Recent Drinking Frequency as a Predictor of Perceived Intoxication

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INTRODUCTION

• Self-perception of intoxication is important to decisions such as whether to drive a car or how to behave in a dating situation (Merz et al, 1995; Morzorati, et al, 2002).

•Several factors besides the person's actual BAC have been shown to influence perceptions of intoxication, such as behavioral tolerance.

•For example, Fillmore & Vogel-Sprott (1996) reported that experienced social drinkers with greater total years drinking exhibited lowered perceptions of intoxication (and thus inferred greater behavioral tolerance) than novice social drinkers.

•The present study sought to examine more specific predictors of intoxication perception using self-reports of drinking frequency and amount per occasion from a QFI measure adapted from Cahalan et al, 1969 .

•We hypothesized that self-reported number of drinking days and amount per drinking occasion would predict self-perception of intoxication in an alcohol laboratory study with measured doses.

SAMPLE DESCRIPTION

160 heterosexual men (ages 21 – 30; M = 22.9, sd = 2.3) recruited for a study of alcohol and dating from UNCW and the surrounding community. (81.6% Caucasian; 8.8% African-American)

METHODS

• Participants were administered questionnaires in small groups in private rooms on campus and paid $15 as part of the larger study.

•The questionnaire included instruments (among many others) to assess drinking, alcohol expectancies, and attitudes towards sex and aggression. The one used in this study:

•The Quantity-Frequency-Variety Index (adapted from Cahalan,et al 1969) yields a 90-day drinking summary, and identifies the type of alcohol that the individual consumes (i.e. hard liquor, beer, and wine). *The two questions specific to this study assessed participants' frequency of alcohol use during the past 90 days and the average amount per drinking occasion.*

•DAYS DRINKING (in the last 90)
M = 40.6 (sd = 26.7 Range 0 – 90)

•AMOUNT PER DRINKING OCCASION
Range: 3 (none) – 19 (>10 standard drinks)
M = 8.8 (3 – 4 standard drinks) (sd = 2.7)

LABORATORY PROCEDURES

During the laboratory experiment, participants consumed one of two doses of alcohol in a double-blind procedure;
the **Moderate dose** produced a M BAC of .065% (n = 78),
the **Low dose** produced a M BAC was .03% (n = 82).

•30 , 60 and 90 mins after drinking was completed, we assessed each participant's
•Blood Alcohol Concentration,
•Perception of intoxication (on a scale of 1= not at all to 10 = extremely) and
•Estimated number of standard drinks (open-ended)

RESULTS

A series of six ANCOVAs was conducted with alcohol dose as a fixed variable and QFI Drinking Frequency as a covariate.

•For three analyses, perceived intoxication at the first three laboratory assessments was the dependent variable; for the remaining three, the dependent variable was the number of drinks estimated at the corresponding time points.

•Similarly, a series of ANCOVAs used QFI Drinks per Occasion as a covariate.

•Aside from the expected main effect of alcohol dose, we found a main effect of QFI Drinking Frequency on both perceptions of intoxication and the estimated number of drinks at each time point.

•**Drinking Days**:
•T1 Intoxication F (1, 156) = 9.0; p<.003
•T2 Intoxication F (1, 155) = 10.2; p<.002
•T3 Intoxication F (1, 150) = 12.76; p<.001
•T1 Estimated # Standard drinks F (1,156) = 5.97; p<.016
•T2 Estimated # Standard Drinks F (1,155) = 8.18; p<.005
•T3 Estimated # Standard Drinks F (1, 150) = 6.27; p<.013

•**Amount per drinking occasion** no significant effects

RESULTS (CONT.)

Pearson's Correlation Table of Days Drinking

	BAC	Intoxication	# of Drinks
30 min	.075	-.191*	-.161*
60 min	.060	-.194*	-.192*
90 min	.066	-.242**	-.175*

* Correlation is significant at the .05 level
** Correlation is significant at the .01 level

	Moderate dose Mean	sd	Low Dose Mean	sd	
Perceived Intoxication	3.95	1.815	3.03	1.738	**30 min post drinking**
Estimated # of drinks	4.95	1.783	4.27	2.007	
Actual BAC	.064	.020	.029	.011	
Perceived Intoxication	2.54	1.735	1.49	1.623	**60 min post drinking**
Estimated # of drinks	4.90	1.844	4.26	1.950	
Actual BAC	.058	.019	.021	.010	
Perceived Intoxication	1.58	1.550	0.85	1.524	**90 min post drinking**
Estimated # of drinks	4.81	2.038	4.37	2.195	
Actual BAC	.048	.016	.013	.009	

CONCLUSIONS

QFI Drinking Frequency was negatively correlated with perceived intoxication and number of drinks estimated. We saw no effect of the QFI Drinks per Occasion on either dependent variable. Findings indicated that diminished perceived intoxication may be related to a recent history of frequent drinking.