

Understanding How and Why Treatment Works: Cognitive Mechanisms of Behaviour Change in Alcohol Use Disorder

Authors: Jennifer Van Pelt¹, Matthew J. Gullo^{1,2,3}

¹ *School of Applied Psychology, Griffith University, Brisbane, Australia*

² *Centre for Mental Health, Griffith University, Brisbane, Australia*

³ *Alcohol and Drug Assessment Unit, Princess Alexandra Hospital, Brisbane, Australia*

Presenter's email: j.vanpelt@griffith.edu.au

Introduction: Mechanisms of behaviour change (MOBCs) describe the specific components and processes that answer questions of "how" and "why" therapy works. In the treatment of alcohol use disorder (AUD), where relapse and dropout remain high, leveraging knowledge of MOBCs offers a promising route to improving outcomes. This study examined the interaction between two MOBCs frequently targeted in AUD interventions: craving and drinking refusal self-efficacy (DRSE; confidence to resist alcohol in tempting situations). It predicted: 1) both craving and DRSE uniquely predict unintended alcohol consumption during treatment, and 2) DRSE moderates the association between craving and consumption, whereby individuals with greater confidence may resist drinking despite high cravings.

Methods: Session-by-session data from an implementation trial of a progress monitoring tool for 136 consecutively-treated AUD outpatients attending 8 psychotherapy sessions across 12-weeks were analysed. Craving and DRSE were measured each session. Outcome variables included quantity (grams of ethanol) and frequency (percentage of days drank) since the previous session. Multilevel modelling examined within-person fluctuations in session-by-session variables and exploratory path analysis examined between-person effects in early treatment.

Key Findings: Within-person session-by-session fluctuations in craving and DRSE during treatment did not predict drinking quantity or frequency at the sample level, though craving effects varied significantly across individuals. DRSE did not moderate the craving effects on consumption. Sex (being male) and baseline positive outcome expectancies predicted greater quantity of consumption during treatment, while sex (being male) and greater baseline negative affect predicted higher frequency of drinking. Path analysis on between-person effects revealed lower DRSE (relative to other individuals) predicted greater subsequent craving and drinking frequency, while greater drinking frequency predicted lower DRSE, suggesting reciprocal effects. Craving demonstrated no prospective effects in the model.

Discussions and Conclusions: This study offers novel insights into MOBCs in AUD treatment, suggesting that deviation from typical MOBC trajectories (between-person) may be more predictive of drinking outcomes than within-person fluctuations. Results underscore the value of session-by-session progress monitoring to inform personalised treatment approaches.

Disclosure of Interest Statement: None to declare.