Rowan University

Rowan Digital Works

Theses and Dissertations

5-2-2007

Social norms: actual versus perceived alcohol consumption of college freshmen

Erick M. Nuñez Rowan University

Follow this and additional works at: https://rdw.rowan.edu/etd



Part of the Educational Psychology Commons

Recommended Citation

Nuñez, Erick M., "Social norms: actual versus perceived alcohol consumption of college freshmen" (2007). Theses and Dissertations. 822.

https://rdw.rowan.edu/etd/822

This Thesis is brought to you for free and open access by Rowan Digital Works. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Rowan Digital Works. For more information, please contact graduateresearch@rowan.edu.



SOCIAL NORMS: ACTUAL VERSUS PERCEIVED ALCOHOL CONSUMPTION OF COLLEGE FRESHMEN

by Erick M. Nuñez

A Thesis

Submitted in partial fulfillment of the requirement of the Master of Arts Degree of The Graduate School at Rowan University May 2, 2007

Approved by

Date Approved

© 2007 Érick M. Nuñez

ABSTRACT

Erick M. Nuñez
SOCIAL NORMS: ACTUAL VERSUS PERCEIVED ALCOHOL CONSUMPTION OF
COLLEGE FRESHMEN

2006/07

Dr. Roberta Dihoff Master of Arts in School Psychology

The purpose of this study was to explore the relationship between the actual frequency of alcohol consumption of college freshmen (n = 84) and the students residential status. The participants consisted of fifty-six resident students and twenty-eight commuter students. The frequency of alcohol consumption by students in general as perceived by the participants was also analyzed. The secondary purpose was explore a relationship between actual alcohol drinking norms and perceived alcohol drinking norms. The Campus Survey of Alcohol and Other Drug Norms were administered and analyzed using basic tables. Results demonstrated that freshmen resident students consume alcohol at a greater frequency than the freshmen commuter students. Results also demonstrated that the frequency of alcohol consumption by students in general as perceived by the participants was greater than the participants' actual alcohol consumption.

ACKNOWLEDGEMENTS

To my mother, Lidia Nuñez, for all of her love and support throughout my life. To my brother, Edwin Nuñez, for being the man I look up to and aspire to become. For my father, Andres Nuñez, I pray that your little boy has made you proud and will continue to exceed your expectations.

To my professors at Rowan, especially Dr. Frank Epifanio, Dr. Roberta Dihoff, and Dr. Barbara Williams, thank you for all of your support and guidance. To Pamela Negro and Christine DiBlasi, thank you for all of your assistance in completing my project.

TABLE OF CONTENTS

Acknowledgements		ii
List of Figures		vi
CHAPTER		PAGE
I.	Introduction	1
	Need	1
	Purpose	1
	Hypothesis	2
	Theory/Background	2
	Definition of Terms	3
	Assumptions	4
	Limitations	4
	Summary	5
II.	Review of Literature	6
	Introduction	6
	Consequences of Alcohol Use	6
	Driving while Intoxicated	8
	Effects on Health	9
	What is considered a drink?	10
	Binge Drinking	10
	Greek Membership and Binge Drinking	11
	Access to Alcohol by College Students	12
	Ability to Afford Alcohol by College Students	12

	Groups Who Drink on Campus	13
	Methods Used to Prevent Alcohol Use on Campuses	13
	Scare Tactics	14
	Drug Abuse Resistance Education – D.A.R.E.	14
	Misperceptions of Alcohol Consumption	15
	What are Social Norms?	15
	History behind the Social Norms Approach	15
	Implementation of the Social Norms Approach	16
	Failed Attempts of the Social Norms Approach	17
	Successful Attempts of the Social Norms Approach	17
	Conclusion	18
III.	Design	19
	Participants	19
	Materials	19
	Reliability/Validity of Scores	19
	Method	20
	Independent and Dependant Variables	20
	Analysis of Data	20
	Summary	21
IV.	Results	22
	Introduction	22
	Results	22
	Summary	25

V.	Discussion	26
	Review of Results	26
	Limitations	27
	Conclusion	28
	Implications for Further Research	28
References		29

LIST OF FIGURES

FIGURE	Pa	AGE
Figure 4.1	How often residents and commuters typically consume alcohol.	23
Figure 4.2	Comparison of actual alcohol consumption of participants	24
	to perceived alcohol consumption of students in general	

Chapter I: Introduction

Need

College is the ultimate learning experience. Students not only learn academics, but also many of life's most important lessons. For many college resident students, it is the first time that they have the freedom to do what they wish, when they wish. College provides experiences and resources to things that would otherwise be unavailable or difficult to attain for the non-college student. One of those resources is alcohol and the access that college students have in just about every party they visit. Alcohol consumption among college students has been an area of extensive concern, largely based on widespread problems with college students' drinking (Lewis & Neighbors, 2006).

Stereotypes are beliefs about the personal attributes of a group based on the inaccurate generalizations that are used to describe all members of the group and with that inaccurate generalization, ignore individual differences. College students are often stereotyped in many of our Hollywood movies. Many people still have the impression that college, specifically Greek life, is no different than what was portrayed in the 1978 film "Animal House" or in the more recent film "Old School." These films and others like it portray college students as doing nothing but partying and binge drinking. In reality, "one out of five students don't drink and one out of four haven't had alcohol in over a month" (Campus Health Service, 2002-2003).

Purpose

The purpose of this study is to examine the differences between the actual drinking habits of the average college resident and commuter student versus the

perceived drinking habits. My goal is to inform the community that what is portrayed in the media is not the actual college experience, but rather a misleading representation of college life and its students.

Hypothesis

It was hypothesized that the frequency of alcohol consumption by freshmen residents would exceed that of freshmen commuters. It was also hypothesized that the frequency of actual alcohol consumption by the participants will be less than the perceptions they have of the frequency of alcohol consumption of students in general. Theory/Background

One theory regarding the widespread use of alcohol among college students involves misconceptions of peer drinking norms (Lewis & Neighbors, 2006). College students specifically tend to overestimate heavy alcohol consumption by their peers (Lewis & Neighbors, 2006). Many college students misperceive the peer drinking norms and this misperception may lead to cause heavy drinking for the average college student.

The social norms theory differs from the pervious methods of reducing alcohol consumption. Traditional methods such as scare tactics, lectures on awareness, and even programs such as DARE do not prove to be successful. However, social norms theory believes that behavior is influenced by the presence of others either real or imagined. It states that people are most strongly influenced by a perceived norm and not an actual norm. In the case of alcohol and college students, a large gap exists between the perceived norm and the actual norm that leads to the misconception portrayed in films.

Definition of Terms

- Alcohol Dependency Also known as Alcoholism, is a dependency on alcohol
 characterized by craving (a strong need to drink), loss of control (being unable to
 stop drinking despite a desire to do so), physical dependence, withdrawal
 symptoms, and tolerance (increasing difficulty of becoming drunk).
- 2. Alcohol poisoning is the result of consuming dangerous amounts of alcohol. When your body absorbs too much alcohol, it can directly impact your central nervous system, slowing your breathing, heart rate and gag reflex. This can lead to choking, coma and even death. Alcohol poisoning most often occurs as a result of drinking too many alcoholic beverages over a short period of time. Binge drinking is a common cause of alcohol poisoning.
- 3. Average drink A drink is considered 12 oz. of beer, 5 oz. of wine, or 1.5 oz. of hard liquor.
- 4. Binge drinking The consumption of five or more drinks on a single occasion, which is approximately the amount of alcohol needed to raise the average sized person's blood alcohol concentration to about 0.10%. In other words, it is the amount of alcohol consumption that would raise the presumption of intoxication.
- 5. Cirrhosis A chronic disease of the liver characterized by the replacement of normal tissue with scar tissue and the loss of functional liver cells. It is most commonly caused by chronic alcohol abuse.
- 6. DARE Drug Abuse Resistance Education is a prevention education program taught by police officers. Its goal is to educate children about drug abuse, the

- consequences of abuse, and skills for resisting peer pressure to experiment with drugs, alcohol and tobacco.
- 7. Hepatitis Inflammation of the liver, usually caused by any of various infectious agents or toxins, including alcohol and numerous chemical compounds.
- 8. Morbidity The incidence or prevalence of a disease.
- 9. Scare Tactics techniques that exaggerate and distort the dangers of alcohol consumption and attempt to reduce high-risk drinking.
- 10. Social norms A theory that believes that people are most strongly influenced by a perceived norm and not an actual norm. This difference in the perceived norm versus the actual norm leads to many misconceptions.

Assumptions

It was assumed that the frequency of alcohol consumption by freshmen residents would exceed that of freshmen commuters. It was also assumed that the frequency of actual alcohol consumption by the participants would be less than the perceptions they have of the frequency of alcohol consumption of students in general.

Limitations

This experiment had several limitations that should be noted. The population that was used was from one college campus. Sample size, diversity of ages and college majors were also a limitation in this study. Another limitation to the study included the sample sizes of the resident and commuter groups. Twenty-eight of the participants were freshmen commuter students while the other fifty-six were freshmen residents. A limitation that should be noted is that the surveys used were completed after students returned from spring break vacation. Actual drinking habits as well as perceived drinking

habits may be slightly skewed higher due to the vacation period. Finally, a limitation that should be considered is that the findings are based on student's honest answers and opinions of alcohol use on college campuses.

Summary

Chapter II includes a review of the research and ideas that relate to the social norms theory and the interventions used on college campuses around the country. This research includes studies that support and reject the idea and the benefit of the social norms project and its effectiveness and practicality to college campuses. It also gives background information on alcohol and its effects short and long-term effects on the body. Chapter III includes the details about the design of the study. I will explain what survey was used to gather information as well as the breakdown of my population. Chapter IV contains my results from the data gathered. Chapter V includes any conclusions that could be drawn from the study. This chapter also includes a discussion on the future of the social norms theory and whether it will continue to be implemented on campuses across the country.

Chapter II: Review of the Literature

Introduction

The research discussed below is listed from the most general to the most specific as related to the current study. General research includes studies that involve alcohol and its effects on health and academics, factors that influence the consumption of alcohol, and prevention strategies. More specific research includes studies of the misperception of alcohol consumption among college students, the social norms approach, and the effects the approach had on college campuses.

Consequences of Alcohol use

There are a number of negative effects of alcohol that are a consequence of heavy drinking. College students that engage in this behavior are prone to a number of negative effects, such as alcohol poisoning, physical health problems, alcohol-related traffic accidents, loss of memory, increased risk of coronary and cardiovascular disease, physical aggression, dependency and abuse, etc. (NIAAA, 2002).

There have been various studies that document the negative outcomes that college age students face when participating in frequent alcohol consumption. Hingson, Heeren, Winter, and Weehsler (2005) gathered data from a number of different agencies and calculated that among college students ages 18-24 from 1998-2001, alcohol-related unintentional deaths increased from nearly 1600 to more than 1700. Hingson et al. (2005) also affirmed: "more than 500,000 fulltime 4 year college students were unintentionally injured under the influence of alcohol, more than 600,000 were hit or assaulted by someone under the influence, and more than 70,000 experienced a date rape caused by another student who had been drinking."

The consequences related to the excessive and underage drinking that occur on college campuses all around the United States not only affect the college community but also the surrounding community and other college students whether they choose to drink or not. These consequences include death, injury, assault, unsafe sex, academic problems, health problems, suicide attempts, drunk driving, property damage, police involvement, and alcohol abuse and dependency.

According to a 2005 article by Hingson et al., statistics show that approximately 1,700 college students between the ages of 18 and 24 die each year from alcohol-related unintentional injuries, including motor vehicle crashes. Approximately 599,000 students between the ages of 18 and 24 are unintentionally injured under the influence of alcohol. More than 696,000 students, between the ages of 18 and 24, are assaulted by another student who has been drinking. More than 97,000 students between the ages of 18 and 24 are victims of alcohol-related sexual assault or date rape. Approximately 400,000 students between the ages of 18 and 24 had unprotected sex and more than 100,000 students between the ages of 18 and 24 report having been too intoxicated to know if they consented to having sex.

About 25 percent of college students report academic consequences of their drinking including missing class, falling behind, doing poorly on exams or papers, and receiving lower grades overall (Engs, Diebold, & Hansen, 1996; Presley, Meilman, & Cashin, 1996a, Presley, Meilman, Cashin, & Lyerla,1996b; Wechsler, Lee, Kuo, Seibring, Nelson, & Lee, 2002). More than 150,000 students develop an alcohol-related health problem (Hingson, Heeren, Zakocs, Kopstien, & Wechsler, 2002) and between 1.2 and 1.5 percent of students indicate that they tried to commit suicide within the past year

due to drinking or drug use (Presley, Leichliter, & Meilman, 1998). Over 2.1 million students between the ages of 18 and 24 drove under the influence of alcohol last year (Hingson et al., 2002).

About 11 percent of college student drinkers report that they have damaged property while under the influence of alcohol (Wechsler et al., 2002). While more than 25 percent of administrators from schools with relatively low drinking levels and over 50 percent from schools with high drinking levels say their campuses have a "moderate" or "major" problem with alcohol-related property damage (Wechsler, Moeykens, Davenport, Castillo, & Hansen, 1995a). About 5 percent of 4-year college students are involved with the police or campus security as a result of their drinking (Wechsler et al., 2002) and an estimated 110,000 students between the ages of 18 and 24 are arrested for an alcohol-related violation such as public drunkenness or driving under the influence (Hingson et al., 2002).

Finally, a major consequence resulting from excessive and underage use and abuse of alcohol is alcohol abuse and dependence. Knight, Wechsler, Kuo, Seibring, Weitzman, & Schuckit, (2002) found that 31 percent of college students met criteria for a diagnosis of alcohol abuse and 6 percent for a diagnosis of alcohol dependence in the past 12 months, according to questionnaire-based self-reports about their drinking.

Driving while Intoxicated

In 2002, the National Highway Traffic Safety Administration found motor vehicle crashes to be the number one cause of death for all persons age 4-34. In the US, 2002 statistics from the NHTSA state that approximately 41 percent of all automobile deaths were alcohol related. In New Jersey, approximately 39 percent were due to alcohol. The

data collected by Hingson et al. (2005) showed that of the 8 million college students aged 18 to 24 in the United States, 39 percent, or 3.1 million, ride at least once a month with a driver who has been drinking. Around 26.5 percent, or 2.1 million, drive under the influence of alcohol at least once each year.

Effects on Health

Alcohol use is related to a wide variety of negative health outcomes including morbidity, mortality, and disability (Rehm, Gmel, Sempos, & Trevisan, 2002). Alcohol use is a major contributor to a range of health consequences that may stem from injuries from traffic accidents to cancer and heart disease. Rehm et al. (2002) state that alcohol use increases the risk for many chronic health consequences (e.g., diseases) and acute consequences (e.g., traffic crashes). The NIAAA (2002) reported that there is no question that alcohol abuse contributes significantly to liver related illnesses such as cirrhosis and hepatitis.

The risk for liver disease is related to how much a person drinks. The risk is low at low levels of alcohol consumption but increases steeply with higher levels of alcohol consumption (Edwards, Anderson, Babor, Casswell, Ferrence, Geisbrecht, Godfrey, Holder, Lemmens, Makela, Midanik, Norstrom, osterberg, Romelsjo, Room, Simpura, & Skog, 1994). Gender also may play a role in the development of alcohol-induced liver damage. Some evidence indicates that women are more susceptible than men to the cumulative effects of alcohol on the liver (Becker, Deis, Sorensen, Gronbaek, Borch-Johnsen, Muller, Schnohr, & Jensen, 1996; Gavaler and Arria, 1995; Naveau, Giraud, Borotto, Aubert, & Capron, 1997). Alcohol has also been linked to a number of cancers,

including cancers of the mouth, esophagus, digestive tract, stomach, colon, and breast (NIAAA, 2001).

What is considered a drink?

A drink is defined as a 12-ounce can or bottle of beer, a four ounce glass of wine, a 12-ounce bottle or can of wine cooler, or a shot of liquor taken straight or in a mixed drink (Dufour, 1999; Rhodes, Singleton, McMillan, & Perrino, 2005; Wechler & Nelson, 2001; Sorocco & Ferrell, 2006; Collins, Koutsky, Morsheimer, & MacLean, 2001). The type of drink, interval between drinks, and quantity of drinks are what will ultimately determine a person's level of intoxication. Most currently used definitions of a drink are based on a certain number of drinks consumed in a specific time period. According to Dufour (1999), defining a "drink" is difficult because alcohol content can differ substantially in their alcohol content, even within the same beverage category (e.g., beer, wine, or distilled spirits).

Binge Drinking

Binge drinking is defined as drinking "five or more drinks in a row one or more times during a two-week period for men, and four or more drinks in a row one or more times during a two-week period for women (Wechsler & Nelson, 2001; Dufour, 1999; Collins et al., 2001; Kellogg, 1999, Young, Morales, McCabe, Boyd, & D'Arcy, 2004; Sheffield, Darkes, Del Boca, & Goldman, 2005; Leppel, 2006; Rhodes et al., 2005). It is the combination of prolonged use and the giving up of usual activities, that form the core of the clinical definition of binge drinking (Schuckit, 1998). The term binge describes the type of heavy episodic drinking that is characteristic of college students (Wechseler & Austin, 1998). This term was introduced in the 1990's to describe college student alcohol

use. The term binge drinking has become the primary way this form of drinking by college students is identified (Wechseler & Isaac, 1992).

One concern society should have is whether binge drinking will lead to future alcohol related problems. It was already stated that the leading cause of death in 18-24 year olds are alcohol related traffic accidents (NIAAA, 2002). Binge drinking has substantial overlap with alcohol related problems and with clinical measures of alcohol abuse (Wechsler & Nelson, 2001). In a study conducted by Knight et al. (2002), a scale that approximates the DSM-IV criteria for alcohol dependence and abuse was administered. Among frequent binge drinkers, who represent about one third of college students nationally, between 1 of 2 and 4 of 5 qualified for a diagnosis of alcohol abuse or dependence by DSM-IV standards.

On any college campus, you will find that the students who partake in binge drinking activities share similarities. According to Wechsler (1996), typical characteristics of binge drinkers include: male, fraternity and sorority members, white, under 24 years of age, involved in athletics, and students who socialize a great deal. White males were found to be the most likely group to binge drink and African American women were the least likely to binge drink.

Greek Membership and Binge Drinking

While binge drinking is contrary to the ideals and foundations of Greek membership, there are rarely Greek social events when alcohol is not present, as it plays a major role in their socialization process. (Kellogg, 1999). In a study conducted by Wechsler (1996), it was found that Greek membership and living in Greek housing is the strongest single predictor of binge drinking. A possible reason for why alcohol is used so

often in Greek social activities may be due to the fact that Greeks believe that alcohol facilitates the bonding and enhances social activities.

Of Greek women who lived in sorority houses, 80% were binge drinkers and of Greek men who lived in fraternity houses, 86% were binge drinkers (Wechsler, 1996). Because of the alcohol abuse, residents of Greek housing reported many more drinking related problems than non-Greek students. (Kellogg, 1999). Drinking related problems included: hangovers, missing class, blackouts, sexual assault and unplanned sexual activity, damaging property, drunk driving, and doing something that they regretted (Wechsler, Kuh & Davenport, 1996).

Access to Alcohol by College Students

It is reasonable to think that the more accessible alcohol is to college students the higher the percentage of binge drinking will be. College students can have various methods of accessing alcohol. Most underage students reported that they obtained their alcohol from another student who was of legal drinking age (Wechsler et al., 1996). Underage students have access to alcohol through older students, other underage students with false identification, and from family members. A study by Wechsler et al. (1996) found that one in 2 underage students reported that alcohol was very easy to obtain, and binge drinkers reported even higher perceived accessibility to alcohol.

Ability to Afford Alcohol by College Students

One would assume that as the price of alcohol rises, there would be a reduction in the amount of binge drinking by underage college students. A study conducted by Laixuthai & Chaloupka (1993), shows that increases in beer taxes will significantly reduce the frequency of youth drinking. According to Slicker (1997), "Legislation that

drinking university students, is another environmental technique that has been shown by economists to be effective in preventing alcohol abuse." The second most frequent reason for college students not to drink was affordability (Slicker, 1997).

Groups Who Drink on Campus

There are a number of differences in the groups that participate in heavy alcohol consumption on college campuses. The differences in gender, ethnicity, prior use, and socio-economic status affect whether a student will tend to drink more heavily than others. According to Knight, Harris, Sherritt, Kelly, Van Hook, & Wechsler (2003) & Wechsler et al. (2002), there is a significant gender difference between men and women in that men are more likely to be frequent heavy drinkers. Wechsler, Dowdall, Davenport, & Castillo (1995b) found that while demographics such as sex and race were significantly related to binge drinking, prior binging in high school was crucial and suggests that binge drinking begins before college.

The college life is what students live on campus to experience. In that life comes freedom that most students do not have at home when is comes to alcohol use. In studies conducted by Knight et al. (2003), Wechsler et al. (1995b), & Wechsler et al. (2002), the drinking habits of students living on campus versus those living off campus with family are significantly higher. Studies have found that resident students are more likely to be frequent heavy drinkers as compared to commuters of the same school.

Methods Used to Prevent Alcohol Use on Campuses

There is a need to produce effective preventative measures to reduce the amount of alcohol consumption of college campuses. Alcohol is the most used and abused drug

by students in universities. Prevention strategies concentrated on reactive techniques, meaning that something had to occur before taking action to correct it. According to Perkins (2003), reactive measures included getting the individual into a counseling program, attending workshops on the effects and risks of drugs, or a punishment such as community service. Studies have found that these strategies are labor intensive and expensive and are mostly containment measures. Perkins (2003) states, "they do not reduce the overall prevalence of the problem among high risk youth; nor do they reduce the substance abuse that occurs in the larger population of youths who would not necessarily be categorized as addicts or persistent problem users." Therefore there has been a push towards more functional preventative measures; techniques such as scare tactics and educational programs were instituted.

Scare Tactics

Scare tactics are techniques that exaggerate and distort the dangers of alcohol consumption and attempt to reduce high-risk drinking (Perkins, 2003). These methods have been found to be ineffective and as Perkins (2003) states, attempts to scare young people straight by vividly portraying extreme dangers of the use of alcohol and drugs lose credibility because they often dismiss their own chance of such an event and believe it to be a relative improbability. In other words, students believe that such a negative outcome can never and will never happen to them.

Drug Abuse Resistance Education – D.A.R.E.

The D.A.R.E. program has been widely studies for its effectiveness and in studies conducted by West and O'Neal (2004) and Ennet, Tobler, Ringwalt, & Flewelling (1994), the project has been found to be minimally effective in preventing substance

abuse. The limited influence DARE has on adolescent drug use behavior contrasts with its popularity and prevalence and this program could be taking the place of another more beneficial drug use curricula that adolescents could be receiving (Ennet et al., 1994).

Misperceptions of Alcohol Consumption

A misperception is the term used to describe the gap between actual attitudes or behaviors and what people think is true about others' attitudes or behaviors (Berkowitz, 2004). In his study, Berkowitz (2004) talks about pluralistic ignorance, false consensus, and false uniqueness. These are different types of misperceptions that the social norms approach is able to effectively modify and correct. Perkins, Meilman, Leichliter, Cashin, & Presley (1999) state that when students more accurately view their peers as less permissive, they become more constrained by this more realistic perception of their peer norm and they are less likely to exhibit problematic use themselves.

What are Social Norms?

Social Norms are people's beliefs about the attitudes and behaviors that people deem normal and acceptable in any social context. It is a set of unspoken and unwritten rules that society try to base their lives around. In many situations, the perception of the norms can greatly influence people's behavior (Berkowitz, 2004)

History behind the Social Norms Approach

Perkins and Berkowitz, conducted a study of the alcohol use patterns of college students, this study paved the ground for the social norms approach. In the study, Perkins and Berkowitz (1986) determined that college students regularly overestimated the extent to which their peers were supportive of permissive drinking behaviors, and they found that the overestimation predicted how much individuals drank. They suggested that

providing students with accurate information on the drinking habits of their peers would be more beneficial than previous intervention strategies. According to Berkowitz (1999), the social norms approach assumes that much of our behavior is influenced by how other members of our social groups behave, and that our beliefs about what others do are often incorrect.

The previous intervention strategies that existed provided information on abuse of alcohol or drugs, the negative consequences and focused more on the identification, intervention and treatment of problem users (Perkins & Berkowitz, 1986). In contrast, interventions using the social norms theory focus on the healthy behavior and attitudes of the majority and try to increase it.

Implementation of the Social Norms Approach

Implementation of the Social Norms approach requires completion of self-report surveys. Berkowitz (1999) has found these surveys to be reliable and accurate as long as the survey is perceived to be confidential and anonymous. There are several do's and don't for how to implement the social norms approach on a college campus from an article by the Office of Communication in the Center for Disease Control and Prevention (1999). Some of these include, making sure the messages that are being utilized are positive, inclusive, and empowering. Always telling the truth and providing sourced for the statistics that are used. Making ads visually appealing and not burden them with a lot of text.

There are some potential problems with the social norms approach, getting the students to notice the information you are providing and also getting the students to believe and remember the information. There are common mistakes that cause the social

norms to not be as effective. Some of these mistakes include focusing on the negative consequences of heavy drinking, telling the students what to do, and not having the message support the actual norm (Johannessen, Collins, Mills-Novoa, & Glider, 1999). Failed Attempts of the Social Norms Approach

A study by Werch, Pappas, Carlson, DiClemente, Chally, and Sinder (2000) intending to prevent heavy alcohol use by providing norms of alcohol use on campus. Students who were randomly assigned to receive the intervention were provided with a two-phase program targeting social norms. During the fall semester, the intervention participants received a series of three greeting cards providing prevention messages. During the spring semester, intervention participants received a peer follow up telephone survey to reinforce the prevention messages on the greeting cards. This study found that a brief, norm-based primary prevention binge drinking program consisting of print materials and telephone contacts holds mixed promise in positively influencing short term heavy drinking patterns among 1st year, residential college students (Werch et al., 2000).

Successful Attempts of the Social Norms Approach

A number of college campuses have successfully reduced drinking by developing media campaigns that promote the accurate, healthy norms for drinking and non-use (Berkowitz, 2004). Martens, Page, Mowry, Damann, Taylor, and Cimini (2006) conducted a study to compare the perceptions of peer norms in the areas of alcohol use, drug use, and sexual behavior with actual behavior and to determine if a relationship existed between a student's perceptions of normative behavior and a student's actual

behavior. The authors found that the participants were overestimating alcohol use, drug use, and sexual behavior among their peers.

Conclusion

Based on the literature gathered and presented in this chapter is it clear that alcohol abuse is a major problem on college campuses. The effects binge drinking has on the body and the risks a person takes when under the influence of alcohol causes alcohol related deaths to be the number one leading cause of death in persons 18-24 years of age. The previous methods used by college campuses to deal with alcohol and drug use were shown to be ineffective and in some cases doing the opposite of what they were set out to do. However, the social norms approach offers an improved and proactive stance to dealing with the issue of alcohol and drug use on college campuses. The social norms approach also does much in reducing the harmful misperceptions college students hold about the alcohol use of their peers.

CHAPTER III: DESIGN

Participants

The participants in this study consisted of 84 college freshmen from Rowan University in Glassboro, New Jersey. There were two participant groups. Group 1 consisted of 56 freshmen students resigning on campus in Chestnut Hall. Group 2 consisted of 28 freshmen commuters. The groups consisted of a total of 43 males and 41 females. The student's race and ethnicity varied, but the predominant race for each group was Caucasian. The students ranged from 18 to 20 years of age with a mean age of 18.88 years.

Materials

The experimenter, in collaboration with Rowan University Center of Addiction Studies, obtained the Campus Survey of Alcohol and Other Drugs Norms. The survey consisted of questions asking participants opinions of their peers alcohol and drug use and of their own alcohol and drug use. Participants answered in 9-point Likert scale ranging from never to everyday use. The Core Institute Student Health Programs in South Illinois University developed this scale.

Reliability/Validity of Scales

Cronbach alpha and item-to-total-test correlations were performed on of the Campus Survey of Alcohol and Other Drug Norms. The corrected item-to-total-test correlations and Cronbach alpha scores for each question analyzed. Henryson (1971) notes that an "item-to-total-test correlation should fall between .3 to .7 for inclusion" in a

survey test. The Cronbach alpha scores for Core Alcohol and Drug Survey meet those criteria in most cases.

Method

To maintain confidentiality, all freshmen residents received a consent form, a survey and two return envelopes via their resident assistant. Participant's choosing to take part in the study completed the survey, signed the consent form, and returned both in their individual envelopes. Commuter students were recruited via campus commuter labs, dining areas, and student recreational centers. The commuter students received the same consent forms and surveys as the resident students. To maintain confidentiality with the commuter students, they were asked to place their surveys and consent forms in separate envelopes before returning them to the examiner.

Independent and Dependent Variables

The independent variable in the study was the residential status of the participant. The dependant variable was their reported actual frequency of alcohol consumption and their perceptions of the frequency of alcohol consumption other college freshmen. It was expected that the frequency of alcohol consumption of a freshman resident would be greater than the frequency of alcohol consumption of a commuter. It was also expected that the perceived alcohol consumption of college freshmen would be significantly higher than the actual alcohol consumption.

Analysis of Data

The data for the frequency of alcohol consumption for both groups was gathered.

A basic table was used to compare the frequency of alcohol consumption. The basic table displayed the percent of respondents whose scores ranged from never to everyday.

Furthermore, the data for the perceived frequency of alcohol consumption of other college students was gathered and assessed by a basic table. The differences between the actual alcohol consumption of the participants and the participants' perceived alcohol consumption by students, in general, were compared.

Summary

In this study, eighty-four freshmen were asked to complete an alcohol and other drug norms survey. Fifty-six participants were freshmen residents the remaining twenty-eight were commuter students. Data was collected and basic tables were used to compare the differences in the frequency of alcohol consumption by residents and commuters. The basic tables were also used to compare the frequency of alcohol consumption by the participants to their perceptions of the frequency of alcohol consumption of students in general. It was expected that the frequency of alcohol consumption of a freshman resident would be greater than the frequency of alcohol consumption of a commuter. It was also expected that the perceived alcohol consumption of college freshmen would be significantly higher than the actual alcohol consumption.

Chapter IV: Results

Introduction

The purpose of this study is to examine the differences between the actual drinking habits of the average college resident and commuter student versus their perceived drinking habits. It was hypothesized that the actual alcohol consumption of college residents was greater than the actual alcohol consumption of college commuters. It was also hypothesized that the perceived alcohol consumption was greater than the actual alcohol consumption of both residents and commuters.

Results

There were 84 participants in the study with a mean age of 18.88 years. Fifty one percent of the participants were male, while forty nine percent were female. Sixty nine percent of the participants were resident students, while thirty one percent were commuters. During the study, all the participants completed the Campus Survey of Alcohol and Other Drug Norms. Scores for alcohol related questions were analyzed and compared.

As shown in figure 4.1, when comparing how often residents and commuters typically consume alcohol, the data showed that 7.1% of resident respondents and 4.8% of commuter respondents claimed to never consume alcohol; 2.4% of residents and 0% of commuters claimed to consume alcohol 1-2 times a year, 8.3% of residents and 0% of commuters claimed to consume alcohol six times a year. Also, 4.8% of residents and 1.2% of commuters claimed to consume alcohol once a month, 13.1% of residents and 2.4% of commuters claimed to consume alcohol twice a month. In addition, 15.5% of

residents and 11.9% of commuters claimed to consume alcohol once a week, 15.5% of residents and 8.3% of commuters claimed to consume alcohol three times a week, 1.2% of residents and 2.4% of commuters claimed to consume alcohol five times a week, and 1.2% of residents and 0% of commuters claimed to consume alcohol daily.

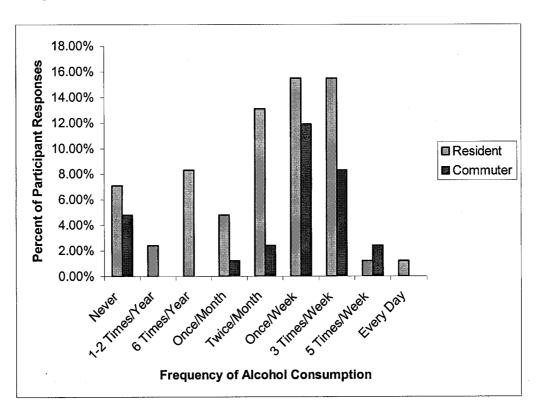
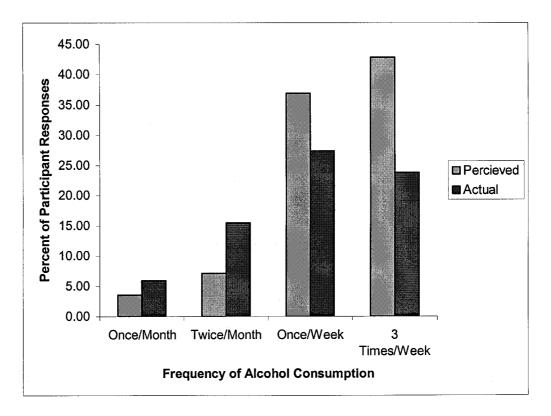


Figure 4.1 How often residents and commuters typically consume alcohol.

When comparing the alcohol consumption of students, in general, as perceived by resident and commuter students, the data showed that 2.4% of resident respondents and 1.2% of commuter respondents perceive that students, in general, consume alcohol once a month; 6.0% of residents and 1.2% of commuters perceive that students, in general, consume alcohol twice a month, 26.2% of residents and 10.7% of commuters perceive that students, in general, consume alcohol once a week, 29.8% of residents and 13.1% of commuters perceive that students, in general, consume alcohol three times a week, 3.6% of residents and 4.8% of commuters perceive that students, in general, consume alcohol

five times a week, and 1.2% of residents and 0% of commuters perceive that students, in general, consume alcohol daily.

Figure 4.2 Comparison of actual alcohol consumption of participants to perceived alcohol consumption of students in general



When considering the hypothesis that the actual alcohol consumption of college residents is greater than the actual alcohol consumption of college commuters, the data showed the frequency of alcohol consumption of residents to be significantly higher than the alcohol consumption of commuters. On average, 7.68% of resident respondents and 3.44% of commuter respondents consume alcohol. Thus, it proves the hypothesis correct.

In considering the second hypothesis that perceived alcohol consumption of students in general is greater than the actual alcohol consumption of both residents and commuters, the data showed that the respondents perceptions of alcohol consumption by students in general is significantly higher than their own actual alcohol consumption.

Figure 4.2 shows that at the highest percent of responses there is a significant difference between the perceived alcohol consumption of students in general when compared to the actual alcohol consumption of the participants. As a result, the data supports the second hypothesis.

Summary

In summary, there were 84 participants in the study consisting of sixty-nine percent resident students and thirty-one percent commuters. All the participants completed the Campus Survey of Alcohol and Other Drug Norms. Scores for alcohol related questions were analyzed and compared. Basic tables using percentages were used to analyze the data gathered. A difference was found between the actual alcohol consumption of residents and commuters. Furthermore, the results also showed a difference between alcohol consumption perceived by resident and commuter students regarding the general students population.

Chapter V: Discussion

Review of Results

After reviewing the data, it was found that resident participants consume alcohol more frequently than the commuter participants. This finding supports the first hypothesis, which stated that actual alcohol consumption of residents would be greater than the actual alcohol consumption of commuters. The data also found that the resident and commuter students' perception of alcohol consumption by students in general, was greater than their own actual alcohol consumption. Therefore it proves the second hypothesis to be correct.

As the first hypothesis stated, the actual alcohol consumption of college residents would be greater than the actual alcohol consumption of commuters. The data results showed that the average percentage of resident respondents that consume alcohol is 7.68% while the average percentage of commuter respondents that consume alcohol is 3.44%. These results resembled the results found in studies conducted by Knight et al. (2003), Wechsler et al. (1995b), & Wechsler et al. (2002), showing that the drinking habits of students living on campus versus those living off campus with family are significantly higher.

The second hypothesis stated that the alcohol consumption of students in general as perceived by the participants would be greater than their own actual alcohol consumption. The data results showed that the average frequency of alcohol consumption of students in general as perceived by the participants of the study was significantly higher than their own actual frequency of alcohol consumption. These

findings support the current research on social norms and the overestimation of perceived drinking norms. As the research conducted by Perkins and Berkowitz (1986) determined, college students regularly overestimated the extent to which their peers were supportive of permissive drinking behaviors, and they found that the overestimation predicted how much individuals drank.

Limitations

One limitation of the current study was the number of participants used to gather the data. Only 86 current freshmen students completed the Campus Survey of Alcohol and Other Drug Norms. The small number of participants could have provided less than accurate results when generalizing the outcome to all college students. The participants consisted of twenty-eight freshmen commuter students while the other fifty-six were freshmen residents. Obtaining a more representative sample of resident and commuters would have proved beneficial in comparing their actual drinking norms.

Another limitation is related to the time of the semester when the surveys were administered. It should be noted that the surveys used were completed after students returned from spring break vacation. Actual drinking habits as well as perceived drinking habits may have been slightly skewed higher due to the vacation period. Due to a high percentage of students participating in spring break activities and not having class for the week it may have led to a higher perception of drinking norms.

Finally, a limitation that should be considered is that the data collected from the surveys were based on students' self-reports of drinking behavior and perceptions of alcohol use on the college campus. Respondents can intentionally provide inaccurate information about their own drinking patterns and therefore skew the results. There could

also be some discrepancy in the students' abilities to understand the questions and provide accurate responses.

Conclusion

In summary, the results of this study showed a significant difference in the actual alcohol consumption between resident and commuter students. The findings show that on average, resident students consume alcohol more frequently than commuter students.

These results were similar to the study showing that the drinking habits of students living on campus versus those living off campus with family are significantly higher.

Additionally, the results also showed that the frequency of alcohol consumption of students in general as perceived by the participants in the study was significantly greater than the actual alcohol consumption of the respondents. These finding are comparable to the research stating that college students regularly overestimated the extent to which their peers were supportive of permissive drinking behaviors, and they found that the overestimation predicted how much individuals drank.

Implications for Further Research

Due to the inaccurate perceptions students have of their peers drinking behavior, more research should be conducted creating new methods of educating students of the actual drinking norms. Also, an analysis of the effectiveness of the current methods used would prove to be beneficial in determining where modifications and improvements can be made. It would also be interesting to study the longitudinal effects of the social norms approach across different universities, but keeping the methods of dispersing information of alcohol drinking norms constant in all universities.

References

- Becker, U., Deis, A., Sorensen, T.I., Gronbaek, M., Borch-Johnsen, K., Muller, C.F., Schnohr, P., & Jensen, G. (1996). Prediction of risk of liver disease by alcohol intake, sex, and age: A prospective population study. *Hepatology*, 23(5), 1025-1029.
- Berkowitz, A. D. (1999). *Questions about social norms theory and its application*.

 Alcohol Issues and Solution, Paper Clip Communications.
- Berkowitz, A.D. (2004). The social norms approach: theory, research, and annotated bibliography. *The Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention*. Retrieved on Feb 2, 2007: http://www.higheredcenter.org/socialnorms/theory/theory.doc.
- Campus Health Service. (2002-2003). The Social Norms Approach at the University of Arizona. Retrieved on April 4, 2007:

 http://www.socialnorms.campushealth.net/click_to_enlarge/general-campaign-ads-05-alcohol03-large.htm.
- Centers for Disease Control and Prevention: Office of Communication. (1999). Scientific and Technical Information: Simply Put, Retrieved on February 2, 2007: http://www.cdc.gov/od/oc/simpput.pdf.
- Collins, R. L., Koutsky, J. R., Morsheimer, E. T., & MacLean, M. G. (2001). Binge drinking among underage college students: A test of a restraint-based conceptualization of risk for alcohol abuse. *Psychology of Addictive Behaviors*, 15, 333-340.

- Dufour, M.C. (1999). What is moderate drinking?: Defining "drinks" and drinking levels.

 Alcohol Research & Health, 23, 5-14.
- Edwards G., Anderson P, Babor T.F., Casswell S., Ferrence R., Geisbrecht N., Godfrey C., Holder, H.D., Lemmens, P., Makela, K., Midanik, L.T., Norstrom, T., Osterberg, E., Romelsjo, A., Room, R., Simpura, J., & Skog OJ. (1994) *Alcohol Policy and the Public Good*. New York: Oxford University Press.
- Engs, R.C., Diebold, B.A., & Hansen, D.J. (1996). The drinking patterns and problems of a national sample of college students, 1994. *Journal of Alcohol and Drug Education*, 41(3), 13-33.
- Ennett, S.T., Tobler, N.S., Ringwalt, C.L., & Flewelling, R.L. (1994). How effective is drug abuse resistance education? A meta-analysis of Project DARE outcome evaluations. *American Journal of Public Health.* 84(9), 1394-1401.
- Gavaler, J.S., & Arria, A.M. (1995) Increased susceptibility of women to alcoholic liver disease: Artifactual or real? In: Hall, P., ed. Alcoholic Liver Disease: *Pathology and Pathogenesis*. second ed. London: Edward Arnold, 123-133
- Henryson, S. (1971). Gathering, analysis and using data on test items. *In R. Thorndike* (Ed.), Educational measurement, second ed.: 153. Washington, D.C.: America council on education
- Hingson, R.W., Heeren, T., Winter, M., & Wechsler H. (2005). Magnitude of alcohol-related mortality and morbidity among U.S. college students ages 18-24: Changes from 1998 to 2001. *Annual Review of Public Health*, 26, 259-279.

- Hingson, R.W., Heeren, T., Zakocs, R.C., Kopstein, A., & Wechsler, H. (2002).

 Magnitude of alcohol-related mortality and morbidity among U.S. college students ages 18-24. *Journal of Studies on Alcohol 63(2)*, 136-144.
- Johannessen, K.J, Collins, C., Mills-Novoa, B.M., & Glider, P. (1999). A practical guide to alcohol abuse prevention: a campus case study in implementing social norms and environmental management approaches. Retrieved on February 2, 2007: http://www.higheredcenter.org/pubs/uofacasestudy.pdf
- Kellogg, K. (1999). *Binge drinking on college campuses*. ERIC Digest. Retrieved on February 2, 2007: http://www.ericdigests.org/2000-3/binge.htm.
- Knight, J.R., Harris, S.K., Sherritt, L., Kelley, K., Van Hook, S., & Wechsler, H. (2003).

 Heavy drinking and alcohol policy enforcement in a statewide public college system. *Journal of Studies on Alcohol*, 64, 696-703.
- Knight, J.R., Wechsler, H., Kuo, M., Seibring, M., Weitzman, E.R., & Schuckit, M. (2002). Alcohol abuse and dependence among U.S. college students. *Journal of Studies on Alcohol*, in press
- Laixuthai, A. & Chaloupka, F.J. (1993). Youth alcohol use and public policy.

 Contemporary Policy Issues, 11, 70-82.
- Leppel, K. (2006). College binge drinking: Deviant versus mainstream behavior. *The American Journal of Drug and Alcohol Abuse*, 32, 519-525.
- Lewis, M.A., & Neighbors, C. (2006). Social norms approaches using descriptive drinking norms education: A review of the research on personalized normative feedback. *Journal of American College Health*, 54, 213-218.

- Martens, M.P., Page, J.C., Mowry, E.S., Damann, K.M., Taylor, K.K., & Cimini, M.D. (2006). Differences between actual and perceived student norms: an examination of alcohol use, drug use, and sexual behavior. *Journal of American College Health*, *54*(5), 295-300.
- Naveau, V., Giraud, E., Borotto, A., Aubert, F., & Capron, J. (1997) Excess weight risk factor for alcoholic liver disease *Hepatology*, 25, 108-111
- National Highway Traffic Safety Administration. (2004). *Traffic Safety Facts: Alcohol Related Fatalities in 2004*. Retrieved on February 2, 2007: http://www.nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/RNotes/2005/809904.pdf.
- National Highway Traffic Safety Administration. (2006). *Traffic Safety Facts Research Note: Driver Alcohol Involvement in Fatal Crashes by Age Group and Vehicle Type*. Retrieved on February 2, 2007: http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/RNotes/2006/810598.pdf.
- National Highway Traffic Safety Administration. (2006). Traffic Safety Facts Research

 Note: Motor Vehicle Traffic Crashes as a Leading Cause of Death in the United

 States, 2003. Retrieved on February 2, 2007: http://www
 nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/RNotes/2006/810568.pdf.
- National Institute on Alcohol Abuse and Alcoholism. (2001). 10th Special Report to the U.S. Congress on Alcohol and Health. Retrieved on February 2, 2007: http://pubs.niaaa.nih.gov/publications/10report/intro.pdf.
- National Institute on Alcohol Abuse and Alcoholism. (2002). *High Risk Drinking in College: What We Know and What We Need To Learn*. Retrieved on February 2, 2007: http://www.collegedrinkingprevention.gov/media/FINALPanel1.pdf.

- Perkins, H. W. (Ed.). (2003). The social norm approach to preventing school and college age substance abuse. San Francisco: Jossey-Bass
- Perkins, H.W. & Berkowitz, A.D. (1986). Perceiving the community norms of alcohol use among students: some research implications for campus alcohol education programming. *International Journal of the Addictions*, 21, 961-976.
- Perkins, H.W., Meilman, P.W., Leichliter, J.S., Cashin, J.R., & Presley, C.A. (1999).

 Misperceptions of the norms for the frequency of alcohol and other drug use on college campuses. *Journal of American College Health*, 47, 253-259.
- Presley, C.A., Leichliter, M.A., Meilman, P.W. (1998). Alcohol and Drugs on American

 College Campuses: A Report to College Presidents: Third in a Series, 1995,

 1996, 1997. Carbondale, IL: Core Institute, Southern Illinois University.
- Presley, C.A., Meilman, P.W., & Cashin, J.R. (1996a). Alcohol and Drugs on American

 College Campuses: Use, Consequences, and Perceptions of the Campus

 Environment, Vol. IV: 1992-1994. Carbondale, IL: Core Institute, Southern

 Illinois University, 1996a.
- Presley, C.A., Meilman, P.A., Cashin, J.R., & Lyerla, R. (1996b). Alcohol and Drugs on American College Campuses: Use, Consequence, and Perceptions of the Campus Environment, Vol. III: 1991-1993. Carbondale, IL: Core Institute, Southern Illinois University, 1996.
- Rehm, J., Gmel, G., Sempos, C.T., & Trevisan, M. (2002). Alcohol-related morbidity and mortality. *Alcohol Research & Health*, 27, 39-51.

- Rhodes, W.A., Singleton, E., McMillan, T.B., & Perrino, C.S. (2005). Does knowledge of college drinking policy influence student binge drinking? *Journal of American College Health*, 54, 45-49.
- Schuckit, M.A. (1998). Biological, psychological and environmental predictors of the alcoholism risk A longitudinal study, *Journal of Studies on Alcohol*, *59*, 485–494.
- Sheffield, F.D., Darkes, J., Del Boca, F.K., & Goldman, M.S. (2005). Binge drinking and alcohol-related problems among community college students: Implications for prevention policy. *Journal of American College Health*, *54*(3), 137-141.
- Slicker, E.K. (1997). University students' reasons for not drinking: relationship to alcohol consumption level. *Journal of Alcohol and Drug Education*, 42(2), 83-102.
- Sorocco, K.H. & Ferrell, S.W. (2006). Alcohol use among adults. The Journal of General Psychology, 133(4), 453-467.
- Wechsler, H. (1996). Alcohol and the American college campus: A report from the Harvard School of Public Health. Change, 28(4), 20-25.
- Wechsler, H. and Austin, B. (1998) Binge drinking: the five/four measure. *Journal of Studies on Alcohol* 59, 123–125.
- Wechsler H, & Isaac N. (1992) "Binge" drinkers in Massachusetts colleges: Prevalence, drinking style, time trends, and associated problems. *Journal of the American Medical Association 267(21)*, 2929–2931.
- Wechsler, H. & Nelson, T.F. (2001). Binge drinking and the American college student: what's five drinks? Psychology of Adaptive Behaviors, 15(4), 287-291.

- Wechsler, H., Kuh, G., & Davenport, A. (1996). Fraternities, sororities and binge drinking: Results from a national study of American colleges, *NASPA Journal*, 33(4), 260-279.
- Wechsler, H., Dowdall, G.W., Davenport, A., & Castillo, S. (1995b). Correlates of college student binge drinking. *American Journal of Public Health*, 85, 921-926.
- Wechsler, H., Moeykens, B., Davenport, A., Castillo, S., & Hansen, J. (1995a). The adverse impact of heavy episodic drinkers on other college students. *Journal of Studies on Alcohol*, 56, 628-634.
- Wechsler, H., Lee, J.E., Kuo, M., Seibring, M., Nelson, T.F., & Lee, H.P. (2002). Trends in college binge drinking during a period of increased prevention efforts: Findings from four Harvard School of Public Health study surveys, 1993-2001. *Journal of American College Health* 50(5), 203-217.
- Werch, C.E., Pappas, D.M., Carlson, J.M., DiClemente, C.C., Chally, P.S., & Sinder, J.A. (2000). Results of a social norm intervention to prevent binge drinking among first-year residential college students. *Journal of American College Health.* 49(2), 85-93.
- West, S.L., & O'Neal, K.K. (2004). Project D.A.R.E. outcome effectiveness revisited.

 American Journal of Public Health. 94(6), 1027-1029.
- Young, A.M., Morales, M., McCabe, S.E., Boyd, C.J., & D'Arcy, H. (2004). Drinking like a guy: Frequent binge drinking among undergraduate women. Substance Use & Misuse, 40, 239-265.