



### Introduction

**Premise:** Perception of approval or disapproval of alcohol use by others (injunctive norms) predict alcohol outcomes but not always <sup>1-3</sup>.

. Injunctive norms measures has shown to account for the inconsistent results<sup>3</sup>.

**Study Aim**: Describe the development and initial validation of an injunctive norms measure that focuses on intoxicated behaviors (i.e., approval of behaviors resulting from alcohol use).

### Method

**<u>Participants.</u>** College students (N = 524; 75.4% female;  $m_{age} = 20.9$ , from a large southwestern public university. Participants were recruited using flyers, announcement boards, and from an undergraduate subject pool and received course credits for participation.

### Measures.

- Injunctive Norms of Intoxicated Behavior scale (INIB)
- Alcohol Use Disorders Identification Test (AUDIT)
- Timeline Follow-Back Method (TLFB)
- Rutgers Alcohol Problem Index (RAPI)
- Drinking Norms Rating Form (DNFR)
- Injunctive Norms Scale (INS)
- Drinking Motives Questionnaire-Revised (DMQ-R)

### **Data Analysis:**

Confirmatory Factor Analysis (CFA) was performed to determine the factor structure of the INIB.

### **References**

# **Development and Psychometric Properties of the Injunctive Norms** of Intoxicated Behaviors Scale J. Awua; A.P. Tuliao PhD; N.D. Mullet PhD; M.J. Martin PhD; K.L. Soloski PhD; S. Bradshaw PhD

The INIB is a valid and measure of injunctive r intoxicated behavior.

 Outcome specific injun instrument can address inconsistencies in the lit

> **Confirmatory Factor A** Items

## **Factor 1: Social Behavior**

Became more friendly Sang Listened to music Told jokes Danced Flirted with someone you found attractiv Laughed harder or more frequently than Became more energetic **Factor 2: Drunken Behavior Factor** Cheated on a boyfriend/girlfriend Told (divulged) a secret Became rowdy or destructive Mood swings Became verbally aggressive Became physically aggressive **Factor 3: Antisocial Behavior Factor** Shirked school responsibilities Took additional drugs Publicly exposed your body Encouraged or forced someone else to da more Decided to keep drinking when you know should have stopped Fled from police or other authorities Played an inappropriate prank



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s the			
analyse	S		
	λ	<b>R</b> <sup>2</sup>	INS CF Pro Drink-Base TLFB
ve usual	0.738 0.707 0.757 0.756 0.836 0.696 0.687 0.755	0.545 0.500 0.574 0.572 0.699 0.484 0.472 0.571	AUDIT Ful AUDIT-C AUDIT-Pro RAPI DMQ- Soci DMQ-Copi DMQ-Enha DMQ- Con
	0.826	0.682	
rink	0.645 0.831 0.649 0.823 0.823 0.807 0.815 0.746 0.746 0.865	0.417 0.691 0.421 0.677 0.678 0.652 0.664 0.556 0.748	<ul> <li>Confirma and achie .950; RM drunken b</li> <li>The INIB to mediur measures</li> <li>The drunk associated correlated</li> </ul>
w you	0.780	0.608	
	0.682 0.793	0.466 0.628	1. This sta therefo differen differen

Choices Grant awarded to Antover P. Tuliao

	Ø			
Gender				
Greek Affiliation				
Athletic Affiliation				
INS- (TS)	0.761			
INS TS Consumption	0.59			
INS TS Problem	0.738			
INS-CF	0.689			
INS CF Consumption	0.514			
INS CF Problem	0.711			
Drink-Based IN				
TLFB				
AUDIT Full	0.813			
AUDIT-C	0.746			
AUDIT-Problem	0.788			
RAPI	0.931			
DMQ-Social	0.873			
DMQ-Coping	0.884			
DMQ-Enhancement	0.83			
DMQ- Conformity	0.881			

## Results

- behavior, and antisocial behavior factors.
- of injunctive norms.
- d for the social behavior factor

### **Future Directions**

- ore future studies should further examine different referent groups.
- 2. A longitudinal study examining the factor structure and the test-retest reliability is warranted.



<b>F1</b>	<b>F2</b>	F3
247**	.098*	-0.006
-0.065	0	-0.077
274**	.217**	.089*
.136**	.358**	.397**
.179**	.210**	.244**
0.07	.406**	.439**
-0.023	.199**	.231**
0.039	.094*	.129**
-0.08	.246**	.264**
.164**	.159**	.238**
-0.077	.102*	0.045
156**	.153**	0.056
0.021	0.061	0.037
220**	.167**	0.059
143**	.221**	.092*
.291**	0.071	.167**
-0.04	.203**	.128**
.201**	0.054	.145**
213**	.228**	.100*

atory Factor Analysis indicated a 3-factor solution eved a good model fit indices (CFI = .957; TLI = ASEA = .050, SRMR = .070): social behavior,

B drunken and antisocial behavior factor had small im positive correlation with other conventional

nken and antisocial behavior factor was positively ed with alcohol-related problems, but negatively

study used "typical student" as the referent group, ential associations and factor structure when using

<sup>1.</sup> East, K., McNeill, A., Thrasher, J., & Hitchman, S. (2021). Social norms as a predictor of smoking uptake among youth: a systematic review, meta-analysis and meta-regression of prospective cohort studies. Addiction (Abingdon, England).

<sup>2.</sup> Larimer, M. E., Parker, M., Lostutter, T., Rhew, I., Eakins, D., Lynch, A., Walter, T., Egashira, L., Kipp, B. J., & Duran, B. (2020). Perceived descriptive norms for alcohol use among tribal college students: Relation to self-reported alcohol use, consequences, and risk for alcohol use disorder. Addictive behaviors, 102, 106158.

<sup>3.</sup> Krieger, H., Neighbors, C., Lewis, M. A., LaBrie, J. W., Foster, D. W., & Larimer, M. E. (2016). Injunctive norms and alcohol consumption: A revised conceptualization. Alcoholism: Clinical and Experimental Research, 40(5), 1083-1092.

<sup>4.</sup> Lowery, A. D., Merrill, J. E., & Carey, K. B. (2018). How acceptable are intoxicated behaviors? Discrepancy between personal versus perceived approval. Addictive behaviors, 76, 258-264.

<sup>5.</sup> Westmaas, J., Moeller, S., & Woicik, P. B. (2007). Validation of a measure of college students' intoxicated behaviors: Associations with alcohol outcome expectancies, drinking motives, and personality. Journal of American College Health, 55(4), 227-237.