Review of: "A Unified Theory of Addiction"

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Overall, this is an interesting theory. It is a bit concerning that the author does not include, reference, or discuss this in the context of a vast amount of literature describing addiction via reinforcement mechanisms. In fact, these universal mechanisms of suffering have been described for thousands of years, and may have a lot more explanatory power than simple displacement (eg. this book, and this paper summarize some of these, but are only representative of a huge literature). Without exploring this within the context of reinforcement learning, it is unclear how much this theory adds to the understanding and treatment of addiction.

A number of sections (e.g. Immune system effect) have very broad claims (eg "The displacement mechanism may in fact impact the immune system") yet are scant on detail, evidence or reference. These would benefit from further explanation and careful background research and referencing.

There is a lot of merit in not separating chemical vs behavioral addictions. The American Society for Addiction Medicine includes this non-separation as part of its definition of addiction: "People with addiction use substances or engage in behaviors that become compulsive and often continue despite harmful consequences." https://www.asam.org/quality-care/definition-of-addiction. Regarding chemical dependence, for patients and physicians, it is not a "side issue" as it can be extremely distressing and life threatening (eg. alcohol withdrawal).

The reference to heroin as an argument for addiction not being permanent is unclear in terms of how it supports the displacement theory. Please explain how this is not related to context and escape/distraction/negative reinforcement, as has been extensively written about.

It is unclear what the intervention that is referenced in the paper is, or how it would target displacement. More detail about "[t]he only parameters that need to be changed for each addiction type are the medium and the cues" is needed. For example, what is meant by changing the medium and cues, and how is this done via an app? One question, for example, is how would someone who smokes a pack of cigarettes/day avoid all of the 20 cues that may be inextricably embedded in their life?