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2010

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D. H. Morris

University of Missouri - Columbia

H. R. Treloar

University of Missouri - Columbia

D. M. McCarthy

University of Missouri - Columbia

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Recommended Citation

Morris, D. H.; Treloar, H. R.; and McCarthy, D. M., "Drinking and driving expectancies as a mediator of impulsivity's influence on drinking and driving" (2010). *Posters*. Paper 14 Samuel B. Guze Symposium on Alcoholism.

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Drinking and Driving Expectancies as a Mediator of Impulsivity's Influence on Drinking and Driving.

D. H. Morris, H. R. Treloar, & D. M. McCarthy
University of Missouri



Introduction

- ❖ Impulsivity is consistently linked to alcohol use and alcohol problems, such as drinking and driving.
- ❖ Recent work has identified four distinct components of disinhibition.
 - Urgency
 - Lack of Planning
 - Lack of Perseverance
 - Sensation Seeking

(Lynam & Miller, 2004; Whiteside & Lynam, 2001).
- ❖ These impulsivity traits are uniquely associated with alcohol-related behaviors (Cyders, Flory, Rainer, & Smith, 2008; Smith, Fischer, Cyders, Annus, Spillane, & McCarthy, 2007). For example, sensation seeking is related to increased risk for drinking and driving (Jonah, 1997).
- ❖ Impulsivity traits also are correlated with alcohol expectancies and alcohol cognitions (e.g., attitudes, normative beliefs).
- ❖ Alcohol expectancies have been found to mediate the relationship between impulsivity and alcohol use (McCarthy, Miller, Smith, & Smith, 2001).
- ❖ Recently, we have developed a measure of drinking and driving expectancies (McCarthy, Pedersen, Thompsen, & Leuty, 2006) and found these expectancies to be strongly associated with engagement in drinking and driving.

❖ **The current study tests drinking and driving expectancies as mediators of the association between impulsivity traits and drinking and driving behavior.**

Method

Participants

- 917 college-age student drinkers (mean age = 18.81, *SD* = 1.05).

- 88.0% Caucasian, 5.4% African American, 2.7% Asian, and 3.9% mixed or other ethnicities.
- 55.7% women.

Measures

- *Demographics.*
- *Alcohol Use.* Drinker/nondrinker status and past month quantity and frequency of use.
- *Driving after alcohol use.* Frequency of drinking and driving.
- *Drinking and Driving Expectancies.* Convenience, Control, Avoiding Consequences, Excitement Seeking (PEDD-Y, McCarthy et al., 2006).
- *Impulsivity Traits.* Urgency, lack of Premeditation, lack of Perseverance, Sensation Seeking (UPPS, Whiteside and Lynam, 2001).

Procedure

- Participants were recruited from introductory psychology courses using an online sign-up system.
- Written consent was obtained and questionnaire forms were completed in a group setting.

Results

- ❖ First, we tested whether the initial variables (impulsivity traits) were associated with the outcome variable (drinking and driving frequency) (see Table 1).
- ❖ We then tested whether the mediator variables (drinking and driving expectancies) were associated with impulsivity traits and drinking & driving (see Table 1).
 - Excitement Seeking was not associated with drinking and driving frequency; therefore, it was removed from further analyses.

- ❖ Finally, we examined the significance of the indirect effect of the impulsivity traits through drinking and driving expectancies on drinking and driving frequency.
- ❖ These results suggest that the association between impulsivity traits and drinking and driving is at least partially mediated by expectancies (see Table 2).

Table 1

Correlations among study variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. D/D Freq.									
2. Urgency	.20**								
3. Premeditation	.19**	.34**							
4. Perseverance	.17**	.38**	.51**						
5. Sens. Seek.	.17**	.15**	.18**	-.12**					
6. Convenience	.45**	.20**	.13**	.20**	.11**				
7. Control	.19**	.13**	.09**	.17**	.03	.55**			
8. Avoid Conseq.	.33**	.18**	.11**	.15**	.08*	.81**	.47**		
9. Excite. Seek.	-.06	.09**	.00	.06	-.01	.36**	.50**	.41**	

Notes: * $p < .05$; ** $p < .01$.

Discussion

- ❖ All drinking and driving expectancies, except Excitement Seeking, partially mediated the association between impulsivity traits and drinking and driving frequency.
- ❖ One way that individual differences in impulsivity can influence decisions about drinking and driving is by altering the development of expectancies about that behavior.

Table 2

Indirect effects of impulsivity through drinking and driving expectancies on drinking and driving frequency

	UPPS		PEDD-Y	
	Convenience	Control	Avoid Consequences	
Urgency	.087**	.022**	.054**	
Perseverance	.087**	.028**	.048**	
Premeditation	.055**	.016*	.035**	
Sensation Seeking	.048**	.010	.028*	

Notes: * $p < .05$; ** $p < .01$.

Acknowledgements

Supported by NIAAA Grant T32 AA 13526; PI Ken Sher.