

The Role of Depressive Symptoms on Social and Environmental Factors That Relate to Illicit Substance Use in Multiracial Adults



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The University of Rhode Island is located on the homelands of the Narragansett and Eastern Nehântick peoples. We acknowledge the legacy of displacement and violence of settler colonialism on which the institution is built. I pledge to work to honor Native land and to celebrate the resilience of Indigenous peoples amidst ongoing oppression

INTRODUCTION

- Multiracial (i.e., two or more races) adults report higher illicit drug use than nearly all their monoracial counterparts (SAMHSA, 2021)
- The associated risk and protective factors are underexplored and no theoretical model has been made with respect to these relations
- Our previous qualitative work identified racial microaggressions, racial identity, environment, mental health, and belonging as important relevant variables (Nalven et al., under review)

Study Purpose:

- To test a model examining factors associated with Multiracial adult illicit substance use

METHOD

Participants and Procedure:

- $N = 165$ Multiracial adults ($M_{age} = 34.5$ years, $SD = 9.3$; 37.6% female, 62.4% male) who reported past-month alcohol use
- In 2019, participants were recruited via Amazon's Mechanical Turk (MTurk) platform
- Participants completed an online Qualtrics survey and were paid \$1 for participation

Measures:

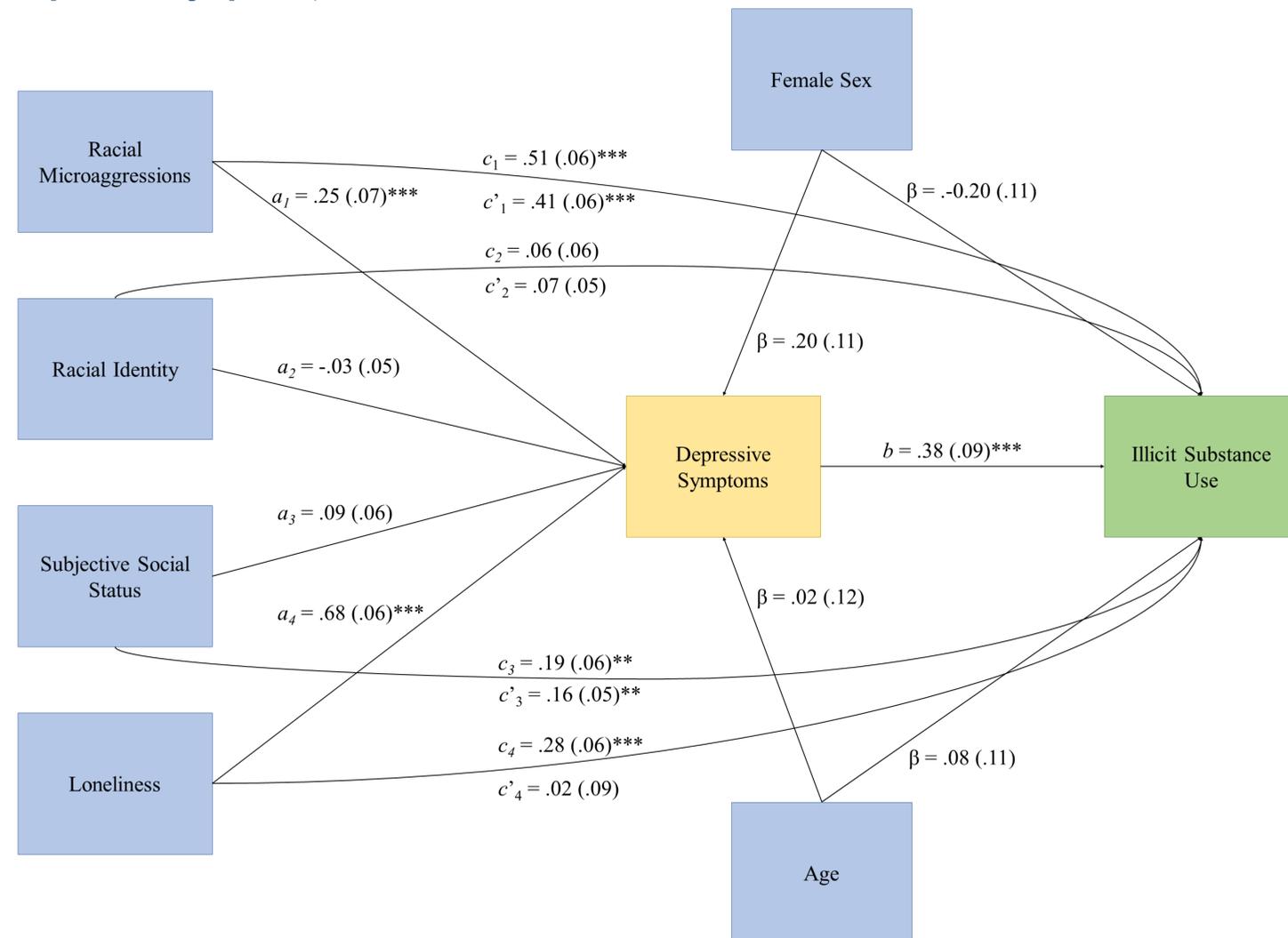
- Racial and Ethnic Microaggressions Scale** (Nadal, 2011); 45-items, Range: 0 – 45, $M = 32.0$, $SD = 15.5$
- Racial identity** – Multigroup Ethnic Identity Measure-Revised (Phinney, 1992); 12-items, Range: 1 – 5, $M = 3.6$, $SD = 0.6$, Cronbach's $\alpha = .87$
- Socioeconomic status (SES)** – MacArthur's Subjective Social Status Scale (Adler et al., 2000); 2-items, Range: 1 – 10, $M = 6.2$, $SD = 1.9$
- UCLA Loneliness Scale** (Russell et al., 1978); 20-items, Range: 0 – 60, $M = 24.8$, $SD = 15.5$, Cronbach's $\alpha = .97$
- Depressive symptoms** – Patient Health Questionnaire-9 (Kroenke & Spitzer, 2002); 9-items, Range: 0 – 27, $M = 11.2$, $SD = 7.1$, Cronbach's $\alpha = .93$
- Illicit substance use** – Past-year frequency of cocaine, MDMA, hallucinogens, PCP, and inhalant use, as well as stimulant, sedative, and opiate misuse; 8-items, Range: 0 – 40

Data Analyses:

- Structural equation modeling examined whether depressive symptoms mediated the associations between racial microaggressions, racial identity, socioeconomic status, and loneliness and illicit substance use

Depression mediates the relations between discrimination/loneliness and illicit substance use SES is directly related to illicit substance use, while racial identity is not significantly related

Figure 1. Summary of model exploring the associations among social and environmental factors, depressive symptoms, and illicit substance use



Note. Values reflect β (SE); * $p < .05$, ** $p < .01$, *** $p < .001$

RESULTS

Bivariate Correlations:

- Racial microaggressions ($r = .75, p < .001$), racial identity ($r = .20, p = .01$), SES ($r = .44, p < .001$), loneliness ($r = .58, p < .001$), and depressive symptoms ($r = .71, p < .001$) were significantly and positively correlated with illicit substance use

SEM Analysis:

- Figure 1 - The hypothesized structural model fit the data well, $\chi^2(8) = 13.22, p = .10$, CFI = 0.99, RMSEA = 0.06, 90%CI [0.00, 0.12], SRMR = 0.03
- Indirect Effects:
 - Racial Microaggressions: $\beta = .10, SE = .04, 95\%CI [0.03, 0.18], p = .01$
 - Racial Identity: $\beta = -.01, SE = .02, 95\%CI [-0.05, 0.02], p = .50$
 - Subjective Social Status: $\beta = .03, SE = .02, 95\%CI [-0.01, 0.08], p = .15$
 - Loneliness: $\beta = .26, SE = .07, 95\%CI [0.14, 0.41], p < .001$

DISCUSSION

- The present study was among the first to explore a model for illicit substance use among Multiracial adults
- Findings are consistent with previous research regarding factors related to substance use in Multiracial people (Nalven et al., under review)

Limitations and Future Directions:

- The cross-sectional, correlational data limit our ability to make temporal or causal inferences
- The combination of races that Multiracial people identify with may be influential (Goings et al., 2020)
- Future research should explore other factors that may be related (e.g., social support, stress)
 - Including confirmation between the relations of SES and substance use, given that our findings unexpectedly revealed a positive relation

Conclusions:

- Interventions addressing healthy ways of coping with or managing responses to microaggressions and loneliness may reduce depressive symptoms and subsequent substance use
- Societal and public health interventions and training programs are needed to educate others about ways to support Multiracial individuals' healthy growth and well being
 - E.g., supporting the formation of Multiracial social groups and clubs or informing others on intervening with microaggressions targeting Multiracial individuals may be beneficial



Take a picture to learn more information about the PATHS lab and read our full land/labor acknowledgement

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