

Presented at the Annual American Psychological Association Conference  
August 6–August 9, 2009 Toronto, Canada

## A Psychosociocultural Examination of Chinese American Undergraduates' Alcohol Use



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### Abstract

This study assessed the psychological, social, and cultural dimensions that influence Chinese American undergraduates' incidents of consequences of alcohol use. An examination of overall and gender consumption patterns revealed relatively low alcohol use; however, differences emerged by sex in which males had more weekly and yearly use and more incidents of alcohol use consequences than females. Overall, the psychosociocultural dimensions uniquely and collectively predicted the variance of incidents of alcohol use consequences with the social dimension being the strongest predictor. In particular, internalization of the negative stereotype of lack of sociability for Asian Americans was a significant positive predictor. Discussion and implications for university clinicians and student service personnel are addressed.

### Asian Americans in Higher Education

- ◆ Largest racial/ethnic group in higher education, making up approximately 19.3% of U.S. college student population (NCES, 2004)
  - Chinese Americans largest Asian subgroup in higher education comprising of Asian American undergraduates as compared to 3 to 13% other Asian groups (Horn, Peter, & Rooney, 2000)
- ◆ Model minority stereotype depicts Asian Americans achieving academic success with minimal psychological or social concerns (Gloria & Ho, 2003) ostracizing them from Whites and causing tensions with other racial/ethnic minorities (Lee, 2006)
- ◆ Perceptions of the university environment and congruity between the universities' and students' culture play an essential role in students' experience (Lin & Gloria, 2009)
- ◆ Experience of microaggressions in higher education settings influence students' sense of welcome and belonging (Sue, Bucci, Lin, Nadal, & Torino, 2007)

## Asian American and Chinese American Undergraduates' Alcohol Consumption

- ◆ When compared to their non-college peers, those attending college have higher rates of heavy drinking (Johnston et al., 2002)
- ◆ Asian American college students' alcohol consumption much higher than expected, exceeding national sample when compared to other groups (So & Wong, 2006)
- ◆ Compared to other Asian groups, Chinese Americans reported drinking much less (Caetano et al., 1998; Henderson et al., 2008)
- ◆ Asian Americans expect more tension reduction from alcohol than their White counterparts (O'Hare, 1995)
- ◆ Youth of all ethnic groups are more likely to use drugs and alcohol when their peers have tried them (Nagasawa et al., 2000), influencing initiation (Kosterman et al., 2000) and maintenance of alcohol use (Orford et al., 2004)
- ◆ Drinking rates increasing for Asian American young adults, including college students (Grant, Dawson, Stinson, Chou, Dufour, & Pickering, 2004; Hahm, Lahiff, & Gutterman, 2004; So & Wong, 2006); yet findings remain inconclusive for alcohol consumption (O'Hare, 1995; Zane & Kim, 1994)
- ◆ Peer drug use significant and most robust predictor of substance use for Asian American college students (Lui & Iwamoto, 2007)
- ◆ Asian American high school females more likely to experiment with alcohol use in the past month than their male counterparts (Otsuki, 2003)
- ◆ Drinking patterns (i.e., self-reported drinking quantity, frequency and duration) by sex revealed that Asian American men consume more alcohol than their female counterparts (Hendershot, Dillworth, Neighbors, & George, 2008)
- ◆ Power over women, emotional control, and risk-taking all influence of Asian American male college students' alcohol use (Lui & Iwamoto, 2007)

### Psychosociocultural Approach to Study

- ◆ Integrative model addressing dimension of psychological, social, and cultural dimensions of students' experiences within the context of higher education
- ◆ Empirically-validated with Asian American (Gloria & Ho, 2003) and Hmong American (Gloria & Lin, 2009; Sengkhamee et al., 2009) undergraduates in which dimensions individually and collectively account for educational experiences



## Purpose of Study and Research Questions

- ◆ Examine Chinese American undergraduates' alcohol consumption and incidents of alcohol use consequences from a psychosociocultural approach
- ◆ What are the alcohol consumption patterns among Chinese American undergraduates?
  - What differences emerge by gender?
- ◆ What are the relationships of the study's variables?
- ◆ What are the unique and collective influences of the psychosociocultural factors on incidents of alcohol use consequences for Chinese American undergraduates?

## Procedures and Setting

- ◆ IRB-approved study
- ◆ Sample from West Coast
- ◆ Research Institution with 53.75% Asian American undergraduates
  - 32.9% Asian American students are Chinese American
- ◆ Non-parametric sampling method (snowball technique)
- ◆ 118 distributed ~ 100 completed (85% response)
- ◆ Students recruited from:
  - All majors and grade levels
  - Ethnic-based organizations (i.e., cultural clubs, fraternities/sororities)
- ◆ Counterbalanced paper-pencil survey
- ◆ 15-20 minutes to complete
- ◆ Returned to researcher
- ◆ No incentive provided

## 100 Chinese American Undergraduate Participants

### Gender:

50 males  
50 females

### Age:

$M = 19.70$ ,  $SD = 1.53$   
Range: 18-25 years

### Generation:

18 First-generation  
71 Second-generation  
6 Third generation  
2 Fourth generation  
1 Fifth generation  
2 Other

### Class Standing:

33 Freshmen  
19 Sophomores  
18 Junior  
29 Senior

### GPA:

$M = 3.13$   
 $SD = .47$   
Range: 2.0-3.96

### Department:

4 Arts  
8 Engineering  
5 Humanities  
5 Information and  
Computer Sciences  
10 Physical Sciences  
14 Social Ecology  
40 Social Sciences  
10 Biological Sciences  
4 Undecided/Undeclared

### Father's Education:

1 No formal education  
2 Elementary school  
1 Middle school  
3 Some high school  
8 High school  
7 Some college  
34 BA/BS  
27 MA/MS/MBA  
3 PhD/EdD  
11 Professional  
2 Other

### Mother's Education:

1 No formal education  
3 Elementary school  
1 Middle school  
8 Some high school  
13 High school  
7 Some college  
46 BA/BS  
9 MA/MS/MBA  
7 PhD/EdD  
7 Professional  
2 Other

### Highest Degree Expected:

14 Bachelors  
33 Masters  
23 MBA  
1 JD  
7 MD  
13 PhD/EdD  
3 Other

<b>Instruments</b>				
	<i>Scales</i>	<i>Content</i>	<i>Items</i>	<i>Alpha</i>
1	Demographic Information	Personal and educational questions	30	--
2	Collective Self-Esteem Scale (CSE) (Luhtanen & Crocker, 1992)	One's positive social or collective identity	16	.89
3	Alcohol Expectancy Questionnaire (Revised AEQ-Adolescent) (Brown, Christiansen, & Goldman, 1987)	Expectation of alcohol as stress relief	9	.79
4	Scale of Anti-Asian American Stereotypes (SAAS) (Lin et al., 2005)	Negative Asian American stereotypes including the model minority stereotype (Sociability)	13	.86
5	Peer Pressure Inventory (PPI) (Clasen & Brown, 1985)	Peer Pressure to engage/not engage in alcohol consumption	4	.80
6	University Environment Scale (UES) (Gloria & Kurpius, 1996)	Perceptions of university environment	12	.74
7	Cultural Congruity Scale (CCS) (Gloria & Kurpius, 1996)	Cultural fit of personal and environmental values	13	.68
8	Incidents of Alcohol Use Consequences (IAUC) (CORE Institute at Southern Illinois University-Carbondale, 2006)	Incidents of alcohol use consequences	15	.85

<b>Alcohol Consumption Patterns</b>			
5 or more drinks last 2 weeks	Average drinks a week	Yearly use	Last 30 day use
65 – None	58 – None	21 – Did not use	31 – 0 days
16 – Once	19 – Once	12 – 1/week	35 – 1/2 days
8 – Twice	8 – Twice	8 – 3/week	20 – 3/5 days
7 – 3-5 times	6 – 3-5 times	12 – 1/month	9 – 6/9 days
3 – 6-9 times	5 – 6-9 times	18 – 2/month	5 – 10/19 days
1 – 10+	3 – 10+	11 – 1/year	
0 – Missing	1 - Missing	18 – 6/year	
M > F ( $t = 3.03, p \leq .01$ )	M > F ( $t = 3.86, p \leq .001$ )	M > F ( $t = 3.40, p \leq .001$ )	M > F ( $t = 3.13, p \leq .01$ )

## Results

- ◆ Age of first alcohol use  
 $M = 17.39$  ( $SD = 2.58$ ), range = 6 to 21
- ◆ No gender differences,  $p > .05$
- ◆ Campus climate promotes
  - 53 ~ alcohol use
  - 75 ~ drinking for males
  - 59 ~ drinking for females
- ◆ Peer Alcohol Use
  - 32 ~ interrupts studying
  - 22 ~ makes them feel unsafe
  - 32 ~ messes up their physical living space
- ◆ Overall incidents of alcohol use consequences  
 $M > F$  ( $t = 2.52$ ,  $df = 98$ ,  $p \leq .05$ )  
Males more likely to report having had hangover, damaged property, been nauseated/vomited, driven a car under influence ( $p \leq .05$ )

Scale Descriptives and Correlations									
Scale	<i>M</i>	<i>SD</i>	CSE	AEQ	SAAS-S	PPI	UES	CCS	IAUC
CSE	5.22	.87	--	.06	-.37***	-.09	.39***	.22*	-.23
AEQ	3.66	.55		--	.04	.12	.26*	.11	.04
SAAS-S	2.89	.70			--	.03	-.17	-.20*	.67**
PPI	4.62	.97				--	.09	.15	.21*
UES	4.13	.75					--	.28**	-.02
CCS	4.13	.67						--	.09
IAUC	1.32	.42							--

Note: \* $p \leq .05$ , \*\* $p \leq .01$ ,  $p \leq .001$ \*\*\*

- ◆ 3-Step Hierarchical Regression  
 $F(6,90) = 4.37$ ,  $p \leq .001$ , 23% of the variance accounted

Step 1: Psychological (CSE, AEQ)  
 $\Delta r^2$  of .07 ( $\Delta F = 3.78$ ,  $p \leq .05$ )  
CSE  $\beta = -.27$ ,  $t = -2.67$ ,  $p \leq .01$

Step 2: Social (SAASS, PPI)  
 $\Delta r^2$  of .13 ( $\Delta F = 7.18$ ,  $p \leq .001$ )  
SAASS  $\beta = .33$ ,  $t = 3.27$ ,  $p \leq .01$   
PPI  $\beta = .18$ ,  $t = 1.94$ ,  $p = .056$

Step 3: Cultural (UES, CCS)  
 $\Delta r^2$  of .03 ( $\Delta F = 1.52$ ,  $p > .05$ )

## Discussion and Implications

- ◆ Consistent with previous literature (Henderson et al, 2008), study's Chinese American undergraduates' overall alcohol consumption patterns low and differences by sex emerged
  - Males reported higher alcohol consumption patterns and higher incidents of alcohol use consequences than their female counterparts which may in part be due to belief that campus climate promotes drinking for males
- ◆ Psychosociocultural framework accounted for 23% of the variance of incidents of alcohol use consequence
  - Social dimension accounted for largest variance (13%) followed by psychological dimension (7%)
  - For the social dimension, students who internalized the Asian American stereotype of not being social and experienced pressure to drink from peers were more likely to report increased incidents of consequences of alcohol use. Findings consistent with literature reporting peer pressure to drink as a strong predictor of initiation (Liu & Iwamoto, 2007; Kosterman et al., 2000) and maintenance of alcohol use (Orford et al., 2004)
  - Collective self-esteem negatively predicted incidents of consequences
  - Perceptions of university environment and cultural fit did not significantly predict incidents of alcohol use consequence; however, an increase positive perceptions of university environment (which is perceived as promoting a drinking culture on campus) was related to the expectancy that alcohol facilitates social engagement
- ◆ Student service personnel must preserve and foster a positive sense of collective self for Chinese American undergraduates through ethnic awareness, preservation, and celebration programming to decrease drinking and potential for incidents of negative alcohol use, in particular for males
- ◆ Provide training and opportunities to identify and enhance culturally-relevant intrapersonal social skills through peer and community interactions, decreasing potential social apprehension and enhancing cultural-efficacy of social abilities
- ◆ University campuses must address the climate of drinking and educate students on how to drink responsibly (should they choose to drink) establishing an environment that prompts alcohol awareness while offering cultural programs that facilitative campus connection and validation

## Limitations ~ Future Research

- ◆ Non-parametric sampling method used ~ Develop large-scale campus assessment and awareness of alcohol use and consequences for different racial and ethnic minority student groups
- ◆ Descriptive items of CORE were not based on ratio data and did not use similar anchors to allow comparison across subscales ~ Identify or develop scale which provides general and specific overview of alcohol patterns of consumption for students
- ◆ Assessment of ethnic identity and values enculturation not examined ~ Determine degree to which ethnic identity influences alcohol consumption patterns
- ◆ Differences by sex rather than gender constructs were addressed ~ Include a culture-based gender role adherence measure to gain an in-depth understanding of behaviors and attitudes of alcohol consumption
- ◆ Study addressed perceptions of behaviors of drinking ~ Emphasize reasons or processes that Chinese American undergraduates are using alcohol (e.g., coping with racial microaggressions, means to connect socially, meeting expectations of what it means to be a college student) to contextual use