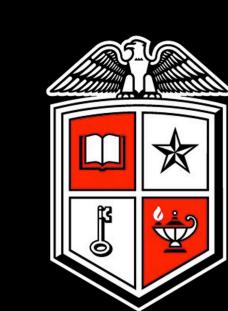


#### Center for Addiction Recovery Research<sup>¬¬</sup>

## THE ROLE OF PROTECTIVE BEHAVIORAL STRATEGIES IN THE RELATIONSHIP AMONG PREGAMING, ALCOHOL USE, AND ALCOHOL-RELATED CONSEQUENCES



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## INTRODUCTION

#### PREGAMING

• Pregaming (PreG), also called pre-funking, prepartying, pre-loading, pre-drinking, refers to "drinking alcohol at home or at someone else's home prior to going out" <sup>1-2</sup> and is viewed as a "supplementary form of drinking"<sup>3</sup> • A huge proportion of drinkers engage in pregaming: ~41% to ~67% <sup>1, 4-6</sup> Pregaming links to alcohol-related consequences (AC) via alcohol use (AU) <sup>1,5,7</sup>

Alcohol use mediates the relationship between pregaming and alcohol-related

consequences.

**PBS types negatively relate to** pregaming, alcohol use, and alcohol-related consequences but PBS-LSD 18.49 7.93 -.10\* -.29\*\* -.16\*\* .66\*\* do not moderate the association among these variables.

### RESULTS

Table 1. Descriptive statistics and correlations							
Variable	Μ	SD	1	2	3	4	5
PreG(Y/N)	.75	.43	1				
AU	5.17	2.22	.37**	1			
AC	9.79	11.23	.25**	.38**	1		

### **PROTECTIVE BEHAVIORAL STRATEGIES**

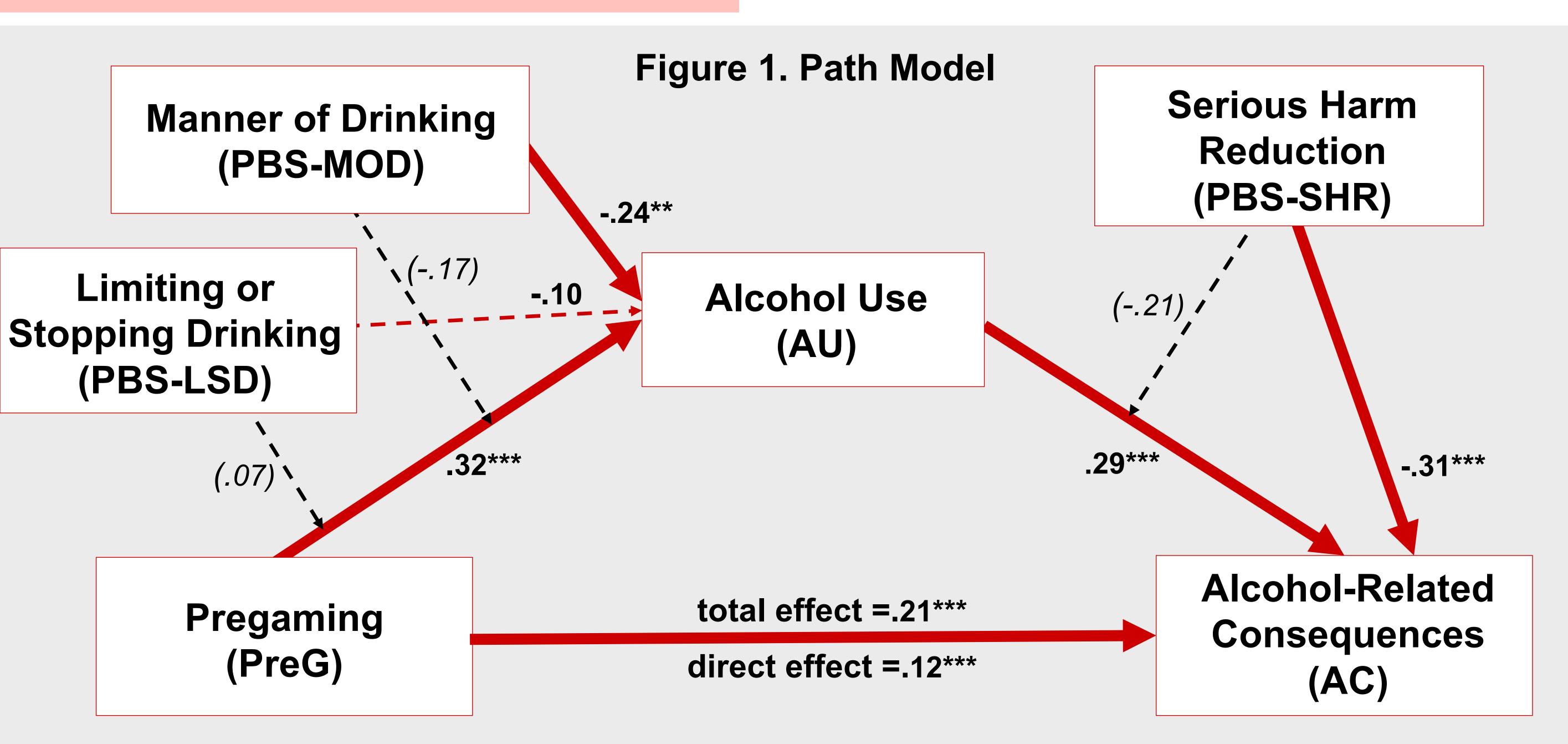
- Protective Behavioral Strategies (PBS) are "specific behaviors one can utilize to minimize the harmful consequences of alcohol consumption" 8-10
- PBS's relationship with AC and AU may differ across PBS type, alcohol outcome measures, or drinking context <sup>8-12</sup>

## THE PRESENT STUDY

This study aimed to explore the role of PBS types, i.e., manner of drinking (PBS-MOD), limiting or stopping drinking (PBS-LSD), serious harm reduction (PBS-SHR), on the relationship among PreG, AU, and AC.

PBS-MOD 10.59 4.50 - .17\*\* - .36\*\* - .21\*\* 1 PBS-SHR 32.13 7.33 - 14<sup>\*\*</sup> - 17<sup>\*\*</sup> - 37<sup>\*\*</sup> 44<sup>\*\*</sup> 45<sup>\*\*</sup>

**Note:** \*\*\**p*<.001, \*\**p*<.01, \**p*<.05



# METHOD

## PARTICIPANTS

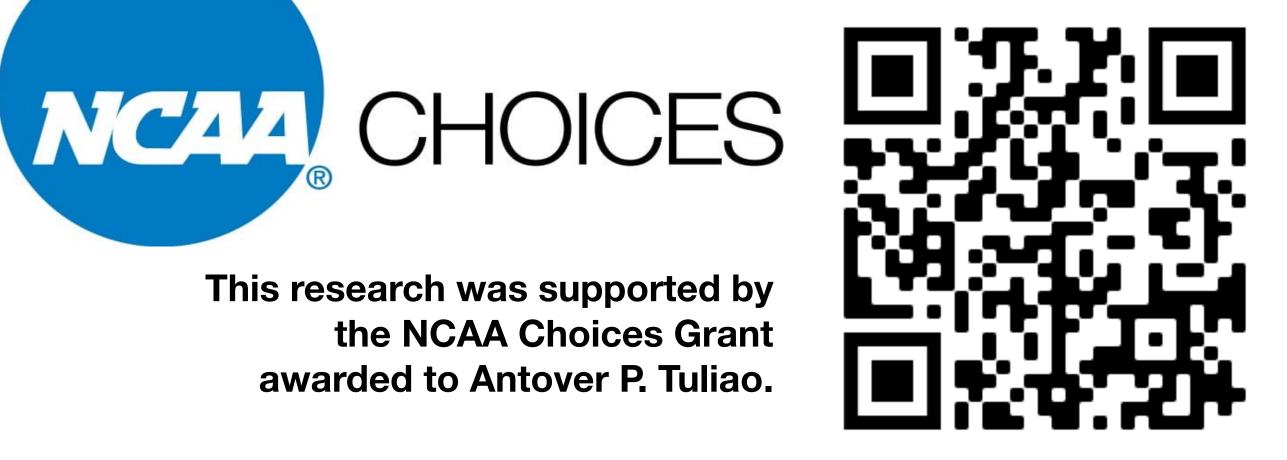
- College students (N = 576)
- $m_{age} = 20.97$  years, sd = 3.51
- 74% female
- 75% engage in pregaming

## MEASURES

- Pregaming (1=Yes; 0=No)
- Protective Behavioral Strategies Scale-20 <sup>9,10</sup>
- Alcohol Use Disorder Identification Tool (Consumption Factor)<sup>13-14</sup>

## **FUTURE DIRECTIONS**

- Explore other factors at play in the relationship among pregaming, alcohol use, and alcohol consequences
- Examine PBS specific to pre-game consumption
- Foster PBS not only on alcohol consumption but also on pre-drinking and post-drinking behavioral risks



Rutgers Alcohol Problem Index <sup>15</sup>

#### DATA GATHERING AND ANALYSIS

- Data gathered via online survey
- Moderated mediation analysis using MLR estimation was done to test the hypothesized model
- Post-hoc exploratory analysis was done to arrive at the final model



1. Read, J. P., Merrill, J. E., & Bytschkow, K. (2010). Before the party starts: risk factors and reasons for "pregaming" in college students. Journal of American college health : J of ACH, 58(5), 461–472. https://doi.org/10.1080/07448480903540523 2. Zamboanga, B. L., & Olthuis, J. V. (2016). What Is Pregaming and How Prevalent Is It Among U.S. College Students? An Introduction to the Special Issue on Pregaming. Substance use & misuse, 51(8), 953–960. ps://doi.org/10.1080/10826084.2016.1187524 3. Foster, J. H., & Ferguson, C. (2014). Alcohol 'pre-loading': a review of the literature. Alcohol and alcoholism (Oxford, Oxfordshire), 49(2), 213–226. tps://doi.org/10.1093/alcalc/agt135

4. Zamboanga, B. L., Casner, H. G., Olthuis, J. V., Borsari, B., Ham, L. S., Schwartz, S. J., Bersamin, M., Van Tyne, K., & Pedersen, E. R. (2013). Knowing where they're going: destination-specific pregaming behaviors in a multiethnic sample of college students. Journal of clinical psychology, 69(4), 383–396. https://doi.org/10.1002/jclp.21928

5. Yurasek, A., Miller, M. B., Mastroleo, N., Lazar, V., & Borsari, B. (2016). Pregaming, Drinking Duration, and Movement as Unique Predictors of Alcohol Use and Cognitions Among Mandated College Students. Substance use & misuse, 51(8), 993–1001. https://doi.org/10.3109/10826084.2016.115249<sup>-</sup>

6. Santos, M., Paes, A., Sanudo, A., Sanchez, Z. (2015). Factors Associated with Pre-drinking Among Nightclub Patrons in the City of São Paulo, Alcohol and Alcoholism, Volume 50, Issue 1: 95–102, https://doi.org/10.1093/alcalc/agu055 7. Barnett, N. P., Orchowski, L. M., Read, J. P., & Kahler, C. W. (2013). Predictors and consequences of pregaming using day- and week-level measurements. Psychology of addictive behaviors : journal of the Society of Psychologists in Addictive Behaviors, 27(4), 921-933. https://doi.org/10.1037/a0031402

8. Pearson M. R. (2013). Use of alcohol protective behavioral strategies among college students: a critical review. Clinical psychology review, 33(8), 1025–1040. https://doi.org/10.1016/j.cpr.2013.08.006

9. Martens, M. P., Ferrier, A. G., Sheehy, M. J., Corbett, K., Anderson, D. A., & Simmons, A. (2005). Development of the Protective Behavioral Strategies Survey. Journal of studies on alcohol, 66(5), 698–705. ttps://doi.org/10.15288/jsa.2005.66.698

10. Treloar, H., Martens, M. P., & McCarthy, D. M. (2015). The Protective Behavioral Strategies Scale-20: improved content validity of the Serious Harm Reduction subscale. Psychological assessment, 27(1), 340–346. https://doi.org/10.1037/pas0000071 11. Blanchard, B. E., Stevens, A. K., & Littlefield, A. K. (2018). Protective behavioral strategies and alcohol consumption: Are all strategies equal? Alcoholism Treatment Quarterly, 36(1), 72–85. ://doi.org/10.1080/07347324.2017.1387034

- 12. Braitman, A. L., Linden-Carmichael, A. N., & Henson, J. M. (2017). Protective behavioral strategies as a context-specific mediator: A multilevel examination of within- and between-person associations of daily drinking. Experimental and clinical psychopharmacology, 25(3), 141–155. https://doi.org/10.1037/pha0000111
- 13. Saunders, J. B., Aasland, O. G., Babor, T. F., de la Fuente, J. R., & Grant, M. (1993). Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO Collaborative Project on Early Detection of Persons with Harmful Alcohol Consumption--II. Addiction (Abingdon, England), 88(6), 791-804. https://doi.org/10.1111/j.1360-0443.1993.tb02093.x
- 14. Bush, K., Kivlahan, D. R., McDonell, M. B., Fihn, S. D., & Bradley, K. A. (1998). The AUDIT alcohol consumption questions (AUDIT-C): an effective brief screening test for problem drinking. Ambulatory Care Quality Improvement Project (ACQUIP). Alcohol Use Disorders Identification Test. Archives of internal medicine, 158(16), 1789–1795. https://doi.org/10.1001/archinte.158.16.1789.

15. White, H.R. & Labouvie, E.W. (1989). Towards the assessment of adolescent problem drinking. Journal of Studies on Alcohol, 50, 30-37.