SUBSTANCE USE DISORDER

Causes for substance use disorder, on the other hand, demonstrate an additional aspect of possible factors: societal influences. Gathering survey results from all undergraduate students in three colleges, Padhy and colleagues were able to determine the prevalence of substance use disorder for a male undergraduate student, which is 45.87%. The study also shows that “staying in hostel, non-satisfactory intra-familial relationship favored substance abuse.” The main catalysts of substance use disorders are curiosity regarding the material, the influence of educational and social expectations, as well as familial challenges. Possible causes for adults include traumatic brain injury. Human and animal studies have found an association between TBI and risky substance use, although the strength of this association varies, and Olsen and Corrigan<sup>[2]</sup> address these factors by providing an overview of key clinical and preclinical studies and listing plausible mechanisms by which TBI could increase risky substance use. TBI-associated alterations in brain networks, chronic changes in neuroimmune signaling, and damage-associated neuroplasticity are some of the potential mechanisms by which TBI could increase substance use.

### 4 CONNECTIONS BETWEEN HD AND SUD

One distinct relation between hoarding disorder and substance use disorder is the one overlap in their comorbidities, which is attention-deficit/hyperactivity disorder (ADHD). Through analysis of psychiatric comorbidity among 252 participants who completed clinician administered psychiatric assessments. In the present investigation, Vieira, Luis Sordo, and colleagues<sup>[3]</sup> harnessed the comprehensive dataset of the Brain Health Registry to conduct an examination of the prevalence rates of self-reported neurological and psychiatric conditions within distinct cohorts including individuals with no/minimal hoarding, subclinical hoarding, and clinically significant hoarding. Connections were analyzed using advanced network analysis techniques. Results indicate that the comorbidity showing the strongest direct relationship demonstrated is ADHD. In addition, social influence promotes the prevalence of ADHD in patients with substance use disorder<sup>[4]</sup>.

Another factor suitable as a link between hoarding disorder and substance use disorder is their treatment approach: cognitive behavioral therapy. Since the work of Meyer in 1966, a specific form of cognitive behavioral therapy has been used to address significant hoarding symptoms among both children and adults, which is Exposure and Ritual Prevention. Patients who were treated through this approach have shown short- and long-term symptom mitigation. Such form of cognitive behavioral therapy consists of two components: “prolonged and repeated exposure to anxiety-provoking thoughts or situations; and voluntary abstinence from ritualization<sup>[5]</sup>.” The typical form of cognitive behavioral therapy used to deal with substance use disorder more frequently consists of three aspects: how emotions affect thoughts and actions, how actions affect emotions and thoughts, and how thoughts affect emotions and actions. Still, both treatment approaches of hoarding disorder and substance use disorder concentrate mainly on how the patient’s thoughts, emotions and actions are connected, and mitigate severity of disorder by making interventions form the gaps of each aspect.

### 5 CONCLUSION

Although hoarding disorder is classified as a mental illness in the latest edition of DSM-5, not as much attention is directed towards it than that of substance use disorder. Through the analysis of respective causes of both disorders and common aspects regarding comorbidities and treatment methods, it is hoped that awareness hoarding disorder would gain as the connection of it to a more familiar issue to the general public is described in the essay.

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