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The Relationship between Alcohol Use and Familial and Social Influence in College Nursing Students

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Abstract

College students are a population with a high prevalence of risky consumption of alcohol and nursing students, specifically, are no exception. Yet few studies have been done on the use of alcohol in the student-nurse population. Since nursing education and practice are highly stressful, unhealthy coping strategies, such as risky alcohol consumption, are sadly common and seriously detrimental.

This paper explores the self-reported consumption of alcohol in undergraduate nursing students as related to peer, familial, and social influences. Based on the Biopsychosocial Model, many different factors contribute to alcohol use. Using anonymous online survey methodology and convenience sampling, data about self-reported alcohol use, family factors, and social factors is collected from undergraduate nursing students. Data is measured using the Alcohol Use Disorder Identification Test (AUDIT); the CAGE Questionnaire; the Measure of Parental Style (MOPS) tool; and the Peer Pressure Inventory. Pearson correlation coefficients are used to determine bivariate relationships.

The Relationship between Alcohol Use and Familial and

Social Influence in College Nursing Students

In 2012, approximately half of the population within the United States 18 years of age

and older were "current, regular drinkers" (*Journal of Addiction & Research Therapy*, 2016).

Additionally, in the year 2006, according to the *Journal of Addiction & Research Therapy*,

alcohol misuse cost the United States nearly 224 billion dollars (2016). There is a distinct

prevalence of alcohol use in college students, with four out of five college students reported to

drink alcohol (*National Institute on Alcohol Abuse and Alcoholism*, 2015). Alcohol use in

college students involves a large population considering there were roughly 20.2 million students

enrolled in higher education programs in the fall of 2015 (*National Center for Education

Statistics. Institute of Education Sciences*). According to the National Institute on Alcohol

Abuse and Alcoholism (2015), "[a]bout 20 percent of college students meet the criteria for a

diagnosis of Alcohol Use Disorder." Alcohol Use Disorder, AUD, is defined by NIAAA as

having a medical diagnosis related to alcohol consumption that causes "distress or harm" unto

the body (*National Institute on Alcohol Abuse and Alcoholism*, 2015).

Many college-age students have engaged in some form of alcohol use prior to college,

but certain influences tend to increase alcohol use in college. These influences include

"unstructured time, alcohol availability, lack of enforcement of laws in relation to underage

drinking, and decreased involvement with parental or other structured adult supervision"

(*National Institute on Alcohol Abuse and Alcoholism*, 2015, p.2). A study by Fenton, Grier,

Keyes, Skido, Grant, and Hasin (2013) examines the role of childhood maltreatment, familial

history, and gender in the risk for alcohol dependence. Interestingly, few researchers have

studied additional factors related to alcohol use, such as personal, familial, and social influences.

Due to the widespread use and detrimental effects of alcohol consumption, analysis of the disorder is imperative. Short-term consequences of alcohol use in students lead to decreased scholastic performance and lower academic standing; loss of scholarships and reduction of financial aid; increased dropout rates; risky behaviors leading to injuries, DUIs, and traffic accidents; and poor sexual judgement which could lead to STDs, unplanned pregnancies, and even fetal alcohol syndrome (*National Institute on Alcohol Abuse and Alcoholism*, 2015). Further, alcohol-related fatality is the third leading cause of preventable death in the United States. In fact, alcohol accounted for nearly 31 percent of traffic deaths in 2013 (*Journal of Addiction & Research Therapy,* 2016). Serious long-term effects may include chronic health problems, such as high blood pressure; liver and renal disease; some forms of cancer; and impaired mental capacity such as memory and learning deficits, mood disorders, behavior, and cognition (*Journal of Addiction & Research Therapy,* 2016). Additional concerns include negative coping skills leading to continued and more severe alcohol consumption in addition to prescription and illegal drug practices.

Approximately 320,074 college students enrolled in nursing programs for the 2014–2015 academic year (American Association of Colleges of Nursing, 2016). Although many researchers have studied alcohol use in college students, few have explicitly focused on alcohol use in nursing students. As researchers have studied alcohol use in nurses, they have found that nearly 15 percent abuse or are recovering from alcohol and other drug dependence (Thomas & Siela, 2011). When nurses are under the influence of drugs and alcohol, they cannot provide safe and professional care to patients and thus society will suffer (Thomas & Siela, 2011). Since researchers have found that habits formed during college often continue through adult life (Baker & Stockton, 2012), it is imperative to study nursing students' alcohol use in order to increase the

awareness of faculty and other advisors about problems in this population. For that reason, the

purpose of this study is to investigate the relationship between alcohol use and familial and

social factors that influence undergraduate nursing students. This non-experimental study

answers the follow research question: What is the relationship between familial, and social

factors and the use of alcohol in undergraduate nursing students?

Literature Review

Prevalence of Alcohol Use

As noted above, four of five college students drink alcohol and of those, one out of five

meets the criteria for alcohol use disorder (*National Institute on Alcohol Abuse and Alcoholism*,

2015). While studying the incidence of alcohol use behaviors in college students, researchers

have noted increases in prevalence and changed behaviors over time. For example, Hingston,

Weitzman, and Zha (2009) found that in 2001 alone, 599,000 college students were injured as a

result of alcohol use. They also found that from the time span of 1998-2005, alcohol-related

annual mortality increased by 3 percent in college students, ages 18–24 years (Hingston,

Weitzman, & Zha, 2009).

The alcohol-use behavior of binge-drinking is one factor that contributes to negative

health outcomes. Binge-drinking is defined as having more than five drinks for men and four for

women on one occasion (Read, Beattie, Chamberlain, Merrill, 2008). Read and colleagues

(2008) examined whether these thresholds of binge-drinking were representative of actual

alcohol-use behaviors. They found that the current definition of binge-drinking was not

representative of population alcohol indices when compared to reported non-binge drinkers

(Read et al., 2008). The above research found that it was reported six or more drinks for women

and seven or more drinks for men on one occasion showed significant changes in the alcohol

guidelines compared to non-binge drinkers (Read, et al., 2008). In regards to consumption of alcohol, researchers have studied behaviors of college students' drinking habits and the effects. Moos, Brennan, Schutte, and Moos (2010) found that alcohol use can be attributed to peer and social interactions, or more specifically, by associating with others who drink alcohol. Kremer and Levey (2008) found that when college students were randomly assigned dorm mates with increased alcohol use, male students rather than female, were more likely to drink excessively as well as have lower grade point averages than students whose roommates had decreased or no alcohol use. Both studies support that peer influence may correlate with increased drinking habits as well as supporting negative outcomes in life. The researchers also found that men were more easily influenced by peers than women regarding alcohol use (Kremer & Levy, 2008; Moos, et al., 2010).

Although many studies have proven that alcohol is widely used on college campuses and that nursing students are highly stressed and looking for coping strategies, few studies focus on alcohol use and alcohol-use behaviors in nursing students. In contrast, Baker and Stockton (2012) surveyed 154 nursing students from 12 different universities and examined the relationship between knowledge about alcohol and alcohol-use behaviors. They found that although nursing students have an increased knowledge about alcohol it did not correlate with a lower likelihood of risky consumption (Baker & Stockton, 2012). In fact, the study revealed that many nursing students reported binge-drinking (Baker & Stockton, 2012). This suggests that although nursing students may have knowledge about alcohol and its usage, it does not mean they will not abuse the substance. Since being knowledgeable about alcohol alone is not related to decreased alcohol use and healthy coping habits, researchers have studied how to alter alcohol-use habits. Robinson, Kavanagh, Connor, May, and Andrade (2015) found that

alcoholics will not change alcohol use habits unless they have internal motivation to do so.

These findings were based on information gathered from recovered and non-recovered alcoholics

(Robinson et al., 2015). In summary, researchers have consistently found that drinking is

prevalent in college students, and specifically in nursing students, and is associated with risk of

harm and negative life outcomes. Further examination is necessary to determine methods to

modify behaviors as well as the need for understanding specific contributing factors to treat the

underlying cause.

Factors of Alcohol Use

Many researchers have examined family and other instrumental factors in the risk for

alcohol dependence. For example, in a national study of 27,212 adults using face-to-face survey

methodology, Fenton, Geier, Keyes, Skodol, Grant, and Hasin (2013) found that childhood

maltreatment correlated with increased likelihood of adult alcohol dependence. The risk

increased even more with family history of alcohol dependence, supporting that genetics may

play a role in the risk for alcohol dependence (Fenton et al, 2013). Further, when maltreatment

involved sexual abuse combined with a family history of alcohol dependence, women were more

likely to become alcohol dependent than men (Fenton et al, 2013). Researchers have also

studied family conflict as a predicting factor of alcoholism or vice versa as alcoholism may

increase family conflicts (Rounsaville, O'Farrell, Burdzovic-Andreas, Murphy, & Murphy,

2014). Rounsaville et al. (2014) found that treatment and recovery of alcoholics significantly

decreased family conflicts. As conflicts and alcohol abuse can be interrelated factors of each

other, this suggests a vicious cycle and opens more questions about the complex origins of

alcoholism. The findings by Fenton and colleagues (2013) supported the theory that alcoholism

and dependence can be caused by many different factors, including family factors, peer factors, personal experience, but also genetics.

The above brings the theory of nature [biological factors] or nurture [environmental factors] into discussion. Dager, Anderson, Stevens, Pulido, Rosen, Jiantonio-Kelly,and Pearlson (2013) studied college students' response to alcohol cues related to family history of alcoholism as well as personal habits. They did this by using functional magnetic resonance imaging (fMRI) on subjects to study the neural response to given by alcohol cues. The researchers found that regardless of the students being light or heavy drinkers, individuals whose families had a positive history of alcoholism showed higher brain involvement with alcohol related cues as compared to students with a negative family history (Dager et al., 2013). Thus, the increased involvement of neural response supports the conclusion that genetics may be a preexisting risk factor for developing an alcohol use disorder (Dager et al., 2013); although, environmental exposure may have been an important variable that resulted in the outcomes. Champion, Lewis, and Myers (2015) reviewed social norms, health beliefs, and demographics in the relationship of alcohol abuse in college students. The findings demonstrated that social norms and health beliefs were the strongest predictors on drinking behavior, while little significance was attributable to demographics (Champion et al., 2015). In conclusion, it is imperative to study influences that may contribute to alcohol use in the population of nursing students, such as peers, family and genetics, or social experience. Nursing students are especially significant study subjects since, as researchers have found, this population has knowledge about alcohol use, addiction, and health outcomes, but there is no lack of usage within the group. They also are at high risk for developing coping habits that involve substance use related to the nursing career being a high

stress field (Robert, Grubb, & Grosch, 2012). All studies used for this literature review are included in a summary table of evidence in Appendix A.

Theoretical Framework

The Biopsychosocial Model was developed by psychiatrist George L. Engel in 1977 (Engel, G., 2013). This model aims to explain that human health and well-being are the sum of a multifaceted interaction between biological factors, psychological factors, and social influences (Engel, G., 2013). A depiction of the model is included in Appendix B. The biological aspect includes features such as pathogens, physical alterations, and genetic factors (Engel, G., 2013). The psychological portion looks at potential mental and psychological factors that may contribute to disease or misbehavior (Engel, G., 2013). Lastly, the social segment of the Biopsychosocial Model takes into consideration social features of life such as socioeconomic status, culture, poverty, technology, and religion (Engel, G., 2013). Engel's theory contests the idea of the Biomedical Model which purely looks at biology associated with health issues (Engel, G., 2013). Engel explained that each factor whether it is biological, psychological, or social can equally affect health or well-being, and that all three of these concepts should be considered when implementing care for a disease (Engel, G., 2013). The following is one of the examples that are given: if someone experiences social isolation, it may lead to psychological problems like depression and sedentary lifestyle, while also contributing to biological issues such as diabetes, myocardial infarction, or other health issues. The example demonstrates how the three sectors of this theory complement one another in effect of an individual's overall health (Engel, G., 2013).

Many physical diseases can be analyzed applying the Biopsychosocial Model. Mental health issues provide an excellent source for application of this theory since mental health

problems are recognized as multi-determined conditions (Dodes, L 2014). Thus, the

Biopsychosocial Model is an important theory in the current study since the use of alcohol in

nursing students is being examined; plus alcohol use, along with abuse and addiction, can be

considered a sector of one's mental health. Lance Dodes (2014) says that all three components

of the theory contribute to mental health and in particular, addiction. He says that each

component is different in its underlying and contributing features, but all factors may present

themselves together as well. Dodes believes the overlapping contributions pose a situation of

blurred lines in the study of addiction and alcohol use (2014). Therefore, the examination of

factors contributing to alcohol use is an important step in the process of learning how to treat and

prevent AUD (Dodes, L., 2014). This study looks at familial, social, and peer influences related

to the use of alcohol in nursing students. All of the factors assessed fall under a separate

component of the Biopsychosocial Theory. According to Engel's theory, the findings of this

study illustrate that nursing students' alcohol habits can be attributed to a variety of factors

which interact with each other.

Methods

Design

The study is a non-experimental design using cross-sectional data collection and

correlational analysis to evaluate relationships and associations between variables. Because data

has been provided by subjects, university IRB approval was required and had been approved.

University IRB approval was obtained before the study was conducted.

Setting and Sample

The setting includes a baccalaureate nursing program at a large, urban, public university

in the Midwest United States. The total number of enrolled students at university for 2013 was

22,122 students. The number of students in the school of nursing in 2013 was nearly 1,000

students including undergraduate and graduate programs. There are approximately 400 graduate

students in the nursing program; the types of nursing programs for graduate students are PhD,

CRNA, and DNP programs. Undergraduate nursing students make up about 600 students and

the undergraduate program includes the traditional baccalaureate degree (BSN), RN to BSN,

accelerated, and LPN to BSN.

The sample population includes all undergraduate nursing students at the university

setting. The subjects are at least eighteen years of age due to that being the legal age to

participate in a study without parental consent (Schmidt, N. & Brown, J., 2015). No persons are

excluded based on gender, ethnicity, race, sexual orientation, marital status, or age as long as

they are 18 years or older.

Sampling Procedures

To recruit subjects, three waves of email recruitment took place over weeks two through

four of the 2016 fall semester. Emails were sent to all undergraduate nursing students attending

the university by the college of health professions office of student success. In Appendix H, the

recruitment letter that was used in the emails is included. In addition to the electronic

recruitment, face-to-face recruitment was used. The researchers attended select sophomore,

junior, and senior level nursing courses describing the study and encouraging participation.

Since sample participants have a choice whether they would like to participate, this is a

convenience sample which may not be representative of the population and therefore, limits the

findings of the study (Schmidt, N. & Brown, J., 2015). In emails sent to the persons of interest, a

link to the anonymous survey was given with the consent form included, also shown in the

appendix. Potential subjects are asked in the recruitment email to click on the link to the consent

form and data collection tool. Once they read the consent form, they are told that progressing to

the data collection tool and submitting the survey will serve to indicate informed consent. The

consent form is found in Appendix C.

Data Collection Procedures

The data collection was conducted electronically via Qualtrics during the 2016 fall

semester. Subjects were able to complete the surveys at their own comfort and leisure.

Although anticipated that the time burden of completing the surveys was approximately ten

minutes, surveys had no time constraints. Subjects were able to change responses, move forward

and backward within the survey, and review responses. They resolved to submit the survey once

they completed it by selecting a "submit" option. Participants had the option to voluntarily

respond to or to omit items on the survey, although the researchers properly worded and placed

items to promote subject response. Subjects were informed in the consent format that surveys

are anonymously completed and submitted and that no identifying information would be

collected. Subjects were reminded of this throughout survey completion, as well as thanked

several times as they completed surveys for their time and information. Further, due to IRB

approval, surveys included some demographic information such as age, education program, and

living arrangements. This information was collected separately from the survey results to

minimize participant exposure. Regardless, the data remains completely anonymous. Data was

input into a data analysis program to be categorized and computed. The dataset is protected by

computer password in which only researchers and sponsors have access to. As the study is

finished, the file containing the collected data will be destroyed.

Measures

Variables such as the subject's alcohol habits, parenting style of the subject's parents/guardians, and peer pressure influence on the subjects are measured in the study. To measure subject's alcohol habits, the Alcohol Use Disorder Identification Test (AUDIT) and the CAGE Questionnaire are applied. The AUDIT (See Appendix D) is a ten-question test in which alcohol behaviors are measured, and is used to detect alcohol use problems experienced within the last year; it does not show chronic alcohol abuse (*National Institute on Alcohol Abuse and Alcoholism*, 2005). Questions on the AUDIT are answered by multiple choice responses and are scored per question with a final score of eight or more suggesting hazardous or harmful alcohol use. The AUDIT has been proven as a clinical tool to note subjects with potential alcohol problems without dependence (*National Institute on Alcohol Abuse and Alcoholism*, 2005). The CAGE screening tool (See Appendix E) is a four-question test used to measure potential alcohol problems; CAGE is an acronym for cut down, annoyed, guilty, eye opener (*National Institute on Alcohol Abuse and Alcoholism*, 2005). Questions are answered via yes or no responses. A positive response of two or more suggests that there is a potential problem with alcohol use and further assessment is warranted. The CAGE screening tool has been proven to measure a wide range of alcohol problems (*National Institute on Alcohol Abuse and Alcoholism*, 2005). Further, measurement of parental style of the subjects is conducted with the Measurement of Parental Style (MOPS) tool (Parker, G., Roussos, J., Hadzi-Pavlovic, D., Mitchell, P., Wilhelm, K., & Austin, M-P.,1997 [See Appendix F]). This is a thirty-item questionnaire, fifteen items about the mother and fifteen items about the father that measures perceived parental style over three measures: indifference, abuse, and over-control. The items are answered with a rating from 0-3, 0 meaning "not true at all" to 3 meaning "extremely true." The higher the score, the more incidence of indifference, abuse, and over-control in regards to parental style of the subjects'

parents. The MOPS tool has been proven to be a sufficient tool to measure perceived

dysfunctional parenting (Parker et al., 1997). Lastly, the variable of peer pressure influence on

subjects is measured with the Peer Pressure Inventory (See Appendix G). This tool is a fifty-

three item questionnaire used to measure influence of peers on the subject completing the

questioner. Each item is scored from -3 to +3, with "no pressure" as a score of 0. The Peer

Pressure Inventory is validated to measure variables of peer pressure, conformity, and popularity

(Darcy, S.A., Messervey, D., & Kusumakar, V., 2000). Although this tool is validated for

adolescents within a high-school age, directions are made to account for this limitation.

The following demographic variables are also measured: full-time or part-time

enrollment; education program; grade level; gender; age; ethnicity; living condition; employment

status; parent level of education; and parent marital status.

Data Analysis

Survey data was imported into the Statistical Package for Social Scientists (SPSS)

software program and was managed for missing data and outliers. In analysis of the data,

descriptive statistics is used to describe the sample and variables, depending on levels of variable

measurement. Bivariant relationships are determined using Pearson's correlation coefficients,

supported by all variables measured at continuous, integral levels of measurement.   The level of

statistical significance is set at a p value >0.05.

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Time Line

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Application for the University of Akron IRB approval was submitted in summer of 2016.

Data collection and analysis was done in the fall semester of 2016. Three waves of surveys were

sent out to all undergraduate students during the second, third, and fourth week of the fall

semester. After results were analyzed, the discussion section was written during the fall semester

of 2016 and early spring semester of 2017. The completed study will be submitted to the Honors

College during spring semester of 2017.

Results

Sample

167 subjects completed and submitted data. Approximately 89% of the respondents to

the online survey were female, and 11% were male. Ages of respondents ranged from 18 years

to 52 years with a mean of 21.10 years (SD=3.89). About 49% of the subjects lived off of

campus with other people followed by 34% living off campus with parents/guardians, 10% living

on campus with others, 4% living off of campus by themselves, and lastly 2% living on campus

by themselves. The distribution undergraduate progression was as follows: pre-

nursing/freshman (24%), sophomore/first level (24%), junior/second level (22%), and

senior/third level (30%). The majority of the subjects are in the 4-year baccalaureate program at

94%. 4% are in the RN/BSN transitional program followed by 2% being in the accelerated

program. Ranging from 0-50 hours, subjects work a mean of 14.14 (SD=11.50) hours weekly.

The Measurement of Parental Style (MOPS) scale measured parental style with 30 items on 4

point Likert scale with higher scores indicating more negative, neglectful, or abusive parental

styles. Item scores were summed and ranged from 0 to 48 (M=20.41, SD=7.10). Alcohol use

was measured with nine items from the 10-item Audit and the four item, yes=1/no=0, Cage

scale. For both scales, higher ratings indicated higher use and possible abuse of alcohol.

Summed Audit ratings ranged from 9 to 31 (M=13.54, SD=3.91). Summed Cage ratings ranged

from 0 to 4 (M=.30, SD=.76). Approximately 0.6% of the sample scored 4, followed by 2.8% at

3, 6.7% at 2, 5.6% at 1, and 84% at 0. Cage scores did not differ based on age, program, hours

worked per week, or progression level. There are no differences in Cage scores, Audit scores, Peer Pressure scores, and Parenting Style scores in male and female subjects.

Table 4.1. Significant Correlations between CAGE, AUDIT, and Peer Pressure

	Audit	MOPS	PP	PP Dimensions				
				Conformity	School	Family	Involvement	Misconduct
Cage	.62***							.19**
Audit			.22**				.23**	.32**
MOPS								.17*
Peer Pressure				.53***	.48***	.20*	.73***	.53***
Conforming with others in peer group							.28***	
School: Doing well in school						.37***	.20**	-.15*
Family: Having good relationship with family							-.05	-.33**
Involvement: Being involved with peer group								.40***

*p<.05; **p<.01; ***p<.001

Research Questions

Research question 1: What is the relationship between familial and social factors and the use of alcohol in undergraduate nursing students?

As expected Audit scores strongly and positively correlated with Cage scores (r=.62, p<.001) (See table 4.1). Therefore, as CAGE scores increased, so did AUDIT scores. Audit scores also weakly and positively correlated with overall peer pressure (r=.22, p<.01) and peer pressure dimensions of involvement (r=.23, p<.01) and misconduct (r=.32, p<.01). There were no correlations between MOPS and CAGE or AUDIT scores, but MOPS scores weakly and positively correlated with Peer Pressure for Misconduct (r=.17, p<.05). Therefore, those who reported more peer pressure for misconduct, also reported more negative parenting experiences.

As expected, the five dimensions of peer pressure correlated with the totaled Peer Pressure scale scores. Specifically, as totaled Peer Pressure increased, so did peer pressure for: misconduct ($r=.53$, $p<.001$), doing well in school ($r=.48$, $p<.001$); conforming with peers ($r=.53$, $p<.001$), having positive family relationships ($r=.20$, $p<.01$), and being involved in peer group activities ($r=.73$, $p<.001$). Within dimensions, peer pressure for misconduct was negatively related to doing well in school ($r=-.15$, $p<.05$) and having positive family relationships ($r=-.33$, $p<.001$) and positively related to being involved with peer group activities ($r=.40$, $p<.001$).

Discussion

Studies have shown that nurses need effective coping mechanisms to help deal with the high-stress field of patient care. Unfortunately, some nurses are at an increased risk of using addictive substances for relief. It can be seen by the results of this study that there are definite correlations between alcohol use and the familial and social factors in this sample of nursing students. In general, those who reported increased alcohol and substance use in the Audit measure also reported increased use in the CAGE measure, and those who reported higher alcohol and substance use also reported increased negative, or bad, parenting measured by the MOPS tool and greater peer pressure for misconduct and being involved with peer group activities. These results showed that the more negative, restrictive, or abusive the parenting style, the higher the report of subjects also having higher peer pressure for misconduct and having increased alcohol use. That is, as one feels more pressure to participate in misconduct and/or participate in peer activities along with being raised under a negative parental style, they are more likely to participate in harmful drinking and vice versa. It is important to remember that findings are only relationships, and it is not possible to say whether these factors were

causative of each other. Although, this does show that there are definite relationships between parenting styles, peer pressure or social factors, and alcohol consumption.

Findings are in accordance with results of other studies that peer influence and alcohol use are related (Kremer & Levy, 2008; Moos, et al., 2010). Outcomes about the relationship between alcohol use and parenting styles are inconsistent with studies in the review of literature that reported positive relationships between childhood maltreatment/negative parenting and the use of alcohol (Fenton et al, 2013; Rounsaville et al, 2014). The difference in these findings raises questions about why they were different and questions about differences in methods, such as measurement tools, sample sizes, different sampling procedures, or different designs. These differences could have also been due to a predominantly female sample or the age of the sample. Another possible reason for the differences to consider is that the sample used for this study was a nursing student population, whereas few the studies in this review of literature had nursing students as the sample population.

Further, as previous researchers have found relationships between alcohol use, familial, and social factors, this study found relationships between peer influence and alcohol consumption and between parenting styles and peer influences. This may suggest an indirect relationship between parenting styles and alcohol consumption, in that parenting styles is related with peer influence, which then is related with alcohol consumption. The relationships between these variables are of interest in regards to the research question, and are supportive of the Biopsychosocial Model that is used as a theoretical framework in this study. The Biopsychosocial Model explains that there are many factors that play a role in a behavior or disease. In this study, it is shown that there is no one factor that causes a specific behaviors, especially in relation to alcohol consumption.

Limitations

There are limitations to this study. First, since the design is correlational, causation is not determined, only relationships are affirmed. Convenience sampling limits generalizability of findings since subjects may not represent the general population of nursing students. Convenience studies tend to allow participants to underreport issues, especially with potentially discreditable behavior, such as underage drinking. Study participants may also underreport the use of alcohol due to believing that the study could not be completely confidential. This significantly increases the risk of results and conclusions being biased. In addition to subjects being collected from a single university, the sample size of n=167 also significantly limits the study.

Implications to Practice and Future Research

Findings may be used to increase awareness of the relationship between peer pressure and alcohol consumption in nursing students. Also, findings of the prevalence of alcohol use in nursing students should be used to increase awareness. Ongoing education of alcohol and its effects and use of positive coping should be considered to help nursing students as they are dealing with the demands of nursing education and taking on more responsibility in clinical settings. For years, nurses have been the study subject in relation to stress on the job site and how this has many short- and long-term effects (Roberts, R., Grubb, P., & Grosch, J., 2012). With long-term exposure to high stress in the work field, nurses tend to engage in poor coping strategies to deal with these stresses; thus it is important to educate young professionals in order to prevent abusive behavior (Roberts, R., Grubb, P., & Grosch, J., 2012). Further studies need to be implemented in order to determine causality of the degree of alcohol use and abuse in nursing

students. Lastly, a tool that measures family history of alcohol use would have helped to greater

encompass the holistic idea of the Biopsychosocial framework used in the study.

References

American Association of Colleges of Nursing. (2016). *New AACN data confirm enrollment*

surge in schools of nursing. Retrieved from http://www.aacn.nche.edu

/faculty/news/2015/enrollment.

Baker, D., & Stockton, S. (2012). An exploration of health science and nursing students'

knowledge and behaviors related to alcohol: A preliminary investigation. *The Internet*

*Journal of Allied Health Sciences and Practice, 10(*4):1-11.

Champion, D., Lewis, T., & Myers, J. (2015). College student alcohol use and abuse:

Social norms, health beliefs, and selected socio-demographic variables as explanatory

factors. *Journal of Alcohol & Drug Education*, *59*(1):57-82.

Dager, A., Anderson, B., Stevens, M., Pulido, C., Rosen, R., Jiantonio-Kelly, R… Pearlson.

(2013). Influence of alcohol use and family history of alcoholism on neural

response to alcohol cues in college drinkers. *Alcoholism: Clinical and Experimental*

Research, 37(s1):E161-E171.

Darcy, S.A., Messervey, D., & Kusumakar, V. (2000). Measuring peer pressure, popularity,

and conformity in adolescent boys and girls: Predicting school performance, sexual

attitudes, and substance abuse. *Journal of Youth and Adolescence, 29*(2):163-182.

Retrieved from http://link.springer.com/article/10.1023/A:1005152515264#page-1.

Dodes, L. (2014). Is addiction a "biopsychosocial" phenomenon? *Psychology Today*. Retrieved

from https://www.psychologytoday.com/blog/the-heart-addiction/201409/is

addictionbiopsychosocial-phenomenon.

Engel, G. (2013). *Biopsychosocial Model:* Retrieved from http://nursingplanet.com

/theory/biopsychosocial_model.html.

Fenton, M, Geier, T., Keyes, K., Skodol, A., Grant, B., & Hasin, D. (2013). Combined role of

    childhood maltreatment, family history, and gender in the risk for alcohol dependence.

    Psychological Medicine, 43(5):1045-1057. doi:10.1017/S0033291712001729.

Hingston, R.W., Weitzman, E.R., & Zha, W. (2009). Magnitude of and trends in alcohol-related

    mortality and morbidity among U.S. college students ages 18-24, 1998-2005. *Journal of*

    Studies on Alcohol and Drugs, (s16):12-20. Retrieved from

    https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2701090/.

Journal of Addiction & Research Therapy. (2016). Facts about Alcoholism. Retrieved from

    https://www.omicsonline.org/scholarly/facts-about-alcoholism-journals-articles-ppts-

    list.php.

Kremer, M., & Levy, D. (2008). Peer effects and alcohol use among college students. *The*

    Journal of Economic Perspectives, 22(4):189-206. doi:10.1257/089533008785539827.

Moos, R., Brennan, R., Schutte, K., & Moos, B. (2010). Social and financial resources and high-

    risk alcohol consumption among older adults. *Alcoholism Clinical and Experimental*

    Research, *34*(4):646-654. doi:10.1111/j.1530-0277.2009.01133.x.

National Center for Education Statistics. Institute of Education Sciences. Fast facts. Retrieved

    from http://nces.ed.gov/fastfacts/display.asp?id=372.

National Institute on Alcohol Abuse and Alcoholism. (2005). Screening for alcohol use

    and alcohol-related problems. Retrieved from http://pubs.niaaa.nih.gov/

    publications/aa65/AA65.htm.

National Institute on Alcohol Abuse and Alcoholism. (2015). College drinking fact sheet.

    Retrieved from https://pubs.niaaa.nih.gov/publications/CollegeFactSheet/

    CollegeFactSheet.pdf.

Parker, G., Roussos, J., Hadzi-Pavlovic, D., Mitchell, P., Wilhelm, K., & Austin, M-P. (1997).

    The development of a refined measure of dysfunctional parenting and assessment of its

    relevance in patients with affective disorders. *Psychological Medicine*, *27*(5):1193 –

    1203. Retrieved from http://dx.doi.org/10.1017/S003329179700545X.

Read, J., Beattie, M., Chamberlain, R., & Merrill, J. (2008). Beyond the "binge"

    threshold: Heavy drinking patterns and their association with alcohol involvement indices

    in college students. *Addictive Behaviors*, *33*(2):225-234. doi:10.1016/

    j.addbeh.2007.09.001.

Roberts, R., Grubb, P., & Grosch, J. (2012). Alleviating job stress in nurses. *Medscape.*

    Retrieved from http://www.medscape.com/viewarticle/765974_2.

Robinson, N., Kavanagh, D., Connor, J., May, J., & Andrade, J. (2015). Assessment of

    motivation to control alcohol use: The motivational thought frequency and state

    motivation scales for alcohol control. *Addictive Behaviors, 59*:1–6.

Rounsaville, D., O'Farrell, T., Burdzovic-Andreas, J., Murphy, C., & Murphy, M. (2014).

    Children's exposure to parental conflict after father's treatment for alcoholism. *Addictive*

    Behavior, *39*(7):1168–1171. doi:10.1016/j.addbeh.2014.03.017.

Schmidt, N. & Brown, J. (2015). *Evidence-based practice for nurses: Appraisal and*

    application of research (3rd ed.). Sudbury, MA: Jones & Bartlett Learning. ISBN-13:

    9781284053302.

Thomas, C., & Siela, D. (2011). The impaired nurse: Would you know what to do if you

    suspected substance abuse? *American Nurse Today, 6*(8). Retrieved from

    http://americannursetoday.com/the-impaired-nurse-would-you-know-what-to-

    do-if-you-suspected-substance-abuse/.

Appendix A

APA formatted reference	Purpose statement. Research Question[1]	Theoretical Framework[2]	Design of study, Site, Sampling Method, Sample Size[3]	Variables and measurement tools[4]	Findings, Conclusion[5]	Limitations of Findings[6]
Baker, D., & Stockton, S. (2012). An exploration of health science and nursing students' knowledge and behaviors related to alcohol: A preliminary investigation.	Purpose statement: "To assess health science and nursing students' knowledge and behavior regarding drinking alcoholic beverages."	Theoretical Framework not mentioned in study.	Design: descriptive exploratory study with survey methodology Site: 12 midwestern universities	Variable and measurement instrument: Knowledge about alcohol – Student Alcohol Questionnaire Variable and measurement instrument: Behaviors using	There is a weak correlation between knowledge and behaviors when it comes to alcohol and its consumption; but it can be concluded that even if someone is very	The sample was a convenience sample. This may produce a biased outcome or findings that are not representative of the population. The sample size was 154 people

The Internet Journal of Allied Health Sciences and Practice, *10*(4):1-11.	Research question: Does knowledge about alcohol and its effects make a difference in behavior and choices about using the substance in nursing students?		Sampling method: convenience sample Sample size: 154	alcohol – Student Alcohol Questionnaire Variable and measurement instrument	knowledgeable about alcohol, this does not lower the likelihood of risky consumption.	which is relatively small. This is another factor that may produce findings that are not representative of the population.
Fenton, M, Geier, T., Keyes, K., Skodol, A., Grant, B., & Hasin, D. (2013). Combined role of childhood maltreatment, family history, and gender in the risk for alcohol dependence. *Psychological Medicine, 43*(5):1045-1057. doi:10.1017/S003329171200172 9.	Purpose Statement: To examine to relationship between childhood maltreatment, gender, history, and the risk for alcohol dependence. Research Question: Do factors such as childhood maltreatment, gender, and family history impact the risk	Theoretical Framework not mentioned in study	Design: Descriptive or survey research design Site: USA Sampling Method: Quota Sampling? Sample size: 27,712	Variable and tool used: Alcohol dependence – DSM-IV criteria and National Epidemiological Survey on Alcohol and Related Conditions (NESAR) Variable and tool used: Childhood maltreatment - National Epidemiological Survey on	It can be concluded that childhood maltreatment can increase the risk for alcohol dependence, but especially when there is a family history. In regards to gender, women have a higher likelihood than men to become alcohol dependent when there is family history combined	They had used a quota sample which may not be representative because it was not randomized. There is no review of literature section. It does not provide what was already known about the subject.

	of alcohol dependency?			Alcohol and Related Conditions (NESAR)	with sexual abuse.	
				Variable and tool used: Family history - National Epidemiological Survey on Alcohol and Related Conditions (NESAR)		
				Variable and tool used: Gender - National Epidemiological Survey on Alcohol and Related Conditions (NESAR)		

| Kremer, M., & Levy, D. (2008). Peer effects and alcohol use among college students. *The Journal of Economic Perspectives,* 22(4):189-206. doi:10.1257/089 5330087855398 27. | Purpose statement: The purpose is to examine the extent to which college students who drink alcohol influence their peers. Research Question: Does the use of alcohol in college students effect their peers as well as their performance in school? | Theoretical Framework not mentioned in study | Design: Descriptive, longitudinal study Site: A university in USA Sampling method: Convenience sampling Sample size: 1,357 | Variable and tool used: High school GPA, survey Variable and tool used: GPA after second year of college, information provided by school Variable and tool used: Gender, survey Variable and tool used: Alcohol use before and during college, survey Variable and tool used: Randomized lottery assigned roommates in college, information provided by school | Males who were randomly assigned to roommates who drink alcohol showed a college GPA of a quarter point lower than roommates who were assigned to non-drinking students. Females didn't show this relation. In conclusion, there may be a correlation between alcohol use in college students and negative effects on their peers. | This study was not very clear of the design, the sampling method, or the site. There was no stated research question or purpose statement. This paper had no titled methods section. Although lots of information was provided, it was not clear about what each section was specifically addressing. |

| Hingston, R.W., Weitzman, E.R., & Zha, W. (2009). Magnitude of and trends in alcohol-related mortality and morbidity among U.S. college students ages 18-24, 1998-2005. *Journal of Studies on Alcohol and Drugs*, (s16):12-20. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2701090/. | Purpose statement: The purpose of this study is to estimate the number of alcohol-related unintentional injury deaths and other associated problems in college students ages 18-24 over the time period from 1998-2005.

Research Question: What is the magnitude of alcohol-related deaths in college students ages 18-24? | Theoretical Framework not mentioned in study | Design: Descriptive, longitudinal study

Site: USA

Sampling method: Statistics of an entire population, convenience

Sample size: U.S. population of college students ages 18-24 (Varied throughout timeframe) | Variable and tool used: People of ages 18-24 in U.S., U.S. Census Bureau

Variable and tool used: College students of ages 18-24, Department of Education's National Center for Education Statistics

Variable and tool used: Alcohol use and behaviors like driving under the influence, national survey

Variable and tool used: Numbers and ages of unintentional deaths, Centers for Disease Control and Prevention | Alcohol-related unintentional injury deaths among college students ages 18-24 increased by 3% per 100,000 over the timespan from 1998-2005. This mortality increased from 1,440 to 1,825. In 2001, 599,000 (10.5%) full-time 4-year college students were injured because of drinking, 696,000 (12%) were hit or assaulted by another drinking college student, and 97,000 (2%) were victims of alcohol-related sexual assault or date rape. From 1999 to 2005, | Since there was no direct way to measure how many unintentional injury deaths were related to alcohol, this study had to look at many different sources of information to then calculate an estimated number. This number could possibly not be correct or could be skewed. |

| | | | | Variable and tool used: Number of non-traffic-related unintentional injury deaths and BAC, meta-analysis

Variable and tool used: Traffic-related unintentional injury deaths, National Highway Traffic Safety Administration's Fatality Analysis Reporting System | the proportions of college students ages 18-24 who reported consuming fi ve or more drinks on at least one occasion in the past month increased from 41.7% to 44.7%, and the proportions who drove under the infl uence of alcohol in the past year increased from 26.5% to 28.9%—7% and 9% proportional increases, respectively (Hingston, et al., 2009). | |
| Read, J., Beattie, M., Chamberlain, R., & Merrill, J. (2008). Beyond the "binge" | Purpose Statement: The purpose of this study is to examine different thresholds of | Theoretical Framework not mentioned in study | Design: Descriptive, explanatory

Site: A mid-sized U.S. college | Variable and tool used: Demographic information, questionnaire | The term "binge" drinking referring to 4+/5+ alcoholic beverages on one occasion distinguishes | Limitations to this finding is that non-binge drinkers reported a high frequency of drinking which may have |

threshold: Heavy drinking patterns and their association with alcohol involvement indices in college students. *Addictive Behaviors*, *33*(2):225-234. doi:10.1016/ j.addbeh.2007.09 .001.	"binge" drinking and their representation of individuals' actual alcohol involvement indices. Research Question: Is the currently defined "binge" drinking of 4+/5+ drinks truly representative of effects of individuals' drinking habits?		Sample method: Convenience sampling through the university's research participant pool Sample size: 356	Variable and tool used: Regular drinker vs. non-regular drinker, questionnaire Variable and tool used: Alcohol consumption amount, date, and time; questionnaire Variable and tool used: Blood alcohol levels on the day of consumption estimated, eBAL equation Variable and tool used: Alcohol consequences, YAACQ	drinkers across some but not all indices of alcohol involvement. Binge drinkers differed from non-binge drinkers on account of eBAL but not on other indices. Only "heavy binge" drinkers (6+/7+) significantly differed from non-binge drinkers on account eBAL as well as most other indices.	skewed results. Also, the sample size is relatively small and only at one location. This may produce unrepresentative results and conclusions.
Moos, R., Brennan, R., Schutte, K., & Moos, B. (2010). Social and financial resources and	Purpose statement: "Do older adults who have more money, engage in more social activities, and	Theoretical Framework not mentioned in study	Design: Longitudinal Site: individuals who outpatient contact with a health care	Social Resources and Tension-Reduction Coping assessed by the Health and Daily Living Form. Quality of	People with advanced drinking habits tend to be friends with others who share their habits. Men tend	Limitations: Study focuses on the older adult not the college age student. Study is aged.

high-risk alcohol consumption among older adults. *Alcoholism Clinical and Experimental Research*, *34*(4):646-654. doi:10.1111/j.1530-0277.2009.01133.x.	whose friends approve more of drinking more likely to engage in excessive or high-risk drinking." Research question: Is drinking influenced socially? The study aims to analyze how different social factors impact a person's drinking habits in relation to socioeconomic status, social agenda, and peer influence.		facility within the last 3 years Sampling method: Convenience sampling Sample size: 719 (399 men, 320 women) 55 to 65-year-old adults at baseline (between 1986-1988), and then again 10 and 20 years later	relationship with spouse assessed by Life Stressors and Social Resources Inventory. Alcohol consumption was assessed by HDL.	to be more easily influenced by societal norms than women. Peer influence, available monetary resource, and increased social interaction tend to increase the alcohol use within this population of study	
Champion, D., Lewis, T., & Myers, J. (2015). College student alcohol use and abuse: Social norms, health beliefs,	Purpose statement: "The purpose of this study is to explore the relationships among social norms, health	Social Norms Theory. Health Belief Model.	Design: Cross-sectional Site: three universities in the southeast United States	Demographic questionnaire for socio-demographic variables. Alcohol use disorder test (AUDIT)	Findings and Conclusions: Quantity norms, perceived susceptibility, and perceived benefit was significant 41%	Limitations: Internal and external validity may be compromised: convenience study limits generalizability,

			Sample method: Convenience	measured quality and frequency of drinking.	of the time in answering the first research	sampling was done in summer
and selected socio-demographic variables as explanatory factors. *Journal of Alcohol & Drug Education*, *59*(1):57-82.	beliefs, and drinking behavior among college students… and to examine the possible mediating effects of health beliefs on the relationship between social norms and drinking behavior" (p.62). Research question: "Do social norms and health belief components predict a significant amount of variance in drinking behavior…? Do social norms and health belief components predict a significant amount of		Sample size: 283 undergraduate students	Drinking norms rating form (DNRF) assessed social norms. The Health Beliefs about Mental Illness (HBMI) surveyed variables of the Health Belief Model including perceived susceptibility, perceived severity, benefits, and barriers.	question. Socio-demographic factors such as ethnicity, gender, Greek involvement, and professional sports teams only accounted for 8% of alcohol use in college. In conclusion, social norms and health beliefs were found to be the strongest predictors on drinking behavior with little input from demographics.	sessions and not during the regular term, small location, and self-report validity.

	variance in drinking behavior above and beyond selected socio-demographic variables…? Do the components of the health belief model mediate the relationship between social norms and drinking behavior…?" (p.62)					
Dager, A., Anderson, B., Stevens, M., Pulido, C., Rosen, R., Jiantonio-Kelly, R… Pearlson. (2013). Influence of alcohol use and family history of alcoholism on neural response to alcohol cues in college drinkers.	Purpose statement: To discern the influence of heavy drinking and family history of alcoholism on alcohol cue related functional magnetic resonance imaging (fMRI) among college students (E161).	Theoretical framework not mentioned in study.	Design: Cross-sectional Site: three Connecticut colleges and universities Sample method: Convenience Sample size: 65 young adults, aged 18-21	Family history of AUD was deciphered by the Family History Assessment Module and the alcohol use module was used for personal alcohol use. The MINI was used to understand current DSM-IV diagnoses. Information on	Findings and Conclusions: Demographics such as sex, ethnicity, age, or presence of a mental disorder had no influence on the outcome of the study. Heavy drinkers with a positive family history showed more alcohol intake over a life time	Limitations: Small sample size especially in FHP individuals, did not assess self-reported craving of alcohol, did not examine personality characteristics such as impulsivity or sensation seeking, did not exclude

				cigarette smoking was collected through the Fagerstrom Test of Nicotine Dependence. Students were divided into four groups family history negative (FHN) light drinkers, FHN heavy drinkers, family history positive (FHP) light drinkers, and FHP heavy drinkers.	(not current intake) than heavy drinkers with a negative family history of alcohol use. Both light and heavy drinkers with FHP alcoholism showed increased simulation in MRI results as compared to light and heavy drinkers of FHN individuals (E166).	individuals with psychiatric disorders.
Alcoholism: Clinical and Experimental Research, 37(s1):E161-E171.	Research question: Do personal drinking habits and family history of alcoholism impact the response of alcohol cue related fMRI?					
Robinson, N., Kavanagh, D., Connor, J., May, J., & Andrade, J. (2015). Assessment of motivation to control alcohol use: The motivational thought frequency and state motivation	Purpose Statement: "To measure motivational cognitions for functional goals based on the existing Craving Experience Questionnaire" Research Question: Will	Elaborated Intrusion Theory of Desire	Design: Non experimental, interview design. Site: Queensland University of Technology Sampling method: convenience	Survey comprising the Motivational Thought Frequency Assessment (MTF-A), State Motivation Assessment (SM-A), Craving Experience Questionaire (CEQ) Alcohol	Findings and Conclusions: It was viewed that if subjects were willing and able to change their drinking habits, then they were much more likely to see positive outcomes than others who were	Limitations: Australian based research. Representativeness was threatened due to unknown response rate on online survey. Due also to the online survey, there is no check to confirm honesty.

scales for alcohol control. *Addictive Behaviors, 59*:1–6.	internal motivation improve the outcome of change in relation to alcohol use?		Sample size: 417 adult third year students	Use Disorders Identification Test (AUDIT), Readiness to Change Questionaire (RCQ), and demographics	not ready to change. Motivation to change drinking habits can cause positive outcomes.	
Rounsaville, D., O'Farrell, T., Burdzovic-Andreas, J., Murphy, C., & Murphy, M. (2014). Children's exposure to parental conflict after father's treatment for alcoholism. *Addictive Behavior*, *39*(7):1168–1171. doi:10.1016/j.adbeh.2014.03.017.	Purpose statement: The purpose of the study was to evaluate the level of conflict within families in relation to fathers with or without an alcohol abuse problem and whether treatment for dependence could influence familial conflict. Research question: Can treatment of alcohol abuse affect conflict within families?	Theoretical framework not mentioned in study.	Design: Longitudinal, cohort, case-control design Site: Meadow's Edge Recovery Center in North Kingston, Rhode Island Sample method: Convenience Sample size: 67 families with acohol dependence vs. 78 families without alcohol abuse issues	Variable: Alcoholic vs. nonalcoholic fathers measured by involvement in treatment programs Variable: Treatment progress: familial involvement and support vs. individual involvement	Findings and Conclusions: The study concluded that families with alcohol use saw more conflict than families without alcohol abuse issues. Within 6 months of treatment, the variance of conflict between families with or without alcohol abuse decreased significantly and continued to decrease at the 12 month evaluation. This study supports the importance of	Limitations: Small sample size; possibly not generalizable to the population; Families with alcoholic fathers not seeking treatment were not included in the study; homosexual families not included.

	The study aim is to evaluate the role of alcohol abuse creating conflict within family structure and the effect this had on the children within the family.				treatment within an alcoholic home to decreasing conflict among individuals and outcomes of the children effected. Family support through the treatment program proves to show much butter outcomes for the alcoholic and his family.	

Appendix B

Biophysical Model
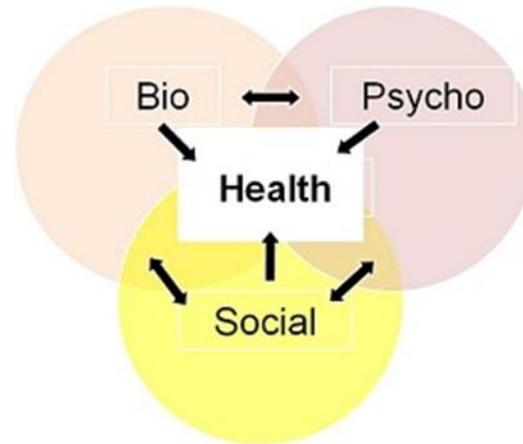
Engel, G. (2013). *Biopsychosocial Model:* Retrieved from http://nursingplanet.com /theory/biopsychosocial_model.html.

Appendix C

Consent Form

Title of Study: The Relationship between Alcohol Use and Personal, Familial, and Social

Influence in College Nursing Students

Introduction: You are invited to participate in a research project being conducted by Kathleen

Gillota and Darren Crooks, nursing students in the College of Health Professions, School of

Nursing at The University of Akron.

Purpose: The purpose of this project is to investigate the relationship between alcohol use and

personal, familial, and social factors in undergraduate nursing students.

Procedures: If you volunteer to participate in this study, you will be asked to complete a short,

online survey about personal, familial, and societal factors influencing alcohol use. It will take

approximately fifteen minutes to complete the survey. Additionally, you will be asked to give

some information about your part-time or full-time enrollment; program enrolled; level within

nursing program; gender; age; ethnicity; living condition; employment status; level of education

of parent; and parent marital status. You will not be asked to give any identifying information at

any time within the survey.

You are eligible to participate in the study if you are enrolled in a Bachelor of Science in Nursing

(BSN), RN-to-BSN, Accelerated BSN, or LPN-to-BSN program and are at least 18 years

old. No persons will be excluded based on gender, ethnicity, race, sexual orientation, marital

status, or age as long as they are 18 years or older.

Benefits and Risks: You will receive no direct benefit from your participation in this study, but

participation may help researchers to better understand the factors influencing alcohol use in

undergraduate nursing students. Possible risks involved in completing the survey include

answering questions about personal behavior and other sensitive information in relation to

alcohol use. Although anticipated that all questions will be responded to, all questions are

voluntary to answer or omit. Due to anonymous involvement in the online survey, and having no

demographic information collected within the actual survey, participant identification risk is

minimal. Participants may complete the survey per leisure and in a comfortable, secure, and

private environment. In case you feel the need to talk with a counselors and health care provider

after completing this survey, please contact: (1) The Counseling Center, Simmons Hall

306, Phone: 330-972-7082, Website: http://www.uakron.edu/counseling/., (2) Student Health

Services, Student Recreation and Wellness Center, Suite 260, Phone: 330-972-7808 Website:

http://www.uakron.edu/healthservices/., and/or (3) Alcohol Abuse and Crisis Intervention

Hotline: 800-234-0246.

Right to refuse or withdraw: Participation is voluntary. Refusal to participate or withdraw

from the study at any time will involve no penalty. Failure to participate in no way affects your

academic standing.

Anonymous and Confidential Data Collection: No identifying information will be collected,

and your anonymity is further protected by not asking you to sign and return the informed

consent form.

Confidentiality of Records: Data are collected with an online survey. The survey is loaded

into Qualtrics, an electronic survey software program. You will complete the survey

electronically and at your own convenience. Electronic survey completion means that data are

automatically entered into a data set; disconnecting participants from their surveys is also related

to protection of human participants. The dataset will be protected by computer password in

which only researchers and sponsors will have access to. When the study is finished, the file

containing the collected data will be permanently destroyed.

Who to Contact with Questions: If you have any questions about this study, you may contact

Kathleen Gillota (kag86@zips.uakron.edu), Darren Crooks (dcc59@zips.uakron.edu), or

Christine Heifner Graor, PhD (Advisor) at (330) 972-6422 or (graor@uakron.edu). This project

has been reviewed and approved by The University of Akron Institutional Review Board. If you

have any questions about your rights as a research participant, you may call the IRB at (330)

972-7666.

Acceptance & Signature: I have read the information and voluntarily agree to participate in this

study. My completion and submission of this survey will serve as my consent. I may print a

copy of this consent statement for future reference.

Thank you,

Darren Crooks and Kathleen Gillota

Click Begin to complete the survey.

Appendix D

Please circle the answer that is correct for you.

1. How often do you have a drink containing alcohol?

| Never | Monthly or less | Two to four times a month | Two to three times per week | Four or more times per week |

2. How many drinks containing alcohol do you have on a typical day when you are drinking?

| 1 or 2 | 3 or 4 | 5 or 6 | 7 to 9 | 10 or more |

3. How often do you have six or more drinks on one occasion?

| Never | Less than monthly | Monthly | Two to three times per week | Four or more times per week |

4. How often during the last year have you found that you were not able to stop drinking once you had started?

| Never | Less than monthly | Monthly | Two to three times per week | Four or more times per week |

5. How often during the last year have you failed to do what was normally expected from you because of drinking?

| Never | Less than monthly | Monthly | Two to three times per week | Four or more times per week |

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?

| Never | Less than monthly | Monthly | Two to three times per week | Four or more times per week |

7. How often during the last year have you had a feeling of guilt or remorse after drinking?

| Never | Less than monthly | Monthly | Two to three times per week | Four or more times per week |

8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?				
Never	Less than monthly	Monthly	Two to three times per week	Four or more times per week

9. Have you or someone else been injured as a result of your drinking?		
No	Yes, but not in the last year	Yes, during the last year

10. Has a relative or friend, or a doctor or other health worker, been concerned about your drinking or suggested you cut down?		
No	Yes, but not in the last year	Yes, during the last year

The Alcohol Use Disorders Identification Test (AUDIT) can detect alcohol problems experienced in the last year. A score of 8+ on the AUDIT generally indicates harmful or hazardous drinking. Questions 1–8 = 0, 1, 2, 3, or 4 points. Questions 9 and 10 are scored 0, 2, or 4 only.

Appendix E

C Have you ever felt you should *cut down* on your drinking?
A Have people *annoyed* you by criticizing your drinking?
G Have you ever felt bad or *guilty* about your drinking?
E *Eye opener:* Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover?

    The CAGE can identify alcohol problems over the lifetime. Two positive responses are

considered a positive test and indicate further assessment is warranted.

Appendix F

Measurement of Parental Style (MOPS)

During your first 16 years how 'true' are the following statements about your MOTHER's

behaviour towards you.

Rate each statement either as: 0 - not true at all 1 - slightly true 2 - moderately true 3 -

extremely true

1. Overprotective of me

2. Verbally abusive of me

3. Over controlling of me

4. Sought to make me feel guilty

5. Ignored me

6. Critical of me

7. Unpredictable towards me

8. Uncaring of me

9. Physically violent or abusive of me

10. Rejecting of me

11. Left me on my own a lot

12. Would forget about me

13. Was uninterested in me

14. Made me feel in danger

15. Made me feel unsafe

During your first 16 years how 'true' are the following statements about your FATHER's

behaviour towards you

Rate each statement either as: 0 - not true at all 1 - slightly true 2 - moderately true 3 - extremely true.

1. Overprotective of me

2. Verbally abusive of me

3. Over controlling of me

4. Sought to make me feel guilty

5. Ignored me

6. Critical of me

7. Unpredictable towards me

8. Uncaring of me

9. Physically violent or abusive of me

10. Rejecting of me

11. Left me on my own a lot

12. Would forget about me

13. Was uninterested in me

14. Made me feel in danger

15. Made me feel unsafe

Appendix G

Peer Pressure Inventory

B. Bradford Brown
Univ of WI-Madison

Donna Rae Clasen
Univ of WI-Whitewater

Here are some *PAIRS of STATEMENTS* describing *PEER PRESSURE* -- which is when your friends encourage you *to do* something or to *not do* something else. For each pair, *READ* both statements and decide whether friends mostly encourage you to do the one on the *LEFT* or the one on the *RIGHT*. Then, *MARK AN "X"* in one of the boxes on the side toward the statement you choose, depending on *HOW MUCH* your friends encourage you to do that (*"A Little," "Somewhat" or "A Lot"*). If you think there's <u>no</u> pressure from friends to do *either* statement, mark the middle (*"No Pressure"*) box.

Remember, mark <u>just ONE</u> *"X"* for <u>each</u> pair of statements.

HOW STRONG is the pressure from your FRIENDS to:	LOT	SOMEWHAT	LITTLE	NO PRESSURE	LITTLE	SOMEWHAT	LOT	Or to: ....
Study hard, do your homework, etc.	3	2	1	S-38	-1	-2	-3	NOT study or do homework
Take DIFFERENT classes than your friends take	-3	-2	-1	C-23	1	2	3	Take the SAME classes that your friends take
Smoke marijuana	3	2	1	M59	-1	-2	-3	NOT smoke marijuana
Be social, do things with other people	3	2	1	P-39	-1	-2	-3	NOT be social, do things by yourself
NOT try to be "tough," stay out of fights, etc.	-3	-2	-1	M42	1	2	3	Try to be "tough," pick fights, etc.
Be part of any "crowd" at school that you want to	-3	-2	-1		1	2	3	Try to get into certain "crowds" and not others
Try to do what your parents want you to do	3	2	1	F-52	-1	-2	-3	Go against your parents' wishes
Have a steady boyfriend or girlfriend (opposite sex)	3	2	1		-1	-2	-3	NOT just go out with one guy or girl
Drink beer or liquor	3	2	1	M65	-1	-2	-3	NOT drink beer or liquor
NOT do many things with your family	-3	-2	-1	F-41	1	2	3	DO lots of things with your family
NOT go to school dances or mixers	-3	-2	-1	P-21	1	2	3	Go to school dances or mixers
Be part of one (or more) of the "crowds" at school	3	2	1	C-35	-1	-2	-3	NOT be part of any of the "crowds" at school
NOT have a part-time job	-3	-2	-1		1	2	3	Have a part-time job
Get home by the time your parents say you should be	3	2	1	F-47	-1	-2	-3	Stay out past the curfew time your parents set

HOW STRONG is the pressure from your FRIENDS to:	LOT	SOMEWHAT	LITTLE	NO PRESSURE	LITTLE	SOMEWHAT	LOT	Or to: ....
Excel, be really good at something (sports, grades, slamming beers, whatever)	3	2	1		-1	-2	-3	NOT be better than any of your friends at something
NOT go to parties	-3	-2	-1	P-53	1	2	3	Go to parties
Take accelerated (advanced level) classes	3	2	1	S-35	-1	-2	-3	NOT take accelerated (advanced level) classes
Try NOT to be friends with the popular kids	-3	-2	-1	C-30	1	2	3	Try to be friends with the "popular" kids
Wear the SAME types of clothes your friends wear	3	2	1	C-36	-1	-2	-3	Wear styles of clothes DIFFERENT than your friends
"Make out" (kissing or petting)	3	2	1		-1	-2	-3	NOT "make out" (kissing or petting)
Smoke cigarettes	3	2	1	M59	-1	-2	-3	NOT smoke cigarettes
Try to look or act older than you are	-3	-2	-1		1	2	3	Try to look or act your own age
Finish high school	3	2	1	S-39	-1	-2	-3	Drop out of school
Be in religious activities (church, Young Life, etc.)	3	2	1		-1	-2	-3	NOT get involved with religious activities
Talk or act DIFFERENTLY than your friends do	-3	-2	-1	C-41	1	2	3	Talk or act the SAME way your friends do
Spend your free time alone or with your family	-3	-2	-1	P-34	1	2	3	Spend your free time with your friends
Get drunk or get "a buzz"	3	2	1	M71	-1	-2	-3	NOT get drunk
NOT shoplift or steal anything	-3	-2	-1	M50	1	2	3	Steal something (shoplift, raid a locker, etc.)
Not to be TOO much of a "brain"	-3	-2	-1	S-32	1	2	3	Be as smart as you can be
Go out with boys/girls (opposite sex)	3	2	1	P-52	-1	-2	-3	NOT go out with boys/ girls (opposite sex)
Be liked by teachers	3	2	1	S-46	-1	-2	-3	NOT be liked by teachers
Wear your hair (or make-up) DIFFERENT than your friends'	-3	-2	-1	C-43	1	2	3	Wear your hair (or make-up) like your friends do
Go out for a sports team	3	2	1		-1	-2	-3	NOT go out for sports
Get beer or liquor before you're 18	3	2	1	M67	-1	-2	-3	NOT get beer or liquor until you're 18

HOW STRONG is the pressure from your FRIENDS to:	LOT	SOMEWHAT	LITTLE	NO PRESSURE	LITTLE	SOMEWHAT	LOT	Or to: ....
NOT ask your friends who you should go out with	-3	-2	-1	C-17	1	2	3	Go out only with someone your friends say is okay to date
Talk back or "smart off" to adults	-3	-2	-1	F-53	1	2	3	Show respect for adults
Go to the games at school (football, basketball, etc.)	3	2	1	P-26	-1	-2	-3	NOT go to school games
NOT cut classes or skip school	3	2	1	S-44	-1	-2	-3	Cut classes or skip school
NOT go to concerts	-3	-2	-1	P-31	1	2	3	Go to concerts
Ignore what your parents tell you to do	-3	-2	-1	F-62	1	2	3	Do what your parents tell you to do
Have the SAME opinion about things as your friends do	3	2	1	C-33	-1	-2	-3	Have DIFFERENT opinions than your friends do
Try to get good grades	3	2	1	S-59	-1	-2	-3	NOT try for good grades
NOT "trash" things or vandalize property	-3	-2	-1	M51	1	2	3	"Trash" or vandalize things (write on walls, break windows, etc.)
Try to be thin	3	2	1		-1	-2	-3	Try to be fat
NOT let your parents know where you go, what you do	-3	-2	-1	F-50	1	2	3	Tell your parents where you go and what you do
Listen to the music, groups your friends think are good	3	2	1	C-36	-1	-2	-3	Listen to music and groups that no one else likes
NOT go "all the way" (not have sexual intercourse)	-3	-2	-1	M52	1	2	3	Have sexual intercourse (go "all the way")
Get along well with your parents	3	2	1	F-53	-1	-2	-3	"Hassle" your parents
"Party" (be rowdy)	3	2	1	P-47 M52	-1	-2	-3	NOT "party" (not be rowdy)
Go out with friends on weekends	3	2	1	P-61	-1	-2	-3	Stay home on weekends
NOT do any hard drugs	-3	-2	-1	M55	1	2	3	Do hard drugs
Do things to impress members of the opposite sex	3	2	1	P-46	-1	-2	-3	Try NOT to impress members of the opposite sex
Give teachers a hard time	-3	-2	-1	S-42	1	2	3	Be nice to teachers

Appendix H

Hello Nursing Students: You are invited to participate in a nursing honors research project

entitled "The Relationship between Alcohol Use and Familial and Social Influence in College

Nursing Students." This study is by Kathleen Gillota and Darren Crooks, senior nursing students

at The University of Akron. If you choose to participate, you will take an online survey which

should take approximately 15 minutes to complete. All data is collected anonymously. To learn

more about the study, click here!!

Appendix I

		CageRCSum	Audit Total	MOPS	PPTotal	Dim.PPressure	Dim.SchoolPP	Dim.FamilyPP	Dim.PInvolv	Dim.MisconductPP
CageRCSum	Pearson Correlation	1	.622**	.100	.112	.009	.000	-.015	.081	.192**
	Sig. (2-tailed)		.000	.184	.137	.907	.998	.844	.278	.010
	N		167	178	178	178	179	179	179	179
Audit Total	Pearson Correlation		1	.116	.217**	.008	.050	-.024	.229**	.319**
	Sig. (2-tailed)			.134	.005	.914	.523	.762	.003	.000
	N			168	167	167	168	168	168	168
MOPS SUMMED	Pearson Correlation			1	.215**	.134	.113	.004	.125	.171*
	Sig. (2-tailed)				.004	.073	.129	.953	.094	.022
	N				180	180	181	181	181	181
PPTotal	Pearson Correlation				1	.527**	.475**	.202**	.727**	.525**
	Sig. (2-tailed)					.000	.000	.006	.000	.000
	N					184	184	184	184	184
Dimension:PPressure	Pearson Correlation					1	.056	-.007	.275**	.099
	Sig. (2-tailed)						.453	.930	.000	.183
	N						185	185	185	184
Dimension:SchoolPP	Pearson Correlation						1	.367**	.198**	-.145*
	Sig. (2-tailed)							.000	.007	.049
	N							186	186	185
Dimension:FamilyPP	Pearson Correlation							1	-.053	-.328**
	Sig. (2-tailed)								.470	.000
	N								186	185
Dimension:PInvolv	Pearson Correlation								1	.395**
	Sig. (2-tailed)									.000
	N									185
	Pearson Correlation									1

Dimensio n:Miscond uctPP	Sig. (2-tailed)									
	N									185

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).