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Alcohol Use Severity among Hispanic Emerging Adults in Higher Education: Understanding the Effect of Cultural Congruity

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Abstract

Background—Identifying and understanding determinants of alcohol use behavior among Hispanic college students is an increasingly important public health issue, particularly during emerging adulthood. Studies examining ethnocultural determinants of alcohol use behavior among Hispanic college students have focused on direct associations with cultural orientation (e.g., acculturation and enculturation); yet there is a need for research that accounts for the complex interplay of other culturally relevant sociocultural factors.

Objectives—This study examined associations of behavioral acculturation, behavioral enculturation, and cultural congruity (perception of cultural fit between the values of the academic environment and the student's personal values) with alcohol use severity (AUS); and tested if gender moderated those associations.

Methods—A hierarchical linear regression and moderation analysis were conducted on a sample of 167 Hispanic emerging adults (ages 18 to 25) enrolled in college.

Results—All predictor variables entered in the regression model accounted for 20.9% of the variance in AUS. After controlling for demographic variables and depressive symptoms, behavioral acculturation and enculturation did not have a statistically significant association with AUS. Further, gender did not moderate either of these associations. Conversely, greater cultural congruity was associated with lower reports of AUS. A moderation analysis suggested that cultural congruity predicted lower reports of AUS among men, but not among women.

Conclusions—This was the first known study to examine the association of cultural congruity with alcohol use. Findings highlight the value of examining contextual factors of culture and moving beyond reductive measures of cultural orientation.

Keywords

cultural congruity; acculturation; alcohol; Hispanic; emerging adults; college students

Enrollment in institutions of higher education among Hispanics has grown substantially in the United States (U.S.) during the past four decades. Currently, Hispanics represent 16.5% of students enrolled in institutions of higher education (Fry, 2012). College enrollment often corresponds with the psychosocial developmental stage of emerging adulthood, spanning from age 18 to 25 (Arnett, 2005; 2007). Studies have shown that emerging adulthood is a period marked by a significant increase in alcohol risk behavior (National Institute on Alcohol Abuse and Alcoholism [NIAAA], 2006; Substance Abuse and Mental Health Services Administration [SAMHSA], 2013; Schulenberg & Maggs, 2002). For instance, among individuals ages 21 to 25, 69.2% reported binge drinking and 45.1% reported heavy drinking in the past 30 days (SAMHSA, 2013). Exacerbating this trend, data also indicate that emerging adults that are enrolled fulltime in college are more likely to report alcohol risk behavior than their peers who are not enrolled full time (SAMHSA, 2013). Consequently, as the proportion of Hispanics continue to grow across college campuses, identifying and understanding determinants of alcohol risk behavior will become an increasingly important public health issue, particularly during emerging adulthood. Nearly 50% of Hispanic college students engage in a heaving drinking episode at least once a week (Venegas, Cooper, Naylor, Hanson, & Blow, 2012) and Hispanic male students drink at higher rates than their female counterparts (Rafaelli et al., 2007; Zamboanga, Raffaelli, & Horton, 2006). Despite these gender differences, the overall prevalence of drinking among Hispanic college students continues to be a concerning health problem warranting further investigation. Thus, the purpose of this study was to examine associations of alcohol use severity with 1) behavioral acculturation and enculturation, 2) cultural congruity, and 3) test the moderating effect of gender on associations among behavioral acculturation, behavioral enculturation, and cultural congruity with alcohol use.

One explanation for high rates of alcohol use during emerging adulthood is that this developmental stage is characterized as a time of exploring areas of career, social relationships, and identity that may produce psychosocial stress, and in turn, increase the use of alcohol consumption (Arnett, 2005; 2007; NIAAA, 2006). What is more, Hispanic emerging adults attending institutions of higher education may also have the added burden of navigating through competing cultural expectations of their heritage culture and the academic environment which in the U.S. often reflects the values, beliefs, and behaviors of White-Eurocentric culture (Cano, Castillo, Castro, de Dios, & Roncancio, 2014; Castillo & Hill, 2004). Consequently, some Hispanic college students may feel pressure to exhibit values, beliefs, and behaviors of both the Hispanic and U.S. cultural streams; yet perceive that they are not meeting the cultural expectations of either.

Acculturation and Alcohol Use

The number of research studies on alcohol use among Hispanic emerging adults and college students has increased in the past decade (Rafaelli et al., 2007; Venegas et al., 2012; Zamboanga, Rafaelli, & Horton, 2006). The extant research has focused a great deal on the impact of acculturation on alcohol use behavior. *Acculturation* is a bidimensional process that encompasses 1) changes in ethnocultural values, practices, and identities as a result of ongoing contact with a new receiving culture (e.g., U.S. culture); and 2) the degree to which the person maintains his or her heritage culture (e.g., Hispanic culture; Gonzales, Fabrett, & Knight, 2009; Kohatsu, 2005; Schwartz, Unger, Zamboanga, & Szapocznik, 2010). The latter part of the definition takes into account the construct of *enculturation*, the process of socialization (or resocialization) to maintain the norms of the heritage culture (Kim & Abreu, 2001).

Multiple domains of acculturation and enculturation have been investigated in relation to alcohol use behavior among Hispanic college students; however, results have been mixed. For example, Schwartz et al. (2011) did not find an association between domains of acculturation and enculturation with hazardous alcohol use. Similarly, Venegas and colleagues (2010) found no link between bicultural integration, hypergender ideology, and traditional Hispanic family attitudes in relation to heavy drinking among Hispanic college students. Raffaelli et al. (2007) found that higher linguistic acculturation was associated with increased alcohol use among Hispanic women only and that the relationship was mediated by drinking context. One explanation for these mixed findings is that the construct of “acculturation” is too broad and abstract, and as such, researchers should instead examine transactions that might account for the fit between an individual and environmental circumstances (Lazarus, 1997).

Examining associations of acculturation and enculturation with alcohol use behavior should also take into account the potential moderating role of gender. Although higher acculturation is thought to be a risk factor for alcohol misuse and disorders among men and women, acculturation has a stronger adverse effect on the drinking behavior of women (Zemore, 2007) compared to men. One explanation for the difference in the magnitude of this effect is that when compared to Latin American countries, the U.S. has more liberal norms for women regarding alcohol consumption (Caetano & Clark, 2003).

Beyond Acculturation: Understanding Perceptions of Cultural Congruity

Academic institutions in the U.S. often reflect a White-Eurocentric framework with respect to cultural values, beliefs, and behaviors (Castillo, Conoley, & Brossart, 2004; Castillo, Conoley, Choi-Pearson, Archuleta, Van Landingham, & Phoummarath, 2006). Thus, navigating through the institutional culture of an academic environment may cause Hispanic college students to feel unwelcome, isolated and more likely to perceive the academic environment as being culturally incongruent with their own values, beliefs, and behaviors (Cervantes, 1988; Gloria & Robinson Kurpius, 1996). Consequently, ethnic minority students, including Hispanics that perceive more *cultural incongruity* (a cultural mismatch) between their heritage culture and the academic environment may be at a higher risk of

experiencing adverse mental outcomes such as depressive symptoms or psychological distress (Cano et al., 2014; Castillo & Hill, 2004). Conversely, *cultural congruity*, the perception of cultural fit between the values of the university and the student's personal values (Gloria & Robinson Kurpius, 1996) has been associated with increased psychological well-being among Hispanic students (Gloria, Castellanos, & Orozco, 2005; Gloria, Castellanos, Scull, & Villegas, 2009).

Although cultural congruity appears to be a culturally relevant determinant of mental health among Hispanic college students it is not known what effect, if any, it may have on substance use behaviors. In the only identified study in this area, Venegas and colleagues (2012) did not find alcohol use to be linked with any ethnocultural variables. However, the study sample was drawn from an institution with high Hispanic enrollment. Such institutions often have environments where Hispanics are well-represented among faculty and staff, institutional policies and programming are culturally affirming, and connections exist with the larger Hispanic community (Laden, 2001; Santos Jr. & Santos, 2003). These affirming and supportive environments may produce high cultural identities with little variability across students, thereby obscuring their impact on alcohol use (Venegas et al., 2012). Furthermore, a more supportive environment may serve as a protective factor with respect to alcohol use in general, which is consistent with the extant literature on the role of social support and drinking behaviors (Groh, Jason, Davis, Olson, & Ferrari, 2007; Menagi, Harrell, & June, 2008; Turner-Musa & Lipscomb, 2007).

To our knowledge, no prior studies have examined the effect of cultural congruity on alcohol use behavior among Hispanic emerging adults or the potential gender differences that may exist in this relationship. However, based on prior literature that suggests that sociocultural adaptation processes (such as acculturative stress; Thoman & Suris, 2004) linked to acculturation vary across gender; we propose that cultural congruity may also have varied effects as a function of gender.

Present Study

The current study builds upon previous research demonstrating associations between acculturation and alcohol use, and examined the association between cultural congruity and alcohol use severity. Additionally, the current study examined the moderating effect of gender on associations among behavioral acculturation, behavioral enculturation, and cultural congruity with alcohol use severity. Given the comorbidity between depression and depressive symptoms with alcohol use and misuse (National Institute on Drug Abuse [NIDA], 2010) and a prior study that demonstrated cultural incongruity had a positive direct and indirect association with higher depressive symptoms (Cano et al., 2014), all primary analyses controlled for the effect of depressive symptoms.

Based on the body of work reviewed above, the following hypotheses were proposed. *Hypothesis 1*, higher behavioral acculturation would be associated with higher reports of alcohol use severity. Conversely, higher behavioral enculturation would be associated with lower reports of alcohol use severity. Further, it was expected that the effect of behavioral acculturation would be stronger among women than men. *Hypothesis 2*, higher cultural

congruity would be associated with lower reports of alcohol use severity. Taking into account the pronounced effects of gender on alcohol use behaviors and sociocultural adaptation processes, we tested gender as a moderator on the association between cultural congruity and alcohol use severity. However, given the lack of research examining cultural congruity and alcohol use severity, no a priori hypothesis was proposed regarding the specific manner in which gender may affect this association.

Method

Participants

Participants were recruited in 2008 via an email announcement that described the study's aims and procedures. The announcement also contained an internet link where participants could voluntarily consent to participate in the study and complete an anonymous online survey. The recruitment announcement and survey link were originally distributed via identified listservs geared toward Hispanic college students. Prospective respondents were also encouraged to share the email announcement with other individuals that may be interested in participating in the study. Eligible participants had to self-identify as Hispanic or Latina/o and be enrolled in a two or four-year institution of higher education. No compensation was provided for participation in the study. The final sample consisted of 167 emerging adults (ages 18 to 25).

Measures

Demographics—Self-reported age, gender, academic level, marital status, parents' level of education, and perception of parents' alcohol consumption were used as covariates in the regression analysis. Academic level options were freshman, sophomore, junior, and senior. Gender was dummy coded (0) for men and (1) for women.

Depressive Symptoms—Symptoms of depression were measured with the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). The CES-D is not a diagnostic instrument for depression; rather it is a reliable measure of depressive symptomatology that has been used with Hispanic subgroups (Roberts, 1980). The 20-item measure asks respondents to report how they have felt during the past week on a 4-point Likert-type scale with choices ranging from *Rarely or none of the time* (0) to *Mostly or almost all of the time* (3). Summed scores range from 0 to 60 with higher scores indicating greater depressive symptoms. A sample item is, "I felt sad." The coefficient alpha of the CES-D in this study was ($\alpha = .91$).

Behavioral Acculturation and Enculturation—Behavioral acculturation was measured using the Anglo Orientation Scale (AOS) of the Acculturation Rating Scale for Mexican Americans-II (ARSMA-II; Cuéllar et al., 1995). The AOS contains 13 items with a 5-point Likert-type scale ranging from *not at all* (1) to *extremely often or almost always* (5). Higher scores indicate greater behavioral acculturation. A sample item is, "I speak English." Behavioral enculturation was assessed with the Mexican Orientation Subscale (MOS) of the ARSMA-II. The MOS is composed of 17 items with the same Likert-type scale used with the AOS. A sample item is, "I enjoy Spanish language TV." The coefficient alphas for the

AOS and MOS in this study were ($\alpha = .77$) and ($\alpha = .90$), respectively. All items in the ARSMA-II with the term *Mexican* were modified to *Hispanic/Latino* to make them more applicable to Hispanic respondents of various national origins.

Cultural Congruity—Perceived cultural fit between the respondents' personal values and values of their respective academic institution was measured with the Cultural Congruity Scale (CCS), which has been validated with Hispanic undergraduate students (Gloria & Robinson Kurpius, 1996). The CCS uses a 7-point Likert-type scale ranging from *not at all true* (1) to *very true* (7). Summed scores range from 13 to 91 with higher scores indicating a higher perception of cultural congruity. A sample item is, "As an ethnic minority, I feel as if I belong on this campus." The coefficient alpha of the CCS in this study was ($\alpha = .86$).

Alcohol Use Severity—Alcohol use severity was measured with the Alcohol Use Disorder Identification Test (AUDIT; Babor, Higgins-Biddle, Saunders, & Monteiro, 1993). The AUDIT is a 10-item self-report measure with varied response choices on a Likert-type scale ranging from 0 to 4. Summed scores range from 0 to 40 with higher scores indicating greater alcohol use severity. A sample item is, "How often during the last year have you found that you were not able to stop drinking once you had started?" The coefficient alpha for the AUDIT was ($\alpha = .86$).

Analytic Plan

The current study utilized hierarchical linear regression (HLR) as the primary data analytic strategy. Preliminary analyses were conducted to ensure data met the requirements of homoscedasticity, normality, linearity, outliers, and multicollinearity.

All variables were entered into the regression model in a specified order so that each predictor contributed to the explanatory variance of the dependent variable (i.e., alcohol use severity) after controlling for the variance explained by the previous variables (Petrocelli, 2003). Predictor variables were grouped into three broad domains and entered in the following order: (1) age, gender, academic level, marital status, parents' education level, perception of parents' alcohol consumption, and symptoms of depression; (2) behavioral acculturation and enculturation; and (3) cultural congruity. Cultural congruity was the last variable entered in the model to determine the extent to which it uniquely predicted alcohol use severity above and beyond the other predictors.

To examine if gender influenced the direction and/or strength of associations among behavioral acculturation, behavioral enculturation, and cultural congruity with alcohol use severity, we conducted three separate moderation analyses using PROCESS v2.10 (Hayes, 2013). All moderation analyses controlled for the demographic variables used in the HLR and symptoms of depression. We also controlled for behavioral acculturation, behavioral enculturation, and cultural congruity unless a respective variable was used in the interaction term. For instance, if behavioral acculturation and enculturation were included as covariates in a moderation analysis, cultural congruity was used in the interaction term along with gender to predict alcohol use severity.

Results

Preliminary Analysis

The sample included college students who were predominately of Mexican heritage ($n = 127$; 76.0%), composed of men ($n = 53$; 31.7%) and women ($n = 114$; 68.3%) with a mean age of 20.24 ($SD = 1.88$) years. Using linear acculturation level cutoff scores recommended by Cuéllar et al. (1995) we calculated the degree of behavioral assimilation to the U.S. culture. The sample in this study was “very Hispanic oriented” (4.2%), “Hispanic oriented/balanced bicultural” (37.1%), “slightly Anglo oriented” (37.1%), “strongly Anglo oriented” (18.6%), and “very assimilated” (3.0%). Bidimensional acculturation typologies (e.g., marginalized, separated, bicultural, and assimilated) were not used because it is possible for a participants to not fall into one of the four categories. The distribution of academic level was as follows: freshmen ($n = 56$) 33.5%, sophomores ($n = 38$) 22.8%, juniors ($n = 37$) 22.2%, and seniors ($n = 36$) 21.6%. With regard to marital status, 9.0% were married or living with a partner and 90.4% were single.

Table 1 presents the means, standard deviations and bivariate correlations for all variables used in the HLR. Alcohol use severity had statistically significant correlations with gender ($r = -.26, p .01$), symptoms of depression ($r = .22, p .01$), and cultural congruity ($r = -.23, p .01$).

Hierarchical Linear Regression

Table 2 presents the standardized regression coefficients from the HLR analysis. Results indicate that 20.9% of the variance in alcohol use severity was accounted for by all predictor variables entered in the regression model. The first block of the model included demographic variables and depressive symptoms that accounted for 17.7% of the variance in alcohol use severity, $R^2 = 17.7, F(9, 150) = 3.59, p < .001$. The second block added behavioral acculturation and enculturation, which did not account for any variance, $R^2 = .00, F(2, 148) = .07, p > .05$. After controlling for all other predictor variables, the third and final block added perceptions of cultural congruity, which accounted for 3.1% of the variance of alcohol use severity $R^2 = 3.1, F(1, 147) = 5.73, p < .05$.

Standardized regression coefficients from the final model indicated that gender ($\beta = -.31, p .001$), academic level ($\beta = -.22, p .05$), symptoms of depression ($\beta = .19, p .05$), and cultural congruity ($\beta = -.20, p .05$) accounted for a statistically significant proportion of the variance in alcohol use severity. No other variables in the model were statistically significant.

Moderation Analyses

A moderation analysis with 10,000 bootstrap iterations indicated that gender did not moderate the association between behavioral enculturation and alcohol use severity. Although the interaction between behavioral acculturation and alcohol use severity was statistically significant ($\beta = 3.28, p > .05, 95\% \text{ CI } [.20, 6.37]$), the conditional effect was not statistically significant. Therefore, there was insufficient support to postulate that gender functioned as a moderator (Hayes, 2013). Lastly, gender had a statistically significant

interaction effect with cultural congruity in relation to alcohol use severity ($\beta = .16, p < .01, 95\% \text{ CI } [.04, .29]$). Also, the conditional effect was statistically significant, indicating that a greater perception of cultural congruity had a beneficial effect in lowering alcohol use severity among men ($\beta = -.20, p = .001, 99\% \text{ CI } [-.35, -.05]$), but not among women ($\beta = -.04, p > .05, 99\% \text{ CI } [-.13, .05]$).

Discussion

Most studies examining ethnocultural determinants of alcohol use behaviors among Hispanic college students have emphasized the potential impact of the acculturative process (Blanco et al., 2013; Caetano, Vaeth, & Rodriguez, 2012; Mills & Caetano, 2012; Raffaelli et al., 2007; Schwartz et al., 2011; Venegas, Cooper, Naylor, Hanson, & Blow, 2012; Zemore, 2007). Yet, findings from these studies have been mixed and investigators have repeatedly called for research utilizing a more nuanced approach that accounts for the complex interplay of sociocultural factors impacting alcohol use among Hispanics (Mills & Caetano, 2012; Schwartz, et al., 2011). Our study addresses this gap in the literature by examining the association between perceptions of the cultural context with alcohol use among Hispanic emerging adults attending college.

With regard to our first hypothesis, we found that behavioral acculturation and enculturation did not significantly predict alcohol use severity after controlling for demographic variables and symptoms of depression. Further, our findings did not demonstrate that the effects of behavioral acculturation or enculturation varied by gender. However, the data supported our second hypothesis, in that a greater perception of cultural congruity with the academic environment had a statistically significant association with lower reports of alcohol use severity. Furthermore, a moderation analysis indicated that this beneficial association was found among men but not among women. These findings underscore the importance of considering the interactive and contextual dimension of culture. As other theorists have proposed (Casmir, 1993; Lazarus, 1997), an individual's cultural identity or cultural orientation can be thought of as a dynamic construct defined and expressed through continual interactions with the environmental context.

In our study, the extent to which Hispanic college students perceived the academic environment as culturally congruent was found to be an important variable. Findings provide evidence for a possible protective effect of cultural congruity on Hispanic men's alcohol use. Our interpretation of the existence of a protective effect relies on the notion that greater cultural congruity in the academic environment offers a more hospitable context with greater social and psychological resources that may attenuate problematic alcohol use. For instance, an individual's perception of their academic environment as culturally congruent is more likely to include culturally similar peers and faculty. Thus, one can speculate that a more culturally congruent environment may provide access to greater social support and a sense of belonging. Numerous studies have shown social support-related variables to be strong determinants of drinking behavior (Groh, Jason, Davis, Olson, & Ferrari, 2007; Menagi, Harrell, & June, 2008; Turner-Musa & Lipscomb, 2007). Moreover, Hispanics pursuing higher education in a more congruent academic environment have a greater ability to resist peer pressures to drink, which is also known to be a significant predictor of use (Hansen,

1992). Lastly, academic environments that are more culturally congruent are also more likely to offer opportunities for extracurricular activities that match Hispanic college students' interests, values, and needs and engaging in such extracurricular activities is a well-known protective factor with respect to alcohol use among young people making the transition to college (Fredricks & Eccles, 2006).

The findings from our moderation analysis indicated that cultural congruity had an effect on alcohol use severity among men, but not among women. In our interpretation of this finding, we considered national data on college enrollment of Hispanic men and women. Since the 1980's the gap between male and female undergraduate college enrollment among Hispanics has continued to widen with Hispanic men being underrepresented as compared to Hispanic women (Fry, 2012). Given this national trend, we surmise that due to the lower numbers of Hispanic men in the academic environment, cultural congruity may play a greater role in predicting alcohol use severity. Possibly, Hispanic men are experiencing greater levels of social isolation due to the lack of gender specific peers. Thus, a more culturally congruent environment may also have the additive benefit of decreasing social isolation, which may further protect against alcohol use. Although we can only speculate on this relationship, future research can examine how gender-specific isolation may contribute to alcohol drinking behaviors.

Our gender moderation finding can also be interpreted with Hispanic gender norms in mind. Previous researchers have linked Hispanic gender norms to substance use and cultural identity (Kulis, Marsiglia, & Nagoshi, 2012; Schwartz et al., 2013). For example, the concept of "machismo" is thought to contribute to a number of health related behaviors, including alcohol consumption (Soto et al., 2011; Unger et al., 2006). Future research can attempt to elucidate the relationships between more specific gender-related norms and how they impact perceived cultural congruity and alcohol use.

Limitations

The limitations of our study should be considered when interpreting our findings and developing plans for future research in this area. First, our study used cross-sectional data, which limits our ability to infer the direction of effect and causality. Second, self-report measures were used, which can include inaccurate data due to participant misrepresentation or error. Third, Hispanics are a highly heterogeneous group with wide ranging characteristics that vary according to race, national heritage, region of the U.S., and family immigration experience. Due to our restricted sample size we could not conduct subgroup analysis and the current study treats Hispanics as a singular panethnic group. This approach fails to recognize the unique characteristics of Hispanic subgroups that may impact the relationships we examined. Fourth, our sample consisted of Hispanic college students and there were a disproportionate number of women in our sample. Thus, the generalizability of our findings were weakened by our sample and future studies are needed in order to explore whether or not our findings generalize to the broader population of Hispanic emerging adults. Fifth, due to the use of the online survey it was not possible to verify the identity of the person completing the survey. Further, it is possible that participants may underrepresent or overrepresent the amount of alcohol use in self-report measures. Nonetheless, self-reports

of alcohol consumption tend to converge well with biological measures among the general population (Del Boca & Darkes, 2003). Last, due to the online nature of our recruitment approach we do not know if our findings generalize to individuals that have limited internet access or have low internet utilization.

Implications

Despite the study limitations, this is the only identified study that has examined the relationship between perceived cultural congruity and alcohol use among Hispanics. There are several potential implications of our findings. Most notable is that as institutions of higher education continue to see growth in Hispanic student enrollment, the need for meeting the unique needs of Hispanic students will continue to increase. Given that college drinking is so ubiquitous and is associated with a number of other problems (i.e., automobile accidents, risky sex, alcohol use disorders, and violence) institutions will continue to place a high degree of emphasis on addressing the problem of alcohol consumption. Our findings suggest that programs seeking to target Hispanic college student drinking may be enhanced by also considering the broader cultural context of the institution. Therefore, efforts in the area of alcohol prevention and treatment among Hispanic college students can potentially take advantage of existing institutional organizations and resources; particularly ones whose aim it is to enhance the cultural climate of the institution. For example, Hispanic student organizations, cultural centers and administrative entities charged with enhancing institutional diversity can all be sought out as partners in a more wide-ranging alcohol program that seeks to enhance the perceived cultural congruity of Hispanic students.

Mental health providers in college counseling centers may also play a role in addressing cultural congruity with Hispanic students seeking services. Counselors can proactively engage Hispanic students in discussions about cultural congruity and the encounters with the academic environment that shape their perception of incongruity. Counselors may also benefit from more specific training in therapeutic approaches that address cultural incongruity (see Bacallao & Smokowski, 2005; Gloria & Rodriguez, 2000). Ultimately, enhancing cultural congruity in the college setting will require multifaceted approaches that are feasible given the comprehensive and wide ranging resources that exist at institutions of higher learning.

The current study contributes to the growing literature focusing on alcohol use among Hispanic college students. Our findings suggest that perceived cultural congruity of the academic environment is not only a significant factor that impacts alcohol use but also, it is a variable that must be considered differently among men and women. Future studies can expand this line of research with a greater emphasis on how specific gender roles may influence this relationship among Hispanic college students.

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Table 1
 Bivariate Correlations, Means, and Standard Deviations for Variables Used in Regression Analysis (n = 167)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	M	SD
1. Alcohol Use Severity	-													4.45	5.15
2. Age	.08	-												20.24	.68
3. Gender	-.26**	-.11	-											-	-
4. Marital Status	.05	.29**	-.01	-										-	-
5. Academic Level	-.30	.71**	-.08	.24**	-									2.32	1.17
6. Mother's Education Level	.09	-.02	-.01	.03	-.09	-								11.09	2.78
7. Father's Education Level	-.02	-.09	.05	-.04	-.01	.10	-							11.18	2.77
8. Mother's Alcohol Consumption	.06	.04	.09	.15	.03	-.02	-.10	-						1.17	.63
9. Father's Alcohol Consumption	.04	-.04	.07	-.12	-.01	.06	.10	.06	-					1.70	1.17
10. Depressive Symptoms	.22**	-.04	.16*	.04	-.01	-.05	.03	.09	.11	-				17.33	11.88
11. Behavioral Acculturation	-.03	.02	.07	-.03	-.08	-.17*	-.09	.16*	.11	.02	-			3.71	.52
12. Behavioral Enculturation	-.04	-.10	.02	-.03	.09	.10	.12	-.04	.01	-.05	-.31**	-		3.40	.80
13. Cultural Congruity	-.23**	-.06	-.10	.01	-.10	-.07	-.10	-.05	-.09	-.41**	.06	.15	-	70.21	14.23

* $p < .05$
 *** $p < .01$.

Table 2

Unstandardized and Standardized Coefficients Predicting Alcohol Use Severity from the Final Regression Model (n = 167)

Variable	<i>B</i>	<i>SE</i>	β
Block 3			
Age	.49	.30	.18
Gender	-3.60	.85	-.32***
Marital Status	.78	1.39	.04
Academic Level	-1.01	.50	-.22*
Mother's Education Level	.12	.14	.06
Father's Education Level	-.04	.14	-.02
Mother's Alcohol Consumption	.51	.63	.06
Father's Alcohol Consumption	.17	.34	.04
Depressive Symptoms	.09	.04	.19*
Behavioral Acculturation	-.78	.82	-.01
Behavioral Enculturation	.27	.56	.04
Cultural Congruity	-.07	.03	-.20*

Note. $R^2 = 17.7$ for Block 1; $R^2 = 0.0$ for Block 2; $R^2 = 3.1$ for Block 3.

** $p < .01$

* $p < .05$

*** $p < .001$.