

ALCOHOL CONSUMPTION AMONG HOSPITALITY AND NONHOSPITALITY MAJORS: IS IT AN ISSUE OF PERSONALITY

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Introduction

Young adults, including university students, are more likely than other groups to engage in risky alcohol consumption. Employees at hospitality establishments and students at hospitality programs have been found to engage in heavy drinking. Excessive alcohol consumption has been linked to serious illness, cognitive difficulties, risky behaviors and sexual dysfunction. High levels of alcohol consumption, high rates of liver cirrhosis, elevated risk of alcohol-associated cancer and high prevalence of alcoholism have been found among restaurant employees. Research has started to explore some of the antecedent conditions and influences that may lead to high levels of alcohol consumption. Initial findings suggest that social modeling, subjective and group norms, personality variables, structural elements of the work place, and living conditions may be associated with alcohol consumption, while work-place stress appears not related to alcohol consumption (Borchgrevink, Borchgrevink, & Sciarini, in review; Borchgrevink, Sciarini, & Borchgrevink, 2010; Kjærheim et al., 1995; Kjærheim, Mykletun, & Haldorsen, 1996; Larsen, 1994; Larsen & Jørgensen, 2003.) Research also suggests that personality variables, such as extroversion and neuroticism, which are found to be predictive of alcohol consumption (Cook, Young, Taylor & Bedford, 1998), are also associated with hospitality as occupational choice (Teng, 2008).

Study Objectives

Our goal is to start to establish whether personality variables such as extroversions, neuroticism, and conscientiousness are associated with hospitality major and non-hospitality majors in a meaningful way that may help explain risky alcohol consumption. The findings should have implications for college and hospitality program recruitment, admission, and intra-organizational interventions.

Methods

The Office for Survey Research (OSR) at a large mid-western university was contracted to collect the needed data. Using the university registrar's email server they generated random email lists of students to whom they sent a notice of a forthcoming study in which they were requested to participate. One week later, a link to the actual survey was included as well as notice of a choice of incentives for completion. The incentives included coupons for food items at local establishments. Approximately, two weeks after the initial mailing, a reminder was sent to the students. The OSR continued to solicit participants until the hospitality business subsample size was large enough to detect small AUDIT effect sizes ($f=.10$) at the conventional power level of .80 (Cohen, 1988). The response rate among solicited students is 43.3 percent. The total sample size is 930 students, hospitality and non-hospitality.

Extroversion, neuroticism, and conscientiousness were measured using the Revised NEO Personality Inventory (Costa & McCrae, 1992). They define extraverts as sociable individuals who like people and prefer large groups and gatherings. They are assertive, active, talkative and have a cheerful, optimistic, and energetic disposition. Conscientiousness is defined as the ability to control impulses, manage desires, and actively plan, manage and complete tasks. Neurotic individuals are defined as typically experiencing negative affect including fear, embarrassment, anger, guilt, and disgust. They may have social phobias and suffer from emotional instability.

Alcohol consumption and associated risk levels were measured using AUDIT (Babor, Higgins-Biddle, Saunders, Monteiro, 2001). This tool was developed by the World Health Organization to screen for excessive drinking and establish the relative population risk of harmful and hazardous drinking. The primary intent of AUDIT is to identify people who would benefit from a reduction in or abstinence from alcohol consumption as the majority of excessive drinkers are undiagnosed (Babor et al., 2001). While the total AUDIT score is used for risk diagnosis, the subscales can be meaningfully interpreted to identify hazardous drinking, harmful drinking and alcohol dependence.

Initial Results

Considering all students using listwise deletion ($N=733$) we found 8 significant ($p=.01$) Pearson correlations between the personality and alcohol consumption constructs suggesting that there is an association between each of the personality variables and alcohol consumption. Please see Table 1.

Table 2 contains the correlational data by major and there are some differences across subsample. Grouping the sample into hospitality business majors and non-hospitality business majors and running a linear regression analysis with AUDIT total as dependent variable, we find that in both cases the three personality variables predict AUDIT total, but that only .07% and .09% of the variance in AUDIT total is explained, and that for hospitality majors neuroticism is the only significant predictor at $p=.01$, while for other majors, neuroticism is statistically insignificant, while extroversion and conscientiousness are statistically significant ($p=.01$) predictors of alcohol consumption. Please see Tables 3 and 4.

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Table 1: Correlations among personality and alcohol consumption within the entire sample

<u>Variables</u>	<u>Extraversion</u>	<u>Conscientiousness</u>	<u>Neuroticism</u>
<u>AUDIT Total</u>	.059	-.214**	.097**
<u>Hazardous Alcohol Use</u>	.100**	-.172**	-.023
<u>Dependence Symptoms</u>	-.047	-.257**	.138**
<u>Harmful Alcohol Use</u>	.064	-.139**	.123**

**p=.01; N=733

Table 2: Correlations among personality and alcohol consumption by major

<u>Variables</u>	<u>Extraversion</u>		<u>Conscientiousness</u>		<u>Neuroticism</u>	
	HB	Other	HB	Other	HB	Other
<u>AUDIT Total</u>	.008	.052	-.148*	-.255**	.210**	.045
<u>Hazardous Alcohol Use</u>	.024	.115**	-.126	-.199**	.058	-.061
<u>Dependence Symptoms</u>	-0.98	-.044	-.183**	-.290**	.237**	.098*
<u>Harmful Alcohol Use</u>	.044	.040	-0.87	-.178*	.220**	.076

*p=.05, **p=.01; HB N=216, Other N=517

Table 3: Regression Analysis Model Summary

HB?	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
						R Square Change	F Change	df1	df2	Sig. F Change
HB	1	.259 ^a	.067	.054	5.52551	.067	5.077	3	212	.002
Else	1	.293 ^a	.086	.081	5.17828	.086	16.066	3	513	.000

a. Predictors: (Constant), Neuroticism, Conscientiousness, Extroversion

Table 4: Regression Coefficients

HB?	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
HB	1	(Constant)	4.536	3.180		1.426	.155
		Extroversion	.143	.074	.148	1.946	.053
		Conscientiousness	-.121	.069	-.133	-1.766	.079
		Neuroticism	.186	.062	.219	2.977	.003
Else	1	(Constant)	9.551	1.728		5.528	.000
		Extroversion	.131	.039	.157	3.313	.001
		Conscientiousness	-.235	.036	-.303	-6.619	.000
		Neuroticism	.009	.036	.012	.257	.797

a. Dependent Variable: AUDIT TOTAL (8 or more is hazardous and harmful)