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### Predictors of Alcohol Hangover in College Students

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# Predictors of Alcohol Hangover among College Students

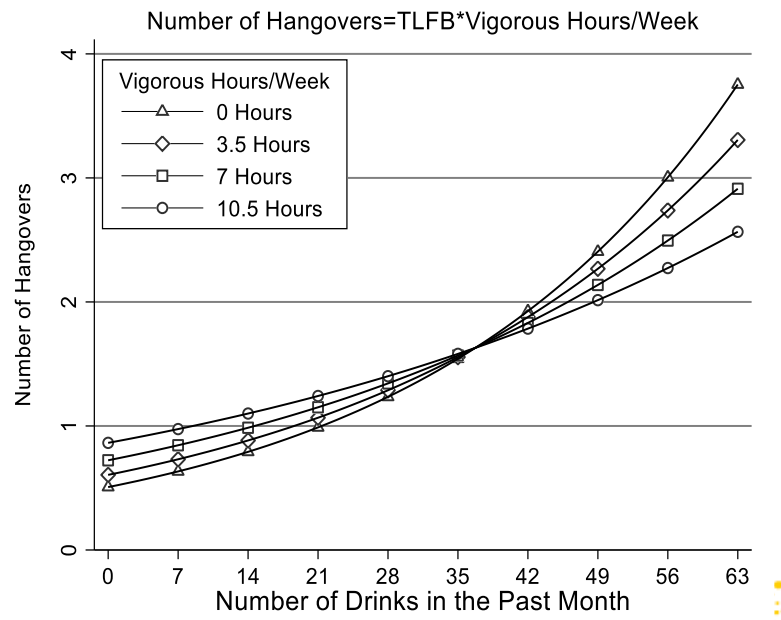
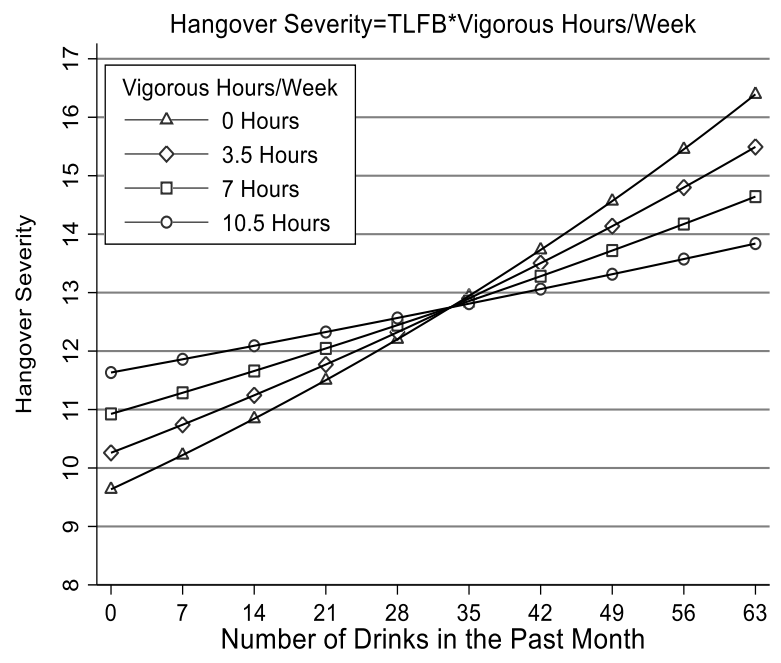
Chelsie M. Young, PhD

- Hangovers, while predictive of future alcohol use, alcohol-related problems, and risk for alcohol use disorder, are understudied.
- Although physical activity (PA) is positively associated with alcohol use, the extent to which PA influences hangover has not been addressed. The present study proposes that:
  - a) PA will be associated with hangover likelihood and severity
  - b) associations between alcohol use and hangover likelihood and severity will be moderated by PA
- College students from 2 campuses participated in an online study.
- To participate, students must:
  - 1) be 18-25 years old
  - 2) experience a hangover in the past 3 months
  - 3) engage in at least 30 minutes of moderate PA per week
- Eligible individuals included 1676 undergraduates (78.8% female; Mean age = 20.36, SD = 1.89) who completed measures of physical activity, hangover severity, and a 30-day timeline follow-back about their alcohol use and experience of a hangover.
- Negative binomial regression models were run with sex and weight as covariates.



# Results

- Each increase of 10 drinks consumed was associated with a:
  - **29.7%** increase in # of hangovers
  - **6.3%** increase in hangover severity
- Each hour of **moderate PA** was associated with a **2.3%** increase in hangover severity
- **Vigorous PA** weakened associations between **drinking and # of hangovers** and between **drinking and hangover severity**.



		# of Hangovers in Past Month				Hangover Severity			
	Predictor	b	se	irr	p	b	se	irr	p
<b>Step 1</b>	Intercept	-.4432	.1216	.642	<.001	2.3912	.0588	10.926	<.001
	<b>Male</b>	<b>-3249</b>	<b>.0792</b>	<b>.723</b>	<b>&lt;.001</b>	<b>-.1127</b>	<b>.0386</b>	<b>.893</b>	<b>.004</b>
	Weight	.0000	.0007	1.000	.983	-.0006	.0004	.999	.076
	<b>TLFB/10</b>	<b>.2472</b>	<b>.0131</b>	<b>1.280</b>	<b>&lt;.001</b>	<b>.0613</b>	<b>.0067</b>	<b>1.063</b>	<b>&lt;.001</b>
<b>Step 2</b>	<b>Moderate hours/week</b>	<b>.0212</b>	<b>.0126</b>	<b>1.021</b>	<b>.091</b>	<b>.0229</b>	<b>.0064</b>	<b>1.023</b>	<b>&lt;.001</b>
	Vigorous hours/week	.0086	.0095	1.009	.363	.0043	.0048	1.004	.368
	TLFB/Moderate hours/week	.0031	.0042	1.003	.466	.0015	.0022	1.002	.495
	<b>TLFB/Vigorous hours/week</b>	<b>-.0131</b>	<b>.0032</b>	<b>.987</b>	<b>&lt;.001</b>	<b>-.0054</b>	<b>.0017</b>	<b>.995</b>	<b>.001</b>

# Conclusions

- This study is the first to explore PA as a predictor of alcohol hangover.
- Drinking and hangovers were relatively common in our sample, with **41%** of college students surveyed reporting drinking and **12%** reporting experiencing a hangover on a **typical Saturday**.
- **Moderate PA** was associated with more severe hangovers.
- **Vigorous PA was protective against hangovers** such that more hours of vigorous PA **weakened the association between alcohol use and hangovers**, resulting in with fewer and less severe hangovers when drinking.
- Thus, hangovers may play a role in the positive association between alcohol use and physical activity.
- Further research is needed to better understand the interplay of these health behaviors.

