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Pregaming among Latina/o Emerging Adults: Do Acculturation and Gender Matter?

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Abstract

Among ethnic minority groups, Latina/o emerging adults are most likely to engage in pregameing, a risky drinking practice. This study examined how U.S. acculturation and enculturation are associated with pregameing and the extent to which gender moderates this relation in a sample of 312 Latina/o emerging adults. Results indicated that men consumed more alcohol when pregameing than women, but there were no gender differences in pregameing frequency. Results also showed that lower levels of U.S. acculturation were associated with greater alcohol consumption while pregameing for men, but not women. Gender did not moderate the association between acculturation and pregameing frequency.

Keywords

Acculturation; enculturation; pregameing; alcohol use; Hispanic; Latino; Latina; emerging adult; college students; gender

Compared to adolescents between the ages of 12 and 17, or adults over the age of 25, emerging adults (typically 18 to 25 years; Arnett, 2000) are more likely to report engaging in high risk drinking practices (e.g., binge, or heavy alcohol use) during the past month (Ahrnsbrak, Bose, Hedden, Lipari, & Park-Lee, 2017; Andrews & Westling, 2016). During this age period, people often encounter formative transitions such as a change in residential status and ‘explorations’ in social identities (Arnett, 2000; Phinney, 2006). For emerging adults from ethnic minority backgrounds, these transitions can often occur within the context of increased exposure to a mainstream culture that is unlike the traditional culture of their family’s home environment (Schwartz, Birman, Benet-Martínez, & Unger, 2017). Scholars assert that such transitions may increase the likelihood of using substances such as alcohol as some emerging adults will seek novel experiences, or conversely, as they try to alleviate the distress resulting from the confusion surrounding these changes (Arnett, 2005).

Most of the research on alcohol use in emerging adulthood has focused on college students, and find that heavy alcohol use and negative alcohol-related consequences are prevalent in this population (e.g., Mallet et al., 2013; Merrill & Carey, 2016). Some research indicates similar patterns of high risk alcohol use (e.g., frequency of intoxication) across college and non-college individuals (White, Labouvie, & Papadaratsakis, 2005). There are a number of activities and environmental factors that may facilitate heavy alcohol use during emerging adulthood, regardless of college status (e.g., 21st birthday celebrations, peer influence, living arrangements, drinking games; Brister, Sher, & Fromme, 2011; Simons-Morton et al., 2016; Zamboanga et al., 2014). In turn, there are numerous adverse consequences associated with hazardous drinking during emerging adulthood (e.g., accidental injuries, assaults, and deaths related to alcohol use, Hingson, Zha, & Whiteman, 2009; increased likelihood of discontinuing education, Jennison, 2004). This paper will focus on one high-risk drinking activity in particular, known as “pregaming,” as research suggests this practice is related to a preponderance of adverse outcomes, described in the next section.

Pregaming

Pregaming involves consuming alcohol (alone or with others) before attending an event/gathering; such alcohol use may lead to intoxication (e.g., ‘buzzed’ or drunk; Zamboanga & Olthuis, 2016). Whereas “pregaming” is a common term used in this area of research, it has been referred to as “pre-loading,” “pre-drinking,” and “pre-partying” (see, Foster & Ferguson, 2013; Labhart, Ferris, Winstock, & Kuntsche, 2017; Pedersen & Labrie, 2007, respectively). Research suggests that emerging adults are motivated to engage in pregaming behavior in order to ‘loosen up,’ and facilitate ease of interacting with others at a social event (Bachrach, Merrill, Bytschkow, & Read, 2012; LaBrie, Hummer, Pedersen, Lac, & Chithambo, 2012). Pregaming among this age group is prevalent. A review of pregaming prevalence rates among college students indicates that more than 60% of students with prior alcohol experience engaged in pregaming at least once in the past month (Zamboanga & Olthuis, 2016). Further, research suggests college students engage in pregaming more than other high risk drinking activities characteristic of this age group (i.e., drinking game participation; Fairlie, Maggs, & Lanza, 2015). Also, scholars note similar patterns in pregaming findings between college and non-college samples (see Foster & Ferguson, 2013).

Research examining pregaming behavior among emerging adults has grown considerably during the past several years (Labhart et al., 2017; Zamboanga & Olthuis, 2016), likely due to the negative consequences related to this risky drinking practice (Merrill, Vermont, Bachrach, & Read, 2013). For example, pregaming is linked to heavy, or extreme drinking (e.g., Fairlie et al., 2015; LaBrie, Earle, Hummer, & Boyle, 2016), and data indicate emerging adults who pregame engage in heavier alcohol consumption and experience greater blood alcohol levels and more intoxication than those who do not pregame (LaBrie & Pedersen, 2008; Wells et al., 2015). Higher levels of alcohol consumption that typically result from pregaming can precipitate increased risks for adverse alcohol related consequences such as assaults and blackouts among emerging adults (see Foster & Ferguson, 2014; Labrie, Hummer, Kenney, Lac, & Pedersen, 2011; Zamboanga et al., 2013). Recent longitudinal findings suggest the relation between pregaming and adverse alcohol

consequences may be due to increased overall alcohol consumption in addition to endorsement of positive attitudes toward drinking (LaBrie, Earle, Hummer, & Boyle, 2016). As noted by Pedersen (2016), pregaming is a risky practice both because of the behavior's close relationship with negative alcohol consequences as well as its relationship to subsequent alcohol related cognitions and increased consumption patterns.

Although national statistics on ethnic differences in pregaming behaviors among emerging adults are not available, data from a large multisite college alcohol study indicated that Latina/os engaged in pregaming during the past 30 days (52%) more than other ethnic minority groups (i.e., Blacks, 44%; Asians, 37%). In fact, Latina/o pregaming engagement was second only to non-Latina/o Whites (60%; Paves, Pedersen, Hummer, & LaBrie, 2012). These findings on the prevalence of pregaming participation among Latina/os as compared to other groups echo other literature suggesting Latina/o emerging adults are at a high risk for hazardous alcohol use (e.g., Schwartz et al., 2011). These drinking patterns, in addition to evidence indicating that Latina/os are disproportionately affected by some negative consequences of alcohol use (e.g., liver disease, Carrion, Ghanta, Carrasquillo, & Martin, 2011; adverse social consequences and violence related to alcohol use, see Chartier & Caetano, 2010), highlight the need for empirical investigations of the key correlates of pregaming in this population. A number of sociocultural factors, including acculturation, have been shown to be related to high risk drinking practices among Latina/os (see Zembre, 2007; Zamboanga, Tomaso, & Lui, 2017), however these factors are understudied in relation to pregaming behavior.

Acculturation and Drinking Behaviors

Acculturation can be defined the process of psychological, behavioral, and sociocultural change and adaptation that happens when people from different cultural backgrounds come in contact (Schwartz et al., 2010; see also Zamboanga et al., 2017). This acculturation process helps contextualize the lived experiences of many Latina/o emerging adults, and evidence suggests some aspects of this process predict health risk behaviors such as alcohol use in this population (e.g., Despues & Friedman, 2007; Perrotte, Baumann, Garza, & Hale, 2017; Raffaelli et al., 2007; Safer & Piane, 2007; Schwartz et al., 2014). A review of the acculturation and alcohol use literature reveals highly mixed findings, likely due to several limitations noted in literature reviews on the subject (e.g., measurement discrepancies, lack of attention to potentially important moderating influences, see Zembre, 2007; Zamboanga et al., 2017).

One of the limitations of the acculturation and alcohol use literature is that the operational definition of acculturation varies across studies. For instance, many studies retain a unidimensional conceptualization of acculturation (i.e., assuming that as individuals acculturate to U.S. society they become less oriented toward their heritage culture). Some of these unidimensional studies have found a positive relationship between acculturation and alcohol use (e.g., Despues & Friedman, 2007; Raffaelli et al., 2007), while other unidimensional studies show null findings (e.g., DeSoto, Tajalli, Smith, & Pino, 2014). Researchers have emphasized the bidimensional nature of the acculturation construct (Berry, 1980; Schwartz et al., 2010). In this context, the term *U.S. acculturation* refers to the extent

to which people adhere to and identify with the mainstream culture, whereas the term *enculturation* refers to the extent to which people adhere to, and identify with, traditional Latina/o culture. This framework operationalizes U.S. *acculturation* and *enculturation* as orthogonal dimensions and assumes that people can have varying levels or degrees of both.

Using a bidimensional conceptualization of acculturation allows for greater specificity in acculturation research. For example, one study showed that *U.S. acculturation* (as indexed by U.S. cultural practices) was positively related to general alcohol consumption among Latina/o college students, while *enculturation* was not significantly related to general alcohol consumption in the same sample (Schwartz et al., 2014). Further, researchers have noted the importance of considering the domains of acculturation (i.e., the practices, values, and identifications associated with both the U.S. and heritage cultures; Schwartz et al., 2010), although examinations of cognitive domains of acculturation in relation to drinking behaviors suggest these are not as robustly and proximally related to alcohol use as behavioral domains, as indicated by empirical findings (e.g., Schwartz et al., 2014). To date, most studies focus on the behavioral domain of acculturation in relation to drinking (e.g., Ceballos, Czyzewska, & Croyle, 2012; Raffaelli et al., 2007; Safer & Piane, 2007), likely because this domain indicates that an individual is participating in the activities that closely align with the mainstream society. Also, although acculturation has been studied in relation to numerous general and high risk drinking behaviors, to our knowledge, no studies (unidimensional or bidimensional) have examined how acculturation might be associated with pregameing behaviors. As described earlier, pregameing is a prevalent practice among U.S. emerging adults (Zamboanga & Olthuis, 2016). For those who are faced with the task of negotiating between their heritage culture and the mainstream U.S. culture, engaging in pregameing behavior would indicate alignment with U.S. practices, including comfort with associating with peers from the mainstream culture who are likely to also pregame. One could therefore surmise that U.S. *acculturation* would be positively related to pregameing behavior. A closer look at the extant acculturation and alcohol use literature, however, warrants an investigation of the potential moderating role of gender, described below.

The Moderating Role of Gender

Literature often suggests men are more likely to engage in high risk forms of alcohol use (e.g., pregameing binge drinking, drinking games participation) than women, but also indicates this gender gap may be narrowing (e.g., Keyes, 2008; LaBrie et al., 2016; Zamboanga et al., 2014). Furthermore, studies have repeatedly found the relation between acculturation and alcohol use may vary as a function of gender (for review including college and non-college samples, see Zeng, 2007; for a review of college samples, see Zamboanga et al., 2017), although some research on acculturation and alcohol use does not investigate the moderating role of gender (e.g., Cano et al., 2015a; DeSoto et al., 2014; Despues & Friedman, 2007; Orona, Blume, Morera, & Perez, 2007). The extent to which gender influences the association between acculturation and alcohol use is an important consideration given gender-specific cultural drinking norms (Caetano, 1987; Zeng, 2007). Acculturation to a cultural host society such as the U.S., where drinking among women tends to be more widely accepted compared to traditional Latina/o cultures, can increase Latina women's risk for alcohol use (Zamboanga, Tomaso, Kondo, & Schwartz, 2014).

Consistent with this suggestion, Raffaelli and colleagues (2007) found that orienting toward the U.S. culture was positively associated with frequency of alcohol use for women whereas the opposite was found for men. Another study showed similar associations for Latina women with respect to the occurrence of heavy drinking being related to U.S. practices, but not for Latino men (Safer & Plane, 2007). Using a bidimensional approach to acculturation, Ceballos, Czyzewska, and Croyle (2012) found that higher levels of U.S. *acculturation* and lower levels of *enculturation* were associated with more frequent alcohol use among women; however, no such relations were found among men.

Not all studies show the same pattern of gender differences in the relation between acculturation and alcohol use. For instance, one unidimensional study found that higher levels of ethnic identity were associated with more frequent heavy drinking for men, but not women (Zamboanga, Raffaelli, & Horton, 2006). With respect to a risky drinking practice like drinking games participation, another study found that cultural practices with respect to U.S. *acculturation* and *enculturation* were associated positively and negatively, respectively, with frequency of drinking games participation and alcohol consumption for women, but not for men (Schwartz, Zamboanga et al., 2014). In short, while some research indicates that gender moderates the association between acculturation and drinking behaviors, not all bidimensional studies support this contention (Cano et al., 2015b; Montoya et al., 2016; Schweizer, Doran, Roesch, & Myers, 2011), thus raising continued questions about the effects of gender on these associations.

The Present Study

Although the literature on acculturation and drinking behaviors among Latina/o emerging adults has grown steadily during the past several years, research examining how acculturation is associated with specific risky drinking practices such as pregaming is lacking. This topic is deserving of empirical attention for practical and theoretical reasons. On its own, research on pregaming suggests this risky drinking practice warrants investigation. Evidence suggests that pregaming often leads to greater overall alcohol consumption (see Foster & Ferguson, 2013). Importantly, research also indicates pregaming participation is a worldwide phenomenon (Labhart et al., 2017) and may uniquely contribute to experiences of adverse alcohol related consequences (LaBrie et al., 2016). Given the prevalence of pregaming among emerging adults (Zamboanga & Olthuis, 2016) and the different patterns of pregaming among ethnic minority groups (Paves et al., 2012), it is important to consider the sociocultural context under which pregaming occurs. Scholars have recognized the need to account for distinct experiences encountered by members of ethnic minority groups during this age period (Syed & Mitchell, 2015). Emerging adulthood is a time of transition, with people often leaving their family home for the first time to navigate mainstream society with newfound autonomy (Arnett, 2000). This creates an opportune window for acculturation researchers, as emerging adults from ethnic minority groups are adopting or rejecting practices that are characteristic of their heritage culture or of mainstream society. With this in mind, acculturation may be a useful construct to study among emerging adults, particularly as it relates to health risk behaviors such as pregaming.

The present study advances the literature on acculturation and drinking behaviors among Latina/o college students in the following ways: First, we use a bidimensional acculturation strategy to provide a more nuanced understanding of how acculturation relates to pregaming behavior than could be offered with a unidimensional acculturation framework. Second, we assessed the moderating effect of gender on the relations between both dimensions of acculturation (i.e., U.S. *acculturation* and *enculturation*) and pregaming behavior. By examining the role of gender, we provide a more comprehensive depiction of how important demographic variables may contextualize the relations between acculturation and specific high risk forms of alcohol use. Also, because research suggests that pregaming tends to also occur in the context of drinking games (Hummer, Napper, Ehret, & LaBrie, 2013; Hummer, LaBrie, & Lac, 2011; LaBrie et al., 2011; Pedersen & LaBrie, 2007; Read, Merrill, & Bytschkow, 2010), we focused on Latina/o emerging adults who have initiated alcohol use and report drinking game participation. Based on the patterns of associations and the gender-specific drinking norms highlighted in the literature, we expected that U.S. *acculturation* would be positively related to pregaming behavior, but this association would be stronger for women than for men. Given the null and mixed findings reported in the literature for *enculturation* and alcohol use, we did not advance any specific directional hypotheses regarding *enculturation* and their associations with our pregaming outcome variables for either gender.

Method

Participants and Procedure

The present study analyzes a subset of data collected to examine sociocultural correlates of drinking games, pregaming behaviors, and other high risk forms of alcohol use among emerging adults. Participants for the present study were recruited via an online web-service (Amazon's Mechanical Turk, or MTurk) as well as from introduction to psychology courses at a university in southwest Texas. Participants were eligible to participate in the study if they were between the ages of 18 and 25, self-identified as Hispanic or Latina/o, were current drinkers and drinking gamers (i.e., they drank and engaged in this activity at least once in the past month). The final analytic sample included 313 Latina/o emerging adults (54.6% from university; $M_{\text{age}} = 20.5$ years; $SD_{\text{age}} = 2.44$; 61.9% female; 75.8% current college students). Data were collected from the MTurk participants during the spring of 2015 and from the university during the fall semester of 2016, during a period of time when students are not typically experiencing dramatic fluctuations in drinking behavior (Tremblay et al., 2010). Participants responded to the English-language survey using Qualtrics, a web-based survey platform. Participants recruited from MTurk received monetary compensation (\$.50) for participation and university students received course credit toward introduction to psychology research requirements.

Measures

Acculturation—Participants completed the Stephenson Multigroup Acculturation Scale (SMAS; Stephenson, 2000), which measures an individual's orientation to either the mainstream U.S. culture or traditional Latino cultures. Using a 5-point scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*), the SMAS contains items that reflect behavioral U.S.

acculturation (e.g., “I think in English,” and, “I am familiar with important people in American history) and *enculturation* (e.g., “I think in my native language,” and, “I am familiar with the history of my native country”). The SMAS demonstrated excellent internal consistency when originally developed (U.S. *acculturation* $\alpha = .90$, *enculturation* $\alpha = .97$; Stephenson, 2000) and has been previously used to assess behavioral acculturation in relation to risky drinking practices in Latina/o college student samples (e.g., drinking games participation, Schwartz et al., 2014). Reliability testing indicated the internal consistency for both acculturation variables in the present sample was adequate (*enculturation*, $\alpha = .93$; U.S. *acculturation*, $\alpha = .79$).

Pregaming—We used two questions to assess pregame behavior. The first assessed pregame *frequency* (i.e., “In the past 30 days, how many days did you engage in pregame?”; response options 0–30, range 0–18) and the second assessed pregame *quantity* (“On the days you engaged in pregame during the past month, on average, how many drinks did you consume?”; range 1–15; Hummer et al., 2011). Participants were provided with a definition of pregame (Zamboanga & Olthuis, 2016), and a definition of a standard drink (i.e., “a 12 oz. of beer, one shot of liquor in a mixed drink or straight, or 5-ounce glass of wine”) that included an illustrative chart depicting standardized portions.

Covariates—Due to evidence suggesting that younger emerging adults tend to pregame more often than older emerging adults (Zamboanga et al., 2013), we included age as a covariate in our primary analyses. Also, although research suggests differences between participant responses obtained by MTurk and those obtained from universities are negligible (Bartneck, Duenser, Moltchanova, & Zawieska, 2015), we included recruitment method as a covariate during hypothesis testing. Further, since we were interested in the unique relation among behavioral acculturation and/or enculturation, gender, and pregame frequency above and beyond drinking games participation (Hummer et al., 2013; Hummer et al., 2011; LaBrie et al., 2011; Pedersen & LaBrie, 2007; Read et al., 2010), frequency of drinking games participation was included as a covariate in this analysis.

Data Analytic Approach

We conducted the analyses using SPSS version 21 and Mplus version 7.11. Descriptive statistics were inspected to assess for data normality. These preliminary analyses indicated that the pregame variables were non-normal. Because the responses to the pregame items were meaningful, we elected to forgo transforming these variables to ensure interpretability of the results (Tabachnik & Fidell, 2007) and instead used a maximum likelihood estimation method that produces robust standard errors in the presence of non-normality (MLR, Muthén, Muthén, & Asparouhov, 2016; Yuan & Bentler, 2000). First, we conducted a simultaneous multiple regression analysis predicting pregame frequency using age, drinking game frequency, recruitment method, gender, U.S. *acculturation*, *enculturation*, and the interaction between gender and each of the two acculturation variables. Second, among participants who reported engaging in pregame behavior, we conducted a regression analysis predicting pregame quantity using the same predictor variables (with the exception of drinking games frequency). All continuous predictors were centered prior to primary analyses.

Results

Preliminary Analyses

Descriptive statistics and correlations among the study's primary variables are presented in Table 1. We found that 87.2% of the sample reported pregaming at least once during the past 30 days, and 13.8% of the sample reported pregaming more than 5 days during the past 30 days. Among those who pregame, participants consumed an average of 3.50 ($SD = 1.88$) drinks while pregaming. Results showed that men consumed more alcohol than women while pregaming $F(1, 213) = 6.137, p = .014$. Results also indicated there were differences between the participants recruited from MTurk and those recruited from the university regarding two variables of interest. Specifically, there was a higher proportion of women from the university than the MTurk recruitment method ($\chi^2(1) = 21.91, p < .001$), and MTurk participants consumed greater quantities of alcohol when pregaming ($M = 3.99, SD = 2.09$) than university participants ($M = 3.06, SD = 1.55; F(1, 185.38) = 13.42, p < .001$). Therefore, we controlled for recruitment method during all primary analyses. Bivariate correlations indicated that endorsing lower levels of U.S. *acculturation* was associated with (a) more frequent pregaming for both genders. Additionally, lower endorsement of U.S. *acculturation* was associated with higher levels of alcohol consumption while pregaming for men only.

Primary Analyses

Pregaming frequency ($N = 290$)—With the exception of drinking game frequency ($\beta = .336, p < .001$), none of the control variables (age, $\beta = -.02, p = .875$; recruitment method, $\beta = -.03, p = .710$) or gender ($\beta = .012, p = .825$) were significantly associated with frequency of pregaming. In addition, neither indices of acculturation (U.S. *acculturation*, $\beta = .024, p = .667$; *enculturation*, $\beta = .006, p = .727$) were significantly associated with pregaming. The interactions between acculturation and gender were not statistically significant (gender x centered U.S. *acculturation*, $\beta = -.034, p = .543$; gender x centered *enculturation*, $\beta = .012, p = .392$). Overall, the model accounted for approximately 12% of the variance in pregaming frequency.

Pregaming quantity ($N = 192$)—None of the control variables (age, $\beta = .117, p = .326$; recruitment method, $\beta = .118, p = .308$) or gender ($\beta = .092, p = .178$) were significantly associated with pregaming quantity, and neither acculturation measures were related to pregaming quantity (U.S. *acculturation*, $\beta = -.119, p = .075$; *enculturation*, $\beta = .048, p = .488$). The interaction between gender and enculturation was not significant ($\beta = -.089, p = .166$); however, a statistically significant interaction emerged between gender and U.S. *acculturation* in relation to pregaming quantity ($\beta = -.171, p = .006$). We plotted the interactions and found that for men, lower U.S. *acculturation* was associated with increased consumption while pregaming, but for women, higher U.S. *acculturation* was weakly related to increased consumption while pregaming (see Figure 1). Overall, the model accounted for just under 12% of the variance in pregaming quantity.

Discussion

Previous research indicates that acculturation is an important correlate of drinking behavior among Latina/o populations (see Zamboanga et al., 2017; Zeng, 2007), but sociocultural correlates of pregame behaviors in this group are not well understood. The present research is the first study that investigated how both U.S. *acculturation* and *enculturation* are related to pregame participation and consumption, and whether gender moderates these associations in Latina/o emerging adults. Although men and women did not differ in their frequency of pregame participation, results indicated that men consumed more alcohol when pregame than women. This is consistent with literature showing that men and women do not differ in how often they pregame, but they do differ in their level of alcohol consumption while pregame (Pedersen, LaBrie, & Kilmer, 2009; Rutledge, McCarthy, & Lendyak, 2014). We also found that neither U.S. *acculturation* nor *enculturation* were directly related to pregame behavior. Despite much empirical evidence suggesting U.S. *acculturation* and/or *enculturation* are important correlates of alcohol use among Latina/os, null findings regarding the relations between acculturation variables and alcohol use outcomes have been documented in the literature (e.g., DeSoto et al., 2014; Orona et al., 2007). The null findings reported in the acculturation and alcohol use literature highlight the need to examine the co-occurring influence of moderating variables, such as gender (Zamboanga et al., 2017).

In line with this assertion, when examining gender as a moderator, we found that gender moderated the association between acculturation and the amount of alcohol consumed while pregame such that lower U.S. *acculturation* was associated with increased alcohol consumption while pregame for Latino men whereas a different pattern was observed for Latinas. This pattern of associations is consistent with previous research linking higher levels of acculturation with increased alcohol consumption levels among Latino/a men and women (e.g., Raffaelli et al., 2007; Safer & Piane, 2007; Zamboanga et al., 2006). As illustrated in the figure, the relations between U.S. *acculturation* and pregame quantity among women was weak, however, particularly when compared to the strong, inverse relations between the same two variables for men.

When discovering gender differences in the relations between acculturation and alcohol use, some researchers surmise that traditional Latina/o gender roles may be partly responsible (e.g., Schwartz et al., 2014). Qualitative research supports this notion, suggesting that traditional Latina/o culture may encourage risky behaviors such as alcohol use among Latino men and discourage Latina women from doing the same (e.g., Fiorentino, Berger, & Ramirez, 2007; Gonzalez-Guarda, Vasquez, Urrutia, Villarruel, & Peragallo, 2011). Relatedly, it would be reasonable to expect that U.S. *acculturation* to be positively related to a risky drinking practice such as pregame for women, whereas *enculturation* be positively related to the same behaviors for men. Our data do not fully support this gender role hypothesis, as it was lower levels of *acculturation* as opposed to higher levels of *enculturation* that was associated with higher quantity of consumption during pregame for the men in our sample.

Cognitions related to pregaming and alcohol use may help explain these findings. The assertion that alcohol can act as a ‘social lubricant’ and reduce tension related to social anxiety has long been held by scholars (Critchlow, 1986), and studies show that people experiencing social anxiety expect alcohol to reduce tension (e.g., Ham, Zamboanga, Olthuis, Castner, & Bui, 2016). Researchers of pregaming practices agree that pregaming may alleviate the social discomfort that some experience from the anticipation of social gatherings (e.g., Wells, Graham, and Purcell, 2009). Considering our selected measure of U.S. *acculturation* was designed to capture behavioral engagement with U.S. society, it is possible that an individual who endorses lower levels of behavioral U.S. *acculturation* may feel more anxious before a social event. In line with this notion, research suggests people pregame to mitigate social distress that may arise from going out (Bachrach et al., 2012; LaBrie et al., 2012; Labhart & Kuntsche, 2017). For example, LaBrie and colleagues (2012) found that motivations for pregaming included “to relax or loosen up before” going out, to ease “talking to new people,” and to bolster confidence before going out (p. 966). Similarly, Bachrach and colleagues (2012) found that people were motivated to pregame to promote ‘social ease.’ In the same study, the authors noted the need to consider other potential factors that may contribute to the relationship between the ‘social ease’ motive for pregaming and actual pregaming behavior (Bachrach et al., 2012).

Related to the gendered findings of the current study, research suggests that men are more likely to expect alcohol use to alleviate feelings of distress than women (see Nolen-Hoeksema, 2004), which may lead to greater alcohol consumption when confronted with negative cognitions. While we recognize that we did not measure distress for this study, the literature has suggested that when one has lower levels of behavioral acculturation, one may also experience higher levels of various forms of distress (e.g., depression, anxiety; see Yoon et al., 2013). The relation between acculturation and distress is particularly relevant in social contexts that are dominated by the majority culture’s practices (i.e., college). This may be due to the mismatch between the individual’s practices (e.g., Spanish language preference) and the expected practices in the context (e.g., they are living in a country and going to a college where there is an implicit expectation that English is the primary language).

Limitations and Future Directions

Being among the first of its kind, we acknowledge that the following limitations must be addressed to further research in this area. First, we employed a cross-sectional design to test our research questions. Because of the dynamic nature of the acculturative process (Berry, 1980), future research should examine the relations between U.S. *acculturation* and/or *enculturation* and pregaming behaviors within a longitudinal framework. Also, while the present analysis allowed us to investigate a novel research question, additional measures could provide further insight into the unique relationship between acculturation, gender, and pregaming. For instance, we did not assess pregaming behavior at the event level, and we were not able to control for typical alcohol use on non-pregaming occasions. Using alternative methods (e.g., ecological momentary assessment; Wray, Merrill, & Monti, 2014) while expanding the pregaming and related alcohol use outcome measures is recommended for future research. Further, because of certain sample characteristics, we caution against generalizing these findings to populations of interest (e.g., community samples of Latina/os).

The surveys were in English and many participants were from an institution of higher education, potentially restricting the range for our acculturation measures. Future research could focus more on community samples, making Spanish language instruments available to account for this. Also, we intentionally sampled from MTurk workers and college students so that participants represented a range of occupations and settings among emerging adults. With this choice, over 75% of participants in our sample were college students, and research indicates drinking patterns among emerging adults may vary as a function of college enrollment status (Merrill & Carey, 2016). We also chose to use a heterogeneous Latina/o sample for this study, although research suggests the relations between acculturation and substance use may differ according to Latina/o subgroup (e.g., Mexican American, Cuban, Puerto Rican; Kondo, Rossi, Schwartz, Zamboanga, & Scalf, 2016). Future research should substantially expand the sample size to test these associations separately for college vs. non-college emerging adults, as well as compare across Hispanic/Latina/o subgroups.

In addition, future research should incorporate variables that can offer a more detailed explanation of the present study's findings. For instance, studies should measure traditional Latina/o gender role values (see Arciniega, Anderson, Tovar-Blank, & Tracey, 2008; see also Castillo, Perez, Castillo, Ghosheh, 2010), to assess the degree to which gender role socialization may actually be responsible for the moderating effect of gender on the relation between acculturation and consumption while pregaming. Future models should be further expanded by including motives for drinking (Cooper, 1994), motives specific to pregaming (Bachrach et al., 2012; LaBrie et al., 2012), and variables capturing the context in which pregaming typically occurs (e.g., alone versus with Latina/o or non-Latina/o peers). Also, models incorporating other known correlates of risky drinking behavior such as socioeconomic status and family history of alcohol use (see Stone, Becker, Huber, & Catalano, 2012) could provide a more comprehensive picture of acculturation and pregaming behavior among Latina/o emerging adults.

Conclusion

In light of the aforementioned limitations, we conclude this study has merit for informing future theoretical research practices and research design. These results demonstrate the importance of incorporating a bidimensional framework when assessing the role of acculturation as related to a risky drinking practice like pregaming behaviors. When considered as correlates of pregaming engagement, we found that a decreased orientation toward the U.S. culture was not synonymous with an increased orientation toward the heritage culture. Our study also highlights the need to account for gender when studying sociocultural predictors of drinking behaviors among Latina/os. Through the careful implementation of a revised course of action (e.g., refined measures and design), we contend that furthering the understanding of how the acculturative process relates to high risk drinking practices such as pregaming behavior among Latina/o emerging adults will be instrumental in supporting future culturally adaptive prevention and intervention strategies.

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Figure 1.

The moderating effect of gender on the relationship between U.S. acculturation and pregaming quantity. Lower U.S. acculturation plotted at -1 standard deviation below the mean; Higher U.S. acculturation plotted at $+1$ standard deviation above the mean.

Table 1

Means, Standard Deviations, and Bivariate Correlations among Key Study Variables

Variables	Total <i>M(SD)</i>	Women <i>M(SD)</i>	Men <i>M(SD)</i>	η_p^2	1	2	3	4
1 Enculturation	3.43(.94)	3.48(.96)	3.35(.91)	.005	-	.07	-.10	.09
2 U.S. Acculturation	4.30(.47)	4.31(.46)	4.27(.50)	.002	.13	-	-.18*	.06
3 Pregaming Frequency	3.06(3.23)	3.08(3.35)	3.03(3.05)	.000	-.06	-.23*	-	.11
4 Pregaming Quantity	3.50(1.88)	3.26(1.76)	3.90(2.01)	.028	-.08	-.34**	.20 [†]	-

Note. Correlations for men below the diagonal and correlations for women above the diagonal. Significant effects highlighted in bold.

* $p < .05$,

** $p < .01$,

[†] $p < .10$