

A Study on the Health Beliefs and Alcohol Expectancies of Prospective Female University Students

Hyun Joo Lee

Department of Nursing, Woosong University, South Korea
hy3929@naver.com

Abstract

This descriptive research study analyzes the relationship between the health beliefs and alcohol expectancies of female university applicants. A structured questionnaire survey was conducted on 293 persons who applied for admission to a university in D city. For data analysis, the SPSS/WIN 22.0 program was used to conduct t-test, ANOVA and correlation analysis. Alcohol expectancies were higher among those who did not participate in club activities (4.12) than those who did (3.10). Alcohol expectancies displayed correlations with barriers ($r=.423, p<.001$) and self-efficacy ($r=-.226, p<.001$) with respect to the health belief. Based on the results of this study, it can be suggested that prospective university students need to lower the barriers to moderate drinking and that moderate drinking programs that educate on cognitive effects should be made, so as to lower prospective university students' positive alcohol expectancies.

Keywords: Alcohol, Health Belief, Expectancies

1. Introduction

In Korean society, where the drinking culture is liberal, the offering of alcohol has normalized and the consumption by women continues to increase. The rate of alcohol consumption among females in their 20s sharply increased from 55.2% in 2008 to 64.8% in 2013, with 1 out of 10 females engaging in heavy drinking. Women absorb alcohol faster than men due to a higher proportion of body fat and have about half the amount of alcohol-degrading enzymes of men. Therefore, women's physical conditions are more vulnerable to the effects of alcohol effects. When women and men drink the same amount of alcohol, women become drunk faster and the alcohol is degraded at a slower rate. The increasing alcohol consumption by women requires social attention.

It is observed that 79.9% of university students begin drinking regularly after entering university [1]. In Korea, the legal drinking age is 19. Upon entering university, students participate in different social gatherings such as in-person meetings, beginning and end-of-term parties, and "membership training" (MT), where they drink alcohol with little awareness of their drinking limits or with no prior drinking experience. Drinking serves as a catalyst for promoting sociability and a rite of passage for freshmen. Students become accustomed to the drinking culture, and drinking holds an important place in university life.

Alcohol expectancies are an important variable in predicting alcohol-drinking types of middle, high school or university students [2]. Positive alcohol expectancies among students

Article history:

Received (August 03, 2017), Review Result (October 12, 2017), Accepted (November 18, 2017)

who have a vague idea about drinking increase the percentage of drinkers, and this can lead to more problems. Those who expect specific effects of alcohol due to past drinking experience or through vicarious learning are impacted; as a result, their drinking behavior is triggered. Both positive and negative alcohol expectancies exist, and the positive ones predict the drinking behavior [3]. Therefore, factors that determine positive alcohol expectancies among university applicants need to be identified prior to entering university and being exposed to excessive drinking as alcohol expectancies are variables that can be modified through education or training.

Individuals' health perception serves as a model that helps to understand and explain health-related behaviors through a sociopsychological process. Having a higher level of sensitivity and a serious perspective of diseases leads to stronger risk factors for diseases, thus increasing the likelihood of acting upon a specific health behavior. When perceived benefits are stronger than perceived barriers, there is a higher likelihood of acting upon health behaviors. It was found that desirable health behaviors can occur when such a higher likelihood is combined with an appropriate opportunity [4][5]. It was also found that perceived barriers are associated with different types of negative alcohol-related consequences and drinking behaviors [6] and that a combination of greater perception of benefits and lower perceived barriers to health leads to a higher likelihood of engaging in health behaviors [7]. A lower self-efficacy in refusing to drink alcohol leads to lower expectancies of alcohol-related consequences, and self-efficacy is a factor that most affects alcohol expectancies [2][8]. As seen above, alcohol expectancies of female students who were to enter university were closely associated with their alcohol consumption behaviors.

These correlations of the alcohol expectancies with health beliefs need to be examined. This study intends to determine the effects of alcohol that female students expect in university life and their views of drinking in university life. The study will also examine the relationship between their health beliefs and alcohol expectancies so that the results can be utilized as preliminary data in improving the drinking culture that is prevalent on campus.

2. Research methods

2.1. Research design

This is a descriptive research study to determine the relationship between the health beliefs and alcohol expectancies of female university applicants.

2.2. Research tools

2.2.1. Alcohol expectancies: Alcohol expectancies refer to drinkers' positive beliefs about the consequences or effects of alcohol consumption. In this study, the alcohol expectancy factors were chosen from among what Yoon and Kim [9] regarded as appropriate for Korean young adults in the Alcohol Expectancy Questionnaire–Adolescents (AEQ-A; Christiansen, Smith, Roehling and Goldman [10]). A total of 14 questionnaire items were scored on a dichotomous scale (expectancy=0 and non-expectancy=1), and a higher score indicating a more positive expectancy about alcohol consumption.

2.2.2. Health beliefs about drinking behaviors: Health beliefs about drinking behaviors consist of seriousness, sensitivity, benefits, barriers and self-efficacy. The tool used in this study is a modified version by Chae [7] of the adult health beliefs measurement tool that Moon [4] had developed based on Becker's Health Belief Model [11]. "Seriousness" refers to the perceived degree of the effects of alcohol-induced diseases or accidents on

mental and physical health, university, life, etc. The section has five questionnaire items. "Sensitivity" refers to the perceived degree of the possibility an alcohol-induced disease or accident could occur. "Benefits" refer to the perceived degree of healthiness, academic grade improvement, appropriate economic condition, and the likelihood to prevent an accident or a disease that can result from moderate drinking. "Barriers" refer to the perceived degree of the difficulty in leading a social life, relieving stress, and communicating with friends due to moderate drinking. The section has three questionnaire items. "Self-efficacy" refers to the degree of being able to successfully refuse to drink in an environment where drinking is present. The same tool used by Cho [2] and Chae [7] was used.

2.3. Data collection

In this study, a random sampling was used to select survey subjects from among female applicants who applied for admission to a university in D city. A total of 293 questionnaires were used for final analysis.

2.4. Data analysis methods

Collected data were analyzed using the SPSS 22.0 program in the following method. The subjects' general characteristics, health beliefs, and alcohol expectancies were analyzed in terms of frequency, percentage, the mean, and standard deviation. The differences in health beliefs and alcohol expectancies according to subjects' general characteristics were analyzed using t-test and ANOVA. Pearson's correlation coefficients were used to examine the correlation between the subjects' health beliefs and alcohol expectancies.

3. Research results

3.1. General characteristics

The average age of the subjects was 19.02, and 94.9% of the subjects were third year students in high school, while 5.1% were high school graduates. Around 41.3% of the subjects were religious, while 58.7% were not religious. Of the subjects, 88.4% participated in club activities in high school and 11.6% did not. The students' average high school records was Level 3 (Table 1).

3.2. Correlations between subjects' general characteristics and major variables

As for the correlations between subjects' general characteristics and alcohol expectancies, alcohol expectations were higher among those who did not participate in club activities (4.12) than those who did (3.10). Regarding the correlations between subjects' general characteristics and health beliefs, the general characteristics had no correlations with seriousness, sensitivity, and benefits. Self-efficacy was higher among those who participated in club activities (19.96) than those who did not (19.00) (Table 1).

Table 1. General characteristics of subjects

Characteristics	Categories	n(%) or M±SD	Alcohol Expectancies	Health Beliefs				
				Seriousness	Sensitivity	Benefits	Barriers	Self-efficacy

			M±SD	M±SD	M±SD	M±SD	M±SD	M±SD
Age	F/r/t	19.02 (±.67)	.010	-.080	-.069	-.082	-.024	-.005
High School Graduate	Yes	15 (5.1)	2.60 ±2.20	17.67 ±1.88	8.27 ±2.99	14.93 ±2.79	5.67 ±1.76	19.80 ±2.18
	No	278 (94.9)	3.25 ±2.53	17.42 ±2.41	8.20 ±2.82	14.70 ±3.24	5.6 0±1.75	19.85 ±2.55
	F/r/t		0.974	-0.382	-0.092	-0.276	-0.135	0.073
Religion	Yes	121 (41.3)	2.88 ±2.57	17.52 ±2.24	8.38 ±2.71	14.74 ±3.33	5.45 ±1.80	20.01 ±1.93
	No	172 (58.7)	3.45 ±2.45	17.38 ±2.49	8.08 ±2.90	14.69 ±3.14	5.72 ±1.71	19.73 ±2.88
	F/r/t		-1.947	.504	.909	.114	-1.259	.917
Club Activity	Yes	259 (88.4)	3.10 ±2.48	17.53 ±2.39	8.22 ±2.83	14.68 ±3.23	5.59 ±1.74	19.96 ±2.53
	No	34 (11.6)	4.12 ±2.61	16.74 ±2.30	8.09 ±2.79	14.91 ±3.11	5.76 ±1.81	19.00 ±2.39
	F/r/t		-2.245*	1.831	.248	-.389	-.558	2.085*
GPA	F/r/t	3 (±0.7)	.028	-.040	.008	.020	.027	-.031

3.3. Correlations between alcohol expectancies and health beliefs

Alcohol expectancies had a positive correlation with barriers ($r=.423$) and a negative correlation with self-efficacy ($r=-.226$). Seriousness had a positive correlation with sensitivity ($r=.169$), benefits ($r=.198$), and self-efficacy ($r=.182$), and a negative correlation with barriers ($r=-.154$). Sensitivity was positively correlated with benefits ($r=.270$) and barriers ($r=.147$), and benefits had a positive correlation with self-efficacy ($r=.207$). Barriers had a negative correlation with self-efficacy ($r=-.223$) (Table 2).

Table 2. Relationship between health beliefs and alcohol expectancies

Variables	Alcohol Expectancies	Health Beliefs				
		Seriousness	Sensitivity	Benefits	Barriers	Self-efficacy
Seriousness	-.071	1.00				
Sensitivity	.040	.169**	1.00			
Benefits	-.009	.198**	.270***	1.00		
Barriers	.423***	-.154**	.147*	.055	1.00	
Self-efficacy	-.226***	.182**	.059	.207***	-.223***	1.00

4. Discussions

The purpose of this study was to examine the relationship that prospective female university students' health beliefs have with alcohol expectancies, one of the factors that

influence drinking behavior. Alcohol expectancies were higher among those who did not participate in club activities (4.12) than those who did (3.10). In the study by Kim, Kim and Kim [8], no statistical significance was found between alcohol expectancies and participation in club activities. The reason that those who did not participate in club activities in high school displayed higher alcohol expectancies than those who did appears to be that the former had vague expectations about the drinking culture in university life.

Regarding the relationship between health beliefs and alcohol expectancies, alcohol expectancies had a statistically significant correlation with barriers and self-efficacy among health belief variables. Those who were more aware of the barriers to moderate drinking and had a lower self-efficacy were found to have stronger positive alcohol expectancies. This implies that the subjects perceived the relationship mediated by alcohol drinking as important for ensuring a successful university life. The findings also suggest that they had anticipated that their refusal to drink alcohol may result in problems in establishing social relationships and managing stress.

5. Suggestions

In order to decrease the alcohol expectancies among prospective female university students, health education programs need to be administered with a focus on improving health beliefs by identifying and lowering the barriers to moderate drinking, and enhancing health beliefs to improve self-efficacy. They need to be educated on the seriousness and potential consequences of alcohol consumption on the body, the benefits of moderate drinking, and the self-efficacy in refusing to drink alcohol, all of which have statistically significant correlations with the perceived barriers to moderate drinking.

References

- [1] S. S. Chun, J. R. Lee, Y. P. Lee, C. H. Song and J. H. Jeong, "Operation and Evaluation of Prevention Programs for Problem Drinking in the University". Report of Ministry of Health and Welfare (2002).
- [2] H. Cho, "Developing a Predictive Model for Alcohol Consumption Behavior among Korean University Students", The Graduate School Yonsei University (1999).
- [3] A. Bandura, "Social Foundation of thought and Action: A Social Cognitive Theory". NJ: Prentice Hall (1986).
- [4] J. S. Moon, "A Study of Instrument Development for Health Belief of Korean Adults", the Graduate School Yonsei University (1990).
- [5] J. S. Park, C. J. Park and Y. S. Kwon, "The effect of Health Education on the Performance of Health Promoting Behavior in College Students". Journal of Korean Academy Nursing, Vol. 26, pp.159-371(1996).
- [6] E. A. Broughton, "The Impact of Information Methods among Drinking College Students Applying the Health Belief Model", University of Florida (1996).
- [7] H. S. Chae, "Factors Influencing Drinking Behaviors of College Students using Health Belief Model", the Graduate School Yonsei University (2001).
- [8] K. H. Kim, J. I. Kim and J. S. Kim, "Correlation Study on Physiological Stress from Drinking, Alcohol Abstinence Self-Efficacy and Outcome Expectancy in Youths", Journal of Korean Academy Fundamental Nursing, Vol. 16, No. 1, pp.73-82 (2009).
- [9] H. M. Yoon, Y. S. Kim and S. O. Jang, "Alcohol Expectancies in Relation to their Drinking Practices among Korea High Students", Korean Journal of Social Welfare, Vol. 38, pp. 153-179 (1999).
- [10] B. A. Christiansen, G. T. Smith, P. V. Roehling and M. S. Goldman, "Using Alcohol Expectancies to Predict Adolescent Drinking Behavior After One Year", Journal of Consulting Psychology, Vol. 57, pp. 93-99 (1989).

- [11] M. H. Becker, "The Health Belief Model and Sick Role Behavior, the Health Belief Model and Personal Health Behavior". Charles B. Slack, New Jersey, pp. 82-92 (1974).