

# PATTERNS OF ALCOHOL AND E-CIGARETTE USE AND THEIR ASSOCIATION WITH ALCOHOL-RELATED CONSEQUENCES

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## Introduction

### Background:

- 1 in 4 young adults have used both alcohol and e-cigarettes in the past month<sup>1</sup>
- E-cigarette users exhibit higher levels of binge drinking and risk of alcohol dependence than non-users<sup>2</sup>
- 34% of young adult e-cigarette users vape *only* when drinking alcohol<sup>3</sup>
- Nicotine enhances alcohol alcohol consumption and e-cigarettes are more pleasurable while drinking alcohol<sup>4,5</sup>

### Aim:

Examine associations between simultaneous alcohol/e-cigarette use and alcohol-related consequences

## Method

### Participants & Procedure:

- 394 young adults who reported past-year alcohol and e-cigarette use ( $M_{age} = 23.79$ ; 52.3% male) completed self-report measures on alcohol use, e-cigarette use, and simultaneous use via Amazon MTurk

### Variables and Analyses:

- *Independent Variable:* Percentage of e-cigarette use that occurs while drinking alcohol (response: 0-100% in 10% intervals)
- *Dependent Variable:* AUDIT-Consequences/Reactions<sup>6</sup> (e.g., blackouts, guilt/remorse, injuries)
- Hierarchical linear regression was conducted with alcohol and e-cigarette use frequency entered first and % of e-cig while drinking entered second

**65% of participants mostly vape while drinking alcohol and 70% of participants report a moderate-strong increase in pleasure from vaping while drinking**

***Engaging in more frequent e-cigarette use while drinking is associated with greater alcohol-related consequences.***

## Results

	Estimate	Std. Error	Sig.
<b>Step 1</b>			
(Intercept)	3.23	.84	< .001
Alcohol Use Freq/Quantity	.46	.11	< .001
E-Cigarette Frequency	.81	.21	< .001
<b>Step 2</b>			
(Intercept)	1.82	.87	.36
Alcohol Use Freq/Quantity	.36	.11	< .001
E-Cigarette Frequency	.62	.21	.003
Percent of e-cig use while drinking	.04	.01	< .001
		<b>R2</b>	<b>R2 change</b>
<b>Step 1</b>		.066	.066
<b>Step 2</b>		.129	.067

## Discussion

### Conclusions & Implications:

- As expected, young adults who engage in most of their e-cigarette use while drinking tend to show higher levels of negative alcohol-related consequences
- A substantial portion of e-cigarette users only vape while drinking,<sup>3</sup> which may have implications for alcohol-related outcomes.

### Future Directions:

- Non-daily cigarette smokers drink significantly more alcohol on smoking days,<sup>5</sup> future study should examine this in relation to e-cigarettes.

## References

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