

# Relative Influence of Big Five Traits and Mindfulness on Alcohol Use

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## INTRODUCTION

- Alcohol use is a common problem and thus a common target for treatment.
- One influence on alcohol use is personality traits, most notably low levels of both Agreeableness and Conscientiousness.
- An additional influence on alcohol use may be mindfulness, which increases awareness of alcohol use triggers.
- For this reason, mindfulness is a part of several contemporary treatments for alcohol use.
- However, it is unclear whether its influence increments those of personality traits.

## METHODS

- Participants were 404 adults recruited from Amazon’s Mechanical Turk (age<sub>mean</sub> = 37 years; see Table 1).
- Measures: *PROMIS Alcohol Use Short Form*, *Big Five Inventory*, and *Mindful Attention Awareness Scale*
- We examined relative effects of traits and mindfulness on alcohol use using a Bayesian approach to multiple regression

## RESULTS

- Traits and mindfulness accounted for a medium-sized amount of variance in alcohol use.
- Agreeableness and Conscientiousness had medium-sized negative effects on alcohol use.
- Extraversion and Openness had small positive effects on alcohol use.
- Neither Neuroticism nor Mindfulness had effects on alcohol use.

## DISCUSSION

- Findings underscore the influence of personality traits on alcohol use regardless of mindfulness.
- This implies that targeting personality traits may be more useful in reducing alcohol use than increasing mindfulness.
- This is consistent with recent enthusiasm for personality-focused treatment.
- Future research can examine how to do this for alcohol use specifically.

# Personality traits influence alcohol use regardless of mindfulness.



Table 1

Demographic Statistics

Demographics	n(%)
Race	
Asian	24 (6)
Black	31 (8)
White	318 (79)
Middle Eastern	1 (<1)
Native American	3 (<1)
Pacific Islander	1 (<1)
Multiracial	10 (2)
Hispanic	12 (3)
No endorsement	3 (<1)
Sex	
Male	210 (52)
Female	187 (46)
No endorsement	7 (2)

Table 2

Internal Consistency and Correlations of Alcohol Use, Personality Traits, and Mindfulness

	1	2	3	4	5	6	7
1. Alcohol Use	(.97)						
2. Agreeableness	-.29	(.84)					
3. Conscientiousness	-.35	.47	(.86)				
4. Extraversion	.01	.33	.21	(.90)			
5. Neuroticism	.18	-.51	-.45	-.50	(.90)		
6. Openness	-.01	.25	.28	.26	-.19	(.86)	
7. Mindfulness	-.21	.17	.35	.07	-.25	.15	(.94)
Skew	2.08	-.20	-.48	-.03	.35	-.33	-.47
Kurtosis	3.48	-.54	-.33	-.73	-.52	-.01	.14

Note: Cronbach’s alpha on diagonal; all ps > |.10| are statistically significant at p < .05

Table 3

Relative Effects of Big Five Personality Traits and Mindfulness on Alcohol Use

	β	95% HDI	R <sup>2</sup>
Agreeableness	-.21*	[-.32, -.10]	.18*
Conscientiousness	-.27*	[-.38, -.16]	
Extraversion	.12*	[.01, .22]	
Neuroticism	.01	[-.11, .13]	
Openness	.10*	[.01, .20]	
Mindfulness	-.10	[-.19, .00]	

Note: \*indicates that 0 did not fall within 95% of Highest Density Interval (HDI)

