Perceived Racial Discrimination, Identity Affiliation, and Heavy Alcohol Use Among Multiracial Individuals

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INTRODUCTION

Multiracial individuals (those who identify as more than one race) are one of the largest growing populations in the U.S. (Goings et al., 2018; Parker et al., 2015)

Despite considerable heterogeneity among multiracial individuals, rates of heavy alcohol use (defined as binge drinking five or more times in a month) are disproportionately high when compared to monoracial individuals (SAMHSA, 2018)

Multiracial individuals also report high rates of perceived racial discrimination (Brackett et al., 2006; Greig, 2014), which has been shown to have a robust relationship with heavy alcohol use (Salas-Wright et al., 2018)

Research has identified racial identity affiliation as a protective factor against heavy alcohol use for some minoritized groups; however, results have been mixed among multiracial individuals (Urbaeva et al., 2017; Fisher et al., 2017)

The purpose of this study was to examine the relations between racial discrimination, racial identity affiliation, and heavy alcohol use among multiracial individuals

We hypothesized that:

(1) Multiracial people will report more perceived racial discrimination than White and Asian individuals, have no significant differences compared to Black individuals, and report more heavy alcohol use and lower overall scores on racial identity affiliation than Asian, White, and Black individuals

(2) Racial identity affiliation, discrimination, and their interaction will be significantly associated with odds of reporting heavy alcohol use among multiracial individuals

METHODS

Participants and Procedure:
- N = 36,309 adults 18-years-old and older
- Female = 56.4%; Male = 43.6%
- 66% (n = 19,194) Non-Hispanic White; 26% (n = 7,673) non-Hispanic Black; 5% (n = 1,516) non-Hispanic Asian; 2% (n = 598) multiracial (both Hispanic and non-Hispanic included)
- Secondary analyses of data drawn from the National Epidemiologic Survey on Alcohol and Related Conditions-III, sponsored by NIAAA
- Between 2012-2013, participants were administered the Alcohol Use Disorder and Associated Disabilities Interview Schedule-IV

Measures:
- *Perceived Racial Discrimination*: 6-items; Cronbach's α = 0.80
  - Range: 6–27, M = 6.57, SD = 1.64; higher scores = greater perceived racial discrimination
- *Racial Identity Affiliation*: 8-items; Cronbach's α = 0.88
  - Range: 8–48, M = 34.97, SD = 7.89; higher scores = strong affiliation with one's racial identity
- *Heavy Alcohol Use*: 1-item (past year frequency of binge drinking)
  - Coded: 1 = heavy alcohol use, 0 = no heavy alcohol use

Data Analyses:
- Racial categories were dummy coded and examined as predictors in one binary logistic regression (outcome: heavy alcohol use) and two linear regression models (outcomes: racial identity affiliation and perceived racial discrimination), controlling for sex
- Binary logistic regression analysis (using PROCESS in SPSS; Hayes, 2012), controlling for sex, explored whether perceived racial discrimination, racial identity affiliation, and their interaction were related to odds of reporting heavy alcohol use among multiracial individuals (model coefficients presented in terms of ordinary least squares)

Table 1. *Regression models examining the effect of racial identity on heavy alcohol use, perceived racial discrimination, and racial identity affiliation (n = 29,026)*

A. Outcome: Heavy Alcohol Use	b	SE	p	OR	95% CI
Race					
Non-Hispanic White	**0.53**	**.19**	**.006**	**1.69**	**[1.16, 2.47]**
Non-Hispanic Black	-0.01	.20	.950	0.99	[0.67, 1.45]
Non-Hispanic Asian	**1.08**	**.27**	**<.001**	**2.94**	**[1.74, 4.96]**
Multiracial					
Sex (female)	**-0.73**	**.07**	**<.001**	**0.48**	**[0.42, 0.55]**
Male					

B. Outcome: Perceived Racial Discrimination	b	SE	β	t	p	95% CI
Race						
Non-Hispanic White	**1.37**	**.11**	**.27**	**12.92**	**<.001**	**[1.16, 1.58]**
Non-Hispanic Black	**-0.31**	**.11**	**-.06**	**-2.84**	**.004**	**[-0.52, -0.10]**
Non-Hispanic Asian	**0.38**	**.12**	**.04**	**3.15**	**.002**	**[0.14, 0.61]**
Multiracial						
Sex (female)	**-0.23**	**.03**	**-.05**	**-8.54**	**<.001**	**[-0.28, -0.18]**
Male						

C. Outcome: Racial Identity Affiliation	b	SE	β	t	p	95% CI
Race						
Non-Hispanic White	-0.04	.35	.00	-0.10	.919	[-0.73, 0.66]
Non-Hispanic Black	**-5.29**	**.36**	**-.30**	**-14.70**	**<.001**	**[-6.00, -4.58]**
Non-Hispanic Asian	**-3.63**	**.40**	**-.11**	**-9.13**	**<.001**	**[-4.41, -2.85]**
Multiracial						
Sex (female)	**0.76**	**.09**	**.05**	**8.49**	**<.001**	**[0.59, 0.94]**
Male						

Note: OR = odds ratio. ORs are exponential parameter estimates (b's). Bolded typeface indicates significance at the p < .05 level.

Table 2. *Binary logistic regression model for heavy alcohol use among multiracial individuals (n = 598; model coefficients presented in terms of ordinary least squares)*

Outcome: Multiracial Heavy Alcohol Use	b	SE	z	p	95% CI
Perceived racial discrimination	**0.12**	**.06**	**1.97**	**.049**	**[0.00, 0.24]**
Racial identity affiliation	-0.04	.03	-1.17	.243	[-0.10, 0.02]
Sex (female)	**-1.57**	**.54**	**-2.91**	**.004**	**[-2.63, -0.51]**
Male					
Discrimination X identity	-0.02	.01	-1.53	.127	[-0.04, 0.00]

Note: OR = odds ratio. ORs are exponential parameter estimates (b's). Bolded typeface indicates significance at the p < .05 level.

RESULTS

Heavy Alcohol Use (Table 1A):
- The overall model was significant (x^2[4] = 200.98, p < .001, Nagelkerke R^2 = 0.03)
- Multiracial people had a greater likelihood of reporting heavy alcohol use than non-Hispanic White and non-Hispanic Asian individuals
- There was no significant difference between the multiracial group and the non-Hispanic Black group for heavy alcohol use

Perceived Racial Discrimination (Table 1B):
- The overall model was significant (F[4, 28614] = 787.29, p < .001, R^2 = 0.10)
- Multiracial people reported greater levels of perceived racial discrimination than non-Hispanic White and non-Hispanic Asian individuals
- Multiracial people reported significantly lower levels of perceived racial discrimination than the non-Hispanic Black group

Racial Identity Affiliation (Table 1C):
- The overall model was significant (F[4, 27570] = 731.78, p < .001, R^2 = 0.10)
- Multiracial people reported lower levels of racial identity affiliation than non-Hispanic Black and non-Hispanic Asian individuals
- There was no significant difference between the multiracial group and the non-Hispanic White group for racial identity affiliation

Multiracial Heavy Alcohol Use Predictors (Table 2):
- The overall model was significant (x^2[4] = 16.74, p = .002, Nagelkerke R^2 = 0.11)
- Higher levels of perceived racial discrimination were significantly related to a greater likelihood of past-year heavy alcohol use among multiracial individuals
- Racial identity affiliation and the interaction of racial discrimination by racial identity affiliation were not significantly related to likelihood of reporting heavy alcohol use among multiracial individuals

DISCUSSION

Results are consistent with prior research suggesting that multiracial individuals have relatively high rates of heavy alcohol use but are inconsistent with literature that suggests Black individuals have lower rates of heavy alcohol use compared to White individuals (SAMHSA, 2018)

The findings that perceived racial discrimination is relatively high and racial identity affiliation is relatively low among multiracial adults is consistent with existing research (Franco & O'Brien, 2018; Poston, 1990; Renn, 2008)
- White individuals also had relatively low racial identity affiliation, consistent with Helms (1990) theory on identity development

Perceived racial discrimination was the only variable significantly related to higher odds of reporting heavy alcohol use among multiracial individuals
- Findings are consistent with literature that finds racial discrimination is related to multiracial substance use (Choi, Harachi, & Catalano, 2006) and that there is a complex relation between racial identity affiliation and heavy alcohol use among multiracial youth (Zapolski, 2017)
- Our results highlight the importance for educators and researchers to include information about multiracial people in discussions and explorations of racial discrimination

Limitations:
- Due to the cross-sectional and correlational nature of this data, we are unable to determine or establish temporal or causal ordering
- As a heterogenous group, the present sample of multiracial adults may not be representative of all multiracial heavy drinkers

Conclusions:

As a growing, high-risk group, heavy alcohol use is largely unexplored in multiracial individuals. Understanding factors related to risk for heavy alcohol use warrants further exploration in order to develop interventions specifically aimed at reducing alcohol use disparities