

## **DON'T TOUCH THAT DRINK! MAKING SERIOUS COGNITIVE TESTING MORE ENGAGING FOR USE IN SUBSTANCE CONSUMER CONTEXTS**

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**Introduction and Aims:** Cognition is an important contributor to substance treatment outcomes. In particular, the ability to inhibit primed responses is associated with reduced risk of relapse. Workforce surveys have indicated strong interest in assessing cognition during substance use treatment. However, cognitive tests are poorly utilised due to cost, licencing restrictions, duration and poor appeal to participants. We aimed to develop an engaging, open access, brief, and valid assessment of inhibitory control for adoption with substance consuming populations.

**Design and Methods:** An assessment of inhibitory control, the go-nogo task, was adapted from a whack-a-mole task. Instead of moles, go-stimuli are bottles of healthy drinks (water, juice) and no-go stimuli are bottles of alcoholic drinks (beer, wine). Two studies were conducted to validate the task: a 7-day test-retest study, comprising both this test and existing measures of inhibitory control in healthy adults; and an acute alcohol dosing study designed to determine sensitivity to intoxication (BrAC=0.05; 0.08).

**Results:** The task demonstrated large magnitude correlations with existing measures of inhibitory control and minimal learning effects on repeat assessments. The task was more sensitive to intoxication than a similar duration stop-signal task. Participants reported greater acceptability of the task than comparative traditional cognitive assessments.

**Conclusions:** The new task provides a valid assessment of inhibitory control that is also useful for repeat assessments. The software is available free for those working in academic and treatment fields and is compatible with most Android devices. Norms and interpretation guides for standard assessment are also in development.\

**Disclosure of Interest Statement:** Nil