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Cultural differences and shame in an expressive writing alcohol intervention

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Abstract

The present study evaluates the relationships between shame, culture, and drinking behavior in predicting drinking intentions in the context of an expressive writing intervention. Theory and empirical findings have generally found that shame is maladaptive and can lead to anxiety, depression, and problematic alcohol use. However, research on cultural differences suggests that shame may be differentially damaging to individuals of collectivist, Asian cultures. Previous research evaluating expressive writing as a brief alcohol intervention has shown promising results such as reduced drinking intentions and increased readiness to change drinking behavior. The present study tested the hypothesis that feelings of shame after writing about a negative heavy drinking event would be associated with greater alcohol use generally and that this effect would differ for Caucasian compared to Asian individuals. We also explored whether this differed for light and heavy drinkers. Two hundred sixty-four undergraduates (74% female) who drank at least one alcoholic beverage in the past month completed measures of demographics, baseline drinking, event-related shame and guilt, pre- and postwriting affect, and drinking intentions. Results revealed that, independent of affect, social desirability, and event-related guilt, shame was generally negatively associated with drinking intentions for Caucasians and light drinking Asians. However, for heavy drinking Asians, shame was associated with increased drinking intentions. Results suggest that interventions that elicit shame are differentially effective and should be targeted accordingly.

Keywords

Alcohol; culture; drinking; expressive writing; narrative

Previous research has demonstrated that experiencing shame is associated with differential outcomes depending on one's cultural background. The current research represents an extension of recent work utilizing the expressive writing paradigm (Pennebaker, 1997; Pennebaker & Beall, 1986) as a brief alcohol intervention for college students (e.g., Young, Rodriguez, & Neighbors, 2013) by examining drinking intentions as a function of event-related shame and race.

Shame is a negative emotion that is felt in regard to the self after committing a transgression (“I did that horrible thing”; Lewis, 1971). When individuals feel shame, they focus on how others will perceive them based on their behavior. Negative evaluations of the self that result from feeling shame have been associated with rumination (Orth, Berking, & Burkhardt, 2006; Silver, 2007) and a depressive attribution style that devalues the self (Tangney, 1999; Tangney & Dearing, 2002). Furthermore, shame has been associated with engaging in risky and harmful behaviors including substance use (Dearing, Stuewig, & Tangney, 2005), self-harm (Gilbert et al., 2010), and suicide (Hastings, Northman, & Tangney, 2002; Tangney & Dearing, 2002), and is associated with negative health outcomes such as anxiety and depression (Cheung, Gilbert, & Irons, 2004; Hoblitzelle, 1987; Lewis, 1987; Stuewig & McCloskey, 2005; Tangney & Dearing, 2002). Thus, shame tends to be maladaptive and can result in negative outcomes.

Although prevailing research suggests that shame is maladaptive, recent work by Sheikh (2014) proposes that shame can, under some conditions, be beneficial. In this framework, shame is associated with both avoidance via the behavioral inhibition system (BIS; Gray, 1982) and approach via the behavioral activation system (BAS; Gray, 1982). Sheikh posits that the more constructive BAS can be activated in situations where shame is evoked and active behaviors are needed to fulfill goals. Thus, situational factors appear to influence enactment of behaviors following the experience of shame. Research also suggests that other factors such as culture may influence the expression of shame and the behavioral outcomes that result.

Cultural differences in shame

Previous investigations of shame have largely taken place in North America and Europe, which are regions that tend to devalue shame (Sheikh, 2014). Because shame is viewed negatively in these individualistic cultures, it tends to be associated with more negative outcomes (e.g., taking protective or self-serving actions; Goetz & Keltner, 2007). However, shame is thought to be more adaptive and beneficial among collectivistic cultures (Fung, 1999; Okano, 1994; Scherer & Wallbott, 1994) and tends to be associated with more positive, restorative outcomes (e.g., modification of behaviors based on social norms). Although externalization of blame, anger, and aggression is associated with shame and shame-proneness among Asian children, these associations were not as strong among Asians compared to Americans (primarily Caucasian and African American; Bear, Uribe-Zarain, Manning, & Shiomi, 2009; Furukawa, Tangney, & Higashibara, 2012). Furthermore, research has shown that after experiencing shame, Asians focused on improving the self and tried harder whereas Caucasians tended to disengage or give up (Bagozzi, Verbeke, & Gavino, 2003; Heine et al., 2001). In addition, Asians perceive shame as positive because it helps them adjust to group standards and norms, consistent with interdependent self-construals, which are stronger in Asian cultures (Markus & Kitayama, 1991; Wong & Tsai, 2007). Bedford and Hwang (2003) proposed that shame is a means of regulating behavior in Asian cultures where the harmony of relationships is valued. This is illustrated by the observation that Asian parents discipline children for misbehaving through eliciting shame (Yang & Rosenblatt, 2001). Bear and colleagues (2009) also proposed that shame brings less harmful consequences within a collectivistic culture. They examined the association of

shame and anger among Japanese and American children, with findings suggesting that the effect of shame on anger was stronger for American rather than Japanese children. In fact, the association between shame and anger among Japanese children was negative and not significant.

Thus, responses to shame may be different across cultures. Research has shown that experiencing shame in Western culture is associated with making negative causal attributions about the self (Tangney & Dearing, 2002). For Caucasians, experiencing shame may elicit negative outcomes such as aggression (Eisenberg, 2000; Thomaes, Bushman, Stegge, & Olthof, 2008) and decreases in prosocial behavior (Roos, Hodges, & Salmivalli, 2014). Conversely, experiencing shame in Asian cultures may actually elicit positive outcomes. As individuals from a collectivistic culture place higher value on interpersonal relationships, shame is a signal that some component of the interpersonal relationship has malfunctioned, and constructive behaviors may be elicited as a remedy.

Shame and alcohol use

In general, shame has been positively associated with substance use (e.g., Fossum & Mason, 1986; Potter-Efron, 2002; Wiechelt, 2007). Past research has found that individuals seeking treatment for substance abuse tend to score higher on measures of shame and shame-proneness (Meehan et al., 1996; O'Connor, Berry, Inaba, Weiss, & Morrison, 1994). Shame-proneness has also been positively linked specifically to alcohol-related problems (Dearing et al., 2005). However, these previous investigations have not considered shame related to a specific event or the potential role of cultural differences in the relationship between shame and alcohol use.

Expressive writing and alcohol use

Described as a therapeutic process, expressive writing can have health and psychological benefits. The traditional paradigm of expressive writing randomly assigns participants to one of two (or more) groups in which participants write about assigned topics or describe their deepest feelings and thoughts over several sessions (Pennebaker, 1997; Pennebaker & Beall, 1986). Research has shown the efficacy of expressive writing on health and psychological outcomes for a variety of populations. For college students, expressive writing reduced the frequency of physician visits (Cameron & Nicholls, 1998; King, 2001; King & Miner, 2000; Pennebaker, Colder, & Sharp, 1990) and buffered physical symptoms such as upper respiratory illness, tension, and fatigue (Lepore & Greenberg, 2002). In addition, students reported greater subjective well-being (King, 2001), adjusted better to college life (Cameron & Nicholls, 1998), and earned higher grade point averages (Cameron & Nicholls, 1998; Pennebaker et al., 1990). Not limited to college students, the effect of expressive writing has been investigated in medical populations, including chronic pelvic pain patients (Norman, Lumley, Dooley, & Diamond, 2004), asthma and rheumatoid arthritis patients (Smyth, Stone, Hurewitz, & Kaell, 1999), and breast cancer survivors (Low, Stanton, & Danoff-Burg, 2006; Lu, Zheng, Young, Kagawa-Singer, & Loh, 2012; Stanton et al., 2002).

Recent research has begun to explore expressive writing as a brief intervention for drinking in college students. Young and colleagues (2013) assigned participants to write about (a) a heavy drinking event that was positive, (b) a heavy drinking event that was negative, or (c) their first day of college. Results provided preliminary support for expressive writing as an intervention in reducing drinking intentions; when compared to control, writing about a negative heavy drinking event was associated with lower drinking intentions for the upcoming month among those with higher hazardous drinking scores on the Alcohol Use Disorders Identification Test (AUDIT) and with higher drinking intentions among those with higher typical baseline drinking. Although this research represented an important initial step, the need for further refinement is clear, especially among heavier drinkers.

Alcohol use and race

Previous research has shown that baseline drinking is an important determinant in alcohol interventions (e.g., Murphy et al., 2001) and with regard to expressive writing (Young et al., 2013). Thus, a final consideration was given to testing whether differences in shame and drinking intentions by race might vary as a function of baseline drinking. National surveys suggest that Asian Americans have a lower alcohol use prevalence compared to other racial groups (Caetano, Clark, & Tam, 1998; Grant et al., 2004; Substance Abuse and Mental Health Services Administration, 2007). Research also suggests that heavy drinking Asians are a different population than light drinking Asians. For example, Cheng, Lee, and Iwamoto (2012) categorized an Asian American sample by gender and typical drinking. Results showed that heavy drinking Asian American females reported significantly poorer mental health (i.e., generalized anxiety and depressive disorders) than Asian-American non-drinkers and light drinkers.

Current research

The current research sought to better understand the roles of shame and culture in an expressive writing alcohol intervention. Previous research has found the expressive writing paradigm to be associated with positive physical and psychological health outcomes. Recently, research has begun to evaluate expressive writing as an intervention for college student drinking with promising results. It is possible that much of the reason why writing about a negative heavy drinking occasion results in reduced drinking intentions is through shame and guilt in reexperiencing the event, although recent work suggests that the mechanism is guilt rather than shame (Rodriguez, Young, Neighbors, Campbell, & Lu, 2015). Cultural research suggests that Caucasians and Asians may have different levels of sensitivity and responses to experiencing shame (Fessler, 2004; Sznycer et al., 2012; Tang, Gao, Qian, Zhang, & Wang, 2008), and the current research aimed to explore whether drinking intentions in light of experiencing shame would differ based on race. Based on previous research, we proposed that Caucasians would respond in a relatively avoidant manner to the experience of shame (e.g., not to reduce future drinking intentions). However, as shame within a collectivistic culture serves a constructive function, we proposed that Asians would respond more positively to the experience of shame (e.g., reducing future drinking intentions). Moreover, because previous research (as well as specific work on expressive writing alcohol interventions) has found that intervention efficacy may vary based

on levels of typical drinking we sought to explore baseline drinking as a moderator of these differences. Our hypotheses were as follows: We expected shame to have differential effects on drinking intentions for Caucasians and Asians. Specifically, we expected shame to be more strongly associated with reductions in drinking intentions for Asians. Furthermore, because previous research has found that this intervention works differently based on typical drinking levels, we explored whether these differences might be moderated by baseline drinking.

Method

Participants

Participants consisted of 265 undergraduate students recruited from the psychology subject pool (74% female) who reported consuming at least one alcoholic beverage in the past month. Individuals reported a mean age of 22.03 years ($SD = 4.58$). Because the current study was focused on differences between Asians and Caucasians with regard to drinking-related shame, the sample was limited to individuals identifying as either Asian (33.2%) or Caucasian (66.8%). Approximately 69% of the Asian participants ($n = 60$) and 77% of the Caucasian participants ($n = 136$) were female. Participants received extra course credit for their participation. All procedures were approved by the University of Houston Committee for the Protection of Human Subjects.

Procedure

After providing informed consent, participants completed measures of their current drinking behavior and were then randomized to one of three expressive writing conditions. In the positive alcohol writing condition, participants were instructed: "Please tell us about an occasion when you drank alcohol heavily and had a good time or experienced things you wanted to experience as a result of your drinking. We would like you to be as descriptive as possible. For example, what specific things made this event so positive for you?" Instructions for the negative alcohol writing condition were as follows: "Please tell us about an occasion when you drank alcohol heavily and had a bad time or experienced things you did not want to experience as a result of your drinking. We would like you to be as descriptive as possible. For example, what specific things made this event so negative for you?" Participants in the neutral (control) writing condition were asked: "Please tell us about your first day of college. We would like you to be as descriptive as possible. For example, what specific things do you recall?" After completing the expressive writing task, participants completed measures of shame and guilt related to the event they described, their current affective states, and their intentions for drinking in the future. Intervention results are detailed elsewhere (Rodriguez et al., 2015).

Measures

Baseline drinking—Baseline drinking behavior was assessed using the Daily Drinking Questionnaire (DDQ; Collins, Parks, & Marlatt, 1985). Participants were asked to consider their current drinking behavior and report how many drinks they typically consume each day of the week. A drinks per week variable was created by summing the number of drinks participants reported consuming each day of the week.

Event-related shame—Shame associated with the event described in the expressive writing task were assessed using 20 items modified from the Test of Self-Conscious Affect (TOSCA-3 revised; Tangney, Dearing, Wagner, & Gramzow, 2000). Because shame and guilt are often highly correlated (Tangney & Dearing, 2002), event-related guilt was also assessed and included as a covariate. Participants were asked to recall as best they could the thoughts and feelings they experienced when the event occurred and rate whether they agreed or disagreed with a series of statements related to feelings of shame and guilt. The shame subscale included items such as, “You felt like a failure,” “You tried to forget that the experience ever happened,” and “You were so afraid of some people’s reactions that you made efforts to avoid telling them about the experience” ($\alpha = .97$). Example items from the guilt subscale include, “You felt bad that you let people down,” “You decided to make it up to people as soon as you could,” and “You wondered if you could have done better” ($\alpha = .97$). Response options ranged from 1 (*strongly disagree*) to 5 (*strongly agree*).

Affect—The Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988) was used to assess affective states following the expressive writing task and was included as a covariate in the analyses. The PANAS consists of 20 emotion-related words related to positive or negative mood states. Example items from the positive subscale include “proud” and “enthusiastic” and examples of the negative emotion items include “ashamed” and “guilty.” Participants were asked to rate the degree to which they felt each of the emotion items in the current moment ranging from 1 (*very slightly*) to 5 (*extremely*). Responses on each were summed to form a composite score for positive ($\alpha = .89$) and negative ($\alpha = .88$) affect.

Social desirability—To mitigate concerns that writing about shame might be associated with underreporting of drinking behaviors, social desirability was included as a covariate. Social desirability bias was assessed with the 33-item Marlowe-Crowne Social Desirability Questionnaire (Crowne & Marlowe, 1960). Participants rated items as true or false of their typical attitudes and behavior. Example items are, “It is sometimes hard for me to go on with my work if I am not encouraged,” “I am always careful about my manner of dress,” and “No matter who I’m talking to, I’m always a good listener.” Each item is scored as 1 (the socially desirable response) or 0 (the nonsocially desirable response). The final score represents the sum of the socially desirable responses from the 33 items ($\alpha = .77$).

Drinking intentions—Participants were also asked to report their intended drinking behaviors for the upcoming month. The DDQ was modified to assess the total number of drinks participants intended to drink over a typical week in the next month. An intended-drinks-per-week variable was created by summing the number of drinks participants reported intending to consume over a weeklong period in the coming month.

Results

Preliminary analyses

We first examined whether differences were evident between Caucasian and Asian participants on all study variables. Descriptive statistics and tests of mean differences across

race are presented in Table 1. There were no differences between Caucasians and Asians in any study variables. Furthermore, Caucasians and Asians were equally distributed across the three Intervention conditions, $\chi^2(2) = .337, p = .845$.

Zero-order correlations among all study variables are presented in Table 2, separately for Caucasians and Asians. Baseline drinks per week were positively correlated with drinking intentions and were marginally positively correlated with negative affect for Asians. Consistent with previous work (e.g., Bear et al, 2009; Wong & Tsai, 2007), shame was positively associated with negative affect for Caucasians but not for Asians.

Shame, race, and alcohol use

Hierarchical regression analyses evaluated the primary models of interest, which focused on the three-way interaction among shame, race, and baseline drinks per week in predicting drinking intentions. Because drinks per week and intended drinks per week exhibited moderate positive skew, we followed recommendations by Tabachnick and Fidell (2012) and Howell (2013) in utilizing transformed (square-root) drinking variables in the regression models. Intervention condition was entered as a covariate. Main effects of the intervention on drinking intention outcomes are reported elsewhere (Rodriguez et al, 2015). Shame was grand-mean centered to facilitate interpretation of the interactions. Culture and intervention condition contrasts were dummy-coded. Results at each step (main effects, two-way interactions, and the three-way interaction) are presented in Table 3. As expected, results revealed a significant three-way interaction between shame, baseline drinking, and culture in predicting drinking intentions. Furthermore, results held when controlling for gender, event-related guilt, social desirability, and positive and negative affect measured after the expressive writing session. Because event-related guilt and shame were highly correlated, multicollinearity analyses (i.e., tolerance values and variance inflation factors) were utilized to test for the presence of multicollinearity. Results from these tests using conventional thresholds (i.e., variance inflation factor of less than 5.0 and tolerance values less than .20; Menard, 1995) suggested that there was no significant multicollinearity.

Tests of simple slopes were utilized to examine the association between shame and drinking intentions for Caucasians and Asians at various drinks per week (1, 5, 10, 20, and 30). Results are presented in Figure 1. Simple slopes analyses revealed that for Caucasians, shame was associated with lower intended drinking for moderate baseline drinkers, with significant negative associations between shame and intentions for those who reported drinking at least five drinks per week. As a whole, the pattern for Caucasians was that shame was associated with lower drinking intentions. For Asians, a different pattern of results emerged. For light drinking Asians (one drink per week), the association between shame and intentions was significant and negative. However, for heavier drinking Asians, the association between shame and drinking intentions was significant and positive.

Discussion

The current research examined differences in drinking intentions as a function of culture and experienced shame during an expressive writing intervention. We predicted that, compared to Caucasians, Asians would respond more positively and constructively to the experience of

shame. The hypothesis was supported among Asians who were light drinkers, suggesting that eliciting shame from heavy drinking occasions can motivate light Asian drinkers to conform to cultural norms and to reduce drinking intentions. Asian cultural norms emphasize abstinence or low to moderate drinking, which may result in lower alcohol consumption (Parrish, 1995). These results provide empirical evidence to support the culture and shame model proposed by Wong and Tsai (2007), who maintain that shame can be adaptive because it helps people adjust their behavior to comply with group standards and norms.

On the other hand, the pattern of results changed as baseline drinking increased for Asian students. We did not find evidence that shame was associated with lower drinking intentions in this subgroup; in fact, heavier drinking Asians who experienced more shame reported significantly *higher* drinking intentions. For these individuals, shame does not appear to be adaptive. This may, at least in part, be due to heavy drinking Asians being less influenced by Asian cultural norms. Results from Chae and colleagues (2008) showed that among Asian Americans, there was greater risk for alcohol dependence for individuals with low ethnic identification. Thus, if Asian heavy drinkers have lower ethnic identity, they may be less likely to follow Asian cultural norms. Unfortunately, we did not assess ethnic identity and are unable to test this possibility; however, future research may wish to explore it further. Relatedly, other work has shown that heavy drinking Asian women, especially those born in the United States, may be particularly less likely to adhere to Asian cultural norms (Cheng et al., 2012; Ja & Aoki, 1993).

Limitations and future directions

The present research findings must be considered in light of a number of limitations and also suggest specific directions for future research. First, this is a single study and replication of these findings would provide greater confidence in conclusions. Second, the Asian population is quite heterogeneous, and the present research did not assess Asian subcategories, ethnic identification, or levels of acculturation, which may have important differences. Future research examining cultural differences in shame and drinking among Asian subcultures and among different levels of acculturation would be worthwhile. Relatedly, there may be larger gender differences in drinking and shame in specific Asian subcultures that would be important to consider. Third, while drinking intentions are an important antecedent for planned drinking (Ajzen, 2011), actual drinking at a future time point was not assessed and presents an obvious and necessary extension of this work. Finally, the sample consisted of undergraduate students who were primarily Caucasian and female.

Research and clinical implications

The present findings extend existing research in several ways. First, the majority of work on shame as related to alcohol and other substance use has focused on shame-proneness (e.g., Dearing et al., 2005) rather than considering actual events related to drinking. The present research focused more specifically on shame related to a specific event. Second, shame has been most widely studied in American populations, and limited attention has considered potentially important differences between individualistic and collectivistic cultures. Finally,

the present research extends a nascent research program considering expressive writing as a brief alcohol intervention and provides important contextual information about the kinds of emotions (shame) one might target or avoid, and for whom, in providing instructions for expressive writing in this context.

This research has specific implications for heavy drinking Asian students. Unlike light drinking Asian students, who could benefit from the culturally adaptive function of shame, heavy drinking Asians may be subject to the negative consequences of shame. Asians with a need for alcohol treatment were less likely to receive treatment compared with Caucasians, suggesting a greater unmet need for alcohol treatment for Asians (Chartier & Caetano, 2010). Furthermore, a study with Chinese and Korean Americans found that those who were referred to treatment often denied having alcohol problems (Park, Shibusawa, Yoon, & Son, 2010). Thus, more attention should be afforded to this subgroup in future studies.

In conclusion, the present research provides a novel examination of the roles of event-specific shame, culture, and drinking in the context of an expressive writing intervention. Results provided support for the suggestion that shame may be adaptive for Asians relative to Caucasians but only among lighter drinkers. Results among heavy drinkers were somewhat counter-intuitive and provide additional directions for future research.

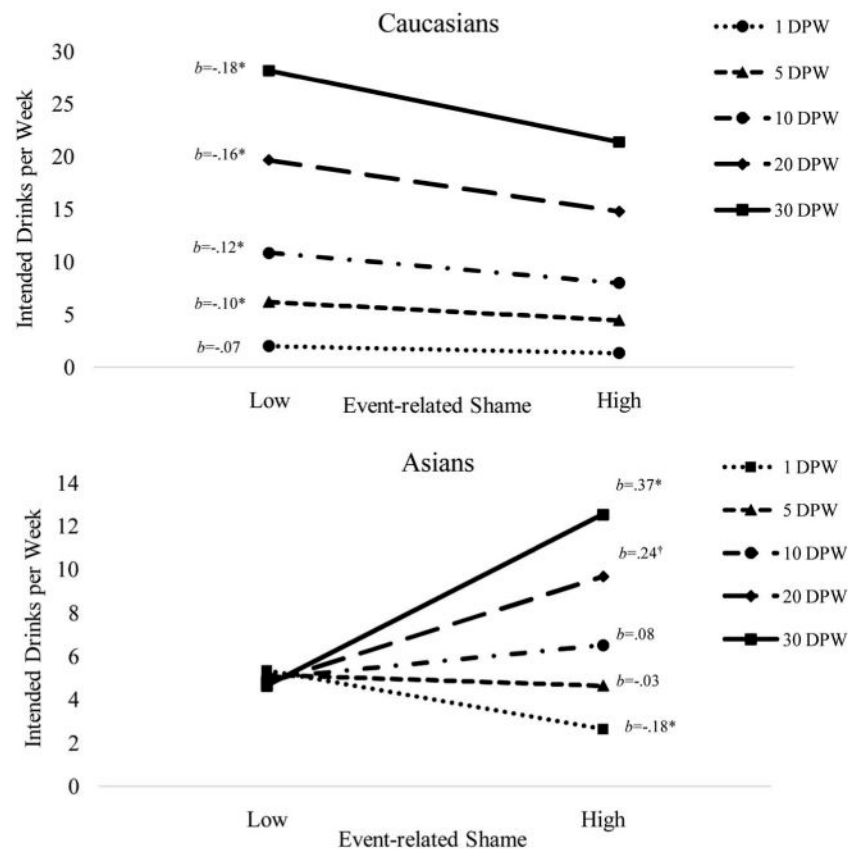
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**Figure 1.**

Three-way interaction among shame, baseline drinking, and race in predicting drinking intentions (drinks per week). Figures present baseline drinking as a moderator of the association between event-related shame and drinking intentions in predicting drinking intentions for Caucasian (above) and Asian (below) students. DPW = drinks per week (baseline). [†] $p < .10$ * $p < .05$.

Table 1

Means and Standard deviations for caucasians and asians.

Variable	Caucasian		Asian		Tests of Diff.	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Baseline DDQ	8.37	6.93	7.15	8.09	1.29	.198
Shame	2.75	1.89	3.05	1.85	-1.22	.223
Guilt	3.41	1.81	3.62	1.77	-.90	.367
Positive Affect	26.35	8.85	27.12	9.34	-.66	.510
Negative Affect	22.25	8.87	23.74	9.01	-1.29	.199
Intended DDQ	6.94	6.51	5.94	6.36	1.19	.236

Table 2

Zero-order correlations among study variables for caucasians and asians.

Variable	1.	2.	3.	4.	5.	6.
1. Baseline DDQ		-.03	.07	.08	.19 [†]	.67 ^{***}
2. Shame	.05		.75 ^{***}	.02	.16	-.03
3. Guilt	.10	.75 ^{***}		.03	.18 [†]	-.06
4. Positive Affect	-.06	.05	.14 [†]		.49 ^{***}	-.03
5. Negative Affect	-.08	.29 ^{***}	.31 ^{***}	.41 ^{***}		.27 ^{**}
6. Intended DDQ	.64 ^{***}	-.10	-.05	-.04	.26 ^{***}	

Note.

[†] $p < .10$;

* $p < .05$;

** $p < .01$;

*** $p < .001$.

DDQ = drinks per week. Variables are presented above the diagonal for Asians and below the diagonal for Caucasians.

Table 3

Interactions between shame, baseline drinking, and race in predicting drinking intentions.

Outcome	Predictor	<i>b</i>	<i>t</i>	<i>p</i>
Intended	Intervention dummy code (positive versus control)	.032	.22	.829
Drinks per	Intervention dummy code (negative versus control)	-.142	-.90	.369
	Baseline drinks per week (DDQ)	.694	12.98	<.001
	Shame	-.075	-2.00	.047
	Race (Caucasian versus Asian)	.075	.58	.560
	DDQ × shame	.015	.55	.581
	DDQ × race	-.165	-1.43	.153
	Shame × race	.091	1.31	.190
	DDQ × shame × race	.148	2.38	.018

Note. Main effects come from a model including only main effects, two-way interactions come from a model including main effects and the two-way interactions, and the three-way interaction comes from the full model. Baseline drinks per week and intended drinks per week were transformed (square root) to account for the moderate positive skew. Race was dummy-coded (0 = Caucasian, 1 = Asian), as were the intervention contrasts.