

Discrimination and Alcohol Problems: Examining Interactions with Genetic Risk and Impulsivity among African American Young Adults

Jinni Su

Department of Psychology, Arizona State University, Tempe, AZ, 85287, USA

Abstract

Experiences of racial discrimination have been shown to increase risk for alcohol problems. Some individuals may be particularly vulnerable to the negative effects of racial discrimination. However, little research has examined interaction effects between racial discrimination and individual characteristics, such as genetic predispositions and personality, in relation to alcohol outcomes. This study examined whether genetic risk and dimensions of impulsivity moderate the association between racial discrimination and alcohol problems among African American young adults ($n = 383$, $M_{age} = 20.65$, $SD = 2.28$; 81% female). Participants completed online surveys and provided a saliva sample for genotyping. Results from multiple regression analyses indicated that both blatant and subtle forms of racial discrimination (i.e., experience of racist events and racial microaggressions) were associated with more alcohol problems. Racial microaggressions interacted with dimensions of impulsivity in relation to alcohol problems, such that racial microaggressions were associated with more alcohol problems when negative urgency was high or when sensation seeking was low. There was no significant interaction between alcohol use disorder genome-wide polygenic score and experience of racist events or racial microaggression in relation to alcohol problems, which may partly reflect low power due in part to limited representation of African-Americans in genetic research. The findings highlight the need to increase the representation of African Americans in genetically-informed research in order to better characterize genetic risk and understand gene-environment interaction in this understudied population, as well as the importance of examining impulsivity as a multidimensional construct that interacts with racial discrimination in relation to alcohol outcomes.

Keywords: Alcohol use; Black/African American; Impulsivity; Polygenic risk; Racial discrimination.

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Biography

Jinni Su is currently working for Department of Psychology, Arizona State University, Tempe, AZ, 85287, USA. He has attended and gave his presentation on

Racial Discrimination and Alcohol Problems: Examining Interactions with Genetic Risk and Impulsivity among African American Young Adults. He has published papers in many international reputed scopus journals.