Oral Defense Announcement
University of Missouri – St. Louis Graduate School

An oral examination in defense of the dissertation for the degree
Doctor of Philosophy in Psychology with an emphasis in Behavioral Neuroscience

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M.A. in Psychology, May, 2016, University of Missouri-St. Louis
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Motivation Predicts Self-Control of Racial Bias After Viewing Alcohol Advertisements

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Time: 1:00 PM to 3:00 PM
Place: 339 Stadler Hall

Abstract
Exerting self-control shifts motivation toward rewarding cues (i.e., approach motivation) and impairs control of racial bias. However, whether approach motivation predicts subsequent deficits in self-control (i.e., racial bias) is unknown. Exertion of self-control is also related to alcohol use, but whether exerting self-control shifts motivation toward alcohol-related cues is not established. Similar to exerting self-control, viewing alcohol-related cues shifts motivation and promotes racial bias. The current study examined the interaction between self-control (not exerted, exerted) and viewing advertisements (neutral, alcohol) on approach motivation and its influence on racial bias. The present study also investigated how individual differences related to approach motivation and alcohol may moderate these relationships. Participants (N = 71) exerted (or did not exert) self-control and then viewed neutral (e.g., water) and alcohol advertisements. To assess shifts toward rewarding cues, neurophysiological indices of approach motivation (LPP, cortical asymmetries) were assessed while participants viewed advertisements. Participants then completed a measure of racial bias assessing behavioral and neurophysiological indices of self-control (ERN, N2). No differences in approach motivation emerged between those who exerted or did not exert self-control. However, alcohol-related individual differences (alcohol identity, coping drinking motives, and alcohol sensitivity) predicted greater approach motivation (i.e., cortical asymmetries) while viewing alcohol advertisements among those who exerted self-control. Participants who exerted self-control also exhibited lower behavioral control of racial bias and impaired error detection (i.e., ERN). Greater approach motivation predicted lower behavioral control of racial bias and error detection, suggesting approach motivation is a mechanism for impaired self-control. Results support motivational theories on self-control and provide insight on the relations among alcohol advertising, self-control, and racial bias.

Defense of Dissertation Committee
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