Research Contribution

Journal of Foodservice Management & Education, Volume 6, Number 2, Pages 16 – 20. ©2012
Published jointly by the Foodservice Systems Management Educational Council and the National Association of College & University Food Services

ALCOHOL USE AMONG UNIVERSITY FOODSERVICE MANAGEMENT STUDENTS

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ABSTRACT

Previous academic and trade analyses have eluded to the phenomenon that hospitality students and industry employees display more frequent alcohol consumption than do their non-hospitality-related counterparts. The aim of this study was to use social learning theory as a basis to investigate the university foodservice management students' alcohol consumption, specifically as they relate to work experience and demographic characteristics. Results indicated that no significant alcohol consumption behaviors were reported among those students with and without practical work experience in the foodservice industry. Age and gender emerged as indicators of significantly different alcohol consumption behaviors.

Keywords: Alcohol, Work Experience, Foodservice Management, Social Learning Theory

INTRODUCTION

Numerous studies have found alcohol consumption to be significantly high among foodservice industry employees. A 2010 study by Borchgrevink, Sciarini and Borchgrevink confirmed the claim that hospitality students and employees display higher alcohol consumption rates than their counterparts in other studies or industries. This finding agreed with earlier studies by Larsen (1994) and Larsen & Jorgensen (2003) which both found hospitality students and employees to display significantly higher scores on the Alcohol Use Disorders Identification Test (AUDIT) than their non-affiliated counterparts. This phenomenon of higher consumption levels among foodservice affiliated individuals has been attributed to a number of factors, including a young labor pool, late-night work hours, work-related stress, required internship in the foodservice/hospitality industry and workplace environmental norms (Larsen, 1994; Larsen & Jorgensen, 2003).

The purpose of this study was to use social learning theory as a basis to investigate the relationship between foodservice management students' demographic characteristics, work experience history, and alcohol-use behavior. The evidence that foodservice industry workers display higher levels of alcohol consumption begs the question, "Will students have higher drinking levels after having actually worked in the industry? Or is it simply a matter of demographics?" Jayson (2011) suggests that college students' continued alcohol abuse despite knowledge of the negative effects indicates a need for continued exploration of student alcohol consumption in general. Because alcohol abuse can cause substantial negative impacts at both the individual and the organizational level, it stands to reason that employee drinking behavior can impact service quality, thus affecting revenue and profit (Larsen, 1994). Finally, the variety of health issues and overall well-being associated with excessive alcohol consumption warrants further investigation on behalf of foodservice industry employees (Borchgrevink, et al., 2010).

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The aforementioned literature highlights a need for change within the culture of the restaurant industry, specifically with regards to work environment, culture and supervision, and suggests the necessary provision of increased counseling on alcohol abuse for foodservice management students, so as to prepare them for the behavioral and health threats prior to entering the industry (Borchgrevink, et al., 2010; Jayson, 2011; Larsen, 1994). Once equipped with a more detailed understanding of this area, academia and industry professionals may better approach the issue and lower potential risks for both employees and hospitality organizations.

Alcohol Use in the Workplace

According to the U.S. Department of Health and Human Services (1999), alcohol consumption is associated with workplace culture and acceptance, workplace alienation, availability of alcohol, and existence and enforcement of alcohol polices in the workplace. Thus, drinking rates vary among different occupations, and if the culture of the workplace accepts or encourages alcohol consumption, then employee drinking levels will be higher (U.S. Department of Health and Human Services, 1999).Studies have found that a work environment fraught with boredom, stress, isolation, low job autonomy, lack of job complexity, lack of control over work conditions, sexual harassment, and/or disrespectful behavior is associated with higher levels of employee drinking (Borchgrevink, et al., 2010; Larsen, 1994). Workers who find it easy to bring in alcohol to the workplace, consume alcohol at the workplace, or obtain alcohol at the workplace will display higher levels of employee drinking behavior. Workers who have limited supervision are associated with a greater number of alcohol problems and levels of alcohol consumption. Finally, establishments with less employee drinking often have an alcohol policy in place, as well as awareness of such a policy among supervisors and employees.

Alcohol Use, Gender and Age

Previous studies have indicated that gender differences may influence drinking culture within the workplace (Hoffman, Larison& Sanderson, 1997; Kraft, Blum, Martin & Roman; Mandell, et al., 1992; Sonnenstuhl, 1996; Trice, 1992).For example, predominately male workplaces and occupations have been found to exhibit a heavier drinking culture and more alcohol-related problems, while female-dominated workplaces and predominately female occupations display a lesser drinking culture (Hoffman, Larison & Sanderson, 1997; Kraft, Blum, Martin & Roman; Mandell, et al., 1992; Sonnenstuhl, 1996; Trice, 1992).In addition, Borchgrevink, Sciarini and Borchgrevink (2010) found that male alcohol consumption was higher than that of females across both student and employee groups.

Other studies have found age to be a substantial indicator in alcohol consumption; Larsen and Jorgensen (2003) found that when age was introduced to their model, all other effects on consumption disappeared. These findings could imply that all groups in a certain age bracket will display heavier alcohol consumption, not just those working in or studying in the hospitality fields. In addition, college

students, a group traditionally comprised of individuals within the 18-22 years of age bracket, have been found to display excessive alcohol consumption, even when armed with the knowledge of negative physical and emotional impacts of such abuse (Jayson, 2011).

Alcohol Use in the Hospitality Industry

Empirical support for the claim that hospitality students as well as hospitality industry workers display higher levels of alcohol consumption than in other fields of education or employment is provided by a number of academic studies (Borchgrevink, Sciarini and Borchgrevink, 2010; Kjærheim, et al., 1995; Kjærheim, et al., 1996; Kouvonen & Lintonen, 2002; Larsen, 1994; Larsen &Jørgensen, 2003; Pizam, A., 2010). High levels of employee alcohol consumption in the hospitality industry have been attributed to several factors, including a relatively young labor pool, a work schedule including late-night shifts, low management surveillance, and a work culture with norms of 'having an end-of-shift drink' or 'going out after work' (Kjaerheim, Mykletun, Aasland, Haldorsen& Anderson, 1995; Kjaerheim, Mykletun & Haldorsen, 1996; Spector, 2001). Levels of employee alcohol consumption are influenced by work schedule (night work influences more drinking), type of workplace (bars, pubs and clubs influencing heavier drinking), and modeling factors, such as co-worker alcohol consumption behavior or perceived pressures by co-workers to engage in heavy drinking (Kjaerheim et al., 1995).

Students in hospitality management programs will typically be working in the hospitality industry during their studies as a large number of hospitality programs have an industry work internship requirement to complete in order to gain work experience and/or future employment upon graduation (Larsen & Jorgensen, 2003). It has been suggested that the introduction to a work environment with co-workers who display high levels of alcohol consumption will increase an individual's likelihood to display high consumption levels of alcohol (Kjaerheim et al., 1995; Kjaerheim et al., 1996); it stands to reason that a student's introduction to the food service industry may play a role in the higher levels of alcohol consumption among foodservice management students. Larsen (1994) hypothesized that lenient attitudes and high levels of alcohol consumption are observed by the individual during their socialization to working in the hospitality industry; thus, heavy drinking is a learned behavior.

Social Learning Theory

Bandura (1977) proposes that displayed behaviors are learned either deliberately or inadvertently through the influence of example, implying that individuals in a social context are influenced by the behavior of others. "In the social learning view, people are neither driven by inner forces nor buffeted by environmental stimuli. Rather psychological functioning is explained in terms of a continuous reciprocal interaction of personal and environmental determinants" (Bandura, 1977, 11-12). Individual actions impact environmental surroundings, which in turn influences individual behavior; thus, behavior is a byproduct of the individual and the environment, not just one or the other. In context, a work environment hosting a large number of heavy drinkers will 'create' more heavy drinkers when new employees are introduced to the work environment. This notion is supported through social learning theory (SLT).

The notion of vicarious learning is a major tenant of social learning theory (Bandura, 1977), suggesting that through observation of others an individual can learn what behaviors are generally accepted or unaccepted. The individual will then imitate the observed behavior. Applicably, if an individual witnesses a peer participating in heavy alcohol consumption, it is likely that the observer will also engage in such behavior. SLT further proposes that this relationship can be strengthened or even reversed depending on perceived outcome expectancies. If the observer perceives that the behavior is not punished, a positive relationship is predicted. If the observer perceives that this behavior will be punished or negatively perceived by others, a negative relationship is predicted. This theory that employees will model their behavior based upon what they consider to be acceptable and rewarded is similar to that seen in the work of Corsun and Young (1998), Kjaerheim, Mykletun, Aasland, Haldor`sen, and Andersen (1995), Whitehead and Simpkins (1983).

The literature review has provided empirical support for the claim that hospitality students and industry workers display higher levels of alcohol consumption. There is also indication that age and gender will influence drinking behavior. The tenants of social learning theory suggest that individuals will imitate observed behavior when that behavior is perceived as rewarded or resulting in positive outcomes. In context, lenient attitudes and high levels of alcohol consumption observed by individuals during their socialization to working in the hospitality industry result in heavy drinking as a learned behavior. The goal of this study was to investigate the impact of work experience, age, and gender on foodservice management students' alcohol consumption behavior. Specific questions to be addressed are as follows:

1: What are the alcohol use behaviors (as measured by AUDIT score) of foodservice management students in the United States?
2: Is there a significant difference in foodservice management students'alcohol consumption based on demographic factors, such as age and gender?
3: Is there a significant difference in foodservice management students'alcohol consumption based on what work experience group they belong to: those with work experience within the foodservice industry, those with work experience in an industry other than foodservice, and those with no work experience?

METHODOLOGY

Population and Sampling Frame

Study participants included undergraduate college students enrolled in foodservice management classes at three universities in the United States.Convenience sampling was used to target students in foodservice and hospitality management classes at all levels of the undergraduate degree programs. Participation was elicited at the end of scheduled class periods, and participation was voluntary. All students present on the day the survey was administered were eligible to participate in the study. Student participants were guaranteed anonymity; i.e., no attempt whatsoever was made to identify respondents by their answers. There were a total of five hundred and fifty (550) respondents representing 31 different countries from around the world, with the majority (more than 65 percent) were from the United States.

Instrument

Participant responses were collected using a self-administered survey containing demographic questions, work experience questions, and items from the Alcohol Use Disorders Identification Test (AUDIT). Developed by the World Health Organization to screen for excessive drinking and establish the relative population risk of harmful and hazardous drinking, AUDIT is recognized as a reliable and valid measure for identifying people who would benefit from a reduction or abstention from alcohol consumption (Babor, Higgins-Biddle, Saunders, Monteiro, 2001).

RESULTS AND DISCUSSION

Demographics

Table 1 presents a demographic description of the respondents as well as a general description of the respondents' work experience. As the table shows, more than 58 percent of the respondents were females, with ages ranging from 17 to 52; the average respondent being 21.88 years of age. Participants were somewhat evenly distributed into three age ranges: 36.9 percent were 20 years of age or younger, 30.5 percent were 21-22 years of age, and 32.5 percent were 23 years of age or older. This grouping represents (1) respondents under the legal drinking age in the United States, (2) those within both the legal drinking age and the age range typical of heavier alcohol consumption (Larsen and Jorgensen, 2003), and (3) those above both the legal and heavy drinking age. With respect to ethnicity, more than 50 percent were Caucasian, and more than 27 percent were Asian-American. Almost 94 percent indicated that their marital status was single. Almost 50 percent of the respondents were classified as either freshmen or sophomores, with more than 76 percent stating that the semester in which they responded to this survey was not their first semester at the university they were currently attending. With regards to work experience, 41.3 percent of participants reported having worked in the foodservice industry, while 31.6 percent had work experience in other types of jobs, and 27.1 percent had no work experience at all.

Table 1. Demographic Characteristics and Work Experience of Respondents

Demographic Characteristic	Percent of Respondents
Gender:	
Female	58.5
Male	41.5
Age:	
20 years of age and younger	36.9
21-22 years of age	30.5
23 years of age and older	32.7
Ethnicity:	
African American	3.5
Asian American	5.4
Asian	27.7
Caucasian	51.0
Hispanic	4.4
Native American	4.0
Pacific Islander	0.9
Other	3.1
Marital Status:	
Single	93.6
Married	5.3
Divorced	0.7
Married, but Separated	0.4
Widow/Widower	0.0
Other	0.0
Classification:	
Freshman	32.2
Sophomore	17.3
Junior	21.7
Senior	22.2
Masters Student	4.4
Ph.D. Student	0.2
Other	18.9
First Semester at this University:	
Yes	23.9
No	76.1
Work Experience:	
Foodservice industry work experience	41.3
Other work experience	31.6
No work experience	27.1

Participants Mean Responses to Drinking Questions

Table 2 shows the means and standard deviations for the ten AUDIT-derived drinking behavior questions as well as the mean respondent AUDIT score. Lower AUDIT scores indicate lower levels of drinking behavior, as do lower ranked responses for drinking behavior questions. A scale is provided for each of the questions below Table 2. As seen in the table, respondents stated that they drank alcohol an average of almost twice per month, with an average of about two or three drinks on those occasions. Respondents also reported that on these drinking occasions they consumed six drinks or more, less than once monthly.

When asked how often in the past year participants were unable to stop drinking once they started, the average response to this question was "almost never" or "less than monthly". Similar responses were reported when asked how often in the last year the participant had failed to do things they were supposed to do because of drinking; the

Table 2. Means and Standard Deviations for Drinking Behavior Questions

Drinking Behavior Question	Means	Standard Deviations
1. How often do you drink alcohol?	1.93[a]	1.07[a]
2. How many drinks do you have on a "typical" day that you drink?	1.27[b]	1.21[b]
3. How often do you drink six or more drinks on one occasion?	1.26[c]	1.08[c]
4. How often, during the last year, have you **not** been able to stop drinking, once you started?	0.47[c]	0.84[c]
5. How often, during the last year, did you not do things you were supposed to do because of drinking (i.e., hangover, drank too much the day before, etc.)?	0.79[c]	0.93[c]
6. How often, during the last year, have you needed a "first drink" in the morning to get yourself going after a heavy drinking session the night before?	0.25[c]	0.68[c]
7. How often, in the last year, have you felt guilty, or had a bad conscience, because of your drinking?	0.64[c]	0.87[c]
8. How often, in the last year, have you not been able to remember what happened the night before, due to drinking?	0.71[c]	0.86[c]
9. Have you, or anyone you know, been hurt because of your drinking?	0.33[d]	0.66[d]
10. Has a friend, relative, or doctor shown any concerns about your alcohol consumption, or told you that you should cut back on your drinking?	0.23[d]	0.58[d]
AUDITScore	7.88	5.86

[a]: 0 = Never; 1 = Monthly or less; 2 = Two to four times a month; 3 = Two to three times a month; 4 = Four times a week or more
[b]: 0 = 1 - 2; 1 = 3 – 4; 2 = 5 – 6; 3 = 7 – 9; 4 = 10 or more
[c]: 0 = Never; 1 = Less than monthly; 2 = Monthly; 3 = Weekly; 4 = Daily or almost daily
[d]; 0 – No; 2 = Yes, but not in the last year; 4 = Yes, during the last year

average response being "almost never", or "less than monthly". When asked how often during the last year participants needed a "first drink" in the morning to get going after a heavy drinking session the previous night, the majority of the respondents answered"almost never". The average response rate was again "almost never" or "less than monthly" when the respondents were asked how often in the last year had they felt guilty or had a bad conscience due to their drinking. When asked how often in the last year their drinking had caused them difficulty remembering what happened the night before, the average response rate was "almost never" or "less than monthly".

Concerning injuries to others caused by the respondents' drinking, the average response was that this had never occurred. When asked if their families, friends, or physicians had ever expressed concerns about their alcohol consumption, or had told the respondents to cut back on their drinking, the average response was "no". Finally, the average AUDIT score for all respondents was 7.88 out of 15, which is near but below a score of 8 (the recognized level to indicate harmful or hazardous drinking) and well below a score of 13/15 (the recognized level in women/men to indicate alcohol dependence) (Babor et al, 2001).

Tests for Significance: Age Category, Gender and Work Experience

An analysis of variance (ANOVA) was performed to determine whether significant differences existed in the alcohol consumption behavior of respondents based on age category. As seen in Table 3, significant differences were found at the $p < .05$ level for AUDIT scores among the three age categories. Post-hoc tests indicated that those respondents who were 21-22 years of age had a significantly higher average AUDIT score than those aged 20 years old or younger. No significant differences were found between respondents who were 23 years of age and older and respondents in either of the two younger age categories.

A t-test was performed to determine the existence of significant differences in drinking behavior based on gender. Results showed significant differences at the $p < .05$ level, with male respondents displaying significantly higher AUDIT scores on average than female respondents. The results of this t-test, as well as means and standard deviations, are provided in Table 4.

Table 3. Analysis of Variance for AUDIT Scores Based on Age Category and Work Experience

Demographic Variable	Means	Standard Deviations	F	p-value*
Age Category:				
20 Years old or younger	9.91	5.21	6.885	.001*
21 or 22 Years old	9.17	6.72		
23 years old or older	7.81	5.47		
Work Experience:				
No foodservice industry Experience	7.69	5.37	0.171	.843
Some foodservice industry Experience	8.00	5.01		
No Work experience	8.00	7.45		

*significant at α = .05

Table 4. T-test for AUDIT Score Based on Gender

Gender	Means	Standard Deviations	t	p-value*
Female	6.75	5.00	-5.568	.000*
Male	9.53	6.59		

*significant at α = .05

With regards to work experience, an ANOVA was performed to determine if significant drinking behavior differences existed among the three groups: those respondents having had some foodservice industry work experience, those having had work experience but in industries other than foodservice, and those having had no work experience at all. Interestingly, no significant differences were found among the three groups; AUDIT scores were not significantly different for student participants regardless of whether they had worked in the foodservice industry, had worked in any other industry, or had not obtained any workplace experience.

CONCLUSIONS AND APPLICATIONS

The purpose of this study was to use social learning theory as a basis to investigate the relationship between foodservice management students' demographic characteristics, work experience history, and alcohol use behavior. The first research question proposed by this study was, "What are the alcohol use behaviors (as measured by AUDIT score) of foodservice management students studying in the United States?" The findings of this study do not provoke concern, as average responses to individual drinking questions indicated a low level of consumption, and AUDIT score average was not indicative of harmful or hazardous drinking levels. Average AUDIT scores for the participants studied was actually similar to that of the hospitality and tourism management students studied by Larsen & Jorgensen (2003).This is a particularly interesting finding, given the commonly held belief and previous reports that hospitality students display higher levels of alcohol consumption than their non-hospitality counterparts (Borchgrevink, Sciarini and Borchgrevink, 2010; Larsen, 1994).

The second question posed by this study was, "Is there a significant difference in foodservice management students' alcohol consumption behavior based on demographic factors, such as age and gender?" Results indicated that participants aged 21-22 reported higher alcohol consumption than those aged 20 and younger. These findings echo the idea of age as a primary factor in drinking behavior; Larsen and Jorgensen (2003) found that when age was introduced to their model, all other effects on consumption disappeared. In the current study, findings could also reinforce previous propositions that all groups in a young age bracket will display heavier alcohol consumption, not just those working in or studying foodservice management fields. It must be noted that the group of participants 20 years of age and younger may actually display significantly high levels of alcohol consumption, but may have reported lower behaviors due to the implications of under-age drinking (the legal drinking in the U.S. is 21 years of age) and decreased access to alcohol in the United States for individuals under the age of 21.

With regards to gender, it was found that males reported significantly higher levels of consumption than female respondents, a finding similar to that of Borchgrevink, Sciarini and Borchgrevink (2010). While alcohol education and excessive drinking warnings should not be relegated strictly to the male population, perhaps this young age group could benefit to increased education and address on the effects of harmful and hazardous levels of alcohol consumption.

The third and final question that this study addressed was, "Is there a significant difference in foodservice management student alcohol consumption based on what work experience group they belong to: those with work experience within the foodservice industry, those with work experience in an industry other than foodservice, and those with no work experience? The foundation for this question came from the proponents of social learning theory, which suggests that individuals who enter into a work environment that cultivates high levels of alcohol consumption will in turn learn to participate in high levels of consumption themselves (Bandura, 1977; Corsun & Young, 1998; Kjærheim et al., 1995; Whitehead & Simpkins, 1983).

An individual's personal standards may be modified through the level of impact in a social environment, possibly creating new, more easily accepted standards. Similar to personal characteristics (such as age, experience, or education), beliefs in personal capabilities may be influenced by these self-generated standards, resulting in a distancing of discrepancies that may have previously existed between personal capabilities and personal belief in the acceptable standards. This reciprocal process of change with higher levels of self-efficacy, as proposed by Bandura (1977), reflects an enhanced learning skill through the social environment and the individual self-directedness in the individual to learn this accepted behavior by the positive outcome or reaffirmation created in this unique social context (Bandura, 1994; Kitson, Lekan, & Guglielmino, 1995).

This is argued similarly in the social cognitive approach that includes a causation model that represents a theory of reciprocal triangular approach (Bandura, 1986). The dynamic relationship between behavior, personal characteristics, and the environment (social setting) continuously interacts with one component influencing the other two components (Bandura, 1977). Within the behavior performed, for instance, the behavior is not simply the result of the personal standards alone, but the result of both components including the social environment (Bandura, 1977, 1986). Therefore, changes in one component influence the nature of the relationship of the other components, and new standards are learned (facilitated by the group) and created simultaneously (Bandura, 1986).

Interestingly, no significant differences were found among the three groups; AUDIT scores demonstrated no significant difference for student participants regardless of whether they had worked in the foodservice industry, had worked in any other industry, or had not obtained experience in the workplace whatsoever.This finding that hospitality work experience has no impact on consumption behavior rejects the social learning theory-based proposition that students learn increased alcohol consumption behaviors after entering the foodservice industry workplace and observing high levels of alcohol consumption of their co-workers. Thus, this finding echoes the question posed by Larsen & Jorgensen (2003); 'Maybe restaurant students are better than their reputation when it comes to drinking?'

Limitations and Recommendation for Future Study

This study is not without limitations, particularly the sensitive nature of the topic and the element of self-reported data. Given that study participants were foodservice management students studying in the U.S., it would be of interest to perform further investigation of students majoring in different educational fields of study. Future research efforts may be helpful in identifying variations according to national, ethnic, or regional boundaries.

As hospitality management is one of the fastest growing fields of study worldwide, it would be interesting to examine foodservice management students studying in other countries such as in Europe, where a large majority of the countries' legal drinking age is lower (18 years old) as well as some Asian countries such as Taiwan where the legal drinking age is 18 years old as well.

Exploration of foodservice workers in the same age groups who are not enrolled in an academic institution may also yield interesting comparisons; perhaps the sample that was surveyed reported lower levels of alcohol consumption because they are university students with increased constraints on their time, leaving less opportunity for drinking than individuals of the same age without academic responsibilities.

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