Cultural Variation in the Relationship between Social Motives, Drinking, and Alcohol-Related Problems

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Abstract

College students consume alcohol based on different motivations, and past research indicates that these drinking motives can differentially predict alcohol-related consequences. However, little is known about how drinking motives and consequences operate in Latinx individuals and other ethnic minority groups. The present study examined social drinking motives and their links to drinking consequences and problematic drinking in a college sample. Participants were 106 Latinx, Asian/Asian American, and European American undergraduates. Social motives were positively and significantly linked to drinking outcomes, but these main effects were qualified by an interaction between social motives and ethnicity on drinking outcomes, such that greater social motives was significantly linked to problematic drinking and drinking consequences for European Americans, but not for Latinx or Asian/Asian American participants. Implications for theory and intervention are discussed.

Keywords: *social motives, alcohol, culture, ethnicity, college drinking*

Cultural Variation in the Relationship between Social Motives, Drinking, and Alcohol-Related Problems

Alcohol use among college students is widespread, yet carries significant risk of adverse consequences on psychological, social, and physical health (Hingson, Heeren, Winter, & Wechsler, 2005; Wechsler, Davenport, Dowdall, Moeykens, & Castillo, 1994). Over half of 18 to 22-year-olds in the United States have consumed alcohol in the past month, with young adults enrolled in college having higher rates of drinking (53.6%) than their non-enrolled (48.2%) counterparts (Center for Behavioral Health Statistics and Quality, 2018). Many of the riskiest drinking behaviors occur in social settings, such as participating in drinking games or “pre-partying”, which occurs when an individual drinks alcohol prior to an event in which they will likely drink more alcohol (Borsari, 2004; Pedersen & LaBrie, 2007). This highlights the role that socializing, and by extension, social motives, may play in the initiation of drinking behavior. To prevent alcohol misuse and its associated consequences among college students, it is important to understand these psychological antecedents of alcohol use or drinking motives (Cooper, 1994).

Although it is important to understand the individual factors that motivate drinking behavior, we cannot neglect group-level factors. Therefore, examining whether cultural factors can shape how drinking motivations influence eventual outcomes. The ethnic diversity of college campuses has been steadily increasing over the last several decades, with a particularly high increase in Asian/Asian American and Latinx student enrollment; therefore, the need for examining cultural differences in drinking motivation and associated outcomes is paramount. A contemporary understanding of drinking motives must reflect the changing demographic makeup of college students. This paper examines the role of drinking motives, specifically social

drinking motives, and culture on alcohol-related outcomes in order to better capture the interaction of individual and group-level factors on this important public-health problem.

A Motivational Model of Drinking

According to the motivational model of alcohol use, college-aged youth typically report four primary motivations for drinking: enhancement, coping, social, and conformity motives (Cooper, 1994; Cox & Klinger, 1988). These motives have been regularly used to study drinking behaviors in youth and young adults (Cooper, 1994; Kuntsche, Knibbe, Gmel, & Engels, 2005). While it is important to consider all drinking motives, the primary focus of this study is on exploring cultural differences in the relation of social motives with drinking outcomes. Social drinking motives refer to the use of alcohol to obtain positive social rewards, such as the ability to be more sociable, have more fun in social gatherings, and celebrate (Cooper, 1994). Of the four drinking motives, social motives tend to be most commonly endorsed across all drinkers, but may be especially useful in explaining the etiology of drinking during the college period (Mooney, Fromme, Kivlahan, & Marlatt, 1987; Van Damme et al., 2013).

The college years are a time of emerging self-identity, increased independence, and the creation of new social networks, and these new goals can elevate social motives for drinking (Arnett, 2000). For example, young adults who view social goals as important report planning to drink more frequently and consume more alcohol than those who do not value social goals as highly (Rhoades & Maggs, 2006). Although young adulthood is, on its own, linked to increased alcohol use, college enrollment may play a unique role on drinking behaviors during this time period (Dawson, Grant, Stinson, & Chou, 2004; Naimi et al., 2003). A review paper of 18 studies indicated that college students tend to drink in higher quantities and with more frequency than their age-matched, non-enrolled counterparts (Carter, Brandon, & Goldman, 2010). For college

students, there are social rewards for drinking: drinking can contribute to a sense of belongingness (Hamilton & DeHart, 2017), while refraining from drinking around peers who are drinking may make someone stand out and prompt encouragement/coercion from peers to drink (Rabow & Duncan-Schill, 1995). Therefore, understanding the consequences of socially-motivated drinking among college students has received particular attention.

Among young adults, past research indicates that social drinking motives are associated with drinking frequently and in social settings (Cooper, 1994). Although a review by Kuntsche et al. (2005) demonstrated that social drinking motives are typically not associated with problematic outcomes, more recently published literature has been inconsistent. A study by Grant, Brown, and Moreno (2013) indicated that social drinking motives are predictive of both drinking frequency and quantity. Other studies indicated that social drinking motives are associated with higher-than-expected levels of drinking (Vaughan, Corbin, & Fromme, 2009), alcohol-related problems (Ham, Zamboanga, Bacon, & Garcia, 2009; Lyvers, Hasking, Hani, Rhodes, & Trew, 2010; Van Damme et al., 2013), and risky drinking behaviors such as “prepartying” (Pedersen & LaBrie, 2007). In sum, further research is needed to unpack the links between social motives and alcohol-related problems.

In order to better understand the relationship between social motives and drinking outcomes, more research with culturally diverse samples is needed. Much of the research in this area has either lacked adequate representation of various ethnic groups or failed to examine how social drinking motives may differ by ethnicity. One of the few studies with a diverse sample found that social motives more strongly predicted alcohol misuse among White adolescents, while coping motives more strongly predicted alcohol misuse among Black adolescents (Bradizza, Reifman, & Barnes, 1999). Another study comprising European American, Latinx,

and Asian American college students indicated that, for the total sample, stronger social motives/behaviors for drinking were associated with greater-than-expected alcohol use and were a stronger risk factor for Latinx and European American students than for Asian American students (Vaughan et al., 2009). However, this study was an exploration of the transition from high school into college and may not be particularly representative of the college experience overall, when greater autonomy and separation from family norms around drinking can change the how social motives relate to drinking and outcomes.

Cultural Considerations around Drinking Motives and Outcomes

Socially motivated drinking may be expressed differently for members of different ethnic groups depending on how social interaction is construed in their culture. For example, in Latinx culture, interpersonal relationships are characterized by *personalismo*, a warm, empathetic social orientation (Consoli & Sheltzer, 2017). As such, cultural scripts for social interactions in Latinx culture emphasize interpersonal warmth and friendliness toward both familiar and unfamiliar individuals. The social value of *personalismo* in Latinx culture may be protective for Latinxs such that socially motivated drinkers may be especially attuned to developing closeness in relationships as opposed to focusing on the drinking itself. In Asian cultures, on the other hand, social relationships often entail a sense of obligation to and interdependence with others in the interest of maintaining interpersonal harmony and social order (Kim, Sherman, & Taylor, 2008). Thus, among Asian Americans, social drinking motives may primarily reflect a desire to fit in with ones' own peer group or follow proper social rules, which could result in greater or fewer negative outcomes depending on the social context.

In contrast to the more collectivist Asian and Latinx cultures, mainstream US culture emphasizes a focus on self-enhancement and the maintenance of individual autonomy in

relationships (Fiske & Fiske, 2007; Hofstede, 2001; Markus & Kitayama, 1991). Therefore, socially motivated drinking in European Americans may be characterized by a desire to present the self in a positive light, reflecting independent concerns about self-presentation and impression management (O'Grady, 2013). Such concerns could lead to worse outcomes associated with socially motivated drinking due to perceived norms of excessive drinking in college (Gotham, Sher, & Wood, 1997; Wechsler et al., 2000) and social pressure to fulfill these norms in order to present a desirable image (Leary, Tchividjian, & Kraxberger, 1994). In summary, sociocultural differences in norms around socializing suggest that the relationship between social drinking motives and drinking outcomes may differ by ethnicity.

The Present Study

The present study aims to examine differences in the relationship between social drinking motives, as defined by Cooper et al. (1994), and alcohol-related outcomes in a culturally diverse sample. To accomplish this aim, we collected data from a cohort of Latinxs, Asian/Asian American, and European American college students who endorsed moderate drinking behavior. Importantly, our sample also employed cultural criteria to ensure that individuals had sufficient exposure to the cultural norms and practices of their culture of origin. These criteria have been used previously in several studies and allow for some within-group variability while also being attentive to between-group differences that are characteristic of different cultural traditions (Soto, Levenson, & Ebling, 2005; Soto & Levenson, 2009; Soto et al., 2012). Given the cultural norms outlined above, we expected that for European Americans (and possibly Asian/Asian Americans) greater social motives to drink will be associated with greater problematic drinking and drinking consequences, but that this relationship will be attenuated for Latinx participants (and possibly Asian/Asian Americans).

Method

Participants

Participants were 106 English-speaking undergraduate students from a large university in the northeastern United States recruited as part of a larger, longitudinal study on daily drinking behavior. To be eligible, participants had to be between 18 and 25 years of age ($M_{age} = 19.86$, $SD_{age} = 1.45$), report drinking at least once every two weeks during the prior three months, and meet the cultural criteria described below. All participants were either recruited from introductory psychology classes and compensated with course credit or recruited from the general campus community and paid \$30 for their participation. The final sample was 37.74% Latinx ($n = 40$), 24.53% Asian/Asian American ($n = 26$), and 37.74% European American ($n = 40$). The sample was predominantly female (69.52%). This study was approved by the university's Institutional Review Board.

Cultural Criteria

These criteria were selected in order to increase the likelihood that participants would have been exposed to and influenced by the cultural norms of their group. To be eligible for the study, participants had to self-identify as belonging to one of the three ethnic/cultural groups of interest (Latinx, Asian/Asian American, European American). Inclusion criteria also required that European American participants were born in the U.S., whereas Latinx participants had to be born in either the U.S. or a Latin American country (Spanish Caribbean; Central or South America), and Asian/Asian American participants must have been born in the U.S. or an Asian/Southeast Asian country. In addition, Latinx participants had to report at least one parent who was born in Latin America. Asian/Asian American participants had to report at least one parent who was born in East or Southeast Asia. We allowed for this range in

ethnicities/nationalities across the Latinx and Asian/Asian American groups because cultural similarities tend to be greater than cultural differences among the sub-groups (Kim, Yang, Atkinson, Wolfe, & Hong, 2001).

Measures

Demographic Screener. This screener assesses respondents' assessment of their ethnic, racial, and cultural backgrounds. The screener also collects more detailed information pertaining to their cultural and ethnic background, including their parent's ethnicities and birthplace, languages spoken, religious affiliation, etc. It also collects basic demographic information including sex, age, class standing, and family income.

Social Drinking Motives. Social drinking motives were assessed using the Social Motivations subscale of the Drinking Motives Questionnaire-Revised (DMQ-R; Cooper, 1994). This questionnaire assesses the frequency with which individuals drink for social reasons. Sample items include “*to celebrate a special occasion with friends*” and “*because it makes social gatherings more fun*”. Participants use a 5-point response scale ranging from 0 (“*almost never or never*”) to 4 (“*almost always or always*”) to indicate how often they drank to fulfill social motives. This measure has shown excellent psychometric properties for use with college students (Cooper et al., 2000; MacLean & Lecci, 2000; Simons, Correia, Carey & Bosari, 1998), with alphas for each of the subscales falling within .85 and .88. Reliability of the DMQ-R was similarly high in our sample, with Cronbach's $\alpha = .92$ for the overall scale and $\alpha = .88$ for the social motives subscale. While our main hypotheses concerned social motives, we also included the other motives as control variables in our analyses. The additional motives evaluated with the DMQ-R included subscales that assess coping motives (e.g., “*to cheer up when you're in a bad*

mood"; $\alpha = .86$), enhancement motives (e.g., "*because it's exciting*"; $\alpha = .90$), and conformity motives (e.g., "*to fit in with a group you like*", $\alpha = .87$).

Self-control. Self-control was assessed using the Brief Self Control Scale (BSCS), a 13-item self-report measure of general self-control (Tangney, Baumeister, & Boone, 2004).

Participants rated how well statements described them (i.e. "*I am good at resisting temptation*") on a 5-point scale. The BSCS demonstrated good reliability in the current sample ($\alpha = .83$).

Problematic drinking. To measure problematic drinking, participants completed the Alcohol Use Disorders Identification Test (AUDIT; Saunders, Aasland, Babor, De La Fuente, & Grant, 1993). This measure comprises 10 items that measure frequency and quantity of alcohol consumption, drinking behavior, and alcohol-related problems. A cut-off score of 11 on the test has previously been employed to discriminate problem from non-problem drinkers (Claussen and Aasland, 1993; Holmila, 1995; Fleming et al., 1991; Tsai et al., 2005). On the AUDIT, participants reported their frequency of alcohol use (e.g., "*How often do you have a drink containing alcohol?*"), binge drinking (e.g., "*How often do you have six or more drinks on one occasion?*"), and alcohol-dependent behaviors (e.g., "*How often during the last year have you failed to do what was normally expected from you because of drinking?*") within the past year. Responses were scored on a 5-point Likert scale (0 = *Never* to 4 = *4+ Times a Week* for the former and 0 = *Never* to 4 = *Daily or Almost Daily* for the latter two indices). Scores were computed as a total sum, ($M = 10.02$, $SD = 5.89$). Reliability in our sample was high ($\alpha = .81$).

Drinking Consequences. Consequences associated with alcohol use were assessed with the Young Adult Alcohol Consequences Questionnaire (YAACQ; Read, Kahler, Strong, & Colder, 2006). The YAACQ is a 48-item inventory of alcohol-related consequences (answered yes/no) in which respondents indicate whether the situations described had happened to them in

the past year. Example items include social-interpersonal consequences (e.g., “*while drinking, I have said or done embarrassing things*”), impaired control (e.g., “*I often have found it difficult to limit how much I drink*”), self-perception (e.g., “*I have felt badly about myself because of drinking*”), self-care (e.g., “*I haven’t been as sharp mentally because of my drinking*”), risky behavior (e.g., “*I have taken foolish risks when I have been drinking*”), academic/vocational difficulty (e.g., “*I have received a lower grade on an exam or paper than I ordinarily would have because of my drinking*”), physical dependence (e.g., “*I have felt anxious, agitated, or restless after stopping or cutting down on my drinking*”), and blackout drinking (e.g., “*I’ve not been able to remember large stretches of time while drinking*”). For the purposes of our study, we used a total score by summing yes/no responses ($M = 13.65$, $SD = 8.19$). Kuder-Richardson’s coefficient 20 (KR-20; Padilla, 2019) was computed as the reliability index, given the dichotomous nature of the items, and indicated high reliability ($KR-20 = 0.90$).

Procedures

A demographic screener was used to determine cultural eligibility for all groups. Subject pool participants completed the screener as part of the subject pool participation credit. Interested individuals recruited from flyers and listserv messages were directed to a website where they completed a demographic screener used to determine their eligibility. Participants who qualified for the study and consented to participate were given a unique identifier and directed to the study website to complete the measures listed above.

Data Analytic Strategy

Our first step in the analyses was to examine mean differences across these variables using one-way ANOVAs, with ethnicity as a between subjects factor. Next, we conducted bivariate correlations between our main dependent (drinking consequences and problematic

drinking), predictor (social motives), and control variables (self-control, other drinking motives). Finally, we tested our primary hypotheses by using Andrew Hayes' PROCESS Macro (Hayes, 2013) to examine whether culture moderated the association between social motives and our main dependent variables (drinking consequences and problematic drinking). All variables included in the model are standardized (z-scored) as part of these analyses, prior to the computation of interaction terms. Ethnicity was represented via two vector codes coding comparing Latinx with Asian/Asian American and European American participants, respectively, where Latinx was coded as +1 and the other group was coded as -1, respectively, for each vector. Self-control was used as a covariate in all models to account for any trait-level differences in self-control, which has been shown to predict drinking outcomes in prior research (e.g., Pearson et al., 2013). All four coping motives were entered in as covariates as well.

Results

Descriptive Statistics and Bivariate Correlations

Descriptive statistics and results of univariate ANOVA analyses testing for group differences in our primary study variables can be found in Table 1. There were no significant differences between ethnic groups in the observed means for social drinking motives, self-control, or drinking consequences. However, an ANOVA comparing ethnic groups on problematic drinking (AUDIT scores) revealed that ethnic differences in problematic drinking were marginally significant, $F(2, 91) = 2.78, p = .07$). Follow-up mean comparisons revealed that European Americans ($M = 11.42, SD = 7.42$) were not significantly different from Latinx individuals ($M = 10.03, SD = 5.01$), but scored significantly higher on problematic drinking than Asian/Asian Americans ($M = 7.73, SD = 3.38$).

[Insert Table 1 about here]

Bivariate correlations among all study variables can be found in Table 2. Higher social drinking motives, overall, were linked to significantly greater problematic drinking scores ($r = .43, p < .001$) and significantly higher levels of drinking consequences ($r = .42, p < .001$). As expected, greater self-control was related to significantly lower problematic drinking ($r = -.35, p < .001$), and significantly fewer drinking related consequences ($r = -.45, p < .001$).

[Insert Table 2 about here]

Relationships between social motives, ethnicity, and problematic drinking

The overall model predicting problematic drinking from social motives with ethnicity as a moderator was significant, accounting for 51% of the variance in problematic drinking, $F(9, 83) = 9.47, p < .001$. Social motives were not significantly associated with problematic drinking when including all covariates in the model ($\beta = 0.77, p = .29$; see Table 3). Ethnicity was significantly linked to problematic drinking, such that Asian/Asian American students had significantly lower problematic drinking scores than Latinx students ($\beta = -2.51, p = .001$), whereas European American individuals scored significantly higher than Latinx students ($\beta = 1.80, p = .006$).

[Insert Table 3 about here]

Importantly, there was a significant interaction between social motives and ethnicity in predicting problematic drinking, $R^2 \Delta = .05, F(2, 83) = 4.25, p = .017$. An examination of the conditional effects of social motives for the different ethnic groups revealed that the relationship between social motives and problematic drinking was significant for European Americans ($\beta = 2.33, p = .02$), but not for Latinx individuals ($\beta = -1.01, p = .31$) or Asian/Asian Americans ($\beta = 0.98, p = .35$). A visual representation of this moderation is presented in Figure 1.

[Insert Figure 1 about here]

Relationships between social motives, ethnicity, and drinking consequences

The overall model predicting drinking consequences from social motives with ethnicity as a moderator was significant, accounting for 43% of the variance in drinking consequences, $F(9, 85) = 7.09, p < .001$ (see Table 4). Higher social motives were marginally related to higher levels of drinking consequences ($\beta = 1.87, p < .08$). There were no ethnic differences in drinking consequences. However, there was a marginally significant interaction between social motives and ethnicity in relation to drinking consequences, $R^2 \Delta = .04, F(2,85) = 2.79, p = .067$.

[Insert Table 4 about here]

Once again, an examination of the conditional effects of social motives for the different ethnic groups revealed a similar pattern of results: the relationship between social motives and drinking consequences was only significant for European Americans ($\beta = 3.85, p < .006$), but not for Latinx or Asian/Asian American participants. A visual depiction of this marginal interaction is depicted in Figure 2.

[Insert Figure 2 about here]

Discussion

Prior literature indicates that drinking motives can affect drinking-related outcomes (Cooper, 1994; Kuntsche et al., 2005). Our study investigated whether there was any evidence that social drinking motives (Cooper, 1994) related to drinking outcomes differently across three ethnic groups given possible cultural differences in how social interactions and social relationships are construed. Although we found that endorsing higher social motives for drinking was generally not associated with more problematic drinking and drinking consequences, we also document important ethnic variation in this association. Specifically, while endorsing higher

social motives was related to more problematic drinking and negative drinking consequences for European Americans, this association was absent among Latinxs and Asian/Asian Americans.

Variation in the outcomes associated with social motives

The fact that social motives did not predict negative outcomes consistently for Latinxs and Asian/Asian American, but did for European Americans, may reflect an important divergence between these groups in the specific ways in which drinking behavior changes when their primary drinking motivates are social. For European Americans, social motives may drive individuals to strive for self-enhancement and individuation among peers as this is a common goal among more individualistic cultures (Fiske & Fiske, 2007; Hofstede, 2001; Markus & Kitayama, 1991). In the context of drinking behavior, this might be easily accomplished by drinking more or as much as others, which can be particularly dangerous among college environments where binge drinking is common (Center for Behavioral Health Statistics and Quality, 2018). Given that competitiveness tends to be associated with greater protestant representation within a culture, the largest religious group among White individuals in the US, this approach may be a culturally sanctioned of way developing relationships and influencing one's social network (Hayward & Kemmelmeier, 2007; Public Religion Research Institute, 2017). This may come at the cost of more detrimental individual outcomes resulting from the drinking behavior. A similar association between social motives/behaviors and drinking outcomes among European Americans was observed by Bradizza et al. (1999), who examined social motives using a different measure.

Examination of the interaction plots reveal that while there was a strong positive association between social motives and alcohol-related consequences for European Americans, this association was attenuated and non-significant for Asian/Asian Americans, while for Latinx

individuals, the relationship was non-existent (e.g., Fig. 2) or even in the opposite direction (e.g., Fig. 1). One interpretation of our findings is that social motives may play a relatively more protective role for Latinx individuals, given that endorsing higher social motives was not associated with problematic drinking, nor negative drinking consequences and the pattern of findings showed this group to be most different from the other two. While further research is needed to test explanatory mechanisms, our speculation is that the emphasis on and primacy of warmth, positivity, and friendliness (i.e., *personalismo* and *simpatía*) among Latinx individuals, may shift the focus of the drinking in this group when it is motivated by social factors. In these circumstances, Latinx individuals may be especially attuned to cultivating the connection with others and ensuring that they are coming across as affable and warm (Torres, 2009), perhaps leading to either less emphasis on the drinking (relative to socializing) and/or ascribing less of a role to the drinking in the socializing behavior. Consequently, Latinx individuals may rely less on alcohol for social facilitation and may drink less when drinking to socialize. The relatively greater emphasis within Latinx culture on socializing and friendliness may obviate the need for greater alcohol use in the service of socializing. There is some evidence in the literature that point to greater sociability and interpersonal skills among Latinx individuals relative to other cultural groups (Holloway, Waldrip & Ickes, 2009; Hofstede & McCrae, 2004).

Interestingly, this finding is contrary to that reported by Vaughan et al. (2009) in their longitudinal examination of drinking among a sample of first-time college students, where they report a positive relationship between social drinking and alcohol-related problems for both European American and Latinx individuals. There are several possible reasons for this discrepancy. First, Vaughan et al. (2009) did not measure ethnicity using the same cultural criteria that we employed, but rather assessed ethnicity using a checklist. Thus, it is possible that

the Latinx samples across both of the studies varied in some important ways that we were unable to explore (different Latinx ethnicities, acculturation level, generational status, etc.). Second, their study did not assess social drinking motives specifically, but rather, assessed the extent to which participants had motivations to engage in social activities across the academic semester (e.g., intentions to make friends). Lastly, Vaughan et al. paper also included high school students, which may have affected the outcomes of interest. Future studies on this specific topic may benefit from measuring these additional cultural variables, such as acculturation status, to determine whether the relationship between social motives and drinking outcomes may vary *among* Latinx individuals depending on some of these variables.

The general pattern of statistical results observed for our Asian/Asian Americans ended up resembling the Latinx participants in that there was no relationship between social motives and either outcome for Asian/Asian Americans. As discussed earlier, the social orientation in many Asian cultures highlights the recognition of appropriate hierarchical relationships and following proper social rules (Ye, 2004). In a college setting, the social rule may be to drink for the purpose of socializing. Thus, as was the case for Latinxs students in our sample, the focus on social motives may act as a buffer for any negative consequences of alcohol use. This relationship might be different in other contexts where the normative expectations are different, such as work or family settings.

Limitations and Future Directions

Several limitations of the present study are noteworthy. First, our sample size was relatively small for drawing group comparisons, and thus our findings should be interpreted cautiously prior to replication in larger samples. However, given the relative dearth of diverse samples in the literature to examine this question, we feel these findings offer preliminary

evidence of a meaningful pattern. The fact that we were able to find a significant moderation with our sample suggests that this may have been a rather conservative test of our hypotheses. Another limitation is that the analyses presented here are cross-sectional, limiting our conclusions about directionality. To some extent, it makes more conceptual sense for drinking motives to precede drinking behavior and consequences, but previous drinking outcomes can understandably shape subsequent drinking motives. Longitudinal work should be conducted in future to tease apart the causal relationships between motives and outcomes as pertains to differences across cultural groups.

Finally, although our interest in examining possible cultural differences in the present study presupposes different ideals/values/scripts associated with social interactions that might affect how social motives relate to different alcohol-related outcomes, we did not have measures of cultural values or beliefs that would allow us to specify the mechanism behind the cultural differences observed. However, our study employed strict cultural criteria to ensure that we were capturing culture as a variable rather than simply ethnicity, which may or may not track with cultural attitudes, beliefs, and norms. That said, future work should directly assess attitudes toward social interactions and relationships among different ethnic groups in the future in order to explore the reasons underlying differences in ethnic group.

Conclusion

Our study addressed a novel research question—whether drinking motives may differentially predict outcomes based on one’s cultural background. Findings suggest that social motives may be somewhat protective of negative outcomes for some groups (e.g., Latinx individuals and Asian/Asian Americans), while it can exacerbate drinking problems in others (e.g., European Americans). Importantly, when these groups are aggregated, these nuances are

lost and can lead to inconsistencies in findings across studies. Coupled with past findings that outcomes associated with drinking behavior vary among cultural groups (Paschall, Bersamin, & Flewelling, 2005), our focus on drinking motives uncovered one potential mechanism for divergent outcomes across ethnic groups: social motives for drinking may function differently across groups in terms of how they relate to drinking behavior and other alcohol-related outcomes. This research presents an important step in demonstrating this cultural variation with regard to social motives and alcohol problems. The hope is that this study will catalyze ongoing investigation in juxtaposing motivational processes and their outcomes across distinct cultural groups to contribute to building meaningful theories alcohol use in college students. Such work can aid in advancing alcohol use interventions and their cultural adaptations for college students.

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Table 1

Descriptive statistics and univariate ANOVA analyses for tests of group differences for key study variables.

	Total (<i>N</i> = 106)	Latinx (<i>n</i> = 40)	Asian/Asian American (<i>n</i> = 26)	European American (<i>n</i> = 40)	<i>F</i>	<i>p</i>
	<i>M (SD) or %</i>	<i>M (SD) or %</i>	<i>M (SD) or %</i>	<i>M (SD) or %</i>		
Age (18-25)	19.86 (1.45)	19.85 (1.39)	19.88 (1.76)	19.85 (1.33)		
% female	69.50%	67.50%	72.00%	70.00%		
Problematic drinking	10.02 (5.89)	10.03 (5.01)	7.73 (3.38)	11.42 (7.42)	2.78	0.07
Drinking consequences	13.65 (8.19)	12.75 (7.20)	13.17 (7.32)	14.81 (9.57)	2.17	0.54
Social motives	3.62 (1.02)	3.58 (0.97)	3.57 (1.13)	3.71 (1.01)	0.19	0.83
Self-control	43.79 (8.71)	44.55 (7.61)	40.68 (9.67)	45.00 (8.86)	2.17	0.12

Table 2
Correlations between all study variables (N = 104).

	1	2	3	4	5	6	7
1. Problematic drinking (AUDIT)	-						
2. Drinking consequences (YAACQ)	.719**	-					
3. Social motives	.428**	.422**	-				
4. Coping motives	.418**	.422**	.521**	-			
5. Enhancement motives	.540**	.414**	.701**	.508**	-		
6. Conformity motives	0.142	.224*	.410**	.206*	.266**	-	
7. Self-control (BSCS)	-.352**	-.451**	-0.115	-.288**	-.198*	-0.099	-

Note. AUDIT = Alcohol Use Disorders Identification Test. YAACQ = Young Adult Alcohol Consequences Questionnaire. BSCS = Brief Self-Control Scale.

Table 3

Summary of moderation analysis for social motives, ethnicity, and their interaction predicting problematic drinking (n= 93)

Variable	β	SE	t	p	95% CI
Intercept	13.04	3.89	3.35	0.001	(5.30, 20.77)
<u>Covariates</u>					
Self-control	-0.24	0.06	-4.11	0.000	(-0.35, -0.12)
Coping motives	0.8	0.58	1.37	0.17	(-0.36, 1.95)
Enhancement motives	1.7	0.61	2.81	0.006	(0.49, 2.90)
Conformity motives	-0.25	0.61	-0.41	0.68	(-1.46, 0.96)
<u>Predictors</u>					
Social motives	0.77	0.72	1.06	0.29	(-0.67, 2.21)
European American (vs. Latinx)	1.8	0.64	2.81	0.006	(0.53, 3.08)
Asian American (vs. Latinx)	-2.51	0.74	-3.38	0.001	(-3.99, -1.04)
<u>Interaction terms</u>					
EAvsLatinx by Social motives	1.56	0.68	2.31	0.02	(0.22, 2.91)
AAvsLatinx by Social motives	0.21	0.75	0.28	0.78	(-1.29, 1.71)

Note. Ethnicity was represented via two vector codes coding comparing Latinx with Asian/Asian American and European American participants, respectively, where Latinx was coded as +1 and the other group was coded as -1, respectively. EA = European American. AA = Asian/Asian American. Bold terms indicate statistical significance at $p < .05$.

Table 4

Summary of moderation analysis for social motives, ethnicity, and their interaction predicting drinking consequences (n= 95)

Variable	β	SE	<i>t</i>	<i>p</i>	95% CI
Intercept	24.11	5.8	4.16	0.000	(12.59, 35.64)
<u>Covariates</u>					
Self-control	-0.37	0.09	-4.23	0.000	(-0.54, -0.19)
Coping motives	1.19	0.83	1.43	0.16	(-0.47, 2.85)
Enhancement motives	0.52	0.91	0.57	0.57	(-1.28, 2.32)
Conformity motives	0.47	0.91	0.51	0.61	(-1.34, 2.28)
<u>Predictors</u>					
Social motives	1.87	1.04	1.8	0.08	(-0.19, 3.93)
European American (vs. Latinx)	1.66	0.94	1.77	0.08	(-0.21, 3.53)
Asian American (vs. Latinx)	-1.72	1.09	-1.58	0.12	(-3.88, 0.45)
<u>Interaction terms</u>					
EAvsLatinx by Social motives	1.98	0.94	2.11	0.04	(0.11, 3.85)
AAvsLatinx by Social motives	-0.27	1.09	-0.24	0.81	(-2.44, 1.90)

Note. Ethnicity was represented via two vector codes coding comparing Latinx with Asian/Asian American and European American participants, respectively, where Latinx was coded as +1 and the other group was coded as -1, respectively. EA = European American. AA = Asian/Asian American. Bold terms indicate statistical significance at $p < .05$, as well as marginally significant results, $p < .10$

Figure 1. Conditional effects of social motives (+1 and -1 SD; x-axis) on AUDIT scores (Alcohol Use Disorders Identification Test; y-axis) for each group.

Figure 2. Conditional effects of social motives (+1 and -1 SD; x-axis) on YAACQ scores (Young Adult Alcohol Consequences Questionnaire; y-axis) for each group.