AN EXAMINATION OF HEALTH EDUCATION FACULTY ATTITUDES AND
PERCEPTIONS OF ALCOHOL-RELATED BEHAVIORS AND POLICIES IN
THE TOP 10 UNIVERSITIES (BY ENROLLMENT) IN TEXAS

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AN EXAMINATION OF HEALTH EDUCATION FACULTY ATTITUDES AND
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DEDICATION

This thesis is dedicated to my cousin, Kelly Jean Laughery, whose life was taken by a drunk driver. She is greatly missed.

Kelly Jean Laughery, November 12, 1985-December 3, 2005
ACKNOWLEDGMENTS

I would like to acknowledge my thesis committee, whose assistance throughout this process went above and beyond expectations. A special thanks to Dr. Kelly Wilson for motivating me to do a thesis and for the many hours she assisted me. Also, a special thanks to Dr. Robert Reardon for his eagerness to help and answer questions, especially throughout the data analysis procedures.

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CHAPTER I

INTRODUCTION

Drinking on college campuses continues to be a major part of college culture in the United States. College students are among the heaviest drinking demographic groups in the United States (Neal & Fromme, 2008), and in the state of Texas, alcohol is the most commonly used drug among college students (Liu, 2007). It is estimated that about 25 percent of college students report academic consequences incurred from drinking, including missing class, falling behind, doing poorly on exams or papers, and receiving lower grades overall (College Drinking Prevention, 2007). Other prominent consequences in the college environment associated with alcohol consumption include property damage, injuries, assaults, unsafe sex, health problems, and police involvement (College Drinking Prevention, 2007). Problems associated with frequent binge drinking have increased among underage students nationally (Wechsler, Lee, Nelson & Kuo, 2002), which is also a great concern to many universities.

July 17, 1984, the National Minimum Legal Drinking Age law was passed which required all states to enforce the age of twenty-one for purchasing and possessing alcoholic beverages. If a state did not enforce the minimum age law, it was subject to a ten percent decrease in annual highway funds (The National Highway Traffic Safety
Administration, 2008). This minimum legal drinking age law is currently enforced by all fifty states in the United States, which makes it illegal for an individual to purchase, consume, or possess alcohol if they are under the age of twenty-one (The National Highway Traffic Safety Administration, 2008).

Despite this minimum legal drinking age law, underage drinking is prevalent and is a trend commonly seen among college campuses in the United States. According to the National Institute on Alcohol Abuse and Alcoholism, underage drinking, specifically binge drinking, is a growing problem on college campuses (NIAAA, 2009). Addressing college drinking is complicated by the fact that some students can legally drink alcohol whereas others cannot, according to age.

College drinking behaviors such as drinking and driving, binge drinking, and underage drinking are important issues to address because irresponsible drinking can lead to negative consequences such as assault, academic problems, sexual promiscuity, unintentional injury, and death (NIAAA, 2009). It is also important to assess regulatory procedures, such as alcohol policies, because they impact drinking behaviors. This study aims to understand Health Education/Promotion faculty attitudes and perceptions of alcohol-related behaviors and policies on their respective campuses. These perceptions could give insight prevention efforts and/or interventions which address negative outcomes associated with alcohol use.

**Statement of Problem**

About four out of five college students drink alcohol, including nearly 60 percent of students who are aged 18 to 20 (Johnston, O’Malley, Bachman, Schulenberg, 2008).
Approximately two of every five college students of all ages—more than 40 percent—reported engaging in binge drinking at least once during the past two weeks (College Drinking Prevention, 2007). However, colleges vary widely in their binge drinking rates—from one percent to more than 70 percent (Wechsler et al., 2000b and NSDUH 2006).

In July 2008, the Amethyst Initiative was launched as an effort to bring attention to underage drinking and the twenty-one only drinking law. The Amethyst Initiative was distributed to colleges across the United States and asked respective presidents and elected officials to weigh the consequences of current alcohol policies, and to invite new ideas on how to best prepare young adults to make responsible decisions about alcohol use (Amethyst Initiative, 2008). Leaders in higher education across the nation signed their names to a public statement indicating they believe the problem of irresponsible drinking by young people continues, despite the minimum legal drinking age of 21. They further recognize a culture of dangerous binge drinking on many campuses (Amethyst Initiative, 2008). To date, two universities in Texas (University of the Incarnate Word and Texas A&M University-West Texas) have signed onto the Amethyst Initiative (Amethyst Initiative, 2008).

The 2006 Monitoring the Future Survey, conducted on colleges and universities across the country, found that approximately 40 percent of all U.S. college students have engaged in high-risk drinking (U.S. Department of Education, 2008). High-risk drinking results in serious injuries, assaults, and other health and academic problems, and is a major factor in damage to institutional property (College Drinking Prevention, 2009).
In the spring of 2005, the Texas Department of State Health Services and the Public Policy Research Institute at Texas A&M University, conducted a statewide survey of substance use and related behaviors among undergraduate students aged 18 to 26. The 2005 Texas college survey found that 84 percent of students drank an alcoholic beverage at least once during their lifetime, 78 percent drank alcohol in the past year, and 66 percent drank alcohol in the past month (Liu, 2005). Almost 30 percent of college students reported binge drinking (38 percent males and 23 percent females) and over 11 percent of college students were frequent binge drinkers, that is, they binged on six or more occasions within the last month (Liu, 2005). Although the legal drinking age is twenty-one, 58 percent of college students ages 18 to 20 reported drinking an alcoholic beverage in the past month (Liu, 2005).

The 2004–2006 National Survey on Drug Use and Health (NSDUH) estimated that 49 percent of Texans age 12 and older drank alcohol in the past month, below the national average of 51 percent, and 24 percent drank five or more drinks on at least one day (binge drinking) in the past month, above the national average of 23 percent (Maxwell, 2008). Twenty-seven percent of Texans who were ages 12 to 20 reported past-month alcohol use, as compared to 28 percent nationally, and 17 percent of Texas underage youths reported past-month binge drinking, as compared to 19 percent nationally (Maxwell, 2008).

A study by Liu (2007), found that alcohol is the most often used substance on college campuses in Texas, and is often associated with other related problems. This study found that many students are negatively affected as a result of others’ abuse of alcohol, creating a type of “second-hand” affect. Among college students in Texas who
had drunk alcohol in the past year, 47 percent had a hangover, 23 percent regretted something that they did while under the influence of alcohol, 17 percent had temporary memory loss, 14 percent argued with a friend, seven percent physically hurt themselves, and four to five percent caused property damage or got into trouble with the police as a result of drinking (Liu, 2007). This study also found that students who binge drink are more likely than non-binge drinkers to experience negative consequences from alcohol use, and they are more likely to engage in other risky behaviors in addition to binge drinking (Liu, 2007).

The Texas Department of State Health Services Substance Abuse (2008) recently reported that alcohol continues to be heavily used in Texas. This report, released in June 2008, stated that alcohol is the primary drug of abuse in Texas, and of particular concern is heavy consumption of alcohol in one sitting, or binge drinking (Texas Department of State Health Services Substance Abuse, 2009).

Previous statewide studies evaluated drinking behaviors of students and young adults by collecting behavioral data, but did not fully assess specific factors contributing to alcohol use in the college environment, or the role individuals (such as faculty members) play in addressing alcohol use in college (Liu, 2007; Texas Department of State Health Services Substance Abuse, 2009). This study aims to evaluate faculty attitudes and perceptions of drinking behaviors specific to universities in Texas, and alcohol policies (university affiliated or government enforced policies) that may affect students’ drinking behaviors.
Rationale

Despite the ban on alcohol use by those under age 21, drinking continues to have a significant impact on college and university campuses across America, even though a large portion of students are under the legal age to drink. It almost appears as if the Minimum Legal Drinking Age (MLDA) law is often ignored or minimally enforced in the college environment. Heavy alcohol use among college students appears to be ingrained in the college culture. Sources indicate 83 percent of college students drink alcohol and 41 percent report drinking five or more drinks on an occasion in the past two weeks, a level considered to be binge drinking (NIAAA, 2007).

Alcohol is the most commonly used substance among college students in Texas, and one study found that eighty-four percent of students drank an alcoholic beverage at least once during their lifetime, 78 percent drank alcohol in the past year, and 66 percent drank alcohol in the past month (Liu, 2007). Irresponsible drinking often leads to many negative consequences such as assault, academic problems, sexual promiscuity, unintentional injury, and even death. It is important that college students are aware of the impact can have in an individuals’ life and also that measures are put in place to reduce negative consequences of drinking.

Some suggest that lowering the drinking age would lead to more responsible alcohol consumption because the MLDA law is not working and has only created a dangerous culture of binge drinking on and around college campuses (Amethyst Initiative, 2008). Others argue that the legal drinking age of twenty-one has had positive effects on health and safety (NIAAA, 2009).
In an appeal to change culture and attitudes toward drinking in America, the Office of the Surgeon General issued a Call to Action To Prevent and Reduce Underage Drinking on March 6, 2007 (Office of the Surgeon General, 2007). Developed in collaboration with the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and Substance Abuse and the Mental Health Services Administration (SAMHSA), the 94-page Call to Action identifies goals to reduce underage drinking (College Drinking Prevention, 2010).

In response to growing awareness of and concern about alcohol and other drug problems, institutions of higher education are implementing policies and programs in an attempt to curb alcohol and other drug abuse and its associated negative consequences (U.S. Department of Education, 2008). Some of these programs include social norms campaigns, computer based alcohol education programs, classroom based alcohol education classes, and other comprehensive prevention approaches. This environmental management approach recognizes that student behavior is influenced at multiple levels: personal, peer, institutional, community, and public policy (U.S. Department of Education, 2008).

Administrators are recognizing that institutions of higher education are potentially liable as property owners, “social hosts” at some events, and as supervisors of student conduct (Steinbach, 1985). The Division of Adolescent and School Health (DASH) at the National Center for Chronic Disease Prevention of the Centers for Disease Control and Prevention (CDC), states that colleges and universities are important settings for delivering health promotion education and services to many young adults (NCHRBS, 1997). As one of the most stable elements in the college community, faculty can provide
valuable insight into factors affecting student life and the whole campus environment. Health Education/Promotion faculty have a background in prevention efforts, program planning, implementation, and evaluation, and could have especially valuable input for addressing alcohol associated problems on college campuses.

High-risk drinking results in serious injuries, assaults, and other health and academic problems, and is a major factor in damage to institutional property (College Drinking Prevention, 2009). Drinking behaviors and policies associated with alcohol use are important to understand and assess. The purpose of this study was to determine Health Education faculty attitudes and perceptions of alcohol-related behaviors and policies at the top 10 universities (by enrollment) in Texas. This study provided insight to potential programs or initiatives which address problematic drinking behaviors and associated consequences among college students at universities in Texas, or other locations in the United States.

**Research Questions**

1. Is there a difference in health education/promotion faculty attitudes about drinking policies on their respective campuses?

2. Is there a difference in health education/promotion faculty perceptions about drinking policies on their respective campuses?

3. Is there a difference in health education/promotion faculty attitudes of drinking behaviors on their respective campuses?

4. Is there a difference in health education/promotion faculty perceptions of drinking behaviors on their respective campuses?
5. Is there a difference in health education/promotion faculty perceptions of the effectiveness of the Amethyst Initiative to promote safer drinking habits?

6. Is there a difference in health education/promotion faculty perceptions of the effectiveness of the Minimum Legal Drinking Age (MLDA) law to promote safer drinking habits?

**Limitations**

A major limitation of this study was the small sample size. Although most of the larger universities in Texas had a variation of a Health Education/Promotion or Wellness program, the programs employed a relatively small number of faculty members. Another limitation of this study was that data collected only reflects the Health Education/Promotion faculty perceptions of alcohol-related behaviors and policies, and not the view of other faculty members on campus.

The study only included faculty members and not other health professionals who worked on campus, which was a limitation because health professionals who work on campus may also have insight as to how alcohol affects their campus. Additionally, the study did not investigate actual drinking behaviors or alcohol policies on campus; the information gathered are *perceptions* and *attitudes* of the faculty members surveyed. Finally, the perceptions examined are those of health educators who worked in the university setting and not in other settings. Because the university setting is fairly unique, the attitudes and perceptions examined from this study may not necessarily be applicable to other populations.
**Basic Assumptions**

For this research, it was assumed that Health Education/Promotion faculty are aware of the impact alcohol has on college campuses and negative consequences associated with alcohol on the participants’ respective campuses. This study assumed participants had a variety of attitudes, perceptions, and experiences associated with alcohol-related behaviors and policies. It was assumed faculty were aware of consequences associated with alcohol on the participants’ respective campuses.

During this study, the researcher assumed that the Health Education/Promotion faculty who participated had an understanding of their campus environment. The researcher also assumed that the perceptions of the Health Education/Promotion faculty accurately reflect the atmosphere of their campus.

**Key Terms**

The National Institute on Alcohol Abuse and Alcoholism defines **binge drinking** as a pattern of drinking alcohol that brings blood alcohol concentration [BAC] to 0.08 grams percent or above (NIAAA, 2009). This generally constitutes four or more drinks for women and five or more drinks for men in a period of about two hours. The **Minimum Legal Drinking Age (MLDA)** law (also known as the National Minimum Drinking Age Act) was enacted in 1984 which made the minimum drinking age 21 and would cause states to lose annual highway funding by the government if the law was not enforced (The National Highway Traffic Safety Administration, 2008). For the purpose of this study, **drinking behaviors** include underage drinking, binge drinking, and drinking and driving. **Health Education/Promotion Faculty** surveyed in this study were
professor (tenured or tenure-track), clinical faculty, adjunct faculty or lecturer of Health Education and/or Health Promotion, or a related field.

**Variables of Interest**

Dependent variables in this study included the MLDA law and the survey. The MLDA law was applicable in all 50 states, including Texas, so the entire target population should have responded to questions on the survey based off their understanding of the same law. The survey was a dependent variable because the same survey was sent to the entire target population. Independent variables in this study included the faculty members, the university in which the faculty members were employed, faculty perceptions, and faculty attitudes of the participants.

**Research Design**

This study employed a web-based survey design. An instrument to measure Health Education/Promotion faculty attitudes and perceptions regarding the alcohol-related behaviors and policies at universities in Texas was developed and tested. Literature on college drinking behaviors, trends, alcohol policies, and programs/interventions were evaluated and used to formulate a survey. Items selected from previously validated instruments such as the College Alcohol Study by the Harvard School of Public Health (College Alcohol Study, 2001) and the Core Alcohol and Drug Survey from Southern Illinois University Carbondale (Core Alcohol and Drug Survey, 2009), were incorporated to ensure accurate content and reliability of items.

The survey underwent content validity testing by faculty in the Health, P.E. and Recreation Department at Texas State University, professionals in the Alcohol and Drug
Resource Center at Texas State University, and Health Education graduate students at Texas State University. The purpose of the content validity assessment was to identify punctuation/spelling errors, appropriateness of questions (whether any questions needed to be added/removed), appropriateness of responses (whether there were appropriate responses for each question), and recognize any other feedback given by the individuals.

A pilot study, designed to test the questionnaire, was conducted with five additional universities in the state of Texas. The purpose of the pilot test was to gain feedback from Health Education/Promotion faculty at other universities in Texas with the intention of altering the survey if necessary, before it was sent out to the actual study population. Data obtained from the pilot study were analyzed and incorporated into the study in order to gain more perspective and because no changes were made to the survey instrument after the pilot test.

**Data Collection/Analysis**

The information gathered from this study provided a quantitative analysis of faculty perceptions of and attitudes about college drinking behaviors and policies on their respective campuses. College faculty members were recruited through their university email address to participate in this study. The criteria for inclusion of the participants were that they must be a professor (tenured or tenure-track), clinical faculty, adjunct faculty or lecturer of Health Education and/or Health Promotion in the top 10 universities (by enrollment) in Texas.

The survey instrument used for this study utilized the online survey program, mrInterview. The online survey was designed to obtain the perceptions of drinking
behaviors and alcohol policies on the respective universities in Texas, from Health Education and/or Health Promotion faculty. The instrument was developed using a review of the literature and selected items from the College Alcohol Study by the Harvard School of Public Health (College Alcohol Survey, 2001) and the Core Alcohol and Drug Survey from Southern Illinois University Carbondale (Core Alcohol and Drug Survey, 2009), both previously validated instruments.

The online survey was prepared in the mrInterview program, and the Teaching, Research-Support, and Evaluation Center (TREC) at Texas State University-San Marcos offered support in building and disseminating the survey. Participants were sent a series of correspondence inviting them to participate in the study. This included a pre-notice letter, an invitation to the survey with the enclosed survey link, and up to three e-mails serving as a follow-up reminder/thank-you to participants. A thank-you email was sent to all participants who completed the survey. After completed surveys were received, the respondents’ email addresses were transferred and compiled into SPSS (Statistical Package for the Social Sciences). Responses from the participants were stored in the SPSS database where they were analyzed. The quantitative data collected from this study was analyzed through descriptive statistics, cross tabulations, ANOVA, chi-square, and Cronbach’s alpha. Further discussion and results of data analysis for this study are presented in Chapter IV.
CHAPTER II

LITERATURE REVIEW

College Drinking Trends

Alcohol prevalence and consumption continues to be a major part of the college environment at many colleges in the United States. The National Minimum Legal Drinking Age Act of 1984 is an example of legislation to address substance abuse issues in the United States. This legislation requires that states prohibit persons under 21 years of age from purchasing or publicly possessing alcoholic beverages as a condition of receiving State highway funds. A federal regulation that interprets the Act excludes from the definition of "public possession," possession for an established religious purpose; when accompanied by a parent, spouse or legal guardian age 21 or older; for medical purposes when prescribed or administered by a licensed physician, pharmacist, dentist, nurse, hospital or medical institution; in private clubs or establishments; or to the sale, handling, transport, or service in dispensing of any alcoholic beverage pursuant to lawful employment of a person under the age of twenty-one years by a duly licensed manufacturer, wholesaler, or retailer of alcoholic beverages (APIS, 2009).
Despite this legislation and other laws, drinking has been a frustratingly persistent problem on America’s campuses (Johnston, O’Malley, Bachman, & Schulenberg, 2008). Irresponsible drinking can lead to many negative consequences such as sexual assault, unintentional injuries, risky sexual behavior, alcohol poisoning, and even death (Hingson, Heeren, Winter, & Wechsler, 2005). College drinking can be a difficult issue to address because some individuals may be of legal age to drink alcohol while others are not.

For most students, drinking does not begin in college. Most students come to college having experienced alcohol in high school. One study found that by the 12th grade, 72 percent of high school students have had a full drink, 26 percent report engaging in binge drinking in the past 2 weeks, and 55 percent report ever having been drunk (Johnston, O’Malley, Bachman, & Schulenberg, 2008). According to the 2007 Youth Risk Behavior Surveillance System (YRBSS), 75 percent of high school students reported ever drinking alcohol during the 12 months before the survey (Centers for Disease Control, 2007). Although many colleges may “inherit” drinking problems, many students do increase their consumption when they get to college (Johnston, O’Malley, Bachman, & Schulenberg, 2008).

Drinking is deeply ingrained in the campus culture at many universities across the nation. One study found eighty-three percent of college students drink alcohol, and 41 percent report drinking five or more drinks on an occasion in the past two weeks, a particularly dangerous pattern of consumption (Johnston, O’Malley, Bachman, & Schulenberg, 2008). In addition, anecdotal reports and some research studies indicate that many college students drink far more than five drinks per occasion (White, Kraus, & Swartzwelder, 2006). An extreme example is the practice of attempting to drink 21 shots
within the first hour starting at midnight of one’s 21st birthday, which has resulted numerous in alcohol poisonings (Rutledge, Park, & Sher, 2008).

One extensive study conducted was The Harvard School of Public Health College Alcohol Study (CAS) which began in 1992. It lasted 14 years, conducted four national surveys, and released more than 80 publications. The CAS was designed to provide the first nationally representative picture of college-student alcohol use and to describe the drinking behavior of this high-risk group (Weschler & Nelson, 2008).

The Core Alcohol and Drug Survey and was developed in 1989 to assess the nature, scope, and consequences of alcohol and other drug use on college campuses. It is one of the most rigorously developed survey instruments for post-secondary populations (Core Institute, 2009). This instrument is not used to diagnose alcohol dependency in individuals but rather to assess the level and impact of alcohol and other drug use on campus. It can also provide assistance for determining how to target populations for prevention programming, designing social marketing and media advocacy campaigns, and assessing the impact of these prevention efforts (Core Institute, 2009). The Core Survey was conducted nationally in 2006 from a sample of 71,189 undergraduate students from 134 two- and four-year colleges located in the United States. The survey found that alcohol was the most prevalently used drug among students, with 84 percent of students reporting use within the past year (CORE Institute, 2009). The next highest reported drug used among students within the past year was tobacco at 38.5 percent (CORE Institute, 2009).
Many negative alcohol-related consequences often occur during specific events (e.g., 21st birthday, homecoming, graduation, and spring break) and in specific contexts (e.g., tailgating, parties, and drinking games), and most severe alcohol-related consequences (e.g., alcohol poisoning and death) often occur during these specific events (Neighbors, Oster-Aaland, Bergstrom, & Lewis, 2006). One study conducted through the National Institutes of Health, assessed normative misperceptions of alcohol consumption associated with special events such as 21st birthday celebrations and football tailgating. The research focused on the perceived drinking behaviors of others (descriptive social drinking norms) and the discrepancy between perceived norms and actual norms specifically of 21st birthday and football tailgating practices. Results revealed students overestimated peer drinking during 21st birthday celebrations and typical alcohol consumption of those who tailgate at a football game (Neighbors, Oster-Aaland, Bergstrom, & Lewis, 2006). A major conclusion is that normative misperceptions of student drinking should be considered when developing prevention efforts in specific event and context situations (Neighbors, Oster-Aaland, Bergstrom, & Lewis, 2006).

Alcohol research indicates that multiple factors interact to produce various drinking patterns. Factors include students' genetic/biological characteristics, family and cultural backgrounds and environments, previous drinking experiences in high school, and the particular environment of the college in which they are enrolled (College Drinking: Changing the Culture, 2009). Even within individual colleges, patterns may be influenced by students' participation in fraternities/sororities, sports teams, or other social groups (College Drinking: Changing the Culture, 2009). Research shows that generally, strategies that encompass multiple aspects of campus life, including the surrounding
community, have been most successful (APIS, 2009). In order to gain a more clear understanding of college drinking, drinking behaviors (such as drinking and driving and binge drinking), underage drinking, environmental factors, alcohol policies, and faculty perceptions about drinking behaviors and policies will be addressed.

**Drinking and Driving**

Driving while either intoxicated or drunk is a dangerous behavior, but more importantly injury or death caused by this behavior is preventable. In 2007, over 1.4 million drivers were arrested for driving under the influence of alcohol or narcotics (Federal Bureau of Investigation, 2008). Each year, more than two million college students aged 18-24 drive after drinking, more than three million ride in motor vehicles with drinking drivers, and 1,400 die from alcohol-related unintentional injuries, most sustained in alcohol-related traffic crashes (Hingson, Heeren, Zakocs, Winter, & Wechsler, 2003). One study found that among students who drove one or more times per week, 13 percent reported driving after consuming five or more drinks, and 23 percent of students said they rode with a driver who was high or intoxicated (Wechsler et al., 2003a).

From 1998 to 2001, alcohol-related unintentional fatalities rose from nearly 1,600 to more than 1,700 among college students (Zhang, Wang, Scholl & Buchanan, 2008). The 20th National Institute on Alcohol Abuse and Alcoholism (NIAAA) annual surveillance report showed that in 2003 drivers between the ages of 21 and 24 continued to make up the highest proportion (33.3 percent) of alcohol-related fatal traffic crashes among all age groups. An estimated 2 million college students drove a motor vehicle
under the influence of alcohol, and more than 3 million rode with an intoxicated driver (Hingson et al., 2005). The study also found that students who binge drink are more likely to put themselves and others at risk by operating or riding in a motor vehicle after drinking (Wechsler et al., 2003a). The national Core Survey in 2006 found that 27 percent of students reported driving a car while under the influence, and 1.5 percent of students reported being arrested for DWI/DUI the year prior to completing the Core survey (CORE Institute, 2009).

One study explored the behaviors and risks of college students who were first intoxicated at ages younger than nineteen. Specifically, it explored whether these individuals were more likely to drive after drinking and/or ride with intoxicated drivers. It also investigated whether these results occur because the students believe they can drink more and still drive legally and safely. The results found that compared with respondents who first got drunk at age 19 or older, those who first got drunk prior to age 19 were significantly more likely to be alcohol dependent and frequent heavy drinkers, to report driving after drinking, driving after five or more drinks, riding with a driver who was high or drunk, and sustain injuries after drinking that required medical attention (Hingson, Heeren, Zakocs, Winter & Wechsler, 2003). The study concluded that educational, clinical, environmental and legal interventions are needed to delay age of first intoxication and to correct misperceptions among adolescents at an early age about how much they can drink and still drive safely and legally (Hingson, Heeren, Zakocs, Winter & Wechsler, 2003).

According to the National Highway Traffic Safety Administration (NHTSA), traffic crashes are the greatest single cause of death for every age from five through
twenty-seven, with almost half of these crashes being alcohol related (The National Highway Traffic Safety Administration, 2008). One study concluded that although there are current programs in effect which target the high school age group, there is a need to identify the exact behaviors and attitudes of students seeking higher education in order to implement programs which more directly target these problem areas (Ritzel et. al, 2001).

Compared with adults, college students represent a unique segment of the drinking population because the majority are under the legal drinking age of twenty-one, they have less driving experience, they have less drinking experience, and they are in an environment conducive to excess alcohol use (Usdan, Moore, Schumacher & Talbott, 2005). One study examined drinking locations prior to impaired driving in a college student sample and found that characteristics of the drinking environment, such as drinking location and source of alcohol consumption, contribute to an individual’s decision to drink and drive (Usdan, Moore, Schumacher & Talbott, 2005). The study found that the number of drinks college students had differed by location and by gender, but not by age, and that participants drank more at parties and at friends’ houses compared with their own home and other locations (Usdan, Moore, Schumacher & Talbott, 2005). After drinking alcohol at a party, students’ average estimated blood alcohol content (BAC) prior to driving was significantly greater than all other drinking locations. This study concluded that impaired driving prevention programs should focus on drinking locations as well as drinking patterns (Usdan, Moore, Schumacher & Talbott, 2005).

The consequences of drinking and driving are significant and widespread. They are especially important understand at the college level because this age group commonly
partakes in this behavior. Drinking and driving is important to address at the college level because many young adults may believe they can get away with this behavior without incurring any negative consequences.

**Binge Drinking**

Binge drinking is defined as a pattern of drinking alcohol that brings blood alcohol concentration (BAC) to 0.08 gram percent and above (NIAAA, 2009). For the typical adult, this pattern corresponds to consuming five or more drinks for a male and four or more drinks for a female in about two hours (NIAAA, 2009). Heavy episodic drinking (HED) represents another term for binge or high-risk drinking and is defined as the consumption of at least five or more alcoholic drinks for men, or four or more alcoholic drinks for women, in a row, at least once in the past two weeks (Wechsler et al., 2002).

One problem when assessing college drinking behaviors is that HED/binge/high-risk drinking measures sometimes do not adequately assess the heavy alcohol use college students engage in while drinking (White, Kraus, & Swartzwelder, 2006). Special events such as Spring Break, New Years Eve, St. Patrick’s Day, and game days are often a time when individuals drink more than they ordinarily would (Glassman, Braun, Dodd, Miller, & Miller, 2009). One measure created to address this short coming in assessing heavy alcohol use among college students and to describe the excessive drinking associated with excessive drinking associated with special events is the term Extreme Ritualistic Alcohol Consumption (ERAC). ERAC Extreme Ritualistic Alcohol Consumption (ERAC) is defined as the consumption of 10 or more drinks on game day for males or
eight or more drinks for females, and can be used to identify people who place
themselves at increased risk for alcohol related consequences (Glassman, Dodd, Sheu,
Rienzo, & Wagenaar, under review).

In 1993, the first College Alcohol Study (CAS) found that binge drinking was a
prevalent activity among American college students (Lee, Gledhill-Hoyt, Maenner,
Dowdall & Wechsler, 1998). Two in five students (44 percent) attending 4-year colleges
in the United States drink alcohol at this level or greater, and this rate of binge drinking
remained stable in all four administrations of the CAS from 1993 to 2001 (Wechsler et
al., 2002a). These results have been corroborated by other major national surveys,
including the CORE Survey (Presley et al., 1996, 1998), the Monitoring the Future study
(O’Malley and Johnston, 2002; Johnston et al., 2005), the National College Health Risk
Behavior Survey (CDC, 1997; Douglas et al., 1997), and the National Survey on Drug
Use and Health (Substance Abuse and Mental Health Services Administration, 2006). A
review of all of these surveys found consistent national rates of binge drinking of about
40 percent, despite varying sampling schemes and methodologies (O’Malley and
Johnston, 2002). There have also been an increasing number of incidents nationwide
where a teen/young adult has drank excessively, or binged, and then died (Ritzel et al.,
2001).

College binge drinking continues to be a major problem on many college
campuses. Among college drinkers, almost half report that drinking to get drunk is an
important reason for drinking (Wechsler & Nelson, 2008). Wechsler et al. (2000b) report
that even occasional binge drinkers are five times more likely than nonbinge drinkers to
have alcohol-related problems, while frequent binge drinkers are 21 times more likely to
experience these effects. Alcohol-related problems can range from missing a class, doing something that was later regretted, damaging property, or getting injured (Vicary & Karshin, 2002).

College freshman are particularly vulnerable to binge drinking as they transition to new freedoms and responsibilities and become accustomed to the norms of college drinking (Johnston, O’Malley & Bachman, 2003). In response to the growing problem of binge drinking on college campuses, the US Department of Health and Human Services set the goal in Healthy People 2010 to reduce binge drinking among college students to 20 percent by the year 2010 (US Department of Health and Human Services, 2000).

One study found that underage students drink less often but have more drinks per occasion, are more likely to drink in private settings (off-campus, dormitory, and fraternity parties), and pay less per drink than do of-age students (Wechsler, Kuo, Lee, Dowdall, 2000). Drinking in private settings could be of concern for university officials and law enforcement because there is no regulation or monitoring of drinking behaviors. The study also found that correlates of underage binge drinking include residence in a fraternity or sorority, very easy access to alcohol, obtaining drinks at lower prices, and drinking beer (Wechsler, Kuo, Lee, Dowdall-Environmental Correlates of Underage Alcohol Use and Related Problems of College Students, 2000).

According 2006 Core Survey data, 55.0 percent of students in the sample engaged in heavy drinking at least once during the two weeks prior to completing the survey (Core Survey, 2006). Heavy and Frequent drinking was defined in the survey as five or more drinks in one sitting as well as self-report of drinking 3 times a week or more. This type
of drinker is considered to be of an exceptionally high risk. 24.0 percent of students in the sample engaged in heavy and frequent drinking (Core Survey, 2006).

Neal and Fromme (2007) conducted a two-year longitudinal research project following freshman and sophomores at the University of Texas. They compared the drinking rates on Saturdays with and without college football games and discovered game days were associated with significantly heavier alcohol consumption regardless of whether the game was played at home or away.

A study by Liu (2007), examined self-reported drinking behaviors of college students in Texas. This study found that almost 30 percent of college students reported binge drinking within the past month. Over 11 percent of college students were frequent binge drinkers, that is, they binged on six or more occasions within the last month. Academic performance was also shown to be associated with binge drinking. Thirty-five percent of students who earned school grades of C+ or lower in 2005 were binge drinkers, compared to 28 percent of those who earned A’s and B’s. When asked to describe their current drinking behaviors, most binge drinkers considered themselves to be light or moderate drinkers. About 26 percent of binge drinkers considered themselves light drinkers, and 61 percent said they were moderate drinkers.

**Underage Drinking**

Some have found that earlier initiation of drinking has been associated with heavier drinking patterns and a variety of alcohol-related health problems later in life (Hingson, Heeren, Zakocs, Winter & Wechsler, 2003). Others think that due to the focus on underage drinking prohibition there is little emphasis on responsible drinking habits,
and little information about transitioning from underage to of-age (Amethyst Initiative, 2009). Many students had already established a pattern of drinking before coming to college (Liu, 2007). A majority (67 percent) of all college students in Texas had drunk alcohol before reaching the age of 18. College students who reported drinking at least several times a month in high school were more likely than those who drank less frequently in high school to binge drink in college (Liu, 2007).

Under many current minimum drinking age laws, underage students may be dissuaded from drinking alcohol to the extent that they drink on fewer occasions and less often in public settings. However, when they do drink they do so in a risky manner, having more drinks per occasion and drinking in private, less controlled situations (Wechsler, Kuo, Lee & Dowdall, 2000). Due to the often risky drinking behaviors of underage people, they tend to suffer more alcohol-related consequences (Wechsler, Kuo, Lee & Dowdall, 2000).

The national 2006 Core Survey found that of the 37,302 students who reported being under the age of 21, a great majority (80.2 percent) reported using alcohol within the year prior to completing the Core survey. A large number (66.4 percent) reported using alcohol within the 30 days prior to completing the Core Survey (Core Institute, 2009).

One study examined underage drinking among first year college students at a small, private, religious university. Specifically, it looked at the relationships between drinking behaviors among underage students, and the correlation of alcohol knowledge, gender, and outcomes associated with drinking. The primary purpose of the study was to
provide an understanding of underage drinking among first year college students and to examine the need for preventive strategies to counter underage drinking. Nearly half of the sample of underage students reported drinking beer at least once per week, and over half reported drinking five or more beers on average at any one time (Coll, Draves & Major, 2008). Hangover and vomiting were the most frequently reported negative outcomes of their drinking and alcohol knowledge was limited among sample participants with 41 percent of participants answering less than 50 percent of knowledge items on the survey correctly (Coll, Draves & Major, 2008).

Minimum drinking age laws are one of the tools that have been used to combat heavy alcohol use by students and specifically to prevent alcohol consumption of those under age 21. However, despite the ban on alcohol use by those under age 21, drinking continues to be prevalent in this age classification, especially in the university setting. Of greater concern, frequent binge drinking and the problems associated with that style of drinking have actually increased among underage students nationally (Wechsler, Lee, Nelson & Kuo, 2002). Overall, underage college students consume approximately half of all the alcohol college students report consuming (Wechsler, Lee, Nelson & Kuo, 2002). Due to the rising incidence of this dangerous alcohol consumption by underage people, some observers have concluded that controls on underage drinking, such as minimum drinking-age laws, do not work for college students and that such laws should be modified or rescinded (Hanson, Heath & Rudy, 2001).

According to the American College Health Association, an estimated 80 to 90 percent of all underage college students drink alcohol (American College Health Association, 2005). Researchers have sought to understand the importance of alcohol use
among college students, particularly alcohol use in excessive quantities despite the adverse consequences and risks to themselves and others. Some factors influencing college drinking that have been explored are college drinking expectations, psychosocial drinking influences, intrapersonal influences, stress reduction, sensation seeking, personal choice vs. responsibility, and institutional obligations (Fisher, Fried & Anushko, 2007).

**Environmental Issues**

The environment plays a critical role in daily activities and choices in all aspects of life. A few studies have aimed to examine how the environment contributes to college drinking, however this area has generally been given less attention than other contributing factors. Student affiliations and their surrounding environments are important determinants of initiating drinking behavior in college (Weitzman et al., 2003). Some external environmental factors that may influence alcohol use among college students include availability of alcohol, pricing, and density of bars and other drinking outlets near the campus (Usdan, Moore, Schumacher & Talbott, 2005).

One study by Liu (2007), examined self-reported drinking behaviors of college students in Texas and the availability of alcohol for underage students. Among underage past-year drinkers, 81 percent obtained alcohol from legal-drinking-age persons, 38 percent from someone under age 21, 38 percent from parents or other relatives, 27 percent from someone else who made it, and 23 percent bought it themselves without getting carded (Liu, 2007). Most of the current alcohol users surveyed had drinks at off-campus private parties and off-campus bars, and more than one-fourth of college students
said they usually could get alcohol without being carded from a local restaurant, a local bar/club off-campus, or a local gas station (Liu, 2007).

The study design of the Harvard School of Public Health College Alcohol Study (CAS) captured variation in the types of colleges, which allowed the opportunity to examine the influence on student drinking of different factors on multiple levels, including the college setting, the adjoining community, and the state in which the college is located (Dowdall and Wechsler, 2002). The CAS results revealed that binge drinking varies by college (ranging from 1 percent to 76 percent), yet, within colleges, binge drinking has remained stable over time (Wechsler et al., 2002). These findings suggest that factors in the environment may influence college student binge drinking (Weschler & Nelson, 2008).

The CAS report found that binge drinking varies by student subgroups, by the region of the country (higher in northeastern and north-central states, lowest in western states), and by the sets of policies and laws governing alcohol sales and use (Weschler & Nelson, 2008). Features of the environment, such as residential setting, low price, and high density of alcohol outlets, as well as the prevailing drinking rates at the college, are significantly related to the initiation of binge drinking in college (Weschler & Nelson, 2008).

One study found that college students consume alcohol at the 5-drink level more often that age-matched peers who do not attend college (Bachman, O’Malley & Johnston, 1984). Also, the rates of binge drinking among college students are nearly double the rates for high school students (Cremeens, Usdan, Brock-Martin, Martin & Watkins,
These findings may indicate that the college environment provoke or encourage high risk drinking.

One study examined whether colleges with larger enrollments of students from demographic groups with lower rates of binge drinking exert a moderating effect on students from groups with higher binge drinking rates. The study found that the binge drinking rates of white, male, and underage students were significantly lower in schools that had more minority, female, and older students (Bachman, O’Malley & Johnston, 1984). It also found that students who do not binge drink in high school are more likely to start binge drinking at colleges with fewer minority and older students (Bachman, O’Malley & Johnston, 1984). The study concluded that student-body composition and demographic diversity should be examined by colleges wishing to reduce their binge drinking problems (Bachman, O’Malley & Johnston, 1984).

Just as the environment can contribute to unhealthy drinking behaviors, it can also be modified to support healthier drinking behaviors. Research shows that several carefully conducted community initiatives aimed at reducing alcohol problems among college-age youth have been effective, leading to reductions in underage drinking, alcohol-related assaults, emergency department visits, and alcohol-related crashes (Hingson, 2005). According to the National Institute on Alcohol Abuse and Alcoholism, a close collaboration between colleges and their surrounding communities is key. This includes environmental approaches such as more vigorous enforcement of zero tolerance laws, other drinking and driving laws, and strategies to reduce the availability of alcohol (NIAAA, 2007).


**Initiatives and Programs to Prevent Underage College Drinking**

The National Institute on Alcohol Abuse and Alcoholism’s (NIAAA’s) Task Force on College Drinking was created in response to growing national concern about hazardous college drinking and the recognition that there are gaps in knowledge regarding effective prevention interventions (College Drinking: Changing the Culture, 2009). The Task Force Report, A Call to Action: Changing the Culture of Drinking at *U.S. Colleges*, describes an understanding of dangerous drinking behavior by college students and its consequences for both drinkers and nondrinkers.

Research shows that the transition into college, including the first few months of their freshman year, is the time when students are most vulnerable to engaging in risky behaviors, including experiences with alcohol (Cremeens, Usdan, Brock-Martin, Martin & Watkins, 2008). Because of this vulnerable period, some researchers have explored parent-child communication as a prevention strategy to reduce heavy drinking among first-year college students. One study found that communication was low between parents and children about alcohol in high school and during the transition to college (Cremeens, Usdan, Brock-Martin, Martin & Watkins, 2008). This is one potentially effective strategy that could be further explored to help with this transition stage and with teaching responsible alcohol use.

A study by Indiana University looked at motivation behind drinking and found the primary objective of many students is to get drunk (Engs, DeCoster, Larson & McPheron, 1978). After consultation with a representative of the National Institute on Alcohol Abuse and Alcoholism (NIAAA), the Division of Student Services created the Alcohol
Education Task Force composed of students, faculty, counselors, physicians, and administrators (Engs, DeCoster, Larson & McPheron, 1978). The Task Force’s main purpose was to develop an alcohol awareness program for college students. A review of the literature and a search for information (including media presentation) revealed that there was a lack of adequate alcohol education materials available for young adults in postsecondary education. Therefore, the Task Force created a program they felt would be useful and engage students. Evaluation of the program found that it was effective in changing knowledge about alcohol use and the students also indicated they liked the approach of the program and gained a greater understanding of their personal behavior (Engs, DeCoster, Larson & McPheron, 1978).

More recent approaches have been targeted toward university presidents and chancellors who are directly involved with the college environment on a daily basis. The Amethyst Initiative was launched in 2008 with the intention of bringing attention and debating the twenty-one year old drinking age. It chose to address college presidents and elected officials since they have close interaction and observations of many drinking habits among college students. The premise behind this initiative is that the age twenty-one drinking law is not effective, and in turn a culture of dangerous, clandestine binge-drinking has developed (Amethyst Initiative, 2009). This initiative poses alcohol education that mandates abstinence as the only legal option has not resulted in significant constructive behavioral change among students, and by choosing to use fake IDs, students make ethical compromises that erode respect for the law (Amethyst Initiative, 2009). As of September 1, 2009, the signatory count of universities for this initiative is 135 throughout the United States (Amethyst Initiative, 2009).
Faculty Perceptions about Drinking Behaviors and Policies

University faculty members assume an integral role in a students’ college experience. Because of the constant interaction with students and working in the college setting, faculty should have an opportunity to provide their perceptions and attitudes on alcohol policy and behaviors on their campuses.

One study examined conceptual and empirical studies on the role of social norms in college student alcohol use and in prevention strategies to counter alcohol misuse. The study found that parental norms have only modest impact on students once they enter college beyond the residual effects of previously drinking attitudes and religious traditions, and that faculty could theoretically provide a positive influence on student drinking behavior, but there is little evidence in the literature that faculty norms and expectations about avoiding alcohol misuse are effectively communicated to students (Perkins, 2002).

Most discussion and research on faculty contributions to the misuse of alcohol have largely concentrated on educational strategies that impart pharmacological and risk knowledge to students (Perkins, 2002). Evaluation studies of this approach suggest that the strategy, while making students more knowledgeable about characteristics of alcohol, rarely produces any notable benefit in terms of reductions in problem drinking (Duitsman & Cychosz, 1997; Robinson et al., 1993). Furthermore, voluntary education offered specifically on risks and dangers of drinking, whether delivered by faculty or health/peer counseling staff, is likely to reach only the least problematic students due to self-selection into these programs (Scott et al., 1997). Nevertheless, in their roles as teachers and
mentors, faculty are presumed to be an important reference group for students. Very little scientific research has been conducted to examine faculty impact on student alcohol use in this capacity, but there is a good deal of speculation about the positive or negative influence of faculty norms in terms of course instruction, role model behavior-and personal values communicated to students (Perkins, 2002).

Research has demonstrated not only large differences between faculty and student consumption patterns, but also differences in what is thought to be indicative of problem drinking where faculty are more conservative in their judgments about consumption levels, frequency of intoxication and inappropriate drinking times, even after controlling for the differences in personal consumption levels (Leavy and Dunlosky, 1989). Indeed, many faculty view student alcohol misuse as a significant problem, are quite interested in the welfare of their students and are concerned about the impact of drinking on academic work; yet relatively few are actively involved in prevention efforts or speaking out on campus (Ryan and DeJong, 1998).

Thus faculty teaching an expanded array of topics and issues about drinking across the curriculum and incorporating discussions of both student and faculty values, attitudes and behaviors in this type of broader curriculum infusion may be key to effectiveness as faculty norms are given greater visibility (Ryan and DeJong, 1998). In addition to achieving a more comprehensive exposure to issues of alcohol use, this kind of teaching might help make students more aware of faculty norms (and vice versa) as an additional normative influence on students (Ryan and DeJong, 1998).
The CORE Institute developed a Faculty and Staff Environmental Alcohol and Other Drug Survey in 1993. It consists of sub-scales developed to assess faculty and staff perceptions of alcohol and other drug problems on campus, awareness of policy and policy enforcement, support for programming efforts to combat alcohol and other drugs problems, awareness of university assessment efforts and faculty and staff’s perceived ability to identify students who are experiencing a problem and refer them for help (Core Institute, 2009). Additional questions were added to measure faculty and staff alcohol and other drug use, as well as their perceptions of student and other faculty and staff use (Core Institute, 2009). The basis for this instrument was the assumption that faculty and staff attitudes, perceptions, and beliefs about the extent of alcohol and other drug problems are a major influence on the campus environment.
CHAPTER III

METHODOLOGY

The purpose of this study was to examine health education faculty attitudes and perceptions of alcohol-related behaviors and policies in the top 10 universities (by enrollment) in Texas. It was reviewed and approved by the Institutional Review Board at Texas State University prior to conducting the study (Appendix G).

Assessment

The information gathered from this study will provide a quantitative analysis of faculty perceptions of alcohol-related behaviors and policies of the top 10 universities (by enrollment) in Texas. This study aimed to gain an understanding of the perceived role of alcohol among universities in Texas and perceptions of policies regarding alcohol.

The results of this study could provide ideas on programs or initiatives to address problematic drinking behaviors amongst universities in Texas. The study could also give insight as to whether current alcohol policies are effective in deterring problematic drinking behaviors among college students in Texas. Professionals in the substance abuse field, college health professionals, and/or Health Education/Promotion faculty could gain an understanding of areas in which they could target efforts to address alcohol-related problems in the college population. Faculty members, university
officials, or health professionals who work in the university setting could also gain insight of how alcohol is affecting their campus, and other campuses in Texas. Prevention measures and initiatives could then be examined to grasp how other universities are dealing with alcohol-related issues.

**Subjects**

This study examined the attitudes and perceptions of alcohol-related behaviors and policies of universities in Texas based on the responses of 38 Health Education/Promotion faculty surveyed. Health Education/Promotion faculty were chosen as the subjects of study because of their close connection with students, campus environment, knowledge of health, background in prevention strategies, and familiarity with program planning, implementation, and evaluation.

The criteria for inclusion of the participants was that they must be a professor, tenured, tenure-track, clinical faculty, adjunct faculty or lecturer of Health Education and/or Health Promotion in the top 10 universities (by enrollment) in Texas. These universities and their enrollment include: The University of Texas at Austin (50,006), Texas A&M University-College Station (48,126), University of Houston-Houston (36,104), University of North Texas-Denton (34,795), Texas State University–San Marcos (29,125), The University of Texas at San Antonio, (28,585), Texas Tech University-Lubbock (28,422), The University of Texas at Arlington (25,070), The University of Texas at El Paso (20,458), University of Texas–Pan American in Edinburg (17,577) (Texas Higher Education Coordinating Board, 2008). A representation of these institution demographics can be seen in Table 1.
These universities were chosen because of their size and impact on the health education/promotion field as well as the considerable number of students they serve. Because these institutions serve a significant number of college students in Texas, it was the intent of the researcher that this study could be generalized to other universities in Texas.
Instrument and Variables

The survey instrument used for this study was disseminated using an online survey constructed in the mrInterview program. The online survey was designed to obtain information on the perceptions of drinking behaviors and alcohol policies on the respective universities in Texas. The instrument was developed using a review of the literature and selected questions from previously validated instruments from the College Alcohol Study by the Harvard School of Public Health (College Alcohol Study, 2001) and the Core Alcohol and Drug Survey from Southern Illinois University Carbondale (Core Alcohol and Drug Survey, 2009).

The online survey consisted of 54 questions total. Twenty-six questions were asked to understand perspectives of drinking behaviors on the participants’ respective campuses, nine were used to understand faculty and/or university involvement regarding alcohol, 16 were used to understand alcohol-related policies on their respective campuses, and three were used to obtain demographic information from participants.

The majority of the scales used were Likert scales and a few dichotomous items were also included. The survey underwent content validity testing by faculty in the Health, P.E. and Recreation Department at Texas State University, professionals in the Alcohol and Drug Resource Center at Texas State University, and Health Education graduate students at Texas State University. These individuals were invited via email and were explained the purpose and procedures of the content validity assessment (Appendix A). The purpose of the content validity assessment was to identify punctuation/spelling errors, appropriateness of questions (whether any questions needed to be
added/removed), appropriateness of responses (whether there were appropriate responses for each question), and recognize any other feedback given by the individuals.

Dependent variables in this study included the Minimum Legal Drinking Age (MLDA) law and the survey instrument. The MLDA law was applicable in all 50 states, including Texas, so the entire target population should have responded to questions on the survey based off their understanding of the same law. The survey was a dependent variable because the same survey was sent to the entire target population. Independent variables in this study included the faculty members, the university in which the faculty members were employed, faculty perceptions, and faculty attitudes of the participants.

**Procedures**

Participants were recruited to participate in the study through their university email address gathered from program websites and correspondence with Health Education/Promotion department chairs. Three weeks before the survey was sent out to the study population, the survey was sent as a pilot test to five additional universities in Texas (Appendix C). These universities included Sam Houston State University, Texas Women’s University, Stephen F. Austin State University, Lamar University, and Texas Southern University. The purpose of the pilot test was to gain feedback from health education/promotion faculty at other universities in Texas with the intention of altering the survey if necessary, before it was sent out to the actual study population. Feedback from the pilot test indicated no changes to the survey were necessary.

The first correspondence to the study population was a pre-notice email sent out notifying participants that they would soon be receiving a brief, confidential, online
questionnaire for an important thesis research project being conducted by a graduate student at Texas State University-San Marcos (Appendix B). This allowed the participants to know in advance they could expect the survey and also gave a brief indication of what the survey was about.

The following week, an invitation to participate in the survey was sent out (Appendix D). The invitation explained that they were selected because they are a faculty member who teaches health education, health promotion or a similar subject at one of the top ten universities (by enrollment) in Texas. It was explained that the study is important because it will help give insight to alcohol policies, college drinking behaviors and insight to how health education/promotion faculty members at universities in Texas perceive these matters. Enclosed in the invitation email was a link to complete the survey and an explanation that completing the electronic survey signified consent to participate in the study. The email informed respondents that all survey data will remain confidential between the researcher (Janelle Hibbing) and the chairperson (Dr. Kelly Wilson) of this thesis study.

A cover page was included in the invitation to the study (Appendix E). This informed participants the purpose of the study and detailed procedures of the study. Contact information of the researchers and the Institutional Review Board were also provided. Up to three follow-up/reminder emails were sent to non-respondents (Appendix F). All individuals received a “thank-you” for participating in the study in the follow-up/reminder email.
The responses were given voluntarily by the participants with the understanding that all questions were answered to the best of their knowledge. Respondents had the option to not complete the survey or stop the survey at any time. The online survey was prepared in the mrInterview program through the Teaching, Research-Support, and Evaluation Center (TREC) at Texas State University-San Marcos. After completion of the survey, the respondents’ email addresses were transferred into the SPSS system, allowing the researchers to know who had not yet completed the survey.

**Confidentiality**

The data for each participant remained confidential. When the participant completed the survey, their email address was “labeled” as complete. The purpose was to prevent future follow up emails to those who had already completed the final survey. Once the final data was collected and thank you emails had been sent out, the list of participants completing the study survey was deleted.

**Analysis of Data**

Health Education/Promotion faculty attitudes and perceptions of alcohol-related behaviors and policies were analyzed quantitatively in this study. Quantitative data obtained from the survey was stored in an SPSS database. The mrInterview program, in which the survey was built, automatically transferred the data of each participant into the SPSS database. The data was then analyzed through descriptive data analysis, crosstabs, Chi-square, and ANOVA. Reliability was run on scaled variables and the Cronbach’s Alpha of this measurement was examined. This was used to calculate how well the
scaled items measure a single underlying construct. Further discussion and results of data analysis for this study are presented in Chapter IV of this thesis.
CHAPTER IV

RESULTS

This study was designed to examine Health Education/Promotion faculty’s attitudes and perceptions about alcohol-related behaviors and policies at universities in Texas. Irresponsible drinking is linked to many negative consequences for college students, so it is important to understand the impact of alcohol related behaviors and policies on university campuses. The purpose of this study was to gain perspective of alcohol-related behaviors and policies at universities in Texas from the Health Education/Promotion faculty members. A greater understanding of alcohol-related behaviors and policies could give insight on measures to assist college students in having fewer alcohol associated consequences. Detailed descriptions of results obtained from this study are analyzed in this chapter.

Analysis of Data

Health Education/Promotion faculty attitudes and perceptions about drinking behaviors and alcohol policy were analyzed quantitatively in this study. Quantitative research involves collecting quantitative data based on precise measurement using structured, reliable, and validated data collection instruments or through archival data sources (Gaur & Gaur, 2009). The nature of these data is in the form of variables and data analysis involves establishing statistical relationships (Gaur & Gaur, 2009). In this study, SPSS (Statistical Package for the Social Sciences) was used for data analysis.
The survey items were entered into mrInterview, an online survey program that automatically merged participants’ responses into an SPSS database. The quantitative data obtained from the survey was stored in the SPSS database. The data were analyzed using descriptive data analysis, crosstabs, Chi-square, and ANOVA. Descriptive statistics were used to summarize and present data in a meaningful manner so that the underlying information could be easily understood (Gaur & Gaur, 2009).

**Descriptive Statistics**

The survey was sent to 70 Health Education/Promotion faculty members employed at the top ten largest universities (by enrollment) in Texas. A total of 38 surveys were completed and returned for a response rate of 54.3 percent. Percentages for this study were computed based off the responses from the 38 returned surveys.

Demographic information was obtained for this study, however, because this was a confidential survey respondents were not asked to connect their name with their responses. Individuals were asked their gender, the classification of students they primarily teach, and the perceived political climate of their university. Table 2 represents the specific demographic information obtained.
### Table 2

*Demographic Information Obtained From Respondents*

<table>
<thead>
<tr>
<th></th>
<th>Frequency (N)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Are you male or female?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>25</td>
<td>65.8</td>
</tr>
<tr>
<td>Male</td>
<td>13</td>
<td>34.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Institution</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A&amp;M</td>
<td>12</td>
<td>17.1</td>
</tr>
<tr>
<td>Stephen F. Austin University</td>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td>Texas Women's University</td>
<td>8</td>
<td>11.4</td>
</tr>
<tr>
<td>TX Tech</td>
<td>4</td>
<td>5.7</td>
</tr>
<tr>
<td>TxState</td>
<td>5</td>
<td>7.1</td>
</tr>
<tr>
<td>UH</td>
<td>4</td>
<td>5.7</td>
</tr>
<tr>
<td>UNT</td>
<td>6</td>
<td>8.6</td>
</tr>
<tr>
<td>UT</td>
<td>6</td>
<td>8.6</td>
</tr>
<tr>
<td>UT-Arlington</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>UT-PanAm</td>
<td>3</td>
<td>4.3</td>
</tr>
<tr>
<td>UTEP</td>
<td>9</td>
<td>12.9</td>
</tr>
<tr>
<td>UTSA</td>
<td>6</td>
<td>8.6</td>
</tr>
<tr>
<td><strong>Which classification of students do you primarily teach?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primarily undergraduate</td>
<td>17</td>
<td>44.7</td>
</tr>
<tr>
<td>Primarily graduate</td>
<td>3</td>
<td>7.9</td>
</tr>
<tr>
<td>Both undergraduate and graduate</td>
<td>18</td>
<td>47.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Do you consider your university to be conservative, moderate, or liberal?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservative</td>
<td>10</td>
<td>26.3</td>
</tr>
<tr>
<td>Moderate</td>
<td>22</td>
<td>57.9</td>
</tr>
<tr>
<td>Liberal</td>
<td>6</td>
<td>15.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>38</td>
<td>100.0</td>
</tr>
</tbody>
</table>
A number of questions about perceived drinking behaviors at each participant’s university were asked in order to gain an idea of alcohol-related behaviors of students on their respective campuses. One perception of the faculty members surveyed is that males are more likely to have significantly higher alcohol consumption rates than females. Only 24 percent (N=9) felt females would have higher alcohol consumption rates than males, while 76 percent (N=29) felt males would have higher alcohol consumption rates than females.

Participants also perceived that undergraduates, specifically those under 21 years of age, are more likely to have significantly higher alcohol consumption rates than students 21 years of age or older. Specifically, 68 percent (N=26) of respondents felt those under 21 years of age would have higher alcohol consumption rates, while 32 percent (N=12) felt those 21 years of age or older would have higher alcohol consumption rates.

Involvement in organizations on campus is often a determinant of social interactions and alcohol use behaviors by university students. Greek sorority and fraternity members were perceived to have higher alcohol consumption rates than other organizations on campus. Specifically, 66 percent (N=25) of respondents perceived Greek sorority and fraternity members to have higher alcohol consumption rates.

Place of residency (i.e. on or off-campus) of students can also influence students’ drinking behaviors. In this study, faculty perceived students living off-campus to have higher alcohol consumption rates than those living on campus. More specifically, 55 percent (N=21) of participants perceived those living off campus to have higher alcohol
consumption rates. Students living in other university affiliated housing such as a fraternity or sorority house were perceived to have the next highest alcohol consumption rates (perceived by 32 percent of individuals). Table 3 represents descriptive statistics of faculty perceptions of alcohol consumption rate classified by gender, university classification, age, organizational involvement and location of residency.
Table 3

Perceived Alcohol Consumption Rates
Who do you think is most likely to have higher alcohol consumption rates at your university?

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency (N)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Females</td>
<td>9</td>
<td>23.7</td>
</tr>
<tr>
<td>Males</td>
<td>29</td>
<td>76.3</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Classification</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman/Sophomores</td>
<td>26</td>
<td>68.4</td>
</tr>
<tr>
<td>Juniors/Seniors</td>
<td>10</td>
<td>26.3</td>
</tr>
<tr>
<td>5th year or beyond (undergraduate)</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>Graduate students</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 21 years of age</td>
<td>26</td>
<td>68.4</td>
</tr>
<tr>
<td>21 years of age or older</td>
<td>12</td>
<td>31.6</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Student Organizations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greek sorority or fraternity members</td>
<td>25</td>
<td>65.8</td>
</tr>
<tr>
<td>Athletes</td>
<td>4</td>
<td>10.5</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>23.7</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Residence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-sex residence hall or dormitory</td>
<td>2</td>
<td>5.3</td>
</tr>
<tr>
<td>Co-ed residence hall or dormitory</td>
<td>3</td>
<td>7.9</td>
</tr>
<tr>
<td>Other university housing; fraternity/sorority house</td>
<td>12</td>
<td>31.6</td>
</tr>
<tr>
<td>Off-campus house or apartment</td>
<td>21</td>
<td>55.3</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Binge drinking tends to be a concern at many universities in the United States. According to The National Survey on Drug Use and Health (NSDUH) (2007), the binge drinking rate among college students was approximately 44 percent (Department of Health and Human Services, 2007). Ironically, the drinking rates among college students are significantly higher than their same age counterparts who are not involved in higher education (Wechsler, Lee, Kuo, et. al, 2002). A majority of respondents perceived binge drinking (79 percent; N=30), underage drinking (82 percent; N=31), drinking and driving (53 percent; N=20), students receiving a citation for Minor in Possession (MIP) (58 percent; N=22), and alcohol use affecting a students’ academic performance as problematic on their campus (53 percent; N=20). Alternatively, most respondents perceived students receiving a citation for public intoxication (PI) (63 percent; N=24) and violence due to alcohol use (90 percent; N=34) were not problematic on their campus. Table 4 represents specific perceived problematic alcohol-related behaviors on the individuals’ campus.
**Table 4**

*Perceived Problematic Alcohol-Related Behaviors*

Are the following alcohol-related behaviors problematic on your campus:

<table>
<thead>
<tr>
<th></th>
<th>Frequency (N)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Binge drinking</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>8</td>
<td>21.1</td>
</tr>
<tr>
<td>Yes</td>
<td>30</td>
<td>78.9</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Underage drinking</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>18.4</td>
</tr>
<tr>
<td>Yes</td>
<td>31</td>
<td>81.6</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Drinking and driving</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>47.4</td>
</tr>
<tr>
<td>Yes</td>
<td>20</td>
<td>52.6</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Minor in possession (MIP)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>16</td>
<td>42.1</td>
</tr>
<tr>
<td>Yes</td>
<td>22</td>
<td>57.9</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Alcohol use affecting academic performance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>47.4</td>
</tr>
<tr>
<td>Yes</td>
<td>20</td>
<td>52.6</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Public intoxication (PI)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>24</td>
<td>63.2</td>
</tr>
<tr>
<td>Yes</td>
<td>14</td>
<td>36.8</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Violence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>34</td>
<td>89.5</td>
</tr>
<tr>
<td>Yes</td>
<td>4</td>
<td>10.5</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
</tbody>
</table>
The environment can be a contributing factor to students’ alcohol use. Several studies have examined how the environment contributes to college drinking behaviors. Some external environmental factors that may influence alcohol use among college students include availability of alcohol, pricing, and density of bars and other drinking outlets near the campus (Usdan, Moore, Schumacher, & Talbott, 2005).

Many respondents (47 percent) answered they believe the social atmosphere at their university promotes alcohol use. One individual stated, “I believe that colleges and universities (and therefore the state of Texas) in some ways promote alcohol use because they accept advertising money from the alcohol industry. Tailgating parties and events have replaced the entertainment value of an actual athletic contest (i.e., the football game). Some people, mostly students, never even go into the stadium preferring to stay in the parking lot and party (drink).”

A respondent at another university added, “On our campus, the university daily newspaper has alcohol ads and specials and the stadium has scoreboards in each end zone provided by Anhauser-Busch (Budweiser). Most college undergraduate students are under the legal drinking age of 21. I think the culture has changed to the extent that the college experience is predominantly about partying and secondly about academics and getting an education. I would be interested in seeing what the crime rate, arrests, and bad behavior incidents are and how they relate to underage drinking surrounding game weekends.”

A majority (58 percent) of the faculty surveyed responded that they were not actively involved in efforts to prevent drug and/or alcohol use problems on campus. This
is not surprising as many faculty surveyed indicated they were not aware of their university’s policy on alcohol use. A vast majority of respondents indicated the university did not provide information on how to recognize when a student has a drinking problem, the university policy for drinking, penalties for breaking alcohol-related rules, or students’ drinking rate at their university. However, a majority (55 percent) of respondents indicated that since the beginning of the school year (2009-2010) their university did provide them information on where a student can go to get help for alcohol related problems. Specific responses can be identified in table 5.
Table 5

*Information Provided by the University*

Since the beginning of the school year (2009-2010) has your university provided the following types of information to you:

<table>
<thead>
<tr>
<th>Information Provided</th>
<th>Frequency (N)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Where a student can get help for alcohol-related problems?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>21</td>
<td>55.3</td>
</tr>
<tr>
<td>No</td>
<td>17</td>
<td>44.7</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>How to recognize when a student has a drinking problem?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>6</td>
<td>15.8</td>
</tr>
<tr>
<td>No</td>
<td>32</td>
<td>84.2</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Your university policy for drinking?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7</td>
<td>18.4</td>
</tr>
<tr>
<td>No</td>
<td>31</td>
<td>81.6</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Penalties for breaking alcohol-related rules?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7</td>
<td>18.4</td>
</tr>
<tr>
<td>No</td>
<td>31</td>
<td>81.6</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Students’ drinking rate at your school?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2</td>
<td>5.3</td>
</tr>
<tr>
<td>No</td>
<td>36</td>
<td>94.7</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Participants’ uncertainty about how their university is dealing with alcohol use may also stem from the fact that they believe additional or stricter efforts should be put into place to address alcohol related issues on campus. One respondent’s view on alcohol
policy was, “There is a conflict between the university's policies and actions (e.g. beer advertisements alongside [School name excluded] logo in groceries and at athletic events). Tailgating is encouraged without monitoring of alcohol. The university should partner more closely with local bars to watch out for over-consumption of alcohol. Increase course rigor to increase expectations that students are here to study/attend classes [sic].”

Understanding the locations where students get in trouble for alcohol violations is important because this allows university officials to investigate areas that are being overlooked and areas where additional monitoring for alcohol violations could be implemented. Universities may be more likely to target unhealthy alcohol-related behaviors utilizing campus resources such as student health centers, health educators, faculty, and/or alcohol resource centers on campus.

A major premise of the Amethyst Initiative is that the Minimum Legal Drinking Age (MLDA) law is not working and has instead created a dangerous culture of binge drinking, which often occurs off-campus and without supervision (Amethyst Initiative, 2009). This initiative has been sent to colleges and universities across the country and has currently received 135 signatories, three of which are in the state of Texas. A vast majority (74 percent; N=28) of faculty surveyed stated they did not know what the Amethyst Initiative is, and an even greater number (95 percent; N=36) of those faculty members did not know if the President at their university had signed the petition pledging support of the Amethyst Initiative.
In this study, a majority of respondents (58 percent; N=22) believed the minimum legal drinking age should remain the same, to be age 21 or over. However, many respondents (42 percent; N=16) believe the drinking age should be changed to under the age of 21. One participant stated, “I think having a specified drinking age unintentionally increases alcohol consumption (especially binge drinking) among young people. Having a drinking age makes drinking an achievement (or right [sic] of passage). Most countries without a designated drinking age have far fewer alcohol related problem. In short, I think the best approach would be to eliminate a designated drinking age. We send mixed messages to kids by drinking while telling them not to.”

A vast majority (90 percent; N=34) of faculty surveyed believed there are ways, other than the MLDA law, to prepare those under 21 years of age to make responsible decisions about alcohol consumption. One respondent stated, “[School name excluded] emphasizes more responsible drinking and we do a lot towards the education aspect in supporting our kids to make responsible decisions. The way we achieve that is through education. The more accurate information they have, hopefully the better decisions they make. We do have a safe ride program in the works, offering free rides home from bars, so students have knowledge and access to those types of services.”

Education is perceived to be an effective tool to promote safer drinking behaviors regardless of the age of the student. Many participants (74 percent; N=28) answered they believe completing an alcohol education program would be effective in promoting safer drinking for students under age 21. Most respondents (71 percent; N=27) answered they believe completing an alcohol education program would be effective in promoting safer drinking for students over age 21. One individual added, “Alcohol consumption among
college students has always and will continue to be a problem. I think our Draconian minimum age laws and the TABC's [Texas Alcoholic Beverage Commission] attitude about alcohol enforcement sets up students for binge drinking episodes. I would support education on responsible alcohol use rather than the current "gotcha" environment prevalent on our campus [sic]."

The issuing of a license to be able to drink has been one proposed tactic to promote safer drinking habits. Under this proposal, a license would be issued after completing an alcohol education course with the understanding that the license could be revoked at any time. A majority (71 percent; N=27) of faculty surveyed believe issuing a ‘license’ to drink at a certain age would not be effective in promoting safer drinking. On the contrary, one respondent stated “We just watched the 60 min video over issuing a license to drink in one of the classes. Most students seemed to think it was a good idea”.

**Reliability**

Reliability of scaled items, likelihood of an underage student getting caught drinking, likelihood of an underage student being reprimanded for drinking, and the perception of the Minimum Legal Drinking Age (MLDA) law contributing to certain drinking behaviors, was analyzed. Reliability refers to the confidence placed on the measuring instrument to give the same numeric value when the measurement is repeated on the same object (Gaur & Gaur, 2009). One commonly used technique to assess reliability is Cronbach’s alpha for internal reliability of a set of questions (scales).

When trying to understand college student drinking behaviors, it is important to examine where drinking takes place, and how drinking is monitored on and around the
university setting, particularly for those who are under the legal age to drink alcohol. In this study, respondents believed students 21 years of age or younger would likely be caught drinking in a dorm room (53 percent; N=20) or at a dorm party/social event (69 percent; N=26). Alternatively, respondents felt it would be unlikely for students under 21 years of age to be caught drinking at a fraternity party (53 percent; N=20) or at an off-campus party (53 percent; N=20). Cronbach’s alpha was used to determine reliability. The Cronbach’s alpha for items related to drinking location was .819 and is shown in table 6.

Table 6

<table>
<thead>
<tr>
<th>Reliability of an Underage Student Getting Caught Drinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>How likely is it that a student under 21 years of age would be caught drinking:</td>
</tr>
<tr>
<td>In a dorm room?</td>
</tr>
<tr>
<td>At a dorm party/social event?</td>
</tr>
<tr>
<td>At a fraternity party?</td>
</tr>
<tr>
<td>At an intercollegiate home athletic event?</td>
</tr>
<tr>
<td>At an off-campus party?</td>
</tr>
<tr>
<td>At an off-campus bar or club?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N of Items</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>.819</td>
</tr>
</tbody>
</table>

Health Education/Promotion faculty members who participated in this study believed students 21 years of age or younger would likely be reprimanded for drinking in a dorm room (69 percent; N=26), at a dorm party or social event (53 percent; N=20), and at an intercollegiate home athletic event (53 percent; N=20). Alternatively, respondents
felt it would be unlikely for students under twenty-one years of age to be reprimanded for drinking at a fraternity party (61 percent; N=23), an off-campus party (79 percent; N=30), or an off-campus bar or club (76 percent; N=29). The Cronbach’s alpha for items related to students being reprimanded for drinking was .890. Table 7 represents this reliability analysis between the scaled variables.

Table 7

<table>
<thead>
<tr>
<th>Reliability of an Underage Student Being Reprimanded for Drinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>How likely is it that a student under 21 years of age would be reprimanded for drinking:</td>
</tr>
<tr>
<td>In a dorm room?</td>
</tr>
<tr>
<td>At a dorm party or social event?</td>
</tr>
<tr>
<td>At a fraternity party?</td>
</tr>
<tr>
<td>At an intercollegiate home athletic event?</td>
</tr>
<tr>
<td>At an off-campus party?</td>
</tr>
<tr>
<td>At an off-campus bar or club?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>.890</td>
</tr>
</tbody>
</table>

*Reprimanded in this sense means a formal punishment or consequence

Generally, respondents indicated they did not think the minimum legal drinking age (MLDA) law solely contributes to unhealthy drinking behaviors by underage people. A majority of respondents believed the MLDA law does not contribute to binge drinking by underage people (63 percent; N=24), drinking and driving by underage people (66 percent; N=25), contribute to risky sexual behaviors by underage people (58 percent; N=22), contribute to violent behaviors by underage people (68 percent; N=26), or contribute to blacking out from drinking alcohol (66 percent; N=25). Reliability analysis
was conducted and the Cronbach’s Alpha for this scale was .956. The reliability can be found in table 8.

**Table 8**

*Reliability of MLDA Law Contributing to Drinking Behaviors*

<table>
<thead>
<tr>
<th>Contribution to Drinking Behaviors</th>
<th>N of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binge drinking by underage people?</td>
<td>5</td>
<td>.956</td>
</tr>
<tr>
<td>Drinking and driving by underage people?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risky sexual behaviors by underage people?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violent behaviors by underage people?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Blacking Out&quot; by underage people?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Cross-tabulation**

Cross-tabulations (or crosstabs) are one of the most frequently used methods of analysis for questionnaire data (Greasley, 2008, p.68). This statistical method enables us to examine the relationship between categorical variables in greater detail than simple frequencies for individual variables (Greasley, 2008, p.68). In this study, crosstabs were used to examine where students are likely to get caught and be reprimanded for drinking at the universities surveyed.

Alcohol appears to be an important topic at universities in Texas, especially in regards to underage drinking. A great number of faculty surveyed (82 percent; N=31) believe their university is concerned with the prevention of alcohol use. A cross-tabulation was performed between the university at which the faculty members were
employed and the perception of whether the faculty members believed their university was concerned about the prevention of alcohol use, as indicated in table 9.

A vast majority (82 percent; N=31) of faculty surveyed believe their university is concerned about alcohol use. A slightly greater number (84 percent; N=32) believe their university is concerned about the prevention of alcohol use for students under 21 years of age. However, a majority of respondents (55 percent; N=21) either disagreed or were unsure if they agree with the way their university addresses issues regarding alcohol use. This uncertainty may stem from the fact that many faculty are not even aware of the measures the university has in place regarding alcohol. Approximately 40 percent (N=15) of respondents stated they did not know their university’s policy about student drinking. Likewise, 40 percent (N=15) of respondents stated they did not know how the students’ use of alcohol on their campus compared to students enrolled at other Texas universities.
Table 9

*University Concern About Prevention of Alcohol*

Do you believe your university is concerned about the prevention of alcohol use?

<table>
<thead>
<tr>
<th>Institution</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&amp;M</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Percentage</td>
<td>10.5%</td>
<td>2.6%</td>
<td>13.1%</td>
</tr>
<tr>
<td>Stephen F. Austin Univers</td>
<td>2</td>
<td>0</td>
<td>5.3%</td>
</tr>
<tr>
<td>Percentage</td>
<td>5.3%</td>
<td>0%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Texas Women’s University</td>
<td>7</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Percentage</td>
<td>18.4%</td>
<td>2.6%</td>
<td>21.0%</td>
</tr>
<tr>
<td>TX Tech</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Percentage</td>
<td>2.6%</td>
<td>2.6%</td>
<td>5.2%</td>
</tr>
<tr>
<td>TxState</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Percentage</td>
<td>10.5%</td>
<td>2.6%</td>
<td>13.1%</td>
</tr>
<tr>
<td>UH</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Percentage</td>
<td>2.6%</td>
<td>2.6%</td>
<td>5.2%</td>
</tr>
<tr>
<td>UNT</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Percentage</td>
<td>13.2%</td>
<td>0%</td>
<td>13.2%</td>
</tr>
<tr>
<td>UT</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Percentage</td>
<td>5.3%</td>
<td>0%</td>
<td>5.3%</td>
</tr>
<tr>
<td>UT-PanAm</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Percentage</td>
<td>2.6%</td>
<td>0%</td>
<td>2.6%</td>
</tr>
<tr>
<td>UTEP</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Percentage</td>
<td>5.3%</td>
<td>5.3%</td>
<td>10.6%</td>
</tr>
<tr>
<td>UTSA</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Percentage</td>
<td>5.3%</td>
<td>0%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>7</td>
<td>38</td>
</tr>
<tr>
<td>Percentage</td>
<td>81.6%</td>
<td>18.4%</td>
<td>100%</td>
</tr>
</tbody>
</table>
**Chi-square**

The chi-square test is generally employed in causal comparative studies and in comparison of observed and theoretical frequencies (Neutens & Rubinson, 2002). It is used to estimate the likelihood that some factor other than chance accounts for the apparent relationship observed (Neutens & Rubinson, 2002). In this study, chi-square was used to examine faculty’s perceptions of the on- and off-campus locations where students are likely to get caught and perceptions of students being reprimanded for drinking.

A chi-square analysis was run between each individual institution and whether the respondents’ perceived their institution was concerned with the prevention of alcohol use. The statistically significant analysis proved that the prevention of alcohol use was of concern to universities in Texas and that there was not a significant difference in the opinions from school to school ($X^2 = 8.22$, $p = .61$). A representation of this analysis can be found in table 10.

**Table 10**

*Chi-Square of Concern With Prevention of Alcohol by Institutions*

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>8.222a</td>
<td>10</td>
<td>.607</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>9.180</td>
<td>10</td>
<td>.515</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 21 cells (95.5%) have expected count less than 5. The minimum expected count is .18.
ANOVA

Analysis of Variance (ANOVA) is a powerful method for comparing means (Neutens & Rubinson, 2002). ANOVA is a ratio of observed differences/error is used to test hypotheses (Neutens & Rubinson, 2002). In this study, a one way ANOVA was used to compare the perceived political climate of the university with questions about the Minimum Legal Drinking Age (MLDA) law. The F calculated was 4.75. The F statistic is the ratio of the variance between questions about the MLDA law to the variance within the perceived political climate of the university. The larger the F value, the more likely it is that there is a true difference between the groups and not one due to extraneous factors (The University of San Francisco, 2008). More precisely, an F value substantially greater than 1 demonstrates the true difference is likely to result of the treatment (Neutens & Rubinson, 2002). The significance calculated from the one way ANOVA was .015. This representation is shown in Table 11.

Table 11

ANOVA of MLDA Law in Helping Underage Students Drink Responsibly

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2.604</td>
<td>2</td>
<td>1.302</td>
<td>4.745</td>
<td>.015</td>
</tr>
<tr>
<td>Within Groups</td>
<td>9.606</td>
<td>35</td>
<td>.274</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>12.211</td>
<td>37</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level
A majority (58 percent; N=22) of respondents answered they believe the MLDA law is only somewhat effective in helping students under 21 years of age drink responsibly. Only five percent believe that the MLDA law is effective in helping students under 21 years of age drink responsibly. Therefore, respondents do not believe the MLDA law is a sole contributor to many negative alcohol-related behaviors, but they do believe other measures could be used in accordance with the MLDA law to help young people make responsible decisions about alcohol consumption. ANOVA was run with the perceived political climate of the school and how much the MLDA law is perceived to contribute to helping students drink responsibly. Results indicate that the more liberal the university, the more respondents agreed the MLDA law is effective in helping students under 21 years of age drink responsibly. The statistical calculation of the ANOVA can be found in table 4.2 and a graphical representation is represented in Figure 1.
Figure 1. ANOVA of Perceived Effectiveness of MLDA Law and Perceived Political Climate
CHAPTER V

CONCLUSIONS, LIMITATIONS, AND DISCUSSION

Conclusion

College students are among the heaviest drinking demographic groups in the United States (Neal & Fromme, 2008). Those who attend college consume considerably more alcohol than their noncollege peers (Johnston, O’Malley, Bachman, & Schulenberg, 2005), and they experience high rates of negative consequences associated with excessive alcohol use (Weschler, et al., 2002). Within the state of Texas, alcohol is the most commonly used substance amongst college students (Liu, 2007). In preventing alcohol abuse, current multi-dimensional approaches are coupling education about alcohol with efforts to alter relevant policies, reduce supply, and change media and marketing practices that shape or reflect norms (Weitzman & Wechsler, Unpublished manuscript).

Binge drinking tends to be a concern at many universities in the United States. According to The National Survey on Drug Use and Health (NSDUH) (2007), the binge drinking rate among college students was approximately 44 percent (Department of Health and Human Services, 2007). Ironically, the drinking rates among college students are significantly higher than their same age counterparts who are not involved in higher education (Wechsler, Lee, Kuo, et al., 2002).
Administrators and prevention specialists have used strategies that span educational and environmental efforts (Wechsler, Kelley, Weitzman, Giovanni, & Seibring, 2000), however minimal research has examined the role of faculty on campus, especially those with a health/wellness background. Overall, few faculty have become directly involved in one-on-one or classroom discussions with students (College Drinking Prevention, 2010).

It is important for students to understand the relationship between academic performance and alcohol use. The relationship between academic performance and alcohol is important for faculty to understand also, so they can understand their role and put measures in place to combat this problem. Faculty should be aware of ways in which they may contribute to the college drinking culture, for example, not scheduling exams—or even classes—on Fridays or being lenient with students who miss academic deadlines or cut classes (College Drinking Prevention, 2010).

Health Education/Promotion faculty have a background in prevention efforts, program planning, implementation, and evaluation. Because of their educational background, these individuals could have beneficial input for addressing alcohol-related behaviors. The findings from this study entail the attitudes and perceptions of alcohol-related behaviors and policies in the state of Texas, and implications for these findings are discussed in this chapter.

**Summary of Findings**

The study participants were identified as Health Education/Promotion faculty members in Texas. These individuals included faculty at the ten largest universities in
Texas (by enrollment). Pilot test data, which was sent to five additional universities in Texas, were also incorporated in order to gain a better understanding and because no changes were made to the survey instrument after the pilot test.

Findings from this study indicate that behaviors such as binge drinking, underage drinking, and drinking and driving were perceived by faculty as significantly problematic on their campus. Students receiving a citation for Minor in Possession (MIP), and alcohol use affecting a students’ academic performance were also perceived as problematic on their respective campus.

The majority of the faculty who responded to the survey perceived the following groups have higher alcohol consumption rates: males, undergraduate freshman/sophomores, students under 21 years of age, and students living off-campus. Greek sorority or fraternity members at universities in Texas were also perceived to have higher alcohol consumption rates.

Data confirm that fraternity members drink more intensely than do non-members (DeSimone, 2007). The National College Health Risk Behaviors Survey (NCHRBS) reported past month binge drinking at 69 percent for fraternity members compared with 42 percent of non-members (NCHRBS, 1997). Analyses of data from the CAS (Chaloupka & Wechsler, 1996) and the Core Alcohol and Drug Survey (Alva, 1998; Cashin et al., 1998) have similarly documented that fraternity members drink more frequently and heavily than do their non-member peers. One study found that members of fraternities or sororities in Texas were more likely than non-members to currently drink (72 percent versus 65 percent), binge drink (42 percent versus 28 percent), get
drunk often (26 percent versus 15 percent), and abuse alcohol (14 percent versus 8 percent). If the Health Education/Promotion faculty perceptions in this study are accurate, it appears fraternity membership in Texas holds true Nationally with fraternity members having higher alcohol consumption rates.

Participants perceived that Freshman and Sophomores are likely to have the highest alcohol consumption rates than other classifications of students on campus. A vast majority of Freshman and Sophomore students are under the age of 21, yet they are perceived to have higher alcohol consumption rates that those who are of legal age to drink alcohol. This is an important finding because regardless of a universities’ alcohol policy, there is a Federal law in place prohibiting individuals under 21 years of age to purchase, consume or possess alcohol, yet these underage students are still perceived to have higher alcohol consumption rates than other students. It should be explored whether this is the case and if so reasons these younger individuals consume more alcohol.

A majority (58 percent) of respondents answered they believe the Minimum Legal Drinking Age (MLDA) law is only somewhat effective in helping students under 21 years of age drink responsibly. Only five percent believe that the MLDA law is effective in helping students under 21 years of age drink responsibly. Therefore, respondents do not believe the MLDA law is a sole contributor to many negative alcohol-related behaviors, but they do believe other measures could be used in accordance with the MLDA law to help young people make responsible decisions about alcohol consumption.

A vast majority (74 percent) of faculty surveyed stated they did not know what the Amethyst Initiative is, and an even greater number (95 percent) of those faculty
members did not know if the President at their university had signed the petition pledging support of the Amethyst Initiative. Health Education/Promotion faculty need to be aware of propositions that could affect their students’ behaviors and in turn health. Faculty input may have important input or advocacy roles toward alcohol policies. Awareness is also important to be able to respond and share knowledge with students.

A majority of faculty believed their university was concerned about alcohol use, especially with the prevention of alcohol use by those under the age of 21. However, approximately 40 percent of respondents stated they did not know their university’s policy about student drinking, and did not know how the students’ use of alcohol on their campus compared to students enrolled at other Texas universities. Not knowing the university policy is a problem because if faculty members are not aware of the policy, they cannot educate their students about the university’s alcohol policy. This may also be an indication that universities are not utilizing individuals who could have valuable input on addressing alcohol-related issues. Given their educational background, Health Education/Promotion faculty may be constructive in dealing with alcohol-related issues and universities should work collectively with these individuals.

In this study, respondents believed students under twenty-one years of age would likely be caught drinking in a dorm room (53 percent) or at a dorm party/social event (69 percent). Alternatively, respondents felt it would be unlikely for students under twenty-one years of age to be caught drinking at a fraternity party (53 percent) or at an off-campus party (53 percent). The fact that faculty perceived a student is likely to get caught drinking at these locations (and possibly violate university alcohol policy) does
not mean students would receive a penalty. Therefore, a separate question on was asked on where an underage student would likely be reprimanded for drinking.

Respondents in this study perceived students under twenty-one years of age would likely be reprimanded for drinking in a dorm room (69 percent), at a dorm party or social event (53 percent), and at an intercollegiate home athletic event (53 percent), but would unlikely be reprimanded for drinking at a fraternity party (61 percent), at an off-campus party (79 percent), or at an off-campus bar or club (76 percent). It appears students would likely be sanctioned, or receive some kind of formal punishment, on university premises, but likely would not be reprimanded at locations not affiliated with the university. This is positive in one sense because this would indicate university officials are overseeing and enforcing the university’s alcohol policy. On the other hand, this could be negative because students may be more likely to drink in a location where they will not be reprimanded, and these perceived locations are off-campus and unmonitored.

Many respondents (47 percent) answered they believe the social atmosphere at their university promotes alcohol use. One study by Liu (2007), examined self-reported drinking behaviors of college students in Texas and the availability of alcohol for underage students. Among underage past-year drinkers, 81 percent obtained alcohol from legal-drinking-age persons, 38 percent from someone under age 21, 38 percent from parents or other relatives, 27 percent from someone else who made it, and 23 percent bought it themselves without getting carded (Liu, 2007). Most of the current alcohol users surveyed had drinks at off-campus private parties and off-campus bars, and more than one-fourth of college students said they usually could get alcohol without being
carded from a local restaurant, a local bar/club off-campus, or a local gas station (Liu, 2007). College campuses and the surrounding environment should enforce laws more strictly.

**Limitations**

A major limitation of this study was the small sample size. Although most of the larger universities in Texas had some sort of Health Education/Promotion or Wellness program, the programs were generally not sizeable, therefore employing a relatively small number of faculty members. Additionally, the study did not investigate actual drinking behaviors or alcohol policies on campus; the information gathered are perceptions and attitudes of the faculty members surveyed. Another limitation of this study was that the data collected only reflects the Health Education/Promotion faculty perceptions of alcohol-related behaviors and policies, and not the view of other faculty members on campus. This is a limitation because input from other health professionals who work on campus was excluded and these individuals may have important insight as to how alcohol affects their campus.

Finally, the perceptions examined are those of Health Educators who worked in the college setting and not in other settings. Because the college setting is fairly unique, the attitudes and perceptions examined from this study may not necessarily be applicable to other populations.

**Discussion**

Understanding the patterns of drinking by different groups of students and in different settings can help researchers understand the factors that promote heavy drinking
and identify potential intervention strategies to reduce alcohol consumption and, in turn, the harms that result from heavy consumption (Weschler & Nelson, 2008). Examining university faculty perceptions and attitudes about the role of alcohol on their campus can help Texas educators and university officials identify strategies to promote safer drinking behaviors for their students.

Health Education/Promotion faculty in this study perceived alcohol to be an important issue to address at their university. A majority (55 percent) of respondents indicated that since the beginning of the school year (2009-2010) their university did provide them information on where a student can go to get help for alcohol related problems. Having this type of information is a start for faculty to be able to be aware of resources the university provides regarding alcohol-related issues.

Many (58 percent) of the faculty surveyed responded that they were not actively involved in efforts to prevent drug and/or alcohol use problems on campus. Similarly, many respondents indicated their university did not provide alcohol-related information to them such as how to recognize when a student has a drinking problem, the university policy for drinking, penalties for breaking alcohol-related rules, or students’ drinking rate at their university. If alcohol is perceived to be an important issue at universities in Texas, faculty and officials in charge should invest more responsibility in addressing alcohol-related issues. This could be done through a combination educational efforts by faculty members and policy adjustment or enforcement by officials.

Specific behaviors that were perceived to be problematic were binge drinking, underage drinking, and drinking and driving. Other consequences perceived problematic
were students receiving a citation for Minor in Possession (MIP) and alcohol use affecting a students’ academic performance. These findings indicate these may be areas to focus prevention efforts at universities in Texas.

One study by Liu (2007), examined self-reported drinking behaviors of college students in Texas. The study found that women were almost as likely as men to have ever used alcohol, but they were less likely to binge drink or abuse alcohol. This same study found that the prevalence of alcohol use increased linearly by class standing and peaked at the senior year. However, junior students reported the highest rate of binge drinking (38 percent) and abusing alcohol (11 percent) (Liu, 2007). The results from the study by Liu differ slightly with the results from this thesis study. Faculty surveyed in the thesis study perceived men to have greater alcohol consumption rates than females. Freshman and sophomores were also perceived to have higher alcohol consumption rates. A social norms campaign marketing these actual alcohol consumption rates may be effective for freshman/sophomore students who are underage.

One study of Texas college students found that forty-one percent of college students reported that their school prohibits all alcohol use on campus by students. About 35 percent did not know what the alcohol policy was on their campus (Liu, 2007). Many students (43 percent) had received information from their universities about drugs other than alcohol (Liu, 2007). This study also found that about 39 percent had received information about the dangers of alcohol overdose, where to get help for alcohol-related problems, or the long term health effects of heavy drinking.
Findings from this thesis study and the 2005 study by Liu suggest that the knowledge of students and faculty of alcohol policy and effects of drinking are at a similar level. Given that alcohol is highly prevalent on college campuses in Texas, Health Education/Promotion faculty should have a better understanding of this issue and policies that pertain to alcohol. Part of the duty of these faculty members should be to relay this information to their students and have a greater understanding/knowledge base than that of their students.

Responsible drinking benefits everyone, and many students may actually be supportive of initiatives and enforcement of responsible drinking. A study by Liu (2005), found that nearly 90 percent of Texas college students surveyed said they would support their university if it were to offer free alcohol and drug counseling to students, if it were to make the alcohol rules more clear, or if it were to have the policy of drug testing student athletes. About 77 percent would support the setting aside some dormitories as alcohol-free, and 72 percent would like to see stricter enforcement of alcohol rules or fining of student organizations that offer alcohol to minors.

One of the challenges of implementing programs to reduce college drinking problems is the variety of groups and subgroups to be addressed and their diverse needs and agendas (College Drinking Prevention, 2009). Key campus constituencies for alcohol efforts include students, specific student subgroups such as Greek organizations, athletes and student leaders, faculty, alumni, and parents (College Drinking Prevention, 2009). DeJong et al. (2006) found that randomly assigned social norms marketing campaigns reduced perceived drinking and actual drinking of college students. Barnett et al. (2006) indicate that mandating attendance in an alcohol education session following alcohol-
related medical treatment or disciplinary infractions can motivate students to change their drinking behavior, particularly if they feel responsible for the corresponding incident.

**Recommendations for Further Research**

Further research should examine the effectiveness of current Health Education/Promotion efforts at universities in Texas regarding alcohol use. Policy effectiveness should also be examined in greater depth. A comparison in various university policies could help determine alcohol policies that are more effective.

Results from this thesis study could be compared in greater depth with actual drinking behaviors of college students in Texas. This may be helpful for faculty to see how their perceptions match up with the actual behaviors of students.

Further research could also examine the perceptions of students regarding alcohol-related behaviors and policies at universities in Texas. Demographical questions about students were not examined in this study, however, research shows differences in drinking behaviors between certain demographics such as race. One study found that 35 percent of Anglos, 25 percent of Hispanics, and 9 percent of African American students reported binge drinking in the past month (Liu, 2007). Anglo students also had the highest percentage of getting drunk often and abusing alcohol (Liu, 2007). Health Education/Promotion efforts targeting certain demographic groups may be an area for further examination.

One final area for further research should investigate the role of the environment at college campuses in Texas. Specifically, do some universities promote alcohol consumption more than other schools? Does alcohol marketing differ between
universities? Results from this study indicate the social atmosphere may be a contributing factor to students’ alcohol consumption rates and further research in this area may be beneficial.
APPENDIX A

CONTENT VALIDITY EMAIL
Hello,

For those of you who don’t know me, I am a graduate student at Texas State University in Health Education working on a thesis project with Dr. Kelly Wilson. The purpose of this study is to examine Health Education/Health Promotion faculty attitudes and perceptions of drinking policies and behaviors at the top 10 universities (by enrollment) in Texas.

You have been selected to participate in a content review of my study. Your name was recommended because you currently work with college students or because you have a background in education or health education. Enclosed is a link to a survey. I am **NOT** collecting data, I am simply asking your help for content validity purposes. While participating in the survey, please look for the following:

- Punctuation/spelling errors
- Appropriateness of questions (do any questions need to be added/removed?)
- Appropriateness of responses (are there appropriate responses for each question?)
- Any other feedback you may have

I am using a web based survey and have some control over formatting, so please let me know if you have any suggestions in that area, as well. Unfortunately, due to the program I am using for the survey, I will not be able to receive data based responses from you. Any comments/feedback that you provide to me will need to be sent in an email or attached as a document. The questions can be easily copied and pasted to a word document. If you could get your feedback to me by next Friday, April 24th that would be great.

Thank you for your time. Your help will be greatly appreciated!

Sincerely,

Janelle Hibbing
APPENDIX B

PRENOTICE EMAIL
Hello,

A few days from now you will receive an email request to complete a brief, confidential, online questionnaire for an important thesis research project being conducted by a graduate student at Texas State University-San Marcos.

I am writing beforehand because many people like to know in advance that they will be receiving a questionnaire. This study is important because it will help give insight to alcohol policies, college drinking behaviors and how Health Education/Promotion faculty at universities in Texas perceive these matters.

Thank you for your time and consideration. It’s only with the generous help of people like you that this research can be successful.

Sincerely,

Janelle K. Hibbing
Graduate Research Assistant
Texas State University-San Marcos
I am writing to ask for your participation in a pilot study of Health Education/Promotion faculty members in Texas. This study is part of an effort to understand Health Education/Promotion faculty attitudes and perceptions of drinking behaviors and alcohol policies at universities in Texas. This study is part of the requirements for a master level thesis.

Because you are a Health Education faculty member teaching at a university in Texas, you may have insight to drinking behaviors among students and alcohol policy on campus. Enclosed in this email is a link to complete a brief survey which should take about 15-20 minutes to complete. [Survey Link]

Results from this survey will be used to better understand faculty attitudes about college drinking behaviors and policies as well as faculty perceptions about college drinking behaviors and policies on your respective campuses. It is important to comprehend these behaviors so that harmful behaviors may be addressed in appropriate disciplines, such as health education.

Your answers are confidential between the researchers and will be released only as summaries in which no individual’s answers can be identified. When you complete the survey, your name will be deleted from the mailing list and never connected to your answers in any way. This survey is voluntary, however, you can help provide valuable information for a thesis study by taking a few minutes to share your experiences and opinions about drinking behaviors and policies on your campus.

If you have any questions or comments about this study, I will be happy to talk with you. You may contact me or my thesis advisor (Dr. Kelly Wilson) at 512-245-4373. Thank you very much for helping with this important study.

Sincerely,

Janelle K. Hibbing
Graduate Research Assistant
Texas State University-San Marcos

P.S. If you are not part of the Health Education faculty but you received this email, a short response stating you are not a part of the Health Education faculty would be extremely beneficial.
APPENDIX D

INVITATION FOR STUDY
I am writing to ask for your participation in a study of Health Education/Promotion faculty members in Texas. This study is part of an effort to understand Health Education/Promotion faculty attitudes and perceptions of drinking behaviors and alcohol policies at universities in Texas. This study is part of the requirements for a master level thesis.

Because you are a Health Education faculty member teaching at a university in Texas, you may have insight to drinking behaviors among students and alcohol policy on campus. Enclosed in this email is a link to complete a brief survey which should take about 15-20 minutes to complete. [Survey Link] Results from this survey will be used to better understand faculty attitudes about college drinking behaviors and policies as well as faculty perceptions about college drinking behaviors and policies on your respective campuses. It is important to comprehend these behaviors so that harmful behaviors may be addressed in appropriate disciplines, such as health education.

Your answers are confidential between the researchers and will be released only as summaries in which no individual’s answers can be identified. When you complete the survey, your name will be deleted from the mailing list and never connected to your answers in any way. This survey is voluntary, however, you can help provide valuable information for a thesis study by taking a few minutes to share your experiences and opinions about drinking behaviors and policies on your campus.

If you have any questions or comments about this study, I will be happy to talk with you. You may contact me or my thesis advisor (Dr. Kelly Wilson) at 512-245-4373. Thank you very much for helping with this important study.

Sincerely,

Janelle K. Hibbing
Graduate Research Assistant
Texas State University-San Marcos

P.S. If you are not part of the Health Education faculty but you received this email, a short response stating you are not a part of the Health Education faculty would be extremely beneficial.
APPENDIX E

COVER PAGE FOR THE EMAIL INVITATION TO THE ONLINE SURVEY
AND COVER PAGE FOR THE ONLINE SURVEY
You are invited to voluntarily participate in a confidential research survey regarding Health Education and/or Health Promotion faculty perceptions of alcohol policies and drinking behaviors on and around your university’s campus. The lead researcher for this study is Janelle K. Hibbing of the Department of Health, Physical Education and Recreation in the Health Education program at Texas State University-San Marcos. If you have any questions Janelle can be contacted by phone at 512-245-4373 or via email at jh1844@txstate.edu. This thesis project is being overseen by Dr. Kelly Wilson and she can be contacted at 512-417-5919 or via email at kw25@txstate.edu. This study was reviewed and approved by the Institutional Review Board at Texas State University-San Marcos. The application number is: 2009H569. Pertinent questions about the research, research participants’ rights, and/or research-related injuries to participants should be directed to the IRB chair, Dr. Jon Lasser (512-245-3413 – lasser@txstate.edu, or to Ms. Becky Northcut, Compliance Specialist (512-245-2102).

The purpose of the research project is to provide an understanding of Health Education/Promotion faculty attitudes about and perceptions of alcohol-related behaviors and policies among students at the top 10 universities (by enrollment) in Texas. You have been invited to participate because you teach health education or health promotion (or a similar subject) at your university and will be able to give valuable insight on this matter.

Enclosed is a link to an online survey which will take no more than 20 minutes to complete. All data collected for this thesis project will remain confidential. Should you decide to participate, your responses will be linked to your email address, only to let us know who has responded. Your answers will not be connected to your name. You have the right to refuse to participate or withdraw your participation at any time for any reason.

There are no risks of physical or psychological harm associated with your participation in this survey. Benefits that may be gained are ideas on interventions, preventative measures for drinking behaviors, or improvements in alcohol policy on your respective campus. Please contact the researchers or your campus’ Alcohol Resource Center if you have any questions or concerns.

Your responses will be held confidential and will not be revealed to anyone other than the researchers under any circumstances. Data will be kept no longer than one year in the secure SPSS database of Texas State University-San Marcos. The results of this confidential survey will be used as data as part of a master level thesis and will likely be published in an academic journal. A summary of findings will be provided to you upon completion of the study if requested. Please contact Janelle Hibbing or Dr. Kelly Wilson at the above contact information if you would like to obtain the results. Please print this form for your records. Thank you for your time and consideration. Sincerely,

Janelle K. Hibbing

Following the link and completing the survey signifies that you fully understand the consent form and its contents and agree to participate in this study.
APPENDIX F

THANK YOU/REMINDER
Hello,

Last week a questionnaire seeking your opinions about alcohol-related behaviors and policies on your campus was emailed to you. You were chosen because you are a Health Education/Promotion faculty in Texas.

If you have already completed and returned the questionnaire, please accept my sincere thanks. If not, this is a friendly reminder to please do so as soon as possible. The survey can be found here: [Survey Link]

It is only by asking people like you to share your experiences and opinions that we can understand perspectives of alcohol use and policies in Texas.

Thank you very much for helping with this important study!

Sincerely,

Janelle K. Hibbing
Graduate Research Assistant
Texas State University-San Marcos

P.S. If you are not part of the Health Education faculty but you received this email, a short response stating you are not a part of the Health Education faculty would be extremely beneficial.
APPENDIX G

INSTITUTIONAL REVIEW BOARD CERTIFICATE OF APPROVAL
Institutional Review Board Application

Certificate of Approval

Applicant: Janelle Hibbing

Application Number: 2009H569

Project Title: An Examination of Health Education Faculty Attitudes and Perceptions of the Amethyst Initiative and Drinking Behaviors in the Top 10 Universities (by enrollment) in Texas

Date of Approval: 04/08/09 17:14:57

Expiration Date: 04/08/10

Assistant Vice President for Research and Federal Relations

Chair, Institutional Review Board
APPENDIX H

FINAL SURVEY INSTRUMENT
Do you teach Health Education/Health Promotion (or a similar subject) in the university setting?
☐ yes
☐ no

The following 5 questions will be asking you about who you think is most likely to report higher alcohol consumption rates at your university.

**AcConsGender**

Who do you think is most likely to report higher alcohol consumption rates at your university?
☐ males
☐ females

**AcConsClass**

Who do you think is most likely to report higher alcohol consumption rates at your university?
☐ freshmen
☐ sophomores
☐ juniors
☐ seniors
☐ 5th year or beyond (undergraduate)
☐ graduate students

**AcConsAge**

Who do you think is most likely to report higher alcohol consumption rates at your university?
☐ under 21 years of age
☐ 21 years of age or older

**AcConsSec**

Who do you think is most likely to report higher alcohol consumption rates at your university?
☐ sorority members
☐ fraternity members
Who do you think is most likely to report higher alcohol consumption rates at your university?
- single-sex residence hall or dormitory
- co-ed residence hall or dormitory
- other university housing
- fraternity/sorority house
- off-campus house or apartment

What is your school's policy about alcohol use on campus by students, staff and faculty?
- alcohol prohibited for everyone, regardless of age
- alcohol prohibited for all students, regardless of age
- alcohol prohibited for everyone under age 21
- alcohol allowed for those over 21, but only in designated locations or at special events
- no school policy
- don't know school's policy

In your opinion, how strongly does your school enforce its alcohol policy?
- the alcohol policy is strongly enforced
- the alcohol policy is enforced
- the alcohol policy is weakly enforced
- the alcohol policy is not enforced at all
- no school policy
- don't know school policy

Are you actively involved in efforts to prevent drug and alcohol use problems on your campus?
- very active
- active
- somewhat active
- not active
Since the beginning of the school year (2008-2009) has your university provided the following types of information to you?

<table>
<thead>
<tr>
<th>Topic</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>where a student can get help for alcohol-related problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>how to recognize when a student has a drinking problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>your university policy for drinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>penalties for breaking alcohol-related rules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>students' drinking rate at your school</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How likely is it that a student under 21 years of age who drinks alcohol on or near your campus in any of the following situations will be caught?

VL=Very Likely SL=Somewhat Likely SU=Somewhat Unlikely U=Unlikely

<table>
<thead>
<tr>
<th>Situation</th>
<th>VL</th>
<th>SL</th>
<th>SU</th>
<th>VU</th>
</tr>
</thead>
<tbody>
<tr>
<td>in a dorm room</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>at a dorm party or social event</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>at a fraternity or sorority party</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>at an intercollegiate home athletic event</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>at an off-campus party</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>at an off-campus bar or club</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Alcohol-related problems on your campus.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>binge drinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>family alcohol and problems driving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>drinking and driving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>underage drinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>minor in possession (MIP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>public intoxication (PI)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>alcohol affecting student's overall academic performance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Which alcohol related problems do you believe are most
**Concerned Use**

The following 2 questions ask about university concern about the prevention of drug and alcohol use.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you believe your campus is concerned about the prevention alcohol use?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you believe your campus is concerned about the prevention of alcohol use for students under 21 years of age?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you believe your campus is concerned about the prevention of drug use?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Agree/Alcohol**

Do you agree with the way your college is dealing with students alcohol use?

- Strongly agree
- Agree
- Disagree
- Strongly disagree

**School Policy**

Which of the following do you think should be your school’s policy about student drinking?

- The current alcohol policy
- A policy which imposes greater restrictions on alcohol use
- A policy which imposes fewer restrictions on alcohol use
- Don’t know school’s policy

**Environment**

The following 3 questions ask you about your campus environment.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the social atmosphere at your university promote alcohol use?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does the social atmosphere promote other drug use?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you feel safe when you are on your university campus?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Compared to students enrolled at other Texas universities, your students' use of alcohol is

- greater than other campuses.
- less than other campuses.
- about the same as other campuses.

Do you know what the Amethyst Initiative is?

- yes
- no

Do you know if your university has signed on to the Amethyst Initiative?

- yes
- no

The following questions ask about how the minimum legal drinking age law (MLDA) contributes to the irresponsible drinking behaviors by underage people?

- Do you think MLDA contributes to binge drinking by underage people?
- Yes
- No

- Do you think MLDA contributes to drinking and driving behaviors by underage people?
- Yes
- No

- Do you think MLDA contributes to risky sexual behaviors by underage people?
- Yes
- No

- Do you think MLDA contributes to violent behaviors (such as fighting) by underage people?
- Yes
- No

- Do you think MLDA contributes to blacking out by underage people?
- Yes
- No

(Irresponsible behaviors are things such as drinking and driving, having unprotected sex, blacking out, getting in fights, etc.)

Do you think there are ways, other than MLDA laws, to prepare
those under 21 years of age to make responsible decisions about alcohol consumption?

- yes
- no

Do you think the MLDA is effective in helping students under 21 years of age drink responsibly?

- very effective
- effective
- somewhat effective
- not effective at all

What should be the minimum legal drinking age?

- under 18
- 18
- 19
- 20
- 21 or over

Do you think completing an alcohol education course would be effective in promoting safer drinking?

<table>
<thead>
<tr>
<th>yes</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>for students under 21</td>
<td></td>
</tr>
<tr>
<td>for students 21 or over</td>
<td></td>
</tr>
</tbody>
</table>

Do you think issuing a 'license' to drink at a certain age would be effective in promoting safer drinking? (A license would be issued after completing an alcohol education course with the understanding that it may be revoked due to offenses at any time)

<table>
<thead>
<tr>
<th>yes</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>under 18</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>
Do you consider your university to be conservative, liberal or moderate?
- conservative
- liberal
- moderate

Which classification of students do you primarily teach?
- freshmen
- sophomores
- juniors
- seniors
- graduate students

Are you male or female?
- male
- female

Thank you for completing this survey for a thesis study. Your answers will remain confidential. Your participation is greatly appreciated.
REFERENCES


VITA

Janelle Kay Hibbing was born in Ames, Iowa on January 10, 1987. She is the daughter of Richard and Joleen Hibbing and has one younger brother, Kyle. After completing her work at Webster City High School, Webster City, Iowa, she entered The University of Iowa in Iowa City, Iowa. She attended The University of Iowa from 2005-2008 where she received her Bachelor of Arts (B.A.) degree in Interdepartmental Studies-Health Science. She also minored in Spanish and Sociology.

In August, 2008, she entered the Graduate School at Texas State University-San Marcos and was a candidate for Master of Health Education (M.Ed.) in May 2010.

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