

PERCEPTIONS OF COLLEGIATE SOCIAL NORMS AND  
THEIR RELATIONSHIP TO ALCOHOL CONSUMPTION

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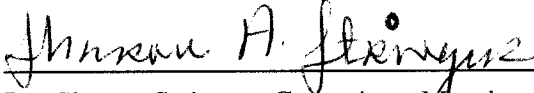
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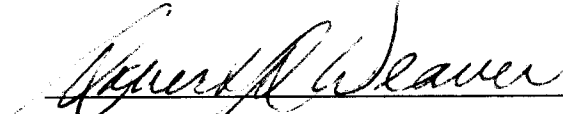
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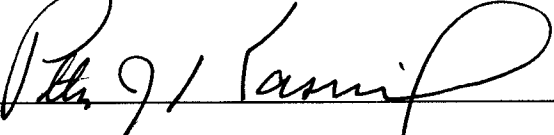
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## Abstract

A descriptive correlational research design composed of a convenience sample of students from a select northeastern Ohio university was used to determine the relationship between current alcohol consumption in the last 30 days and peers' perceptions of others' alcohol consumption. The hypothesis tested were students' perceptions of peer alcohol use will affect their consumption of alcohol and other factors will affect perceived use.

The design consisted of a single group of 747 students enrolled in 26 courses at the select university who completed and returned the Core Alcohol and Drug Surveys. A secondary data analysis was completed on the data. From the personal sociodemographic data, it was indicated that participants' ages ranged from 16 to 57 with a mean of 22.6 years of age. The ratio of men to women participants was 39 percent males to 61 percent females. Information from the completed survey provided correlative results which were used to determine relationships between current alcohol consumption in the last 30 days and peers' perceptions of others alcohol consumption. Eighteen percent of the variance was accounted for by variation with six independent variables in relationship to current alcohol consumption in the last 30 days. Only three percent was accounted for by variation with three independent variables in relationship to perceptions of others' rate of alcohol use. Analyses revealed that perception of peers' alcohol consumption was moderately but significantly related to actual alcohol consumption in the last 30 days. Although perceptions of peers' alcohol consumption was significant, the age when the student first began to drink, gender and classification were more strongly related to alcohol consumption in the last 30 days. Recommendations for future research were to use the long form of the survey and a more scientific process of survey administration.

## TABLE OF CONTENTS

Abstract	iii
Table of Contents	iv
List of Tables	vii
Acknowledgements	ix
Chapter I. Introduction	1
Statement of Research Problem	3
Significance and Justification	3
Statement of Purpose	4
Hypotheses	4
Delimitations of Study	4
Assumptions of the Study	5
Limitations of the Study	5
Summary	6
Chapter II. Review of Literature	8
Historical Overview	8
Theories	8
Drinking Patterns	14
Studies	15
Core Alcohol Study	15
Student Health Behavior Assessment	18
CAGE	18
Monitoring the Future	19
Core Alcohol and Drug Survey	21
History Leading to Core Survey Development	21
Development of the Core Survey	22
Content of the Core Survey	23
Pilot Research	23
Services Offered	24

Core Advisory Group Committee	25
Summary	25
Chapter III. Methodology	27
Design	27
Subjects	28
Instrument	28
Core Alcohol and Drug Survey Reliability	29
Survey Administration Procedure by	
Primary Researcher	29
Secondary Data Procedure	33
Selection of Variables from the Core	
Alcohol and Drug Survey	33
Summary	35
Chapter IV. Analysis of Data	36
Demographic Profile of the Sample	36
Hypothesis One	37
Hypothesis Two	44
Summary	53
Chapter V. Summary, Conclusions, and	
Recommendations	55
Summary	55
Conclusions	56
Implications	57
Research Recommendations	58
BIBLIOGRAPHY	60

Appendix	A. Human Subjects Issues	.....	29
Appendix	B. Instruction for Graduate Student	.....	29
Appendix	C. Informed Consent	.....	30
Appendix	D. Core Alcohol and Drug Survey	.....	31
Appendix	E. Note of Permission, Jennifer Whiting	.....	33

## List of Tables

Table 1. The Relationship Between Alcohol Use in the Last 30 Days and Respondent Demographics Using Pearson Correlation	..... 37
Table 2. The Relationship Between Alcohol Use in the Last 30 Days and Respondent Living Arrangements Using Pearson Correlation	..... 39
Table 3. The Relationship Between Alcohol Use in the Last 30 Days and Respondent Family Alcohol History Using Pearson Correlation	..... 41
Table 4. The Relationship Between Alcohol Use in the Last 30 Days and Respondent Perceptions of Others Drinking	..... 43
Table 5. The Relationship Between Perceptions of Other Alcohol Use Rate And Respondent Demographics Using Pearson Correlation	..... 44
Table 6. The Relationship Between Perceptions of Other Alcohol Use Rate And Respondent Living Arrangements Using Pearson Correlation	..... 46
Table 7. The Relationship Between Perceptions of Other Alcohol Use Rate and Respondent Family Alcohol History Using Pearson Correlation	..... 48

Table 8. The Relationship Between Select Significant Pearson Correlations from the Core Alcohol and Drug Survey and Alcohol Use in the Last 30 Days Using Multiple Regression	..... 50
Table 9. The Relationship Between Select Significant Pearson Correlations from the Core Alcohol and Drug Survey and Others Alcohol Use Rate Using Multiple Regression	..... 52



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## Chapter I

### Introduction

Despite declines in alcohol consumption over the years, college alcohol use continues to remain a significant public health problem in the United States. Further supporting such data, two noteworthy findings were found by researchers, Henry Wechsler, PhD, George W. Dowdall, PhD, Gretchen Maenner, BS, Jeana Gledhill-Hoyt, MPH, and Hang Lee, PhD, who conducted the national Harvard School of Public Health College Alcohol Study (CAS) in 1999. Firstly, the researchers showed an increase in students who did not drink and secondly, an increase in students who binge drank three or more times in a 2-week period. The CAS was used in an attempt to discover the extent and consequences of binge drinking to identify the types of students most involved in this behavior (Wechsler, Dowdall, Maenner, Gledhill-Hoyt & Lee, 1998).

It was reported that almost one in five students (19%) were abstainers and almost one in four (23%) were frequent binge drinkers (Wechsler, Kuo, Lee & Lee, 2000). Between the years of 1993 and 1999, the percent of students who abstained from alcohol use grew from 15.4 percent to 19.2 percent (Wechsler, Kuo, Lee & Lee). Conversely, the percent of students who were heavy drinkers also increased from 19.8 percent in 1993 to 22.7 percent in 1999 (Wechsler, Kuo, Lee & Lee).

Although overall binge-drinking rates did not change, the nature and intensity of drinking became more risky. Researchers are aware of people who are drinking and at what rates they drink. However, they do not know of methods to implement effective prevention programs to deter this growing health problem.

In one study it was indicated that, “students generally perceive their peers’ drinking levels to be higher than their own and higher than what they actually are” (Shalala, 1995, p. 3). Other authors indicating this same philosophy are: Henry Wechsler, Ton Oostveen and Alan D. Berkowitz. Students are under the assumption that the majority of their peers are consuming alcohol. Maybe it is because of the students they associate themselves with or maybe it is because alcohol consumption is all students talk about with each other.

Coupled with this, other studies point out that inflated perceptions of others’ drinking are often times related with greater individual consumption (Shalala, 1995). Researchers have found that students’ consumption of alcohol is shaped, in part, by how much they think other students on campus drink (Wechsler & Kuo, 2000). It is the perceptions or misperceptions of alcohol consumption that contributes to the rise in heavy alcohol consumption as well as the decrease in alcohol consumption.

Student perceptions of their peer’s alcohol use are predominately high, in that students believe a large majority of their peers are consuming alcohol on a regular basis. Moreover, there is great disparity between student perceptions of alcohol consumption in relationship to actual alcohol consumption by students.

Since most students who drink are vulnerable to pressure exerted by their peers, a false identification of alcohol consumption is developed. Perhaps in an environment where large amounts of alcohol are being consumed, the student may find himself or herself believing that excessive alcohol consumption is the “norm”. In reality, alcohol consumption may not be as prevalent as perceived. Aside from health problems and potential societal problems with excessive alcohol consumption, there is a perceived

benefit attached to alcohol consumption. If students believe that the majority of their peers are consuming alcohol excessively and on a regular basis, they may begin to feel as though it is both expected and accepted.

Students continue to behave in ways that they feel will contribute positively in their lives either through recognition or status. The person who consumes alcohol may believe that they will become part of a larger group of students who already consume alcohol and gain popularity and acceptance as a result of their actions. Students have a tendency to believe that their peers are drinking at excessive levels, therefore they justify their drinking behaviors as socially acceptable because everyone is drinking at the same rate. When in actuality, drinking behavior is not as excessive as presented and believed.

#### Statement of Research Problem

College students may be misinformed about and may misperceive the extent of alcohol consumption. In so far as students desire to conform to perceived behaviors. Such misperceptions may well contribute to the over use of alcohol.

#### Significance and Justification

College students are affected by misperceptions of alcohol use by their peers. Researchers have begun to focus on programs to address growing misperceptions of alcohol use in an attempt to educate students to curb possible drinking behaviors. An example of such programs is social marketing. Social marketing “can popularize positive ideas and attitudes and encourage favorable changes in social values and individual behavior” (Zimmerman, 1997, p.2).

Identifying the relationship of perceptions to behavior may lead to a greater understanding of why certain perceptions exist and provide direction to reducing incorrect perceptions or encourage correct perceptions to reflect current alcohol use behavior. The research conducted here will determine the perceptions of students from a select northeastern Ohio university regarding alcohol consumption and current drinking patterns in the last 30 days. Once current behavioral information is obtained, incorrect perceptions can be changed or modified based on making informed decisions.

#### Statement of Purpose

The purpose of this study was to determine the relationship between current alcohol consumption in the last 30 days and peer perceptions of others' alcohol consumption. This research focus is unique because it shows that based on current perceptions of peers, college students believe that a majority of students are drinking. These views in turn predict how students will model their current drinking behaviors based on their perceptions.

#### Hypotheses

The hypothesis to be tested will be:

1. Students' perceptions of peer alcohol use will affect their consumption of alcohol.
2. Other factors will affect perceived use (e.g. demographic variables, living arrangements will affect perceived use).

#### Delimitations of Study

The study was delimited as follows: (1) participants were college students who attended select northeastern Ohio university, (2) participants represented more females (61%) in the study, (3) participants living off campus represented 89% of the population.

### Assumptions of the Study

This proposed study is based on the following assumptions:

1. People's perceptions reflect behaviors.
2. Accurate reporting of perceptions of peers' alcohol use.
3. Frequent drinking is considered to be a problem.
4. The questionnaire will reveal perceptions.
5. Participants will be reasonably honest when filling out the questionnaire.
6. The instrument used was appropriate for population studied.
7. Participants who completed survey were enrolled in a select northeastern Ohio university.
8. Participants who signed the consent form were the only ones who completed the survey.

### Limitations of the Study

1. Self-reported data might be subject to intentional or unintentional distortion, although a number of studies generally support the validity of self-report studies of alcohol use. Non-responses may introduce another potential source of bias. When respondents have anonymity and privacy, this method is generally considered valid. Nevertheless, some degree of inaccurate reporting is probable.
2. Investigations relied on a sample from one campus. Thus, caution is needed in generalizing the findings (even though the study was designed to examine relationships between variables rather than identify the prevalence of alcohol use in the student population). Further testing in other samples is essential.

3. This sample is based on second hand analysis of a convenience sample, which may limit the generalizability of the results.
4. The questionnaire contains questions that may have been too personal, which may have resulted in lower response rates.
5. Participants may have become frustrated or dropped out prior to completion of the questionnaire either because of the nature of question(s) or its length.
6. The study is limited to those students enrolled at select northeastern Ohio university.
7. There could have been an administrative flaw in the procedure for signing the consent and completing the survey.

#### Summary

Despite declines in alcohol consumption, over the years, college alcohol use continues to remain a significant public health problem in the United States. Identifying the relationships of perceptions to specific alcohol consumption behaviors may lead to a greater understanding of why certain behaviors exist. It may provide direction for reducing an incorrect perception or encouraging correct perceptions to reflect current alcohol use behavior.

Chapter II will provide a review of the literature with a discussion of studies in which perceptions of peers' alcohol consumption were identified and related to current alcohol consumption patterns.

Chapter III will present the study design, the sample, and the tools used to measure perceptions of peers' alcohol consumption and current consumption patterns. The

statistical methods used to evaluate the scores and their relationship to variables will be presented.

In Chapter IV, the results of the data analysis will be presented along with a discussion of alcohol use scores and perception scores to various variables.

In Chapter V, a summary of the study, the findings, limitations, and implications are discussed. Recommendations for future research are presented.



## Chapter II

### Review of Literature

The purpose of this study was to determine the relationship between current alcohol consumption in the last 30 days and peers' perceptions of others' alcohol consumption. This chapter contains a review of select literature related to alcohol consumption among college students. A brief historical overview of alcohol and its relationship to colleges and universities is presented and is followed by various theories explaining the relevance of alcohol consumption at the collegiate level. Drinking patterns and associated studies are also presented to help define the nature of the problem.

### Historical Overview

Beginning in the Colonial Days, to control drunk and rowdy celebrants at Harvard University, the local sheriff would lead the University graduation proceedings. Since the first colleges were started in the United States, drinking practices of college students have been a concern. Despite declines in alcohol consumption, over the years, college alcohol use continues to remain a significant public health problem in the United States. There are an overwhelming number of college students who use and abuse alcohol every day, the majority of whom are below the minimum drinking age. Representing this argument, to this day, the same tradition with the local sheriff is still in existence at Harvard University (Haines, 1996).

### Theories

Randy Burke and Robert Stephens (1999) present the notion that the developmental age of most college students is most closely associated with feelings of

invulnerability, experimentation with adult behaviors and assertions of independence. Not only do the aforementioned characteristics promote drinking, but they also represent changes in culture and environmental contingencies such as peer pressure, social norms and the high availability of alcohol which all compound already existing complications (Burke & Stephens, 1999). Various researchers have identified that perceptions of peers, social expectancies and the drinking habits of close friends, play a significant role in students' drinking behaviors.

Several studies also indicate "students generally perceive their peers' drinking levels to be higher than their own and higher than they actually are" (Shalala, 1995, p. 3). Coupled with this, other studies further point out that inflated perceptions of others' drinking are often times related to greater individual consumption (Shalala). Evidence from the Commission on Substance Abuse at Colleges and Universities indicates that, because some students drink to be accepted or belong to a group, peer perception of how much and how often students believe their peers drink, affects their own drinking behavior (Commission on Substance Abuse at Colleges and Universities, 1994). Researchers have found that students' consumption of alcohol is shaped, in part, by how much they think other students on campus drink (Wechsler & Kuo, 2000).

Peer influence and perceptions are considered to be strong social influences on young adults' alcohol consumption, specifically in regards to norms, modeling, pressure, socializing and conformity. Norms develop as a result of the communication of values by others and by observing behaviors and their reinforcement (Oostveen, Knibbe & Vries, 1996). Pressure can be exerted internally and externally. External pressure comes in the form of remarks concerning the number of glasses consumed by individuals and

current drinking rates. Ordering drinks by the round or pitcher as well as the size of the group the individual is apart of can exert internal pressure (Oostveen, Knibbe & Vries). Not only are socializing and conformity influential in encouraging individuals' participation in various drinking situations, but they are also indicators of individuals' desires to become part of a peer group (Oostveen, Knibbe & Vries). The aforementioned perceptions have been described as a set of peripheral environmental pressures influencing habituation to or experimentation with consumption of alcoholic beverages (Oostveen, Knibbe & Vries). Anything from going to a party, to a concert or just hanging out with ones' friends can be considered strong social influences.

Using social learning perspectives to understand this argument, learning processes are described as the "exposure to other people's drinking behavior (modeling), which is perceived as positively reinforced" (Oostveen, Knibbe & Vries, 1996, p. 188). Another explanation of social learning, as presented by Ann Williams and David Clark, states that "alcohol abuse is seen as a habitual, maladaptive coping response, adopted by certain individuals who hold characteristic beliefs about the effects of alcohol, coupled with inefficient resources for coping with everyday stressful events" (1998, p. 371). Using either description, when their peers who drink surround non-drinking students, there is a chance that the non-drinking students' perceptions of drinking could be heavily influenced. The social learning theory also suggests that the observed behavior is mediated by cognitions that could result in similar actions based on the modeled behavior, as opposed to imitation (Oostveen, Knibbe & Vries).

The second approach presented emphasizes youthful drinkers' expectancies of alcohol's reinforcing effects (O'Hare, 1997). Alcohol expectancies can play an

important role in moderating the relationship between stress and alcohol use. As presented by Michael Sayette, associate professor in the Department of Psychology at University of Pittsburgh, “in the United States, both social drinkers and problem drinkers believe in alcohol’s stress-reducing properties” (1999, p. 250). Whether they are drinking because of the way it makes them feel, either by temporarily alleviating their problems or making them less self-conscious, the expectancy of tension reduction by alcohol use can predict problem drinking in students (Williams & Clark, 1998). Expectancy research also supports the idea that both heavy and problem drinking tends to be associated with what students see as positive social encounters (O’Hare, 1997). Students will continue to drink, if they feel drinking helps to alleviate stress.

One of the most powerful predictors of frequent drinking is termed Escape drinking. Escape drinking is defined as “negative reinforcement drinking” (Williams & Clark, 1998, p. 371). Simply stated, escape drinking is referred to as drinking to forget about ones’ problems. Individuals who use alcohol as a means of escaping from the stresses of everyday life are more likely to develop alcohol related problems in the future.

“An inflated assessment of high-risk drinking on campus promotes a negative and incorrect perception of the norm on college campuses, which may further drive up levels of high-risk drinking among students trying to ‘fit in’” (DeLong & Stubbs, 2000, p. 3). Personal drinking practices have been found to mirror those of the social group the student has lived with whether it is a fraternity, sorority or dormitory (Wechsler & Kuo, 2000). The desire to be part of the peer group or making new friends can lead to a non-drinkers’ adaptation of his or her current drinking or non-drinking behavior.

A recent study conducted by Thombs and colleagues in 1994 proved that drinking intensity was closely associated with perceived norms (Beck & Truman, 1996). Confirming these data, according to a survey from colleges receiving funds from the Fund for the Improvement of Postsecondary Education (FIPSE), students who perceive that all of their peers drink alcohol consume six times as many drinks per week as those students who perceive that only a few of their peers drink (Commission on Substance Abuse at Colleges and Universities, 1994). Students often times justify their drinking in terms of “everyone is doing it” and typically those students who use this excuse are those who perceive that more drinking occurs than actually does (Wechsler & Kuo, 2000). In response to the aforementioned statements, attempts have been made to reduce student misperceptions of alcohol supporting the overall foundation of the social norms theory.

Social norms theory presents the argument that much of human behavior is influenced by incorrect perceptions of how other members of a social group(s) think and act (Berkowitz, 2000). This theory predicts “overestimations will result in increased problem behavior while underestimations of healthy behaviors serve to discourage individuals from engaging in them” (Berkowitz, p. 1). Henry Wechsler and Meichun Kuo examined students’ perceptions of drinking at colleges and attempted to correlate the perceptions to the students’ own drinking levels from a national point of view based on analysis of responses from the 1999 Harvard School of Public Health College Alcohol Study (CAS) (Wechsler & Kuo, 2000).

Results from the 1999 College Alcohol Study support the social norms theory in an attempt to understand how students define binge drinking and if it relates to their drinking patterns (Keeling, 2000). A few of the findings determined that students’

definitions of binge drinking varied as a function of their own drinking patterns. In addition, a students' view of an existing campus alcohol problem was positively associated with the level of binge drinking at that school (Wechsler & Kuo, 2000). The authors also noted a strong relationship between students' perceptions of their friends' binge drinking and their own drinking (Wechsler & Kuo). For example, frequent binge drinkers were likely to overestimate the existing drinking norm as well as report that their close friends drank at the same level they did (Keeling). The authors also concluded that the more the student drank, the higher the number of drinks they believed qualified as binge drinking.

Overall, social norms theory attempts to persuade students' choices regarding health behaviors by emphasizing an underlying, but under-emphasized and under-recognized positive behavioral norm that highlights what the majority of students do "right", rather than what some students do "wrong" (Wechsler & Kuo, 2000; Keeling, 2000). If students presently adapt to their (mis) perception of the norm in ways that generate health risks, they might modify their behavior if they recognize that most students, in reality, did not drink (Keeling). Social norms theory was designed to publicize a more truthful norm to correct the misperception and, in turn, anticipated the result to be decreased consumption as students modified their behavior to fit in with the campus community (Carter & Kahnweiler, 2000). For example, the theory is based on the assumption that if students binge drink because they believe the majority of their peers binge drink, they might drink less alcohol at one time or do so less often if they realize that the majority of their peers are not binge drinking. Therefore, individuals might modify their behavior if provided with accurate information about their peers.

As stated by Berkowitz and Perkins, “correcting the misperception of the norm could be instrumental in changing drinking levels by making it easier for students to act on their moderated attitudes” (Carter & Kahnweiler, 2000, p. 66). Thus, correcting these misperceptions is likely to result in decreased drinking and or increased prevalence of healthy, protective behaviors.

### Drinking Patterns

In this arena, there have been at least two major developments that have influenced contextual views of college drinking behavior and social influences, namely research on the structural aspects of drinking and alcohol expectancy research (O’Hare, 1997). Researchers indicate that problematic drinking among college students is related to the expectations that positive effects occur as a result of consuming alcohol (Lewis & O’Neill, 2000). Some perceived positive effects range anywhere from tension reduction to improvements in social behavior to the feeling of being able to relax in social situations.

Another possible indication for the reasons behind problem drinking surrounds social anxiety or deficits in social functioning (Burke & Stephens, 1999; Lewis, & O’Neill, 2000). Social anxiety has been collectively defined as an “individuals feeling that their behavior is subject to the real or imagined scrutiny of others or when they are motivated to make a good impression but have doubts about their abilities to do so” (Burke & Stephens, 2000, p. 514). The first approach to studying alcohol use through deficits in social functioning, argues that most college drinking has been considered a social affair with most heavy drinking done in peer groups, when partying in large social gatherings and on weekends (O’Hare, 1997). Since college campuses are highly social,

the need to “fit in” typically results in students meeting and socializing with new people, possibly leading to increased opportunity to experiment with alcohol. Having the desire to be social on campus and feeling the need to be accepted, some students may feel anxious or nervous. Feelings of nervousness or anxiousness could lead to drinking as a possible means of alleviating those feelings and allowing the student to be temporarily worry-free.

Social anxiety though, in and of itself does not lead to excessive alcohol consumption. It seems more probable that drinking will occur in situations where the individual views alcohol as an anxiety reducer and social facilitator, coupled with feelings of inadequacy and low confidence (Burke & Stephens, 2000). When such characteristics are present, the tendency to consume alcohol becomes more likely.

## Studies

### College Alcohol Study

Henry Wechsler, PhD, George W. Dowdall, PhD, Gretchen Maenner, BS, Jeana Gledhill-Hoyt, MPH, and Hang Lee, PhD conducted the first of three surveys in 1993 using the Harvard School of Public Health College Alcohol Study (CAS). The CAS was used in an attempt to first, discover the extent and consequences of binge drinking then to identify the types of students most involved in this behavior (Wechsler, Dowdall, Maenner, Gledhill-Hoyt & Lee, 1998).

As defined by the authors, binge drinking was classified as the “consumption of five or more drinks in a row for men and four or more drinks for women, at least once in the two weeks preceding the survey” (Wechsler, Lee, Kuo & Lee, 2000, p.199). In their study, it was noted that women who typically consumed four drinks had similar effects as



those of males who drank five drinks at a time (Wechsler, Dowdall, Davenport & Rimm, 1995). Women tend to achieve higher concentrations of blood alcohol and become more impaired than men after drinking the same amounts of alcohol. Since women have lower rates of gastric metabolism of alcohol, eighty percent of men's, higher blood alcohol levels result (Wechsler, Dowdall, Davenport & Rimm, 1995).

There are also significant differences in body weight or lean body mass between the genders (Wechsler, Dowdall, Davenport & Rimm, 1995; Mumenthaler, Taylor, O'Hara & Jerome, 1999). It only seems to make sense to have different levels of alcohol consumption classified as binge drinking for men and women, as alcohol affects women differently. Women have more negative health issues result (Wechsler, Dowdall, Davenport & Rimm). In summary, women seem to become more impaired than men after drinking corresponding amounts of alcohol, attaining higher blood alcohol concentrations even when doses are adjusted for body weight (Mumenthaler, Taylor, O'Hara & Yesavage, 1999). Using the same definition for men and women, 33 percent would be classified as binge drinkers in comparison to using the new definition where 39 percent are now classified as binge drinkers (Wechsler, Dowdall, Davenport & Rimm).

Drawing from reports, following the 1993 survey, more than two of five students (44%) were classified as binge drinkers (Wechsler, Dowdall, Maenner, Gledhill-Hoyt & Lee, 1998). It is believed that binge drinking was prevalent among college students. Another CAS was conducted in 1997 to determine whether any change had occurred in the rates of binge drinking and related problems (Wechsler, Dowdall, Maenner, Gledhill-Hoyt & Lee). A comparison of student drinking behavior in 1993 and 1997 revealed very little change aside from students who abstained from drinking. Results from the second

survey prompted a third. The CAS was replicated in 1999 to establish whether the tendency towards amplified polarization of drinking behaviors on campus had sustained, as well as to examine overall levels of binge drinking (Wechsler, Lee, Kuo & Lee, 2000).

Two noteworthy findings from the researchers showed an increase in students who did not drink and students who binge drink three or more times in a two week period both over the course of the three surveys. Almost one in five students (19%) were abstainers and almost one in four (23%) were frequent binge drinkers (Wechsler, Lee, Kuo & Lee 2000). There was a significant increase in both of these groups from 15.4 in 1993 to 18.9 in 1997 and 19.2 percent in 1999 for abstainers and 19.8 in 1993 to 20.9 in 1997 to 22.7 percent in 1999 for those who were classified as binge drinkers (Wechsler, Lee, Kuo & Lee). Although overall binge-drinking rates did not change, the nature and intensity of drinking became more risky.

The most striking increases came with an increase in the number of frequent binge drinkers. Frequent binge drinkers were defined as the proportion of students who were drunk three or more times a week, students that drank on ten or more occasions, students that usually binge drank and those who drank to get drunk (Wechsler, Lee, Kuo & Lee, 2000). Frequent binge drinkers increased from 23.4 percent in 1993 to 28.1 percent in 1999. On the other hand, in the same six-year time period, the rates of abstaining from alcohol increased from 15.4 percent in 1993 to 19.2 percent in 1999 (Wechsler, Lee, Kuo & Lee). The 1999 survey also noted a decrease in binge drinking among dormitory residents and an increase among students living off campus (Wechsler, Lee, Kuo & Lee).

## Student Health Behavior Assessment

Another group of surveys was distributed among various colleges across the nation. In the spring of 1988, the Health Enhancement Services at Northern Illinois University (NIU) began surveying students about alcohol use and other health-related practices (Haines, 1996). The Student Health Behavior Assessment survey was anonymous and distributed to assess student attitudes and behaviors regarding health. Upon completion of the survey in 1988 NIU found that 43 percent of students were binge drinkers (Haines). During the next academic year, the focus was shifted to increasing prevention efforts on campus. By the completion of the 1989 survey, data revealed that 44.8 percent of students binge drank, an increase from the previous year. Disappointed with the outcome, NIU came to the realization that if misperceptions of binge drinking were corrected, the actual binge-drinking rate would decline (Haines). Beginning in 1989, the NIU Campaign focusing on students who drink alcohol was implemented. The program focused on presenting a realistic notion of campus drinking rates through lectures, posters, pamphlets and financial incentives. Over the course of the next six years, perceptions of binge drinking and actual binge drinking rates steadily declined. In 1995, binge-drinking rates were down 35 percent (Haines).

## CAGE

A third group of alcohol related surveys was conducted by Beth Lewis and Katherine O'Neill (2000) who used the four-item CAGE, Rutgers Collegiate Substance Abuse Screening Test (RCSAST) and the Alcohol Expectancy Questionnaire-Adolescent Form (AEQ-A) to gather information about social functioning, alcohol expectancies and alcohol use. The four-item CAGE is an acronym for key words from its four questions:

Have you ever felt you should Cut down on your drinking?, Have people Annoyed you by criticizing your drinking?, Have you ever felt bad or Guilty about your drinking? and Have you ever taken a drink first thing in the morning to steady your nerves or get rid of a hangover? (Eye opener) (ALCOWEB [online] April 30, 2001). The CAGE was used as a screening devise to identify potential participants in detecting early signs of alcohol dependence (Lewis & O'Neill, 2000). The RCSAST was then used to differentiate between non-problem and problem drinkers once students had been recruited into the study (Lewis & O'Neill). The AEQ-A was used to measure alcohol related beliefs.

Following completion of various questionnaires, Lewis and O'Neill (2000) came to the conclusion that “problem drinkers expected more arousal, sexual enhancement, improvements in cognitive and motor abilities, global positive change, improvements in social behavior, and relaxation and tension reduction as a result of consuming alcohol than non-problem drinkers” (2000, p. 298). They also discovered that problem drinkers are more likely to expect positive outcomes associated with drinking (Lewis & O'Neill).

#### Monitoring the Future

One survey that was conducted regarding alcohol use among young adults, not specifically collegiate students, was the Monitoring the Future survey. They determined that of those individuals who completed the survey, 34.4 percent were binge drinkers (Quigley & Marlatt, 1996). This timeframe was over the duration of one to four years after graduation from high school. The highest rate, 41 percent, was among 21-to 22-year-olds (Quigley & Marlatt). The survey also determined that young adults in college had a higher rate of binge drinking relative to their non-college peers. This difference may reflect either a non-college bound students' earlier adoption of adult roles involving

work or marriage or a college students' easier access to alcohol and parties among students.

This trend toward heavy drinking appeared to begin before college. However, in fact, those who were among the heaviest drinkers in high school were likely to continue drinking heavily following graduation, whether or not they planned to enter college (Quigley & Marlatt, 1996). Surprisingly, college-bound high school seniors reported binge drinking in high school less frequently than non-college-bound students (Quigley & Marlatt). In comparison, the National Household Survey on Drug Abuse found that 18 to 25 year-old respondents showed a lower prevalence of alcohol consumption than the 26 to 34 year-old cohort.

All in all, as offered by H. Wesley Perkins, PhD. of Hobart-William Smith College in Geneva, NY, student misperceptions about alcohol and drinking need to be clarified and students need to be alerted that not everyone drinks to get drunk. With this approach, Dr. Perkins argued that the desire to conform by consuming more often and in greater quantity may become less frequent. When drinking occurs then, it will be done in smaller quantities (Chapman, [online], March, 31 2000). Correcting misperceptions of alcohol use is important because it can empower young adults and break the vicious self-fulfilling prophesy of drinking. Correcting such misperceptions is likely to result in decreased drinking and/or increased prevalence of health, protective behaviors (Berkowitz, 2000). These peer perceptions are based more on what peers are believed to be doing (perceived norm) than on real beliefs or actions (actual norm). Individual students almost always believe that most others on campus drink more heavily than they

do and the disparity between the perceived and the actual behaviors tends to be quite large (Hanson, [online], March, 31 2000).

“Binge drinking is down (although heavy drinking is up) and abstinence is up among American college students. Yet, in spite of this and other overwhelming evidence, the false impression persists that drinking is increasing and that bingeing continues unabated” (Hanson, [online], March 31, 2000). This misperception is dangerous because when young people go off to college falsely thinking that everyone is drinking and bingeing, they are more likely to drink and to binge in order to conform. Overall, at many colleges and universities, there is a discrepancy between student estimates of binge drinking and actual binge drinking.

### Core Alcohol and Drug Survey

#### History Leading to Core Survey Development

Contained within the Anti-Drug Abuse Act of 1996, the Drug-free Schools and Communities Act of 1986 was created on October 26, 1986. The Drug-free Schools and Communities Act of 1986 included a set-aside of funds for higher education. These funds were to be distributed by the FIPSE, a granting agency within the U.S. Department of Education. In May of 1987, in response to the Congressional mandate, FIPSE held its first competition for substance abuse prevention programs in higher education. FIPSE staff made a request for interested individuals to volunteer to serve on a survey instrument selection committee at the second annual meeting of grantees in October 1988.

There was a pressing need to identify an instrument to assist grantees in gathering baseline and trend data regarding the alcohol and other drug use situations on their

campuses and thereby satisfy the grant requirements of a pre/post assessment. The first meeting of the Instrument Selection Committee took place during the National Collegiate Drug Awareness Week Conference at Crystal City (Arlington, Virginia) in late January 1989.

The committee considered several existing instruments. These instruments ranged from the Monitoring the Future survey, organized by the Institute for Social Research at the University of Michigan, to the PRIDE instrument, developed by the Parents Resource Institute for Drug Education based in Atlanta, to the Wechsler and McFadden (1979) survey of 34 New England colleges, and the Center for Disease Control's Youth Risk Behavior Survey (YRBS). They also considered questionnaires used by various individual campuses in the past.

It quickly became apparent that existing instruments would not meet the needs of even those institutions that were represented on the Instrument Selection Committee, and would not address the Department of Education specifications to assess environmental change with regard to alcohol and other drug use. Accordingly, the Instrument Selection Committee developed a survey to assess the nature, scope, and consequences of students' drug and alcohol use, as well as students' awareness of relevant policies. The questions and response options on the new survey were designed to be compatible with national databases noted above, in order to allow for valid comparisons.

#### Development of the Core Survey

The new instrument eventually came to be known as the Core Alcohol and Drug Survey because it was designed to be the centerpiece or "core" of potentially lengthier studies that institutions might conduct on their campuses. It was specifically designed to

be inexpensive, easily administered, of high quality, statistically reliable and valid, and comparable to other surveys in the field. The content of the Core Survey was developed on the basis of both theoretical assumptions regarding alcohol and drug use in the higher education setting and on previous research reported in the literature

#### Content of the Core Survey

The Core Alcohol and Drug Survey Short Form covers the following areas: demographics (including year in school, age, ethnic origin, marital status, and gender); working and living arrangements, academics (including self-reported grade average, focus of coursework, and full- or part-time status); perceptions of campus substance abuse policies and their enforcement; average number of drinks consumed per week; frequency of binge drinking; patterns of use of alcohol, tobacco, marijuana, cocaine, amphetamines, sedatives, hallucinogens, opiates, inhalants, designer drugs, steroids, and other drugs; age of first use; perceptions of others' use; location of use; consequences of use; family history of substance abuse problems; and desire for an alcohol and drug free social environment.

#### Pilot Research

During the summer of 1989, the Core Analysis Grantee Group met in Washington, D.C., to format the questions based on the above criteria. By late February 1990, the survey was ready for distribution and use by FIPSE grantees. The Campus Survey of Alcohol and Other Drug Norms was piloted at a small private university with 100 subjects and again at a large public university with 150 subjects. Comparisons between different form versions revealed acceptable differences within the range of what



is expected by random chance alone. At a small private university, 81 comparisons were made, 4 were expected to be significant by chance alone, and 7 were found at the .05 level. At a large public university, 162 comparisons were made, 8 were expected to be significant by chance alone, and 5 were found at the .05 level. One should note that the forms were not parallel forms and a reliability coefficient is not appropriate. The comparisons demonstrate the relative stability of the survey items across different forms and groups.

#### Services offered

The Core Institute is a not-for-profit organization whose main purpose is to assist institutions of higher education in drug and alcohol prevention efforts. They offer both student and faculty/staff surveys including the Core Alcohol and Drug Survey, a 4-page questionnaire, which can be used as a pretest-posttest measure of the effectiveness of campus-based prevention programs. The Core Institute will score the instrument and offers several optional reports (as well as special analyses) to aid in interpreting data. In addition, they offer literature based on past nation-wide administrations of the Core instrument, slide presentations of past results, an instructional video on how to administer the Core instrument, and on-line research advice and help, as well as other assessment tools.

The Campus Survey of Alcohol and Other Drug Norms is a questionnaire, which allows for the assessment of students' perceptions of alcohol and drug use on campus so that data can be compared to the reality of their use. The survey looks at perceptions regarding alcohol, marijuana, other illicit drugs, binge drinking, and attitudes toward campus policies. It asks students to rate the perceived use and attitudes of their friends

and the general student population and to provide their own usage and attitudes regarding the same items.

#### Core Advisory Group Committee

Members of the Advisory Group include individuals associated with FY 1987 and FY 1988 FIPSE institution-wide, drug prevention grants. Committee members initially represented large and small, two-year and four-year, residential and non-residential, and private and public institutions. More recently, the workings of the original committee have been subsumed under the auspices of the Core Institute at Southern Illinois University - Carbondale (SIUC).

The following individuals comprise the working FIPSE Core Institute Advisory Group: Cheryl A Presley, Ph.D., Executive Director of the Core Institute, is also the Director of Quality Assurance, Evaluation, and Information Management for the Student Health Programs at SIUC. She is the Project Director for the Core Analysis Grant, Philip W. Meilman, Ph.D., Co-Director of the Core Institute, is Director of Counseling and Psychological Services and Courtesy Professor of Human Development and Family Studies at Cornell University, Ithaca, NY. Dr. Meilman originally represented Dartmouth College on the committee (all information about the Core Alcohol and Drug Survey from pages 20 through current was obtained from Presley, C., Austin, B. & Jacobs, J., 1998; Delong, W., Wechsler, H., 1995; Core Institute, online, February, 26 2000).

#### Summary

The high perception of drinking is a major health problem in the United States and one, which is very difficult to address. A survey revealed that the majority of students, who have consumed alcohol heavily at one point or another, believe that their

peers are also doing so at the same rate or worse. Health educators have not appropriately addressed the high association between perceptions of others' drinking behaviors and actual drinking behaviors.

Research in this area revealed that a major factor in perceptions of others is the perceived reward or benefit derived from partaking in a certain behavior. Students must become aware that not all students are drinking at such high levels and that those who are drinking are most likely drinking as a result of an incorrect perception.

Information from this study will be used to determine if college students of a select northeastern Ohio university hold the same perceptions of the research findings and if the same variables hold significance to perceptions.

Chapter III provides an outline of the methodologies used in the study. An explanation of the design, the sample, the tool used to measure perceptions concerning alcohol use, and the statistical methods used to correlate perceptions and current drinking patterns to variables discussed. It also provides the descriptive data and findings from the completed questionnaires.

Chapter IV discusses the significance of these findings. Chapter V describes the conclusions of the findings. Implications of the study are discussed and recommendations for future research are included.

## Chapter III

### Methodology

The purpose of this study was to determine the relationship between current alcohol consumption in the last 30 days and peer perceptions of others' alcohol consumption. Chapter III provides the research methodologies used in the study to identify the perceptions of the convenience sample of participants who attended a select northeastern Ohio university. It also investigates the relationship between perceptions, current alcohol consumption, and other variables that are significant correlates. Secondary data analyses were used to analyze the alcohol patterns of students at this select northeastern Ohio university. An explanation of the design, subjects, instrument, reliability, survey administration procedure, secondary data procedure and selection of variables for analyses are discussed. In this chapter, the various measures and procedures used are explained. The procedures implemented by the university's counselor and alcohol/drug specialist for the administration of the Core Survey are explained below and represent the steps taken to implement the original study.

#### Design

The study design consisted of a single group of students from a myriad of classes at the select northeastern Ohio university. For the original study, classes were chosen by the counselor and drug/alcohol specialist based on several criteria. These criteria included most courses that were introductory level courses, based on size and by willingness of the professors to set aside a portion of their class for the survey to be distributed. Students who participated represented several courses and different grade levels.

The counselor and drug/alcohol specialist chose the short form of the survey for administration to subjects. This form contained 23 questions and was distributed between April 1, 1999 and May 6, 1999. The University added five additional demographic questions. Once the courses were chosen, with the approval of course instructor, voluntary participation from students was solicited, to have those interested complete the survey either before class or at the end of class based on the preference of the professor.

### Subjects

The sample consisted of students from twenty-six classes including freshman, sophomores, juniors and seniors, ages ranging from 16 to 57 for a combined total of 747 students.

### Instrument

The instrument used was the Core Alcohol and Drug Survey, developed in 1989 to assess the nature, scope, and consequences of alcohol and other drug use on college campuses by the Core Institute at Southern Illinois University-Cardondale (SIUC). In 1994 the survey was expanded to include an assessment of students' perceptions and beliefs about alcohol and other drug use and related sexual behavior and violence.

The Core Alcohol and Drug Survey Short Form covers the following areas: demographics (including year in school, age, ethnic origin, marital status, and gender); working and living arrangements, academics (including self-reported grade average, focus of coursework, and full- or part-time status); perceptions of campus substance abuse policies and their enforcement; average number of drinks consumed per week; frequency of binge drinking; patterns of use of alcohol, tobacco, marijuana, cocaine,

amphetamines, sedatives, hallucinogens, opiates, inhalants, designer drugs, steroids, and other drugs; age of first use; perceptions of others' use; location of use; consequences of use; family history of substance abuse problems; and desire for an alcohol- and drug-free social environment.

#### Core Alcohol and Drug Survey Reliability

Considerable evidence supports the validity of the Core Survey with a level of agreement for item inclusion among experts to be .90. Test-retest reliability was estimated using Pearson product-moment correlation coefficients. For alcohol and other drug use and associated consequences the majority of items fell about .80, items on campus norms fell between .30 and .80, and campus norms fell between .30 and .70.

#### Survey Administration Procedure by Primary Researcher

The counselor and alcohol /drug specialist at the select university conducted the research using the Core Survey's Short form. The Core Survey was used because it was a Federal mandate for the Drug Free Campuses Act. The purpose of the survey was to help evaluate an Alcohol and Other Drug prevention program on campus.

Upon completion of Human Subjects Issues (Appendix A), the committee permitted the counseling departments' graduate assistant to distribute the surveys in place of the primary researcher. Graduate student instructions are found in Appendix B. The graduate student called and asked permission of the professors to administer the CORE Alcohol and other Drug Survey in his/her class. The student explained that the survey was a federal requirement of the Drug Free Campuses Act and was to be distributed every two years. Professors were informed that the counseling department wanted to survey 1,000 students during the winter and spring quarters. Professors were also made

aware that the survey consisted of twenty-three questions surrounding attitudes and actual alcohol and other drug use.

The graduate student was instructed to take enough surveys, Informed Consent Forms and pencils to each class that she or he attended. Depending upon the preference of the professor, the graduate student went into the classes and administered the survey either at the beginning or end of class. Once the graduate student was introduced to the class, the professor left the room. The students were informed that the survey was part of a federal requirement, but was completely anonymous and voluntary. If students chose not to participate it was accepted. They were however instructed that if they had completed the same survey in another class, not to complete another survey.

The consent forms were passed out to the students to read and sign if they so chose to participate or not to participate in the research. If they chose not to participate they placed the consent form face down so that no one would be made aware of who chose to participate and who did not. The consent form briefly explained that the survey was designed by a committee to be used as a uniform evaluation instrument to assess the nature and extent of alcohol and drug use on college campus (Appendix C). Students were reassured again that the survey was completely anonymous and the responses kept confidential. The consent also stressed that participation was voluntary and that they could halt participation at anytime. Students were asked to be as truthful as possible and if that was not an option, they were asked not to continue with the survey. Once all of the students were completed with the consent forms, they were asked to pass them in upside down so that it could not be seen if a student signed or not. The consent forms were then placed in an envelope.

As soon as the consent forms were obtained, depending on how the rooms were arranged, the surveys (Appendix D) along with a pencil were passed down the rows to the students. After ten minutes, the students were told that they could bring their survey up to the front and lay them upside down on the desk, if they were finished. As the students completed the survey, they were placed in a pile. All surveys were completed and turned in upside down so that no one was singled out for not completing the survey. It was assumed that those persons who did not sign the consent also did not complete the survey. There was a twenty-minute time frame allotted to complete the survey. Most students completed the survey within that time.

Once all surveys were returned, they were mixed up and then placed in another envelope in front of the students. The graduate student, then, thanked the students for their participation and requested that they not complete another one if it was offered to them in another course. As the surveys were completed, the graduate student kept all consent forms in one envelope and all surveys in another labeled by professor name and course. From start to finish, the entire process took two weeks to get into various classes and obtain enough results for the survey. Until all courses and surveys were completed, consent forms and surveys were kept locked in the drug/alcohol specialists' file cabinet.

Until the surveys were ready to be returned to Core to be scored, the only other person who had access to the information was a student employee. Once all surveys were completed and all consent forms received, they were separated by those forms signed and not signed and by surveys completed or not completed. Although the student employee separated the consent forms and surveys, all surveys were mailed into the Office of Measurement Services at the University of Minnesota for analysis.



Once the surveys were optically scanned, the Core Institute scored the surveys as well as offered several report options. Options included special analyses, to aid in the interpretation of resulting data and aggregated data for direct comparisons between the select university and others from the Core database. The various results and analyses provided by the Core institute compared select northeastern Ohio university to other colleges across the nation of similar size to see how they matched with others. The counseling department only requested their Core Drug and Alcohol Survey-Form 191 Executive Summary, abbreviated analysis report, and raw statistical data on diskette.

The executive summary paid special attention to key findings of those students who participated. For comparison purposes, some portions of the survey were analyzed in terms of a reference group and the select northeastern Ohio university. The questions involved in that process were:

- Question 16- At what age did your first use (substance)?
- Question 18-During the past 30 days on how many days did you have (substance)?
- Question 21-Please indicate how often you have experienced the following due to your drinking or drug use during the last year.

The abbreviated analysis report contained the actual breakdown of responses for each question based on those that were considered valid or invalid through the use of frequencies. A response was considered invalid if there was no answer or more than one per question. The data contained in the abbreviated analysis report were also saved on to a 3.5inch floppy diskette so independent analyses could be conducted.

## Secondary Data Procedure

Recognizing that the same survey had already been conducted the previous year, the thesis committee decided to use the prior years data to conduct a secondary data analyses. Measures to acquire permission for analyses of their data were instituted (Appendix E). The counselor and Alcohol/Drug Specialist at a select northeastern Ohio university was contacted regarding the survey. After inquiring about whether or not the data would be made available for additional analyses, the statistical results and diskette containing the raw data were forwarded to the researcher from the Counselor and Alcohol/Drug Specialist, primary researcher.

### Selection of Variable from the Core Alcohol and Drug Survey

The Statistical Package for Social Sciences (SPSS) was used to analyze data. The analysis consisted of Pearson's Product Partial Correlations and Multiple Regression analyses. The overall perception of drinking and how students responded to their perceptions in terms of their own drinking are analyzed. Of the 29 variables that make up the Core survey, four groups were established. The groups listed below represent the individual groups and variables contained within each.

#### Group 1. Respondent Demographics

- classification
- age
- gender
- working status
- age of first alcohol consumption

Group 2. Respondent living arrangements

- living in approved housing
- living in fraternity or sorority
- living in a house
- living in a resident hall
- living in other
- living with a roommate
- living alone
- living with parents
- living with spouse
- living with a child
- living with other

Group 3. Respondent family alcohol history

- mother drinking
- father drinking
- step mother drinking
- step father drinking
- brothers and sisters drinking
- mothers parents drinking
- fathers parents drinking
- aunt and uncle drinking
- spouse drinking
- children drinking

- no one is drinking

Group 4. Respondent perceptions of others' drinking

- perceived alcohol use

The raw data were obtained in order to conduct analyses of the differences in perceptions of drinking between students who drink and students who don't drink. These data were analyzed based upon the dependent variable of drinking and the independent variable of social norms. Specific behaviors of students who drink and do not drink will be linked to students' beliefs that the majority of students who drink are going to drink and those students who believe the majority of students do not drink are not going to drink.

#### Summary

In this chapter, the research methods used to determine student perceptions about alcohol use and its relationship to current alcohol consumption and their relationship to select variables were identified. Information obtained from this study provided baseline data explaining the perceptions of other students' alcohol consumption and its relationship to current drinking behaviors at a select northeastern Ohio university. In Chapter IV, the statistical methods outlined in this chapter are presented as well as the actual results.

This study is further summarized in Chapter V and conclusions of the findings are presented. Implications of the study and recommendations for further research are included.

## Chapter IV

### Analysis of Data

The purpose of this study was to determine the relationship between current alcohol consumption in the last 30 days and peers' perceptions of others' alcohol consumption. Information from the completed Core Alcohol and Drug Survey short form were used to determine the convenience samples' perceptions towards students' current alcohol consumption and were also used to correlate their perception and current behavior scores with select variables. Respondent demographics, respondent living arrangements, respondent family alcohol history and respondent perceptions of their peers were analyzed.

#### Demographic Profile of the Sample

There were 279 freshmen, 192 sophomores, 136 juniors, 111 seniors, 8 graduate/professional students, 8 students classified as other and the remaining 13 students chose to either not respond or had multiple responses. Of the 747 who participated in the survey, there were 280 males and 430 females. The remaining 37 respondents were considered invalid either as a result of no response or multiple responses. People of all ages who chose to participate in the survey were grouped together. There were two students between 16 and 17 years of age, 235 students between 18 and 19 years of age, 230 between 20 and 21 years of age, 116 between 22 and 24 years of age, 57 between 25 and 29 years of age, 24 between 30 and 34 years of age, and 48 students who were above 35 years of age.

The Statistical Package for Social Sciences (SPSS) was used to analyze data. The analysis consisted of Pearson's Product, Partial Correlations and Multiple Regression

analyses. The remainder of this chapter is organized by the two hypotheses that guided the study.

### Hypothesis One

Students' perceptions of peer alcohol use will affect their consumption of alcohol. Pearson Product correlation was used to determine the relationship between the demographic variables and the dependent variables, alcohol use in the last 30 days. Table 1 describes this relationship.

Table 1  
The Relationship Between Alcohol Use in the Last  
30 Days and Respondent Demographics Using Pearson Correlation

Variables	Alcohol Use Last 30 Days
	R
Age of First Alcohol Use	-0.312**
Classification	0.077*
Age	-0.095*
Gender	-0.199**
Working	-0.030

\*  $p < .05$       \*\* $p < .01$

Correlation coefficients were computed among the five demographic variables. From the results of the correlation analyses shown in Table 1, the researcher found that four of five correlations were statistically significant. Age of first alcohol use and gender were statistically significant at .01 and classification and age were statistically significant

at .05. The correlation of working status with alcohol consumed during the past 30 days was not significant. It was suggested that the later a student began to drink, the less likely he or she would consume alcohol. This suggestion supports the correlation that as age increased, the tendency to drink decreased. There was a moderate tendency for young males to consume alcohol during the past 30 days. In summary, it was also suggested that the lower grade level (classification) a male student was, the more likely he was to drink.

Pearson Product correlation was used to determine the relationship between the independent variables and all dependent variables that fall within respondent living arrangements. This relationship is described in Table 2.

Table 2  
The Relationship Between Alcohol Use in the Last  
30 Days and Respondent Living Arrangements Using Pearson Correlation

Variables	<u>Alcohol Use Last 30 Days</u>
	R
Living in Approved Housing	-.020
Living in Fraternity or Sorority	.080*
Living in a House	-.004
Living in a Resident Hall	-.020
Living in Other	.029
Living with a Roommate	.083*
Living Alone	.020
Living with Parents	.018
Living with Spouse	-.106**
Living with a Child	-.141**
Living with Other	.022

\* p < .05      \*\*p < .01



Correlation coefficients were computed among the eleven living arrangement variables. From the results of the correlation analyses shown in Table 2, the researcher found that four of eleven were statistically significant. Living with a spouse and living with a child were statistically significant at .01 and living in a fraternity or sorority house and living with a roommate were statistically significant at .05. In summary, it was suggested that if students lived with a roommate or lived in a fraternity or sorority house, they had an increased tendency to drink over the past 30 days. Likewise, if students lived with a spouse or child, there was a decreased tendency to drink over the past 30 days.

Pearson Product correlation was used to determine the relationship between the independent variables and all dependent variables that fall within respondent family alcohol history. The relationship between alcohol use and family alcohol history is described in Table 3.

Table 3

The Relationship Between Alcohol Use in the Last 30 Days and Respondent Family Alcohol History Using Pearson Correlation

Variables	<u>Alcohol Use Last 30 Days</u> R
Mother Drinking	.028
Father Drinking	.022
Step Mother Drinking	-.031
Step Father Drinking	.055
Brothers and Sisters Drinking	-.029
Mothers Parents Drinking	-.024
Fathers Parents Drinking	.050
Aunt and Uncle Drinking	.092*
Spouse Drinking	-.050
Children Drinking	-.053
No One is Drinking	-.078*

\*  $p < .05$       \*\* $p < .01$

Correlation coefficients were computed among the eleven variables for family history of alcohol problems. From the results of the correlation analyses shown in Table 3, the researcher found that two of eleven were statistically significant both at .05. If aunts and uncles drank, there was an increased tendency for students to drink. However, if no family members were drinking, there was a decreased tendency for the student to drink.

Pearson Product correlation was used to determine the relationship between the dependent variable and all independent variables that described respondent perceptions of others' drinking. Table 4 describes this relationship.

Table 4

The Relationship Between Alcohol Use in the Last  
30 Days and Respondent Perceptions of Others' Drinking

Variables	<u>Alcohol Use Last 30 Days</u> R
Perceived Alcohol Use	-.150**

\*\*p < .01

A correlation coefficient was computed between students' perceptions of others' use of alcohol. From the results of the correlational analysis shown in Table 4, the researcher found that others' alcohol use was significant at .01 and indicated that the less a student believed his or her peers were drinking, the more he or she had consumed alcohol during the past 30 days. The correlation is opposite of expected results but gets resolved when other variables are included in Regression Analyses (Table 8).

## Hypothesis Two

Other factors will affect perceived use (e.g. demographic variables, living arrangements will affect perceived use).

Pearson Product correlation was used to determine the relationship between the independent variables and all dependent variables that fall within respondent demographics. The relationship between alcohol use in the last 30 days and respondent demographics is presented in Table 5.

Table 5

The Relationship Between Perceptions of Other Alcohol Use  
And Respondent Demographics Using Pearson Correlation

---

<u>Variables</u>	<u>Perceived Alcohol Use</u>
	R
Age at First Alcohol Use	-.138**
Classification	-.025
Age	.039
Gender	.028
Working	-.045

---

\*\*p <.01

Correlation coefficients were computed among the five demographic variables. From the results of the correlation analyses shown in Table 5, the researcher found that only one of five correlations were statistically significant. Age of first alcohol use was statistically significant at .05. In summary, the correlation of age at first alcohol use to perceptions of others use suggested that the younger a student was when they first drank, the greater the tendency was for them to believe that others were drinking.

The Pearson Product was used to determine the relationship between variables related to students' living arrangements and perceived alcohol use in the last 30 days. These data are presented in Table 6.

Table 6 describes the relationship between alcohol use in the last 30 days and respondent living arrangements using the Pearson Product Correlation.

Table 6

The Relationship Between Perceptions of Others' Alcohol Use  
And Respondent Living Arrangements Using Pearson Correlation

Variables	Perceived Alcohol Use
	R
Living in Approved Housing	-.117**
Living in Fraternity or Sorority	.000
Living in a House	.091*
Living in a Resident Hall	-.085*
Living in Other	.025
Living with a Roommate	-.102**
Living Alone	-.034
Living with Parents	.098**
Living with Spouse	.046
Living with a Child	-.043
Living with Other	-.003

\*  $p < .05$

\*\* $p < .01$

Correlation coefficients were computed among the eleven living arrangement variables. From the results of the correlation analyses shown in Table 6, the researcher found that five of eleven were statistically significant. Living in approved housing, living with a roommate and living with parents were statistically significant at .01 and living in a house and living in a residence hall were statistically significant at .05. In summary, if students lived in approved housing, with a roommate or in a residence hall, there was a decreased perception that others were drinking. It was also suggested that students living with parents or in a house had a tendency to perceive that their peers were drinking more.



Table 7 describes the relationship between alcohol use in the last 30 days and respondent family alcohol history using the Pearson Product Correlation.

Table 7

The Relationship Between Perceptions of Others' Alcohol Use and Respondent Family Alcohol History Using Pearson Correlation

Variables	Perceived Alcohol Use R
Mother Drinking	-.017
Father Drinking	.000
Step Mother Drinking	-.013
Step Father Drinking	-.005
Brothers and Sisters Drinking	.044
Mothers Parents Drinking	.032
Fathers Parents Drinking	-.021
Aunt and Uncle Drinking	.075*
Spouse Drinking	.007
Children Drinking	.016
No One is Drinking	-.043

\*  $p < .05$

Correlation coefficients were computed among the eleven variables for family history alcohol problems. From the results of the correlation analyses shown in Table 7, the researcher found that only one of eleven was statistically significant at .05. It is suggested that if aunts and uncles were drinking, there was an increased tendency for students to perceive that others were drinking. This significant relationship may be an deviant result since in the literature there are no data to support this type of finding.

#### Multiple Regression Analyses

Multiple regression analysis was conducted using variables from the Pearson Product moment for each independent variable. Although aunt and uncle drinking patterns were significant factors in the Pearson Correlation analyses, there was no support in the literature stating that either one had a significant influence on peer alcohol consumption. Belonging to a fraternity or sorority was also a significant factor. However, since there was only a minimal portion of the study sample residing in either living arrangement, it did not prove to be a significant variable in determining alcohol consumption even though it was significant in the Pearson Correlation.

Multiple regression was used to determine the relationship between the independent variables and all significant Pearson Product Correlations. Table 8 describes this relationship between study variables and alcohol use in the last 30 days.

Table 8

Regression of Alcohol Use in Selected Independent Variables.

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	Alcohol Use Last 30 Days
Select Pearson Variables	Standardized Beta
Classification	.14**
Age	-.09*
Gender	-.17**
Age At First Use: Alcohol	-.28**
Others use rate: Alcohol	.10**
Living with a roommate	.09*
Living with a spouse	-.04
Living with a child	-.04
No one is drinking	-.09

---

\*  $p < .05$       \*\*  $p < .01$

Surprisingly, the relationship is negative. The greater perceived alcohol use rate, the less the students drank but this negative relationship is specavous in the same way as other variables (the relationship is shown to be positive and significant). A multiple linear regression was calculated to predict students' current alcohol use in the last 30 days based on nine significant predictors from the Pearson Product Moment Correlation.

Eighteen percent of the variation in alcohol use in the last 30 days was accounted for by the six independent variables in the equation (Others' use rate: Alcohol, Age at first use: Alcohol, Classification, Age, Gender, Living with a roommate). On the basis of Table 8, the researcher found four variables to be strongly significant (classification, gender, age at first use and perceptions of others) with two being moderately significant (age, living with a roommate). There was a strong tendency for students to drink in the last 30 days if his or her classification (junior or senior) was higher. It was suggested that the younger a student was when he or she first began to drink, the more likely he or she would be to consume alcohol in the last 30 days. There was also a strong tendency for males to consume alcohol in the last 30 days. The researcher also found that the more a student believed his or her peers to be drinking the more he or she would have consumed alcohol during the last 30 days. There was only a moderate to a mild relationship between the age of the student and whether or not he or she lived with a roommate to their current alcohol consumption in the last 30 days.

Multiple regression analysis was conducted using the same independent variables that were significant for alcohol use in the last 30 days. The purpose was to test the significance of the relationship of these variables to student perceptions of peers' alcohol use. Table 9 describes the relationship between eight predictors of the study and perceptions of others' alcohol use rate.

Table 9

Regression of perceived alcohol use on selected independent variables.

Select Pearson Variables	Perceived Alcohol Use
	Standardized Beta
Age at first use: Alcohol	-.13**
Classification	-.04
Age	.07
Gender	.04
Living with a roommate	-.10**
Living with spouse	.05
Living with a child	-.09*
No one is drinking	-.02

\*  $p < .05$

\*\* $p < .01$

A multiple linear regression was calculated to predict others' perceived alcohol use based on eight significant predictors from the Pearson Product Moment Correlation. Three percent can be accounted for by variation with three independent variables (Age of First alcohol use, Living with a roommate and Living with a child and No one is drinking) in relationship to the dependent variable (Others Alcohol Use Rate). In Table 9, the researcher found two variables to be strongly significant (age at first use and living with a roommate) with only one being moderately significant (living with a child). Age at first alcohol use to perceptions of others suggested that that younger the age a student was when he or she first began to drink, the more likely he or she would be to believe that others were drinking. The researcher also found that if students lived with a roommate, there was a decreased tendency to perceive others were drinking. Living with a child proved moderately to mildly significant in determining perceptions of peers' alcohol consumption.

### Summary

A total of 747 questionnaires were distributed to students in twenty-six college courses. From personal demographics it was reflected that participants' ages ranged from 18 through 57 years of age with a mean of 22.6 years. The ratio of women to men participants was 60.6% females to 39.4% males. Of the sample, 33.7% had not consumed alcohol in the last 30 days while 27.68% consumed alcohol on 6 or more days. Information obtained from the completed Core Alcohol and Drug survey provided the data to determine participants' alcohol consumption during the past 30 days as well as their perceptions of their peers' alcohol consumption. Overall, this researcher found that participants who perceive fewer peers as drinking, the less alcohol they consumed.

Significance was achieved for both hypotheses using Pearson Product Correlations and Multiple Regression analyses. There was no significant relationship between family demographics or working status and perceptions or alcohol consumption during the past 30 days.

The study is further summarized in Chapter V and conclusions of the findings are presented.

## Chapter V

### Summary, Conclusions, and Recommendations

#### Summary

Peer misperceptions of others' drinking continues to contribute to alcohol consumption in college institutions. Students continue to believe that their peers are drinking leading to a reflection in their own drinking behaviors. The analyses revealed that perception of peers' alcohol consumption was moderately related to actual alcohol consumption in the last 30 days. Although perceptions of peers' alcohol consumption was significant, the age when the student first began to drink, gender and classification were more strongly related to alcohol consumption in the last 30 days.

The purpose of this study was to determine the relationship between current alcohol consumption in the last 30 days and peer perceptions of others' alcohol consumption. A convenience sample of 747 students attending the select northeastern Ohio university was recruited. Selected variables: respondent demographics, living arrangements and family alcohol history were all examined to see if there was a linear relationship between those factors and current alcohol consumption in the last 30 days and peer perceptions of others' alcohol consumption. Identifying the relationship between select variables and perceptions of peers to current alcohol consumption are helpful in understanding why alcohol consumption rates continue to remain relatively unchanged.

Upon Human Subjects Approval, the original researcher conducted the administration of the Core Alcohol and Drug Survey Short Form to fulfill a federal mandate requirement. Based on student responses from the 26 selected courses,



information was obtained by the graduate student from the completed survey.

Information provided data to determine perceptions of peers and current alcohol consumption in the last 30 days as well as to correlate perceptions to consumption.

Although the results did not indicate what factors contributed to peer perception, the data analysis revealed that the participants from the study were strongly influenced by their perceptions of peers' alcohol consumption.

Using all Core Alcohol and Drug Survey variables, Pearson Product Correlation was used for analyses. Those variables that showed a significant relationship were used for Multiple Regression analyses. From hypothesis one, 18% can be accounted for by variation with six independent variables in relationship to current alcohol consumption in the last 30 days. From hypothesis two, 3% can be accounted for by variation with three independent variables in relationship to perceptions of others' alcohol use rate.

### Conclusions

Information obtained from the completed Core Alcohol and Drug Survey revealed the following:

- Participants in the study viewed their peers to be consuming alcohol at higher rates than was actually reported. The sample in this study indicated that students perceived only 1.7 % of their peers never having consumed alcohol, but in actuality, 33.7% of their peers have never consumed alcohol. The sample in this study also indicated that students perceived only 2.6% of their peers drinking once or twice a month, but in actuality, 21.6% of their peers have only consumed alcohol once or twice a month. The sample in this study further indicated that students perceived 68.6% of their peers to have consumed between three and five

days a week, but in actuality only 12.3 % of their peers have consumed alcohol between three and five days a week.

- Classification, gender and age at first use: alcohol proved to be strong correlates of alcohol consumption in the last 30 days using multiple regression analyses. Perceived alcohol use rate proved to be a mild correlate to alcohol consumption in the last 30 days using multiple regression analyses.
- Age at first use: alcohol proved to be a strong correlate to perceived alcohol use using multiple regression analyses. Living with a roommate proved only to be a mild correlate to perceived alcohol use as revealed by multiple regression analyses.

#### Implications

A social marketing assessment and response tool (SMART) needs to be implemented at the select northeastern Ohio university to educate the academic community as to the reality of alcohol consumption on campus (McKenzie & Smeltzer, 1997). By educating the academic community and campus population to current alcohol consumption rates, the select northeastern Ohio university population will be more aware of the reality of alcohol consumption and will therefore be able to make more informed decisions and judgments in regards to their own alcohol consumption behavior.

Also, the academic community needs to be made aware of the long-term impacts of consuming alcohol at an early age. This would be beneficial so that they could make the effort to educate others and possibly begin their own prevention efforts to deter adolescents and young adults from consuming alcohol at such young ages.

More focus needs to be directed at determining what factors affect student perceptions of peers' alcohol consumption rates so that the academic community can take a preventative stance on alcohol consumption. Conducting various needs assessments within the academic community need to take place. Determining what the community views as a problem can help the select northeastern Ohio university take a preventive stance on alcohol consumption and curb it from becoming a problem by educating those in the community. Educating the community allows more informed decisions to be made.

#### Research Recommendations

Similar studies to determine the influence of perceptions of peers' alcohol consumption on current alcohol consumption need to be conducted. It is recommended for future research that the Core Alcohol and Drug Survey Long Form be administered. The long form should be administered because there is more focus upon perceptions of others' drinking behaviors. For example, a few questions are: Question one: How often do you think students in each of the following categories typically consumer alcohol?, Question four: Overall, what percentage of students here do you think consume no alcohol beverages at all?, Question five: Overall, what percentage of students here do you think consumer five or more drinks in a row on at least one occasion in the last two weeks? and Question eight: Think about your last social drinking occasion with other students, A How many drinks did you consume on that occasion?, B How many drinks did the other students consume on average? C. Looking back, how many drinks would you have preferred to drink? And D Again looking back, how many drinks do you think the other students would have preferred to drink, on average?

Also, there should also be more federal monies available for administration of the survey to allow for a more scientifically based process of administration of the surveys to ensure a more accurate representation of drinking trends. It is not known what factors influence peer perceptions of alcohol use and if the sample reflects the campus population.

The present research study completed in 1999 will be compared to 1997 results for trending purposes. In 1999, 66% of students on the select university consumed alcohol, down three percent from the 1997 survey. Of those students, 38% were binge drinkers, down four percent from the 1997 survey. Ninety-five percent of the students believed that the average student on campus uses alcohol once a week or more often, the same since the 1997 survey. Seventy-one percent of females and 63% of males consumed alcohol in the last 30 days, both down two percent from the 1997 survey.

Although results indicate that the less students are consuming alcohol, there is a corresponding drop in drinking rates. This decline could have been attributed to the finding that 863 students participated in the survey in 1997 and only 746 participated in the 1999 survey. This is a drop of 8.6% or 117 students between the two years. Without further testing, there is no way of knowing if the drop in drinking rates was related to prevention programming or if it was because there was a drop in student responses.

This study could increase the academic community's awareness that misperceptions of peer alcohol consumption influences current alcohol consumption and help programmers provide facts regarding actual drinking behaviors in order to modify those students distorted or negative perceptions of their peers' alcohol consumption.

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**Appendix A**

**Human Subjects Issues**

## Human Subjects Issues

This original research study was conducted at a northeastern Ohio university where the institution's Human Subjects Review Committee reviewed it. This document is not included in this thesis to maintain the confidentiality of the institution. Since this study was a secondary data analyses, the human subject's review from the original study was not included. All data were treated as aggregate when sent to the Core Institute for analyses and was reported in an Executive Summary. This summary reported the university's data analyses and compared it with similar universities. Individuals interested in reviewing the Executive Summary can do so by requesting a copy.

Submitted by Dr. Carol Mikanowicz, Thesis Advisor

**Appendix B**

**Instruction for Graduate Student**

## PROCEDURE FOR CORE ALCOHOL/DRUG SURVEY

1. Call a professor and ask permission to administer the Core Alcohol/other drug Survey in his/her class. Explain that the survey is a federal requirement of the Drug Free Campuses Act and must be given every two years. We are attempting to survey 1,000 students during the winter and spring quarters. The survey is simply 23 questions that ask about the attitudes and use of alcohol/other drugs. The survey is totally anonymous and takes about 10min. to complete. The results of the survey are used to plan prevention programs for the campus.
2. Make sure you take enough surveys, Informed Consent Forms and some pencils with you to the class.
3. Explain to the class that the survey is a federal requirement but that it is completely anonymous, confidential and voluntary. If they do not wish to take the survey they do not have to. If by some chance they have taken it in another class then ask them not to complete another survey.
4. Pass out the consent form. As soon as they are signed, have them passed in upside down so no one knows who did or didn't sign it. As soon as those are collected-pass out the surveys and be sure they complete the survey in **pencil**. When they are finished, have the students bring them up to the desk and turn them in upside down.
5. Place the surveys in one envelope and the signed consent forms in another. Be sure to turn them into Jain with the professor's name and what class it was on the front of the envelope with the surveys in it.

6. If anyone asks you can explain that the surveys will be sent to the Office of Measurements services at the University of Minnesota for analysis. Select university will be compared to other like universities across the nation. The results will be available for fall quarter.

Appendix C  
Informed Consent





Appendix D

Core Alcohol and Drug Survey



Appendix E

Note of Permission, Jennifer Whiting

**Lisa Cusick**

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**From:** Jennifer Whiting <jennw@siu.edu>  
**To:** Lisa Cusick <lmcusick@infonline.net>  
**Sent:** Monday, October 30, 2000 6:34 AM  
**Subject:** Re: Second Hand analysis...

The only thing we ask for is proper citation. Thank you for checking.

At 10:46 PM 10/29/00 -0800, you wrote:

> Jennifer, if I planned on publishing anything I needed to have  
> permission. I do not think that this falls under the same thing as what  
> was mentioned earlier, but I just wanted to clarify this. The only thing  
> she received was the abbreviated analysis and the executive summary, and  
> everything I am doing has nothing to do with what she received, but my own  
> analysis for my Thesis. Thank you so much for your help I really  
> appreciate this. Lisa Cusick Graduate Student

~~~~~

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