Acculturative Stress as a Moderator of the Influence of Peers on Alcohol Risk Behaviors among Hispanic College Students

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Background

- Acculturative stress (AS), or stress from the process of acculturating into a new culture, may be a correlate of maladaptive outcomes, such as psychological distress and substance use (Berry, 1976/2006; Zamboanga et al., 2009)
- Substance misuse and alcohol-related risky behaviors are highly prevalent in Hispanic college students (NAHIC, 2007; Windle, 2003)
- Alcohol use may be conceptualized as an ineffective coping skill in response to chronic AS (Lee et al., 2013)
- Associating with substance-using peers is a risk factor for drinking initiation and problematic alcohol behaviors (Carhill, Suárez-Orozco, & Páez, 2008)
- Extant literature lacks examination of relations between AS, peer norms (e.g., injunctive and descriptive), and problematic alcohol use in Hispanic college students (Kim, Hogge, & Salvisberg, 2014)
- Injunctive norms (IN)
 - Perceived approval of peers regarding drinking behaviors
- Descriptive norms (DN)
 - Perception of peer drinking behaviors
- It remains unclear if the association between peer norms and problematic alcohol use is moderated by AS.
- More specifically, need examination on whether differences exist between American-based AS (ABAS) AS from pressure to adjust to American culture, and Hispanic-based AS (HBAS) AS, in predicting problematic alcohol use
- Further, nuanced understanding of how ABAS and HBAS may differentially interact with peer norms and alcohol use is needed

Current Study

Aims:

- (1) To corroborate previous findings of predictive relation between peer norms and problematic alcohol use
- (2) To explore relations between AS and problematic alcohol use
- (3) To explore moderating effects of ABAS and HBAS on relation between peer norms and problematic alcohol use

Participants

- 172 non-alcohol abstaining Hispanic college students
- 69.1% female, 30.9% male
- Age: M = 20.34, SD = 3.57
- Participants completed a battery of self-report measures via an online survey.



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Table 1. Descriptive statistics of all variables (n = 172).

Predictors	Mean/%	SD	Min	Max
ABAS	20.38	6.75	14.00	56.00
HBAS	24.07	9.88	11.00	56.00
IN	7.37	1.70	2.00	10.00
DN	12.01	3.61	4.00	22.40
Problematic Drinking	36.05%	.23	_	_

Table 2. Pearson correlations between all variables.

Variable	ABAS	HBAS	IN	DN
ABAS				
HBAS	.41***			
IN	.03	.24**		
DN	16 *	.12	.54***	
Problematic Drinking	08	.15	.26***	.46***

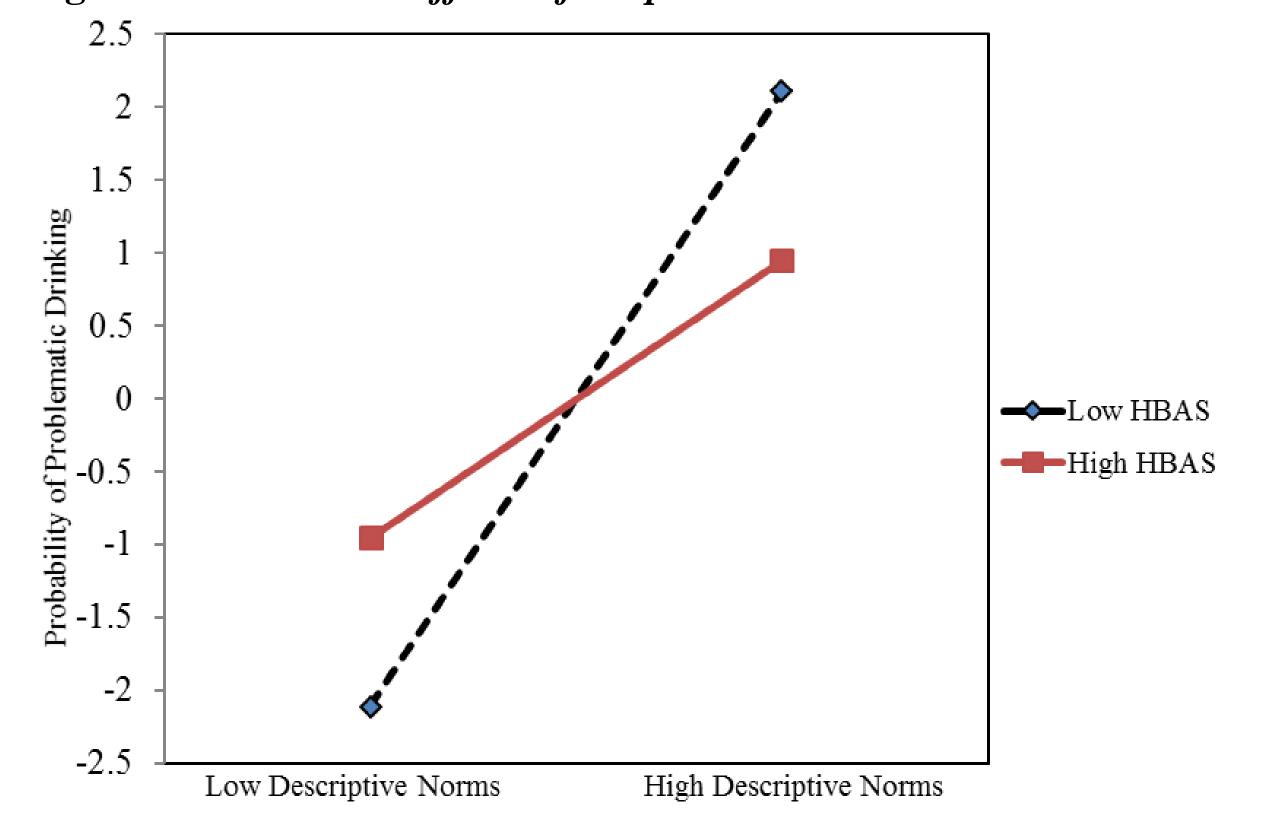
Note. * p < .05, ** p < .01, *** p < .001.

Table 3. Logistic regression for predictors of problematic drinking.

Predictor	β	SE	Wald's X ²	p
ABAS	04	.04	1.20	.27
HBAS	.03	.02	2.66	.10
IN	.02	.13	.03	.85
DN	.35	.08	20.09	<.01***
HBAS*DN	01	.01	5.44	.02*

Note. Likelihood Ratio test $\chi^2 = 12.54$, df = 3, p < .01

Figure 1. Moderation effects of Hispanic-based acculturative stress.



Measures

- Multidimensional Acculturative Stress Inventory (MASI; Rodriguez et al., 2002).
- American-based acculturative stress (ABAS)
- AS related to pressure to acculturate
- Hispanic-based acculturative stress (HBAS)
- AS related to pressure against acculturation
- Peer and Partner Norms for Substance Use Scale (Park, Sher, Wood, & Krull, 2009)
- Injunctive norms (IN)
- Descriptive norms (DN)
- Alcohol Use Disorder Identification Test (AUDIT; Barbor et al., 1989/2001)
- Dichotomous; Score of ≥ 8 as cutoff for problematic drinking

Analytic Procedure

- All analyses conducted in SAS® 9.3 (SAS Institute, Cary NC).
- Predictive relation between predictors (i.e., AS and peer norm variables) and outcome (i.e., AUDIT)
- Conducted after mean centering predictors
- Tested the following interactions: ABAS*IN, ABAS*DN, HBAS*IN, HBAS*DN

Results

- Significant interactions between HBAS and DN
- Findings suggest experiencing pressure to maintain Hispanic cultural heritage dampens impact of DN on problematic alcohol use (see Figure 1)
- No other interactions were significant

Conclusions

- Results suggest further examination of how HBAS and ABAS differentially predict risky alcohol use and interact with other alcohol risk factors in Hispanic young adults is needed
- There is potential clinical utility of psychoeducation on AS, especially HBAS, in protecting against problematic alcohol use
- Results may not be representative of Hispanic college students across the United States. Future studies may aim for larger sample size using multi-method data collection to strengthen validity

Selected References

Berry, J. W. (1976). *Human ecology and cognitive style: comparative studies in cultural and psychological adaption*. New York: John Wiley. Kim, E., Hogge, I., & Salvisberg, C. (2014). Effects of self-esteem and ethnic identity, acculturative stress and psychological well-being among Mexican immigrants. *Hispanic Journal of Behavioral Sciences*, *36*(2), 144-163. Lee, C. S., Colby, S. M., Rohsenow, D. J., López, S. R., Hernández, L., & Caetano, R. (2013). Acculturation stress and drinking problems among

urban heavy drinking Latinos in the Northeast. *Journal of ethnicity in substance abuse*, 12(4), 308-320.

Zamboanga, B. L., Schwartz, S. J., Jarvis, L. H., & Van Tyne, K. (2009). Acculturation and substance use among Hispanic early adolescents: Investigating the mediating roles of acculturative stress and self-esteem. *The Journal of Primary Prevention*, 30(3-4), 315-333.z

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