

Alcohol Consumption Habits among Young Adults: Perceptions of Personal Alcohol Consumption in Comparison to the Peer Groups

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Abstract

In the United States, binge drinking is considered a ‘normal’ experience among teens and young adults; however, excessive alcohol consumption often results in severe or even fatal consequences. In order to combat this critical health problem among this impressionable population, prevention efforts have been implemented. The authors launched a survey that collected data from July 1st, 2015 to July 6th, 2015. Four hundred and seventeen individuals between the ages eighteen and twenty-four years, who self-reported engaging in binge drinking within thirty-days prior to participation in the survey, provided responses to a thirteen-question survey using the Survey Monkey online platform. Those who self-reported not engaging in binge drinking within thirty days prior to the study were excluded from the study. The survey asked participants about their personal alcohol consumption habits in relation their peers’ drinking patterns, if they have a friend or friends who engage in problematic drinking, and if they feel they themselves or their friend identified as having problematic drinking patterns may have or does have an Alcohol Use Disorder (AUD). Cross-tabulations, Pearson chi-squared tests, and logistic regression modeling were used to investigate the relationship between misperceptions of personal alcohol consumption in relation to the peer group and identifying having “that friend,” a friend with problematic drinking habits. The results showed that those who misperceive their alcohol consumption to be lower than the peer group more often identify as having “that friend” than those who misperceived their alcohol consumption to be higher than the peer group. The results from this study suggest that further efforts to reduce binge drinking among the young adult population may benefit from targeting peers to help their friends who may be struggling with an AUD.

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Introduction

Binge drinking has emerged as a social norm among American youth culture^[1]. As per the National Institute on Alcohol Abuse and Alcoholism, binge drinking is defined as consuming four or more alcoholic beverages for women and five or more alcoholic beverages for men within a two-hour time span (National Institute on Alcohol Abuse and Alcoholism). Many young adults between the ages of 18 and 24 years old engage in binge drinking. Although elevated rates of heavy drinking and binge drinking exist among young adults in general, there is a concentration of these behaviors occurring amongst college students and on college campuses^[2]. In fact, 80% of college students report using alcohol every year; among these students, nearly 50% engage in binge drinking^[3].

There are many short- and long-term consequences associated with binge drinking, including physical injuries, high-risk sexual behavior, alcohol overdoses, health problems, suicide attempts, driving while under the influence, antisocial behavior, and academic difficulties^[1,4]. About a third of 18 to 24 year olds who were admitted to emergency rooms after sustaining severe injuries were under the influence of alcohol^[4]. Despite educational and legal attempts to reduce excessive consumption, binge drinking among youths continues to be a major public health concern^[5].



A majority of the investigations surrounding youth binge drinking culture have focused on the catalysts behind these behaviors. Many theories and a majority of current research indicate that youth binge drinking culture is likely created and perpetuated through social norms. When individuals possess personal ideations about others' behaviors, beliefs, and attitudes, social norms are formed. The perception of others' quantity and frequency of drinking (descriptive norms) and the perception of others' acceptance of drinking and representation of the peer group's moral standing (injunctive norms) come together to create an individual's ideation of social norms^[6]. Social Learning Perspective suggests that acceptable and supported behaviors concerning alcohol consumption are demonstrated and subsequently learned through peer drinking behavior. Furthermore, excessive drinking among youth may be learned through close social interactions with drinking peers^[4].

Perceptions and learned behaviors from peers translate into one's personal behavioral patterns and belief system: existing literature suggests that perceived support of others for drinking is consistently associated with personal alcohol use^[6]. The adoption of normative perceptions raises issues when students overestimate other students' alcohol consumption rates and embrace misinformed social norms. As a result, students may end up conforming to inaccurate and elevated drinking levels^[3].

Due to an overestimation of their peers' alcohol consumption, most students consider their drinking habits and approval of alcohol use to be less than their peers. The disconnect between one's own alcohol consumption and attitude with others' is a phenomenon called Self-Other Discrepancy^[7]. Due to this Self-Other Discrepancy, individuals are at increased odds of remembering highly noticeable behavior in others, such as drunkenness^[8].

In this study, the authors investigated young adults' perceptions of their own alcohol consumption in relation to that of their peers. Students and non-students between the ages of 18 and 24 who reported engaging in binge drinking within the past 30 days were surveyed. Participants were queried about their personal drinking habits and perception of their alcohol consumption in relation to their peers. In addition, individuals were asked whether or not they had "that friend" or "those friends": a person or group of individuals who they felt consumed alcohol more excessively than most of the peer group members, and frequently became more intoxicated, ill, incoherent, and/or pressured others to drink. Those who identified as having "that friend" or "those friends" were asked a follow-up question about whether or not they felt that the individual or individuals have or may have an Alcohol Use Disorder (AUD). Individuals often overestimate their peers' drinking habits, resulting in a misperception of their relative alcohol consumption, and additionally have an increased likelihood to notice others' high-risk drinking habits rather than their own. Due to these likelihoods, the authors hypothesized that those who perceived their alcohol consumption to be less than their peer group's but report drinking equal or higher amounts than their cohorts would have increased odds of having "that friend." Conversely, those who perceived their alcohol consumption to be greater than that of their peers but report drinking equal or less amounts to their cohorts would be less likely to believe that they have "that friend."

Methods

Survey Design

A 13-question survey was created using SurveyMonkey's online platform. The survey targeted individuals between the ages of 18 and 24 who have engaged in binge drinking (National Institute on Alcohol Abuse and Alcoholism) within 30-days prior to survey participation. The survey instrument was comprised of eleven multiple choice questions, two of which are contingency questions; one open ended question, and one five-point Likert item question. Respondents were asked to identify their age, sex, current student status, and monthly alcohol consumption, as well as evaluate their alcohol consumption in relation to their peers. Respondents were also asked to indicate if they have a peer with problematic drinking, and if they perceive themselves or their peers, whom they identified as having problematic drinking, as having an AUD.

Sample Selection

Data collection occurred between July 1, 2015 and July 6, 2015. Respondents were recruited via SurveyMonkey Audience. SurveyMonkey Audience is a product that provides researchers with targeted, representative sample populations. Respondents were indirectly compensated; SurveyMonkey makes a charitable micro-contribution for each completed survey (SurveyMonkey Audience).

The survey fielded 1,474 responses. Respondents who self-identified as not engaging in binge drinking were disqualified from the study. 417 responses were collected from individuals fitting the sample parameters and meeting 100% completion threshold on relevant questions; these responses constituted the data used in analyses.

Analytical Approach

Analyses utilized STATA/IC 13.1^[9]. This study's key independent variable was created by evaluating how the respondent's self-reported perception of his or her relative drinking measured against his or her self-evaluation of alcohol consumption - 'drinks consumed per month' - compared to his or her peer group's mean 'drinks consumed per month'. A peer group was defined as the respondent's student status (student or non-student) and gender. The four peer groups are: male students, female students, male non-students, and female non-students. Each respondent's 'drinks consumed per month' was calculated by multiplying the respondent's number of drinking sessions per month by number of drinks consumed in an average session. The respondent was defined as drinking the same as his or her peers if the respondent's 'drinks consumed per month' fell within one day's worth of drinks (mean divided by 30.42) on either side of the respective peer group's mean 'drinks consumed per month'. The respondent drank less or more if he or she had consumption outside of the lower or upper bounds of this range, respectively. This result was compared to the

respondent’s self-reported perception of his or her relative drinks consumed per month (i.e. did the respondent report drinking less, the same, or more than his or her peers) to determine if the respondent misperceived his or her perception of relative drinks consumed per month. (Appendix 1). Cross-tabulations, Pearson chi-squared tests, and logistic regression modeling were used to create descriptive statistics and test the hypothesis.

Appendix 1: Construction of “consistency of self-perception” groups.

“Consistency of self-perception” group	Self-reported perception of consumption relative to peers	Self-reported monthly consumption compared to peer group mean consumption
Misperception (low)	Consume less	Within “same” range
Misperception (low)	Consume less	Above “same” range
Misperception (low)	Consume same	Above “same” range
Consistent perception	Consume less	Below “same” range
Consistent perception	Consume same	Within “same” range
Consistent perception	Consume more	Above “same” range
Misperception (high)	Consume same	Below “same” range
Misperception (high)	Consume more	Below “same” range
Misperception (high)	Consume more	Within “same” range

Results

Descriptive

55.40% (n = 231) of respondents were female. 54.68% (n = 228) of respondents were non-students. Female students comprised the largest peer group (30.94%, n = 129), followed by female non-students (24.64%, n = 102), male students (23.74%, n = 99), and male non-students (20.86%, n = 87). Respondents reported a mean consumption of 37.16 drinks per month. Male non-students had the highest monthly mean consumption (51.70 drinks per month), while female non-students had the lowest mean consumption, at 30.80 drinks per month. Female students and male students consumed 33.31 and 35.99 drinks per month, respectively. (Table 1).

Table 1: Descriptive statistics; frequency distribution for each peer group and whole sample for group frequency, mean monthly consumption, perception of alcohol consumption relative to peers, and consistency of consumption perception. Percentages by row for categorical variables

Peer Group	Distribution of groups	Mean monthly consumption	Perception of alcohol consumption relative to peers $\chi^2(6) = 12.9776, p = 0.043$			Consistency of consumption perception $\chi^2(6) = 9.4416, p = 0.150$		
			Consume less	Consume same	Consume more	Misperception (Low)	Consistent perception	Misperception (High)
Female non-student	102 24.46%	30.8039	58 56.86%	29 28.43%	15 14.71%	21 20.59%	60 58.82%	21 20.59%
Female student	129 30.94%	33.3101	59 45.74%	51 39.53%	19 14.73%	29 22.48%	63 48.84%	37 28.68%
Male non-student	87 20.86%	51.7011	30 34.48%	42 48.28%	15 17.24%	16 18.39%	40 45.98%	31 35.63%
Male student	99 23.74%	35.9495	49 49.49%	30 30.30%	20 20.20%	28 28.28%	50 50.51%	21 21.21%
Totals	417	37.16	196 47.00%	152 36.45%	69 16.55%	94 22.54%	213 51.08%	110 26.38%

Respondents primarily reported consuming less alcohol than their peers (47.00%, n = 196); 36.45% (n = 152) reported consuming the same amount and 16.55% (n = 69) reported consuming more than their peers. Of the four peer groups, male students had the highest frequency (20.20%, n = 20) of believing they consume more alcohol than their peers; conversely, female non-students had the lowest frequency (14.71%, n = 15). 17.24% (n = 15) of male non-students and 14.73% (n = 19) of female students reported consuming more than their peers. Female non-students had the highest frequency (56.86%, n = 58) of reporting consumption less than their peers, while male non-students had the lowest frequency (34.48%, n = 30). 49.49% (n = 49) of male students and 45.74% (n = 59) of female students reported consuming less than their peers. There was a statistically significant difference between these groups and their self-perception of their alcohol consumption relative to their peers ($\chi^2(6) = 12.9776, p = 0.043$). (Table 1).

Self-evaluations of alcohol consumption by 51.08% (n = 213) of respondents were consistent with self-reported peer group consumption. 22.54% (n = 94) of respondents had a misperception of consumption below the peer group’s mean range and 26.38% (n = 110) of respondents had a misperception of consumption above the peer group’s mean range. The evaluations conducted by female non-students were most frequently consistent with those of their cohort (58.82%, n = 60), while those evaluations conducted by male non-students were least frequently consistent with their peer group (45.98% n = 40). 50.51% (n = 50) of male students and 48.84% (n = 63) of female students had consistent perceptions. Male non-students most frequently (35.63%, n = 31) had mispercep-

tions above the mean consumption range, followed by female students (28.68%, n = 37), male students (21.21%, n = 21), and female non-students (20.59%, n = 21). Male students most frequently (28.28%, n = 28) had misperceptions below the mean consumption range, followed by female students (22.48%, n = 29), female non-students (20.59%, n = 21), and male non-students (18.39%, n = 16). However, there was not a statistically significant difference between these groups ($\chi^2(6) = 9.4416, p = 0.150$). (Table 1).

57.55% (n = 240) of respondents believed they have “that friend” or “those friends” who consume alcohol more excessively and/or display erratic or uncharacteristic behaviors while intoxicated. Female students most frequently (66.67%, n = 86) reported a belief that they have “that friend” or “those friends”, while male non-students least frequently (48.28%, n = 42) reported a belief that they have “that friend”. There was a statistically significant difference across these groups ($\chi^2(3) = 8.9259, p = 0.030$). Of the respondents that believed they have “that friend”, 59.17% (n = 142) believed “that friend” has an AUD. Female non-students most frequently (66.04%, n = 35) reported the belief that “that friend” has an AUD while male non-students reported this belief least frequently (50.00%, n = 21). Comparatively, only 10.07% (n = 42) of respondents reported that they, personally, believed they may have an AUD. 5.75% (n = 5) of male non-students, 10.78% (n = 11) of female non-students, 10.85% (n = 14) of female students, and 12.12% (n = 12) of male students reported their possible AUD. (Table 2).

Table 2: Descriptive statistics; frequency distribution for each peer group and whole sample for believing [respondent] has an AUD, having “that friend”, and believing “that friend” has an AUD. Percentages by row for categorical variables

Peer Group	Having “that friend” $\chi^2(3) = 8.9259, p = 0.030$		Believing “that friend” has an AUD $\chi^2(3) = 2.6144, p = 0.455$		Respondent believes he or she has an AUD $\chi^2(3) = 2.3996, p = 0.494$	
	Do not have “that friend”	Do have “that friend”	Does not believe “that friend” has AUD	Believes “that friend” has AUD	Does not believe he or she has an AUD	Does believe he or she has an AUD
Female non-student	49	53	18	35	91	11
	48.04%	51.96%	33.96%	66.04%	89.22%	10.78%
Female student	43	86	34	52	115	14
	33.33%	66.67%	39.53%	60.47%	89.15%	10.85%
Male non-student	45	42	21	21	82	5
	51.72%	48.28%	50.00%	50.00%	94.25%	5.75%
Male student	40	59	25	34	87	12
	40.40%	59.60%	42.37%	57.63%	87.88%	12.12%
Totals	177	240	98	142	375	42
	42.45%	57.55%	40.83%	59.17%	89.93%	10.07%

Pearson χ^2 tests and a logistic regression model were used to investigate the authors’ hypothesis. There was a statistically significant ($\chi^2(2) = 13.6731, p = 0.001$) difference between the three “consistency of self-perception” groups and distribution across “having ‘that friend’” or not. The majority, 64.89% (n = 61), of respondents who misperceived (low) their consumption relative to that of their peer group believe they have “that friend”. Conversely, 42.73% (n = 47) of individuals who misperceived (high) consumption level than those of their peer group reported having “that friend”. 61.97% (n = 132) of respondents that had a consistent perception reported having “that friend”. (Table 3)

Table 3: Cross tabulation of accuracy of consumption perception and having “that friend”, percentages by row. $\chi^2(2) = 13.6731, p = 0.001$

Consistency of Consumption Perception	Don’t Have “That Friend”	Do Have “That Friend”
Misperception (low)	33 35.11%	61 64.89%
Consistent perception	81 38.03%	132 61.97%
Misperception (high)	63 57.27%	47 42.73%
Total	177 42.25%	240 57.55%

Logistic regression models suggested that a respondent’s self-perception is related to the odds of the respondent reporting having “that friend” or not. Specifically, compared to respondents who misperceived their monthly consumption below their peer group, respondents whose consumption was misperceived above their peer group have statistically significant (OR: 0.402, p = 0.002) decreased odds of believing they have “that friend”, when adjusting for *peer group*. Likelihood ratio tests, paired with the results from χ^2 tests above, demonstrated the appropriateness of including *peer group*. (Table 4)

Table 4: Logistic Regression of having “that friend,” on accuracy on consumption perception, controlling for peer group.

	Odds Ratio	Standard Error	p	95% Interval
Consistency of Consumption Perception				
-Misperception (low)	Reference			
-Consistent perception	0.91	0.24	0.707	0.54-1.51
-Misperception (high)	0.40	0.12	0.002	0.23-0.72
Peer Group				
-Female non-student	Reference			
-Female student	2.02	0.56	0.012	1.17-3.49
-Male non-student	0.97	0.29	0.929	0.54-1.75
-Male student	1.37	0.40	0.274	0.78-2.42
_cons	1.38	0.39	0.254	0.79-2.39
Likelihood ratio test of A (consistency) nested in B (consistency + peer group)	LR chi2(3) = 9.03 prob > chi2 = 0.289			

Discussion

The findings of the current study indicated that past research illustrating the consistent norm misperceptions held by many young adults may not always be the case. Prior studies have shown that individuals often hold misperceptions regarding their personal drinking habits and opinions in comparison to their peers' alcohol consumption and opinions. According to existing literature, it would have been assumed that a majority of the participants self-report their own alcohol consumption rates to be less than those of their peers, while self-reporting rates of alcohol consumption equal or more than their peers. However, more than half of the participants' perceived alcohol consumption habits were consistent with those of their peer group, and approximately 23% of respondents quantified their alcohol consumption to be less than that of their peers. Furthermore, findings indicate that those who misperceived their peers' alcohol consumption to be greater than their own had increased odds of having “that friend” than those who misperceive their peers' alcohol consumption to be less than their own. In addition, results show that a majority of those who identified having “that friend” consider him or her to possibly or definitely have an AUD. The results of the present study illustrated young adults' current perceptions and opinions toward binge drinking; these insights have major implications for present and potential efforts in reducing the amount of high-risk drinking taking place among the American youth population.

The common presence of binge drinking among young adults, especially college students, can be heavily attributed to peer influence; both cross-sectional and longitudinal studies have demonstrated the direct impact peers have on individual drinking^[10]. Individuals acquire the information needed to construct norms about peers from three primary sources: observable behaviors, direct and indirect communications, and knowledge of the self^[7]. Observable behaviors provide the most overt information about others but are also vulnerable to fundamental attribution error, which is the propensity of people to view others' behavior at a given time or in a certain situation as reflective of a dispositional trait. Peers can influence an individual's alcohol use both directly and indirectly. Direct influences are explicit efforts to get someone to drink, which may be polite signals or conspicuous commands. Indirect influences are sourced from peers' actions that inadvertently illustrate what is acceptable, including modeling and perceived norms^[6]. Knowledge of one's self is susceptible to the false consensus effect, which is when a person thinks that sources of information come together in an additive fashion, thus potentially leading to incorrect estimates of others' behaviors and beliefs^[7].

These influences from peers come together and construct individuals' descriptive and injunctive norms about their peers alcohol consumption. However, individuals often misperceive these norms, and inaccurately assess the frequency and amount of alcohol use of their peers, or how socially acceptable binge drinking is McAlaney et al.,^[8]. Students act according to the perceived group normality, not their own personal view: a student will match their drinking habits with their perceptions of what other students do and approve of (i.e. perceived descriptive and injunctive norms). Therefore, if a student perceives others as approving of and engaging in heavy drinking, that student is more likely to have greater, and in turn unhealthy, alcohol consumption habits^[6]. The current thresholds for what is considered to be an unhealthy consumption of alcohol has been debated; however, research has shown that the five-drink threshold can be considered “clearly dangerous for the drinker and for society”^[11]. High-risk alcohol consumption, such as binge drinking, has been associated with negative consequences both physically and socially^[12]. Those who engage in excessive alcohol consumption are at increased risk of sexual and physical assault, accidents, crime, aggression, health problems, and academic struggles^[4,12].

Current efforts to lessen high-risk drinking patterns among college students and the general young adult population have focused on correcting misperceptions. Students most often perceive themselves as drinking less and being less approving of drinking than their peers due to an overestimation of descriptive and injunctive norms^[7]. An emerging method of prevention and intervention to high-risk alcohol consumption among the young adult population is the Social Norms Approach, which challenges the misunderstandings around peer alcohol use and beliefs about drinking. Through various outlets, such as marketing and media campaigns, the approach aims to confront misperception by emphasizing the actual alcohol consumption and norm^[8]. The current efforts put forth through the Social Norms Approach are promising^[6] but may not be utilizing the very influential impact peers have on individuals or the ability of peers to more easily identify issues in others than themselves.

The negative consequences of binge drinking illuminate the urgent need for an overall reduction of these harmful drinking habits among the young adult population. Though the Social Norms Approach has demonstrated efficacy in lessening the volume of alcohol consumed by young adults, there may be additional strategies for reducing drinking that are being overlooked. The Social Norms Approach focuses on adjusting an individual's perception of their peers and therein themselves in relation to their peers, in turn aiming to reduce one's own alcohol use. This has proven to be an effective method^[6]; however, this sole focus on one's self may be overlooking the direct and indirect influence peers have on drinking patterns and the potential impact peers may have on changing drinking patterns. In addition, our results indicate that individuals may not be misperceiving their alcohol consumption as dramatically and as frequently as past research as shown. Therefore, individuals may not be misperceiving their own drinking as severely or as frequently as is theorized.

Given that the majority of the survey participants who reported having "that friend" felt as though he or she may have or does have an AUD, the peer audience is potentially a useful target in efforts to encourage those who are struggling with an AUD to seek the help they need. Individuals are more likely to perceive issues or problems in others' drinking habits than in their own consumption, whether that be due to self-other discrepancies, memory biases, or misperceptions^[8]. In addition, peer influence significantly induces and sustains alcohol use in college students; peers' direct and indirect influence contributes to an individual's drinking habits^[7]. The present study not only demonstrates that individuals are likely to view a friend or friends as behaving more recklessly than themselves with alcohol, but also that a majority of these individuals view "that friend" or "those friends" as definitely or potentially having an AUD. Due to the major influence peers have and their ability to detect drinking problems in others, peers and friends of those struggling with an AUD may be the best sources to get help for those who need it. The various efforts used with the Social Norms Approach to correct misperceptions, such as social media campaigns^[8], marketing tactics and individualized feedback systems might be useful techniques to reach the peer populations and friend groups of those struggling with an AUD. Emphasizing peer influences and the ability of peers to identify potential AUD risks in individuals in mass outreach efforts could have a positive impact on lessening the binge drinking culture and securing help for those struggling with an AUD.

A limitation to this study was the assumption that the sample serves as a representative substitution for each respondent's peer group. For instance, a respondent could consume less than his peers, and report such, but still consume more than the mean, thus his consumption relative to his peers would be skewed. Future studies could benefit from investigating how friends and peers who believe someone may have or does have an AUD would go about finding that friend helps. Finding outlets and methods that are most comfortable for this population to find their peers the proper resources is crucial in constructively using peers' perceptions and influence to administer the help needed at a large scale, and to overall lessen binge drinking.

Conclusion

High risk drinking patterns, such as binge drinking, are very prevalent among the young adult population. Due to the dangers and risks that excessive alcohol consumption can induce, it is critical that efforts to reduce these drinking habits are implemented^[12]. Binge drinking is often times enacted and perpetuated through peer influence (National Institute on Alcohol Abuse and Alcoholism). Additionally, existing literature shows that young adults frequently overestimate their peers' drinking habits, thus creating a misinformed norm and, in turn, misperceiving their own alcohol consumption to be less than the group norm^[7]. Current efforts, such as the promising Social Norms Approach, attempt to lessen binge drinking among the young adult population by correcting misperceptions about one's own alcohol consumption in comparison to the peer groups^[8]. This study found that most of the participants assessed their alcohol consumption in relation to their peer to be consistent with the alcohol consumption of the peer group. Furthermore, the findings that over half the participants who identified as having "that friend" or "those friends" to whom frequently engage in problematic drinking at a more elevated level than the rest of the peer group may have or does have an AUD has major implications for possible future efforts to reduce binge drinking among the young adult population. The effects peer influence have on an individual's drinking habits, both on inception and perpetuation, in combination with the ability of a peer to detect problematic drinking and potential for an AUD in others can be utilized in campaigns and other forms of public education to reduce binge drinking and get those who may be struggling with an AUD the help they need.

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Disclosure and Ethics

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Author Contributions

AC and RS designed the survey instrument and collected the data. AKM analyzed the data. AC conducted the review of literature. All authors contributed to the manuscript's construction. All authors agree with the manuscript's results and conclusions. All authors reviewed and approved of the final manuscript.

References

1. Capece, M., Lanza-Kaduce, L. Binge drinking among college students: A partial test of Aker's social structure-social learning theory. (2013) *Am J Crim Just* 38(4): 503-505.
2. Slutske, W. S. Alcohol use disorders among US college students and their non-college-attending peers. (2005). *Arch Gen Psychiatry* 62(3): 321-327.
3. Chauvin, C. D. Social norms and motivations associated with college binge drinking. (2012) *Sociological Inquiry* 82(2): 257-281.
4. Guo, G., Li, Y., Owen, C., et al. A natural experiment of peer influences on youth alcohol use. (2015) *Soc Sci Res* 52: 193-207.
5. Deas, D., Clark, A. Youth binge drinking: progress made and remaining challenges. (2009) *J Am Acad Child Adolesc Psychiatry* 48(7): 679-680.
6. Borsari, B., Carey, K. B. Peer influences on college drinking: A review of the research. (2001) *J Subst Abuse* 13(4): 391-424.
7. Borsari, B., Carey, K.B. Descriptive and injunctive norms in college drinking: a meta-analytic integration. (2003) *J Stud Alcohol* 64(3): 331-341.
8. McAlaney, J., Helmer, S., Stock, C., et al. Personal and perceived peer use of and attitudes toward alcohol among university and college students in seven EU countries: Project SNIPE. (2015) *J Stud Alcohol Drugs* 76(3): 430-438.
9. Stata Statistical Software: Release 13, StateCorpLp, College Station, TX, USA, 1999. Survey Monkey Audience.
10. Lau-Barraco, C., Linden, A. N. Drinking Buddies: Who Are They and When Do They Matter? (2014) *Addict Res Theory* 22(1): 57-67.
11. Grucza, R. A., Norberg, K. E., Bierut, L. J. Binge drinking among youths and young adults in the united states: 1979-2006. (2009) *J Am Acad Child Adolesc Psychiatry* 48(7): 692-702.
12. Norman, P., Conner, M. T., Stride, C. B. Reasons for binge drinking among undergraduate students: An application of behavioural reasoning theory. (2012) *Br J Health Psychol* 17(4): 682-698.