

Review of: "A Unified Theory of Addiction"

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Potential competing interests: No potential competing interests to declare.

Overall, the paper presents an interesting argument but lacks scientific evidence and contains numerous logical leaps. The paper's description of the displacement mechanism is still vague and lacks direct evidence to support the claim that the displacement mechanism causes addiction. In fact, most cited references do not explicitly discuss the relationship between the displacement mechanism and addiction, and thereby weakening the argument's foundation. In addition, although the paper argues that therapies utilizing the displacement mechanism are effective for all addictions and compulsive behaviors, this is an overstatement. The clinical trials mentioned in the paper target food addiction, and their effectiveness for other addictions is unknown. Furthermore, the trials' small sample size and reliance on unpublished results undermine their credibility. Accordingly, it would be beneficial to compare the proposed concept with prior research and explain how applying this concept addresses issues identified in previous studies. Additionally, discussing the biological mechanisms would strengthen the persuasiveness of the argument. The following revisions are suggested for each section:

Displacement

The paper inadequately explains addiction scientifically by discussing stress-related compulsive behaviors in animals and humans. The concept of displacement resembles the self-medication hypothesis for addiction (Khantzian 1997). The self-medication hypothesis covers most descriptions in this section.

From sensation to compulsion

The vulnerability of addiction under chronic stress is well-know (Sinha 2008). The use of "mental energy" as an explanation is unclear. Please provide a logical explanation using more widely understood scientific terminology.

Smoking as displacement

Provide scientific reasoning for the statement, "With smoking, the brain uses the breathing or 'sigh' drive to displace the overflow mental energy..." The cited literature does not support your argument. Avoid using sensory terms like "mental energy" and "brain energy." Instead, provide a logical explanation based on biological evidence using scientifically accepted terminology.

Chemical dependence vs. behavioral addictions

When claiming that "the most addictive substances do not have the most severe chemical withdrawal symptoms," provide



specific examples of substances and include citations. Break down the logic to make it more digestible.

Addictions are not permanent

It is widely known that drug use does not always lead to addiction. Not everyone who has consumed alcohol becomes an alcoholic. A certain number of individuals misuse substances, resulting in addiction, which is the problem. What is the role of this chapter in the overall logical structure of the paper, and what is the main argument?

Addictive substance or addictive situation

This argument lacks novelty. The idea that addiction is conditioned by situational cues is well-established, particularly in drug addiction research (Di Chiara and Bassareo 2007; Berridge and Robinson 2016; Everitt and Robbins 2016). Similar research has been conducted for gambling addiction (Limbrick-Oldfield et al. 2017), gaming disorder (Ko et al. 2009), internet addiction (Niu et al. 2016), shopping addiction (Trotzke et al. 2014), and kleptomania (Asaoka et al. 2023).

From thrill to compulsion

It is well-known that uncertainty promotes dopamine release and leads to reward (Schultz 2007), especially in gambling addiction (Linnet et al. 2011). Provide scientific literature to support the claim, "Yet, it is not the desire to recoup the losses that seems to perpetuate the gambling. Rather, it is the fact that losses are stressful, and that the default way through which the person's brain has learned to handle stress is by gambling, a classic vicious circle."

Drives and displacement

The content is difficult to understand. What is meant by "drive"? If this is not a commonly used term, please discuss it while providing scientific evidence.

Immune system effect

The statement "The displacement mechanism may in fact impact the immune system" is followed by a discussion of stress-related literature. Is displacement synonymous with stress? If not, the connection between displacement and the immune system cannot be scientifically explained.

Rechanneling the displacement/The displacement equation

What is the position of the displacement theory within the existing addiction research? Also, what is the relationship between the displacement theory and the biological evidence related to addiction research?

Discussion

The argument is unclear. It is inappropriate for the discussion section to refer to an individual's treatment history. Explain the problem and potential solutions while referring to prior research.

Conclusion



Overall, the paper contains many logical leaps and lacks clear evidence and citations. As a result, it is impossible to agree with the presented arguments.

To improve the paper, consider revising each section as suggested to provide a more persuasive, scientifically grounded argument.

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