

Mechanisms Underlying the Relationship between Negative Affectivity and Problematic Alcohol Use

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Research has long supported the role of negative affectivity for problematic alcohol consumption (Bechara, 2005; Dolan, 2007; Larsen, 2000; Tice & Bratslavsky, 2000; Tice, Bratslavsky, & Baumeister, 2001). However, the mechanisms that underlie how negative affective traits influence problematic alcohol use and attentional biases are not well understood. These inconsistencies can be attributed to three possible reasons: (1) research has often utilized broad measures of negative affective traits that can mask the effect of specific underlying unidimensional traits (Smith, Fischer & Fister, 2003), (2) research has tended to utilize only the valence of traits and has often failed to consider how activation of traits might predict behavioral outcomes, and (3) research has not fully incorporated other aspects of affective traits (e.g. affective lability and emotion-based rash action) that could be serving as mechanisms in predicting problematic alcohol use. The current study sought to characterize mechanisms that drive problematic alcohol use and attentional biases. Three undergraduate student studies were conducted ($n = 510, 429, \text{ and } 38$). Negative urgency partially mediated the effects of negative affectivity (B for indirect effect = .119, $CI = .09 - .16$) and affect lability (B for indirect effect = .928, $CI = .47 - 1.45$) on problematic alcohol use. Activation level of hostility predicted increased variance in problematic alcohol consumption ($R^2 \text{ change} = .01, \beta = .16, p = .02$) above trait valence. Negative urgency predicted alcohol attentional biases over and above valence and activation ($\beta = 2.23, p = .05$). Negative urgency is a prime mechanism by which negative affective traits influence problematic alcohol consumption. This suggests that the relationship between negative urgency or lack of planning and problematic alcohol consumption could be driven, in part, by increases in attentional biases when cued with alcohol stimuli, although this was not directly tested in the current study.

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