

Eastern Kentucky University

**Encompass**

---

Online Theses and Dissertations

Student Scholarship

---

January 2018

## Alcohol Policy Initiatives of Post-Secondary Institutions in the State of Kentucky: An Evaluation of Best Practice Strategies to Reduce Binge Drinking

Deniece Bell

*Eastern Kentucky University*

Follow this and additional works at: <https://encompass.eku.edu/etd>



Part of the [Higher Education Administration Commons](#), and the [Substance Abuse and Addiction Commons](#)

---

### Recommended Citation

Bell, Deniece, "Alcohol Policy Initiatives of Post-Secondary Institutions in the State of Kentucky: An Evaluation of Best Practice Strategies to Reduce Binge Drinking" (2018). *Online Theses and Dissertations*. 508.

<https://encompass.eku.edu/etd/508>

This Open Access Dissertation is brought to you for free and open access by the Student Scholarship at Encompass. It has been accepted for inclusion in Online Theses and Dissertations by an authorized administrator of Encompass. For more information, please contact [Linda.Sizemore@eku.edu](mailto:Linda.Sizemore@eku.edu).

ALCOHOL POLICY INITIATIVES OF POST-SECONDARY INSTITUTIONS IN  
THE STATE OF KENTUCKY: AN EVALUATION OF BEST PRACTICE  
STRATEGIES TO REDUCE BINGE DRINKING

BY

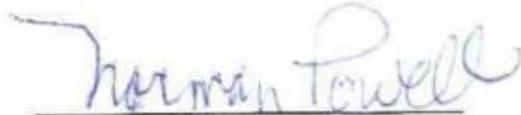
DENIECE BELL

DISSERTATION APPROVED:



Sherwood Thompson

Chair, Advisory Committee



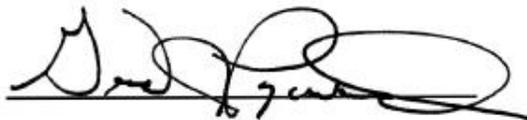
Norman Powell

Member, Advisory Committee



J. Matthew Webster

Member, Advisory Committee



Dean

Dean, Graduate School

## STATEMENT OF PERMISSION TO USE

In presenting this dissertation in partial fulfillment of the requirements for a Doctorate of Education degree at Eastern Kentucky University, I agree that the Library shall make it available to borrowers under rules of the Library. Brief quotations from this document are allowable without special permission, provided that accurate acknowledgements of the source is made. Permission for extensive quotation from or reproduction of this document may be granted my major professor in [his/her] absence, by the Head of Interlibrary Services when, in the opinion of either, the proposed use of the material is for scholarly purposes. Any copying or use of the material in this document for financial gain shall not be allowed without my written permission.

Signature:

X *Alexis Bue*

Date: 04/09/2018

ALCOHOL POLICY INITIATIVES OF POST-SECONDARY INSTITUTIONS IN THE STATE OF  
KENTUCKY: AN EVALUATION OF BEST PRACTICE STRATEGIES TO REDUCE  
BINGE DRINKING

BY

DENIECE BELL

Submitted to the Faculty of the Graduate School of  
Eastern Kentucky University  
in partial fulfillment of the requirements  
for the Degree of  
DOCTOR OF EDUCATION  
2018

@ Copyright by DENIECE BELL, 2018  
All Rights Reserved.

## DEDICATION

This Dissertation is dedicated to my parents who are with me in spirit. Thank you for teaching me the importance of discipline, perseverance, the fundamental values of achieving goals and most importantly being my spiritual guide and moral compass. I love you both, infinitely.

To my two loves, Malcolm and Malik, Mom loves you

## ACKNOWLEDGMENTS

I am eternally grateful to my committee Chair and mentor, Dr. Sherwood Thompson, for his leadership, patience, unwavering support and expectancy of scholarly work. Thank you for creating a platform, transforming me from consumer to producer.

I would also like to thank my committee members, Dr. Norman Powell and Dr. Matthew Webster, for taking a profound interest in my study and sharing their knowledge and expertise with me to produce a quality study. Dr. Norman and Sandra Powell, thank you for your sustaining support from beginning to end throughout this process. Your support is immeasurable. Dr. Matthew Webster, thank you for your great counsel, sound advice and commitment of time. I truly could not have done it without you!

I would also like to thank my two sons, Malcolm and Malik, for inspiring me to go beyond the limits and for their patience during the successful completion of my Dissertation. My prayer is that you always aspire to achieve the greatness within you, my two! Never be afraid to soar! To my brother, "My Broby", thank you for being ever present in my life! Your mentorship and words of encouragement are invaluable! Your baby Sis loves you!

I would like to express my sincere gratitude to Dr. James Bliss and my adviser, Dr. Charles Hausman, for all of their support, personal feedback, shared experiences and dedication during this process. Thank you to countless others who provided words of encouragement during this personal journey, you know who you are. I appreciate you!

Thank you, God, for guiding me through this process and giving me the strength to endure. "I Can Do All Things Through Christ Who Strengthens Me" (Philippians 4:13).

## Abstract

Binge drinking has become a matter of public health. The legal drinking age is 21 in the United States; however, binge drinking by underage college students is prevalent, alarming, and consequential (Malloy & Goldman, 2002). This polarizing topic has caused great concern among policy makers, legal experts, constituents and organizations alike, and as a result they have acted with a sense of urgency to implement policies and evidence-based recommendations for prevention and treatment (U. S. Department of Health and Human Services Alcohol and Health, 1990).

The purpose of this study was to examine the current alcohol policy initiatives among four post-secondary institutions in the State of Kentucky. First, an Alcohol & Drug Educator was identified to determine the content of their current alcohol policies and if they contained evidence-based strategies to include treatment and prevention. A secondary purpose of this study examined the university policies to determine if those said policies were being monitored for fidelity and effectiveness as well as to assess Alcohol and Drug Educators' perceptions of these policies.

Findings revealed that each college campus must identify content experts to model evidence-based interventions to reduce binge drinking. Policy makers, college presidents and college administrators should be charged with the undertaking of creating collective collaboration in an effort to secure allocated funding to eliminate the fiscal and budgetary constraints that are prohibiting effective interventions and eliminate the disconnect that exist with fulfilling the requirements of both, the Drug Free Schools and Communities Act and 952 of the HERA Act.

*Keywords:* binge drinking, content expert, evidence-based, high-risk drinking

## Table of Contents

Chapter	Page
I. Introduction.....	1
Statement of the Problem.....	2
Background of the Study .....	7
Participants.....	8
Sample Population .....	8
Purpose of the Study .....	9
Research Questions .....	11
Limitations of the Study .....	11
Delimitations of the Study .....	12
Resulting Actions.....	14
Definition of Key Terms .....	14
Summary .....	17
II. Literature Review.....	20
National Studies .....	26
College Alcohol Study (CAS) .....	26
Core Alcohol and Drug Study (CORE) .....	27
Monitoring for the Future (MTF) .....	30
Legislative Mandates.....	31
Minimum Legal Drinking Age Act (MLDA) .....	31
Drug Free Schools and Communities Act.....	32
Family Educational Right and Privacy Act (FERPA) .....	33
Binge Drinking Defined: Frequency, Quantity and Prevalence .....	34
The Neuroscience Behind Underage Drinking.....	40
A New Paradigm Shift: Changing the Culture, One Student, One Step at a Time .....	44
NIAAA Task Force 4-Tier Evidence-Based Recommendations.....	45
The Surgeon General’s Report on Alcohol, Drugs & Health:	
Evidence-Based Recommendations.....	52
III. Methodology .....	60
Introduction.....	60

Background of the Study .....	61
Purpose of the Study .....	62
Statement of the Problem .....	63
Research Questions .....	67
Participants.....	68
Sample Population .....	68
Instrumentation .....	70
Data Collection .....	72
Data Analysis .....	73
Trustworthiness .....	75
Limitations of the Study .....	75
Delimitations of the Study .....	76
Resulting Actions.....	77
Participant Demographic Summary .....	78
Summary .....	78
IV Findings: Themes and Findings .....	79
Overview of Key Findings .....	81
Discussion: Themes and Findings.....	83
Trustworthiness and Corroboration Strategies .....	97
Summary of Findings.....	97
V. Conclusions and Recommendations.....	99
Interpretation and Analysis of Key Findings.....	101
Summary .....	118
Recommendations for Future Research .....	120
References .....	122
Appendences.....	147
Appendix A: Demographic Questionnaire .....	148
Appendix B: IRB Consent to Participate Form.....	151
Appendix C: Interview Guideline.....	154

## I. Introduction

Binge drinking has become a matter of public health. The minimum legal drinking age (MLDA) is 21 in the United States, however underage drinking among college students has become increasingly excessive and is prevalent, alarming, and consequential (Malloy, Goldman, & Kingston, 2002). Underage consumption has become a polarizing topic that has caused great concern among policy makers, legal experts, constituents and organizations alike, and as a result they have acted with a sense of urgency to implement policies and evidence-based recommendations for prevention and treatment (U.S. Department of Health and Human Services Alcohol and Health, 1990). Injurious, risky and sometimes lethal consequences associated with excessive alcohol consumption have caused stakeholders to implement strategies to reduce binge drinking:

- *Enactment of the Minimum Legal Drinking Age Act (MLDA) of 1984: Legislation was implemented to prohibit the sale of alcohol to persons under the age of 21 (DeJong & Blanchette, 2014).*
- *Enactment of the Drug-Free Schools and Communities Act Amendments of 1989: Legislation was imposed that would require schools, colleges and universities to implement prevention programs (U.S. Department of Education, Office of Safe and Drug-Free Schools, Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention, 2006).*
- *The Family Educational Rights and Privacy Act (FERPA) of 1974, amended in 1998, also known as The Buckley Amendment: Federal law that protects the privacy of student education records (U.S. Department of Education, 2015). Parents are requesting more*

*collaboration and inclusion in concerns related to campus safety, institutions and greater interactive communication (Sells, D, 2002).*

- *Corresponding National case studies such as the College Alcohol Study (CAS), the Core Alcohol and Drug Survey (CORE), the Monitoring for the Future Survey (MTF), the National College Health Risk Behavioral Survey (NCHRBS), and the National Survey on Drug Use and Health (NSDUH) have all consistently reported national findings associated with binge drinking with a rate of 40%. These studies further reported 2 out of 5 students (44%) who attend 4- year colleges reported binge drinking (Wechsler & Nelson, 2008; Wechsler et al., 1994, 1998, 2000b, 2002b; Presley et al., 1996; Johnston et al., 2005; O' Malley & Johnston, 2002; CDC 1995; Douglas et al., 1997; SAMSHA, 2006).*
- *The National Institute on Alcohol Abuse and Alcoholism (NIAAA): The NIAAA provides evidence-based recommendations based on extensive research of literature presented in an overarching 3-in-1 framework strategy to address at risk individuals, and/or alcohol dependent drinkers, the student population as a whole, and the college and neighboring communities (Malloy et al., 2002).*

### **Statement of the Problem**

Binge drinking is commonly seen as an integral part of the college culture and students often enter post-secondary institutions with their own established patterns of drinking that is exacerbated by their newfound autonomy and environment. Researchers suggest that many students have already experienced alcohol use in high school prior to their entry into post-secondary institutions but their frequency and consumption increases upon college (Wechsler, Kuh & Davenport, 2009; Wechsler, Davenport, Dowdall, Moeykens, & Castillo, 1994; White, Labouvie, & Papadaratsakis, 2005; White, McMorris, Catalano, Fleming, Haggerty, & Abbott, 2006; Johnston,

O'Malley, & Bachman, 1993). This heavy episodic pattern of drinking is often associated with risk that includes sexual assault, aggressive behaviors, engaging in high risk sexual encounters, missing class, academic problems, health concerns, motor vehicle accidents, physical assault, acute myocardial infarction, and poor peer relationships (NIAAA, 2003; Wechsler et al., 2009; O'Grady, Arria, Fitzelle, & Wish, 2008; Fuertes & Hoffman, 2016). Literature suggests the term "binge drinking" is often analogous with other descriptive words such as underage drinking, college drinking and high-risk students when discussing a population of students who consume alcohol based on heavy consumption which Wechsler refers to as "binges" (NIAAA, 2007; NIAAA, 2003; Weitzman, Nelson, & Wechsler, 2003b; Wechsler et al., 2009; Malloy et al., p. 6).

Additional literature indicates that this level of drinking among college students causes students to fall behind in school work, spend less time studying, earn lower grade point averages, engage in anti-social behavior including vandalism and having encounters with the police (Powell, Williams, & Wechsler, 2004; Wechsler, Lee, Kuo, & Lee, 2000b; Wechsler, Lee, Kuo, Seibring, Nelson, & Lee, 2002b). Likewise, Wechsler and Wuethrich (2002) report that although sorority houses have routinely been known to be dry, sorority members, particularly freshman, will place themselves at greater risk by drinking in excess trying to keep up with their male counterparts. As a result, Wechsler et al. (2002) indicate sorority members are more inclined (twice as likely) than non-members to become victims of date rape, sexual assault and unwanted sexual advances. In *Dying to Drink Confronting Binge Drinking on College Campuses*, Wechsler et al. (2002) illustrate the following example from an ex-fraternity member describing his account of a scene in a fraternity house.

“Clay, a student at another school who quit his fraternity in his junior year” reported the following:

There was a lot of date rape; sometimes people had intercourse after the girls were passed out. There was a lot of nonconsensual sex in the fraternities. The way that most frats are designed, there’s a party room downstairs, and then there are bedrooms. It’s not like you go to a ballroom, where there aren’t beds (p.40).

Literature suggests a correlation among Greek activities and increasing rates of binge drinking. Similarly, studies indicate shared characteristics among at-risk student populations for increased alcohol consumption, frequency, and negative outcomes. This includes residing in Greek housing, bidding for sorority and/or fraternity systems and having any Greek affiliation (Klein, 1989; Lo & Globetti, 1993; Werner & Greene, 1992). College athletes and college students who were involved in high school sports are at the greatest risk of binge drinking, running second to Greek members (Ford, 2007; Hildebrand, Johnson, & Bodle, 2001; Martens, Dams- O’Connor, & Beck, 2006; Turrisi, Mallet, Mastroleo, Larimer &, Kilmer, 2007; Wechsler & Nelson, 2001). According to Weitzman, Nelson, and Wechsler (2003b) first year college students are identified as another at-risk group. Although there is a history of drinking prior to their arrival, first year college students often engage in binge drinking as part of the college culture.

Fuertes and Hoffman (2016) contend that freshman and sophomore college students are at the greatest risk of alcohol dependence. They recommend college administrators provide interventions to target these populations during their transition from high school to college to limit their potential risk of harm associated with binge drinking. Likewise, students who are unaffiliated with Greek and athletic organizations are at the greatest risk for binge drinking. These students lack additional supportive services, targeted interventions, and community involvement.

Fuertes and Hoffman (2016) concludes that a freshman who is unaffiliated with a Greek or athletic organization, and is attending school in a rural community on a wet campus is at the highest risk of alcohol dependence. The literature further surmises that college campuses with dry alcohol policies have not eliminated excessive student drinking or abuse, however evidence reveals a lower onset of alcohol dependence (Fuertes & Hoffman, 2016).

One of the most notable and tragic cases of binge drinking on a college campus to involve a first-year college student and Greek Fraternity member is the death of Scott Krueger. In 1997, Scott Krueger was a freshman at MIT and accepted a bid to pledge in the Iota Mu Chapter of Phi Gamma Delta fraternity. As part of the initiation he along with the other pledges were required to consume “a minimum of two cases of beer and a fifth of whiskey” (A fifth is equivalent to 25.5 ounces). He was then required to consume an additional fifth of rum that he was to share with his “big brother”. During the initiation, Scott became nauseated, vomited and lapsed into unconsciousness (Krueger v. Fraternity Phi Gamma Delta, 2001). His reported blood alcohol content (BAC) was .401. Fraternity members moved Scott to the basement, placed him on a couch, and left him there. They continued to drink, and Scott aspirated, vomited, and stopped breathing. Scott Krueger was in a coma for two days before his death. According to court documents, the autopsy report revealed that Scott Krueger died from acute alcohol intoxication with terminal aspiration of gastric contents (Krueger v. Fraternity Phi Gamma Delta, 2001).

The aftermath of Scott’s death led to two major changes at MIT. First, all freshmen are required to live in residence halls during their first year of college and second, all fraternity and sororities are required to have resident advisors residing on site (Wechsler, et al., 2002).

Correspondingly, twenty years later, on February 3<sup>rd</sup>, 2017, Penn State University sophomore, Tim Piazza died after pledging Beta Theta Pi fraternity. Piazza consumed lethal amounts of alcohol during a hazing ritual known as “the gauntlet.” After falling down a flight of stairs, he received a lacerated spleen, his abdomen filled with blood and he received multiple traumatic brain injuries. He was taken to the couch after reportedly falling head first down a flight of stairs where pledges continued to pour more alcohol on his face and his lethargic body. Medical attention was not sought until 12 hours later the following day where Tim Piazza died from his fatal injuries. His blood alcohol level (BAC) was .36. Tim was required to consume a 1.75 liter of Vodka, a 30 –can pack of beer and a box with several liters of wine along with other pledges. (*In Re: Application of Stacy Parks Miller, District Attorney of Centre County Requesting an Order Directing That An Investigating Grand Jury Be Summoned*, 2017).

Hank Nuwer, a member of HazingPrevention.org, reported that there have been 33 hazing deaths within the last ten years. The Beta Theta Pi house was required to be alcohol free at the time of Tim Piazza’s death. University administrators shared during an interview that “Reform only works if fraternity members follow them” (Reilly, 2017, pg. 61).

## **Background of the Study**

Binge drinking among college students between the ages of 18-24 years old can lead to risky and perilous consequences. The NIAAA reported approximately 696,000 students among the ages of 18-24 are "Assaulted by a student who is drinking each year, more than 97,000 students between the ages of 18-24 are victims of alcohol related sexual assault or date rape" (NIAAA, pg. 1, 2007). Results from the 2015 National Survey on Drug Use and Health revealed that 7.7 million people between the ages of 12 to 20 reported alcohol use within the past month, 5.1 million reported binge drinking and 1.3 million reported heavy consumption (Center for Behavioral Health Statistics and Quality, 2016). According to the Center for Behavioral Health Statistics and Quality (2015) approximately 60 percent of college students between the ages of 18-22 self-reported consuming alcohol within the last thirty days and approximately 2 out of 3 reportedly engaged in excessive alcohol consumption (Center for Behavioral Health Statistics and Quality, 2015).

Nelson, Toomey, Lenk, Erickson and Winters (2010) reported in their findings of "NIAAA College Drinking Task Force Recommendations: How Are Colleges Doing 6 Years Later" that 78 percent of college administrators had knowledge of the evidence-based recommendations to decrease alcohol usage, however the primary strategy colleges chose to implement was education (Nelson et al., p. 5, 2010). The Task Force report concluded with strong evidentiary findings that education programs in isolation were ineffective measures to reduce college drinking and alcohol-related problems (Nelson et al., 2010). It further suggests that collaborative efforts with local officials to counteract access to alcohol should be implemented by using the following strategies, compliance monitoring, alcohol outlet density, mandatory responsible beverage service training, and increasing alcohol prices (Nelson et al., 2010; Malloy et al., 2002).

## Participants

In August of 2017, an Internet search was conducted to gather a listing of all colleges/universities within the State of Kentucky. The Internet search resulted in a list of colleges/universities found on Wikipedia of public, private, community and technical colleges located in the Commonwealth of Kentucky. The purpose of qualitative research is to describe and explore. Literature contends that there are no defined guidelines regarding sample sizes. Sandelowski (as cited in Litchman, 2013) suggests, "That determining sample size is a matter of judgment" (pg. 193).

### Sample Population

The researcher contacted fifteen colleges/universities for the purposes of this study. There were eleven (N=11) potential participants referred to the researcher by college administrators and staff as possible candidates for the study. One (N=1) potential participant opted out of the study. Seven (N=7) did not respond to the email invitations to participate, follow-up emails nor telephone calls. Three (N=3) completed the demographic questionnaires (**Appendix A**) and the IRB Consent to Participate Forms (**Appendix B**) but did not continue with the study. Four (N=4) potential participants responded to the email invitations, completed the demographic questionnaires and the IRB Consent to Participate Forms.

The final total response rate representing the colleges/universities yielded a total of six (N=6) potential participants willing to participate in this study. There were three (N=3) participants representing (N=1) post-secondary colleges/universities and one (N=1) participant representing each of the three (N=3) additional colleges/universities participating in the study.

Upon receiving IRB approval, college/university websites were accessed individually via the Internet and contact information for each potential participant was identified, including name,

title, telephone number, and email address. An initial email invitation to participate was sent to all fifteen (N=15) potential participants representing the colleges/universities. Three (N=3) follow-up reminder emails were sent to potential participants. The first (N=1) reminder email was to confirm receipt of the email invitation to participate, the demographic questionnaires sent to those who responded to the initial email, and to increase the response rate from the initial mailing. The second (N=2) email was sent to those who were referred by administrators/staff of the college/university to participate in the study as content experts and a demographic questionnaire was sent based on their response rate. The third (N=3) email was sent to confirm and remind potential participants of their scheduled telephone interviews.

Three (N=3) follow-up telephone calls were made to each potential participant. The first (N=1) telephone call was to confirm receipt of the email invitation, the demographic questionnaires sent to those who responded to the initial email invitation, to increase the response rate and to discuss the purpose of the study and the IRB Consent to Participate Form. The second (N=2) telephone call included contacting those who were referred by administrators/staff of the college/university to participate in the study as content experts. The third (N=3) telephone call was made to review the protocol for the IRB Consent to Participate Form, obtain consent to tape the telephone interview, answer any questions related to the study and schedule the telephone interview.

### **Purpose of the Study**

The purpose of this study was to understand the current alcohol policy initiatives among four post-secondary institutions in the State of Kentucky. First, an Alcohol & Drug Educator was identified to determine the content of their current alcohol policies and if they contained evidence-based strategies to include treatment and prevention.

A secondary purpose of this study examined the university policies to determine if those said policies were being monitored for fidelity and effectiveness, as well as to assess Alcohol and Drug Educators' perceptions of these policies. The qualitative data collection method chosen and utilized for evaluating the university policies consisted of the following:

- A. Individual prescreen interview questions were used to collect demographic information from each of the participants utilizing the demographic questionnaires,
  - a. Telephone interviews were conducted with each participant to confirm receipt of the demographic questionnaires.
- B. Researcher conducted scheduled telephone interviews with the participants.
  - b. Each of the interviews was transcribed using a transcription service and reviewed by the researcher for accuracy.
  - c. Transcribed interviews were coded, revisited and sorted, identifying themes and placing them into categories and subcategories.
  - d. Researcher conducted member checking by submitting final summarizations of the transcripts to each of the participants for credibility and verbatim accounts of the events transcribed.

## **Research Questions**

1. Are post-secondary institutions in Kentucky applying evidence-based strategies to include treatment and prevention programs for high-risk student drinkers?
  - a.) What, if any, strategies are in place to meet the needs of student drinkers who are not identified as high-risk drinkers?
  
2. What are the Alcohol & Drug Educators' perceptions about binge drinking and the current alcohol policies?
  - b.) What are the current alcohol policies?
  
  - c.) How do you measure them?
  
  - d.) What do you think of them?

## **Limitations of the Study**

One limitation of the study was getting enough participants to partake in the multiple campus case study. The initial study was a selected multiple campus case study; however the study was extended to include a larger pool due to the lack of responses. To minimize this limitation the researcher contacted 15 colleges/universities within the State of Kentucky and conducted a purposive multiple campus case study with four colleges/universities. A second limitation of the study was administrators found it difficult to ascertain who specifically would be identified as the content expert for the study at their college/university with the appropriate knowledge and skill set regarding policy.

To minimize this limitation a general term was implemented for the study, Alcohol and Drug Educators, to encompass all faculty and contract employees working within positions who had direct knowledge related to the implementation of alcohol policies within their respective colleges/universities. Using this globalized term provided a forum for all university department members who represented specific knowledge related to the implementation of alcohol policies to engage and participate in the study.

### **Delimitations of the Study**

The purpose of this study was to understand the current alcohol policy initiatives among four post-secondary institutions in the State of Kentucky. First, an Alcohol & Drug Educator was identified to determine the content of their current alcohol policies and if they contained evidence-based strategies to include treatment and prevention.

A secondary purpose of this study examined the university policies to determine if those said policies were being monitored for fidelity and effectiveness, as well as to assess Alcohol and Drug Educators' perceptions of these policies. The qualitative data collection method chosen and utilized for evaluating the university policies consisted of the following:

- A. Individual prescreen interview questions were used to collect demographic information from each of the participants utilizing the demographic questionnaires,
  - a. Telephone interviews were conducted with each participant to confirm receipt of the demographic questionnaires,

- B. Researcher conducted scheduled telephone interviews with the participants,
  - b. Each of the interviews were transcribed using a transcription service and reviewed by the researcher for accuracy.
  - c. Transcribed interviews were coded, revisited and sorted, identifying themes and placing them into categories and subcategories.
  - d. Researcher conducted member checking by submitting final summarizations of the transcripts to each of the participants for credibility and verbatim accounts of the events transcribed.

This study was designed to include a purposeful selection of a population to include college administrators, staff, and faculty and/or contract employees from post-secondary institutions in the State of Kentucky. The study intentionally excluded the student population as the purpose of the study was to gain an in depth understanding from the perspectives of Alcohol and Drug Educators who implemented the alcohol policies within those institutions that directly impact students who consume alcohol in excessive amounts. Literature suggests that students who self-report may oftentimes report “inflated definitions of binge drinking” and have more liberal attitudes about underage use (PIRE, 2011). Additionally, the conceptual framework of the literature and the premise of the study are solely grounded on evidence-based strategies. This was established at the genesis of the study, to utilize the NIAAA’s 3-in-1 Framework four Tier strategies as a standard of measurement concerning the content of the alcohol policies. This is the first comprehensive and exhaustively studied research commissioned to examine and explore factors that influence college drinking.

## Resulting Actions

This research study may provide significant insight to policy makers, government officials, constituents, college presidents, college administrators and legal experts alike. Collective collaboration may secure allocated funding to eliminate the fiscal and budgetary concerns that are prohibiting effective interventions. Creating a better partnership with Alcohol and Drug Educators may increase the urgency of the stifling conditions that are leading to hazardous drinking environments with increased consequential risks.

## Definition of Key Terms

**Binge Drinking:** “Five or more drinks in a row for men, and four or more drinks in a row for women” (Wechsler et al., 1994, 1998, 2000b; Malloy et. al., p. 6, 2002; U.S. Department of Health and Human Services, Task Force of the National Advisory Council on Alcohol Abuse and Alcoholism, pg. 5-6).

**Content Expert:** “Are people who are thoroughly familiar with skills and content that training must impart. Sometimes instructional designers work with a team of people who can guide the development process. In addition, they may work with written resources, job descriptions, or related manuals.

The type of content expertise needed, and the best ways of accessing that knowledge, vary. For example, when the Health Resources and Services Administration (HRSA) decided to develop a national curriculum to train new Performance Reviewers—people responsible for reviewing and helping to improve grantee performance—they hired a contractor to help develop the training, but established two important internal mechanisms to guide the development process that included:

1. A Steering Committee to oversee development process, review products, and ensure the contractor remained on track; and

2. A Stakeholder Advisory Group consisting of both new and experienced performance reviewers who share their knowledge of job requirements in both group and individual interviews and who, in addition, work small teams to provide further advice and resources on particular modules in the curriculum” (SAMHSA, pg. 1, n. d.).

**Credible Research:** “Provides the foundation for making solid programming decisions. Improves the effectiveness of prevention programs aimed at adolescents and young adults, and provides much-needed accountability for resources expended.

In contrast to research that is methodologically weak or where more has been inferred than the data allow, credible research increases understanding.

Sound research follows the principles of the scientific method and uses as many rigorous methodological techniques as possible when designing studies. Among those techniques are randomized assignments of study subjects to control and experimental groups, use of pre- and post-observations or multiple observations when feasible, and use of probability sampling.

Whereas findings from inadequately designed, implemented, or analyzed research can lead to erroneous conclusions, credible research advances the practice of alcohol problem prevention and treatment by generating, methodically applying, and testing new ideas” (Malloy et al., p. 13, 2002)

**Cultures:** “The tradition of drinking has developed into a kind of culture—beliefs and customs—entrenched in every level of college students’ environments. Customs handed down through generations of college drinkers reinforce students’ expectation that alcohol is a necessary ingredient for social success. These beliefs and the expectations they engender exert a powerful influence over students’ behavior toward alcohol “(Malloy et al., pg. 1, 2002; U.S. Department of Health and Human Services, Task Force of the National Advisory Council on Alcohol Abuse and Alcoholism, pg.5 & 8).

**Customs:** “Customs that promote college drinking also are embedded in numerous levels of students’ environments. The walls of college sports arenas carry advertisements from alcohol industry sponsors. Alumni carry on the alcohol tradition, perhaps less flamboyantly than during their college years, at sports events and alumni social functions. Communities permit establishments that serve or sell alcohol to locate near campus, and these establishments depend on the college clientele for their financial success” (Malloy et al., p.1, 2002).

**Evidence-based Practice:** “The conscientious, explicit, and judicious use of current best evidence in making decisions about the care of communities and populations in the domain of health protection, disease prevention, health maintenance and improvement (health promotion). This includes making decisions based on best available scientific evidence, using data and information systems systematically, applying program-planning frameworks, engaging the community in decision-making, conducting sound evaluation and disseminating what is learned” (Suicide Prevention Resource Center, SAMHSA, 2018).

**High-risk Drinking & Excessive Consumption (used interchangeable in this study) Based on Alcohol Consumption:** “The term alcohol consumption refers to the frequency with which alcohol

is consumed and/or quantity consumed over a given time. Because individuals do not drink the same amount on each drinking occasion, some surveys attempt to assess the frequency of drinking various amounts of alcohol (e.g., one to two drinks, three to four drinks, five to six drinks, seven or more drinks) over a specified period. This approach, although cumbersome, probably provide a more accurate assessment of total volume consumed as well as variability of drinking pattern.

However, assessing the frequency of drinking varying amounts of alcohol is complex. Moreover, for many purposes, the primary concern is not light or moderate consumption but rather “heavy” consumption. As a result, it is common to assess heavy consumption using the frequency of consuming a number of drinks meeting or exceeding a certain threshold. Heavy drinking occasions are often referred to as “binges” in the college student drinking literature” (U.S. Department of Health and Human Services, Task Force of the National Advisory Council on Alcohol Abuse and Alcoholism, p. 6, 2002).

### **Summary**

According to the National Institute of Alcohol Abuse and Alcoholism (NIAAA) (as cited in Malloy et al., 2002) binge drinking is defined as five or more drinks in a row for men and four or more drinks in a row for women that is consistent with a blood alcohol concentration (BAC) of 0.08 grams or above within a 2-hour threshold.

The 5 /4 threshold a day was recommended by the NIAAA to be used by physicians as a risk management tool to identify excessive alcohol consumption and alcohol use disorders (NIAAA, 2007). The term binge drinking is synonymous with terms like underage drinking and/or college drinking, both encompassing a population of students with patterns of illegal heavy alcohol

consumption, however an age variance exists based on the methodology and study that is used to identify the student populations.

Underage drinking commonly refers to the consumption of alcohol by persons under the Minimum Legal Drinking Age (MLDA) and college drinking refers to a “tradition”, “culture” or “rite of passage” often associated with binge drinking or excessive consumption (Dowdall & Wechsler, 2002; U.S. Department of Health and Human Services, Task Force of the National Advisory Council on Alcohol Abuse and Alcoholism, p. 6, 2002; Malloy et al., p. 1, 2002). Horowitz (1987) states, “Colleges have rich histories of traditions and customs, some of which focus on the use of alcohol” (As cited in Dowdall & Wechsler, 2002, pg. 15; Malloy et al., p.1, 2002; U.S. Department of Health and Human Services, Task Force of the National Advisory Council on Alcohol Abuse and Alcoholism, 2002). The passage of the Minimum Legal Drinking Age Act of 1984 prohibits the purchase and public possession of alcohol to any person under the age of 21. Studies vary on age categories that identify risk indicators for binge drinking, alcohol use, or excessive consumption for example; Monitoring for the Future Survey (MTF) examines students between grades 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup>, among the ages of 12-17-year old’s. (Miech, Johnston, O’Malley, Bachman, & Schulenberg, 2015). The National Survey on Drug Use and Health examined students between the ages of 12-20 and the Substance Abuse and Mental Health Services Administration (SAMHSA) examined the prevalence of alcohol consumption of college related drinking among students between the ages of 18-22 (Center for Behavioral Health Statistics and Quality, 2016; SAMHSA, 2014).

The CDC (2016) has identified the following risks and consequences associated with binge drinking as misuse of other drugs, and changes in brain and neurological development that may result in lifetime effects, memory deficits, social problems, disruption of regular growth development, legal issues, and driving under the influence that may lead to tragedy.

Researchers suggest that most students have already experienced alcohol use in high school prior to their entry into post-secondary institutions but their frequency and consumption tend to increase upon entering college (Wechsler et al., 2009; Malloy et al., 2002). The CDC (2016) revealed that adolescents who engaged in drinking prior to the age of 15 were 6 times more likely to develop alcohol abuse or dependence later in life than their counterparts who began consuming at or after 21 years of age.

Wechsler et al. (2009) suggest that nearly every piece of literature on college related drinking indicates that fraternities often drink more in excess and more often and as a result have more alcohol related issues than their classmates. Wechsler et al. (1994) asserts, "The single best predictor of binge drinking in college is fraternity membership" (p.396). On the contrary, Greek affiliation in African American fraternities reveals positive outcomes. Likewise, sorority membership may contribute to academic attainment while fraternity membership is either negative or impartial. Chapter 2 will expound on the micro dynamics of binge drinking and extend further analysis on the role of political, economic and ecological factors to include alcohol densities, fraternities, sororities and intercollegiate athletics on binge drinking.

This chapter provided a brief overview of the introduction, background of the study and the methodology used in this qualitative multiple campus research case study. The following chapter will provide a comprehensive review of literature regarding alcohol policies.

## II. Literature Review

Binge drinking is prevalent among the United States colleges all across America, both public and private institutions alike. This has become a pervasive problem leading to potential health problems and other environmental concerns. It is one of the primary contributing factors relating to unintentional deaths and accidents related to driving under the influence as reported by The U.S. Department of Health and Human Services (1990). The *Diagnostic and statistical manual of mental disorders* (5<sup>th</sup> ed.) (2013) reports under the diagnostic criteria for alcohol intoxication notable behavioral and psychological changes related to the ingestion of alcohol consumption includes the following symptomology, imprudent sexual conduct, aggressive/assaultive behavior, impaired judgment, mood culpability and impaired social agility. Additionally, the *DSM-5* states that a large proportion of alcohol consumption is typically associated with prior use. In 2010, 44% of seniors reported use within a 12-month period and 70% of college students reported the use within a 12-month period within the same year (American Psychiatric Association, 2013).

According to Hingson, Heeren, Winter and Wechsler (2005) college students between the ages of 18-24 years old reported that they drove while under the influence of alcohol, this was an increase from 26.5% to 31.4%. This increased from 1998 from 2.3 million to 2.8 million. Additionally, a reported 1700 unintentional injury related deaths among students were also reported within the same age group.

The NIAAA (2007) reports that more than 696,000 students between the ages of 18-24 are assaulted by someone who has been binge drinking, and more than 97,000 additional students within the same age group are victims of sexual assault or rape because of alcohol use (NIAAA, 2015). The Substance Abuse and Mental Health Services Administration (SAMHSA) (2014) examined the prevalence of college related drinking and reported that in 2013 59.3% of full-time

college students between the ages of 18-22 consumed alcohol within a 12-month period, 39% of college students reported binge drinking within the past month and 12.7% participated in heavy drinking.

Nelson, Xuan, Blanchette, Heeren and Naimi (2015) suggest that excessive alcohol consumption can create both substance use disorders and a culture of binge drinking (Fuertes & Hoffman, 2016). Substance use disorders and binge drinking are acute and chronic and can create social and health consequences that are laborious global public health concerns. The implementation of alcohol control policies can abate excessive alcohol use and the consequences that follow. From 1999 to 2011, 29 state alcohol policies were examined and rated based on policy efficacy. Results revealed that “less effective policies had low levels of implementation in 1999, but increased significantly from 1999 to 2011” (pg. 64). Further results revealed the most effective group of policies were underutilized in comparison to other policy groups and did not increase during the course of the study period” (Nelson et al., 2015, pg. 64). This evidentiary finding suggests, according to Nelson et al. (2015), that effective alcohol policies are politically shunned and less efficacious policies are more favorable. Legislatures were willing to adopt legislation respectively, for underage drinking and impaired driving but were disinclined to address the same drinking problems with the general population.

One of the most notable Alcohol Researchers, Robin Room, has asserted that, “ The effective strategies for reducing the public health burden of alcohol are generally unpopular with legislators and the public and therefore are less likely to be implemented, while politically popular strategies are generally not very effective” (Nelson et al., 2015, pg. 59). Researchers further revealed the most “effective” policies are those that are created to reduce binge drinking; the consequences associated with use and reduce drinking in general. Globalized implementation of

effective alcohol policies will adversely affect the alcohol sales and therefore will be contested by the alcohol retail industry. Findings revealed that there is spirit of rigidity between the interests of the public health and fiscal management when instituting alcohol control policies. The alcohol industry will attempt to influence the community sentiment and the interests of the legislators regarding policy enactment (Mitchell, Toomey, & Erickson, 2005).

Faden, Corey and Baskin (2009) (as cited in Filce, Hall, & Phillips, 2015) conducted a comprehensive study on university alcohol policies that reviewed 52 nationally known college websites. This study compared a previous study conducted by the researchers. The results indicated that out of the 52 colleges, 48 had an existing website for their alcohol policy but only 15 had identified specifics surrounding alcohol consumption during tailgating, and out of those 15, 11 allowed alcohol during tailgating (Filce et al., 2015). Miller and Gillentine (2006) (as cited in Filce et al., 2015) revealed that only 53% of the 98 NCAA Division I schools reported an alcohol policy on tailgating that was accessible on their college websites. Sixteen percent made a policy available upon request and 31% did not have an existing tailgating policy. Sixty-two percent had no time frames initiating the start time and 82% had no identified timetable for ending tailgating. Ninety-Two percent made allowance for alcohol during tailgating however, only 68% formally addressed alcohol consumption in their policies.

Thirty-four percent limited hard liquor during tailgating and 36% limited the amount of alcohol that could be brought into the designated areas. Forty-one percent reported no monitoring of the designated area by trained personnel.

The researchers suggest a correlation between "Active monitoring and a decrease in excessive drinking" (Filce et al., 2015, p.55). The researchers further contend that a lack of

adequate supervision and organization could result in injurious and sometimes-fatal consequences during tailgating and can adversely affect the college and athletic departments. Filce et al. (2015) suggests universities must have well-defined policies, which are “actively enforced” and further contend that policies should include alcohol management, policy and training, sales and marketing, tailgating and detection and enforcement. (p.56).

According to Nelson et al. (2015), substance use disorders are a related consequence of binge drinking. Silveria attests that the rats that were exposed to an increased level of alcohol during adolescence experience more sensitivity to alcohol induced memory impairments later in life. Likewise, human studies revealed cognitive impairments in adolescents’ weeks after use. Respectively, other animal studies found that adolescents lack the ability to exhibit outward signs of impairment. As a result, a greater intake is necessary along with frequency and quantity, which later leads to an increased tolerance due to additional amounts of alcohol intake in order to receive the same desired effects (Silveria, 2012; Malloy et. al., 2002).

Literature suggests that, “Addiction may begin to emerge as alcohol intake escalates and tolerance develops, with the periods between episodes of alcohol use now including craving, or increased desire, for alcohol. As craving for alcohol increases, symptoms can lead to alcohol addiction, characterized by compulsive drinking, loss of control over drinking, and impairments in social, behavioral, and cognitive functioning” (Adinoff, 2004; Koob, & Volkow, 2010; Silveria, 2012, p.193; Yucel, & Lubman, 2007). In 2015, the National Survey on Drug Use and Health (NSDUH) revealed that 623,000 adolescents between the ages of 12-17 had an alcohol use disorder. This included 298,000 males and 325,000 females (SAMHSA, 2015). According to the NIAAA (2017) in 2013, 72,559 people between the ages of 12 and above died from liver disease, 46,568 were males and 25, 991 were females. All of the deaths involved alcohol use.

As noted in previous literature, the *Diagnostic and statistical manual of mental disorders* (5<sup>th</sup> Ed.) (2013) reported under the diagnostic criteria for alcohol intoxication notable behavioral and psychological changes related to the ingestion of alcohol consumption, which included the following symptomology, imprudent sexual conduct and aggressive/assaultive behavior (American Psychiatric Association, 2013). The NIAAA (2007) reported that more than 696, 000 students between the ages of 18-24 are assaulted by someone who was binge drinking and more than 97,000 additional students within the same age group are victims of sexual assault or rape because of alcohol use (NIAAA, 2007; NIAAA, 2015). Hart (2013) and Sloan (1994) suggest that college campuses are comparatively safe with limited violent crime with the exception of sexual assault (Allen & Jacques, 2014). More of the major crime offenses involve property crimes, burglary and larceny. However, the most common type of them all is underage drinking (Dowdall, 2013). In 2010, over 30,000 arrests were made nationally, for alcohol related student offenses. Of those arrests, 90% were on college campuses (U. S. Department of Education, 2010; Dowdall, 2013; National Center for Education Statistics, 2011).

Likewise, violent and property crimes that occurred on college campuses were committed by an intoxicated offender or victim (Dowdall, 2013). Researchers suggest that the typical population is largely made up of 18-24-year-old white middle-class or above background and campus police report high rates of binge drinking (Trends in Higher Education, 2011; U. S. Department of Education, 2011).

Wechsler et al. (1994) conducted a national study of one hundred and forty U.S. colleges to examine the behavioral characteristics and potential dangers associated with binge drinking by college students. This is the first national study conducted since the study directed by Straus and Bacon (1953) 64 years ago in 1953. Most studies conducted have focused primarily on single

campus studies or multi-campus studies; however, this study utilized a random sampling to obtain a national representative sample to encompass college students. A total of 17, 592 students participated with an overall 44% response rate. Wechsler et al. (1994) defines binge drinking as five drinks for men in a row and four drinks for women in a row within a two-week period. The study suggests that binge drinking is a pervasive problem among college campuses and that one fifth of the students self-reported a culture of intentional intoxication. This study further stated that almost half of the students reported alcohol related problems, one out of three reported an injury, two out of five reported an unplanned sexual encounter and three out of five males reported driving under the influence. Wechsler et al. (1994) recommends long and short-term behavioral intervention strategies should be included in the implementation of university policies of alcohol treatment.

Likewise, the findings of Wechsler et al. (1994) are consistent with other similar national studies conducted since the College Alcohol Study (CAS) was published. Wechsler et al. (1994) reported that surveys administered by University of Michigan's Monitoring for the Future (MTF), The CORE Institute and Centers for Disease Control and Prevention have all consistently found that 2 out of 5 U.S. college students are binge drinkers. The results of the College Alcohol Study (CAS) reported 44% of the college students as binge drinkers. The University of Michigan's Monitoring for the Future study revealed that 41% of college students were binge drinkers and The Core Alcohol and Drug Survey indicated that 42% of college students were binge drinkers (Wechsler et al., 1994, p. 1676). O'Malley and Johnston (2002) asserts that there are five national evidence-based sources among college students and youth which are The Harvard School of Public Health College Alcohol Study (CAS); The Core Institute (CORE) Southern Illinois University, Monitoring for the Future (MTF), University of Michigan; the National College Health Risk Behavior Survey (NCHRBS), the Youth Risk Behavioral Surveillance (YRBS), Centers for Disease Control

and Prevention (CDC), the National Household Drug Survey on Drug Abuse (NHSDA) and Substance Abuse and Mental Health Services Administration (SAMHSA).

For the purposes of this study, the three national studies that were reviewed are the College Alcohol Study (CAS), Monitoring for the Future Study (MTF) and the Core Alcohol and Drug Survey (CORE). The College Alcohol Study was the first study to conduct a nationally representative sample in the United States that examined binge drinking among college students. The CAS Study defined the term binge drinking and utilized a gender specific measurement, five drinks in a row for males and four drinks in a row for women within a two-week period. The Monitoring for the Future study is an extensive and comprehensive study that measures the drug use amid 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students between the ages of 12-17. MTF conducts follow-up studies of adolescents, college students and adult graduates through the age of 55. The Core Alcohol and Drug Survey is the largest national database on post-secondary educational alcohol and other drug statistics.

This instrument can be created to meet the needs of the student population on any campus or high school to address alcohol and drug use. Collectively, each of these studies address the prevalence of high-risk drinking and the consequences related to excessive use.

## **National Studies**

### **College Alcohol Study (CAS)**

The Harvard School of Public Health College Alcohol Study (CAS) (Wechsler & Nelson, 2008) originated in 1992. Dr. Henry Wechsler has been regarded as an expert in the field of alcohol and drug abuse and has written more than 18 books and more than 200 peer-reviewed articles on alcohol abuse and high-risk behaviors associated with alcohol use. As the principal

investigator of CAS, he published more than 80 peer-reviewed articles. He conducted the first national college drinking study since Straus and Bacon conducted their original national college drinking research in 1953. CAS was developed to conduct the first nationally representative sample in the United States to study binge drinking among college students and to interpret their drinking patterns. CAS published their first study in 1993. The subsequent studies were conducted between 1997, 1999, and 2001. The study represented a diversion from focusing primarily on the students and instead addressed the college environment that influenced the behavior. Wechsler et al. (2008) suggest that clinicians should focus primarily on shifting a behavioral change towards the majority rather than focusing on the individual behavior of the heaviest drinker. Literature indicated additional changes would also include limiting the availability of alcohol (including proximity to campus), limits on irresponsible advertising, price and marketing, reevaluation of university policies, university drinking cultures/customs and enforcing local and state polices controlling the sale of alcohol (Malloy et al., 2002; Dowdall & Wechsler 2002).

### **Core Alcohol and Drug Survey (CORE)**

A national alcohol and drug study was conducted between the years of 1989-1991 in response to the Drug Free Schools Act of 1986. The purpose of enacting this legislation was to promulgate a national drug control policy that would require schools, colleges and universities to implement prevention programs as a requisite of receiving federal funding (U.S. Department of Education, Office of Safe and Drug-Free Schools, Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention, 2006). As a result of the Drug Free Schools Act and the 1989 amendments the U.S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE) Drug Prevention Program initiated a substance abuse prevention program in 1987. Grantees of the FIPSE acknowledged the need of a viable

assessment tool to accurately measure alcohol and drug use on college campuses. A committee was formed of FIPSE grantees and this committee implemented the Core Alcohol and Drug Survey.

The study administered the Core Alcohol and Drug Survey and was given to college students among 56 four-year institutions and 22 two-year college campuses with a cumulative 56,361 students. The study revealed that alcohol was the “primary drug of choice” among college students (Presley & Meilman, 1992, pg.1). The study further indicated that students were uncertain of the universities’ policies on alcohol and drugs and only 47 % stated that their institutions executed those policies. Additionally, 33 % of the students reported that alcohol should not be sold at events on campus and 87 % did not want other drugs accessible to students (Presley & Meilman, 1992).

Presley and Meilman (1992) reported this survey as the “Largest database on the nature, scope, and consequence of alcohol and other drug use by students enrolled in colleges and universities” (pg. 4). The findings revealed from the FIPSE cohort indicated that students who participated in binge drinking exhibited violent behaviors associated with crime, driving under the influence, assaultive behaviors and learning difficulties. Other academic difficulties reported were missed classes, and under achievement on assignments and tests (Presley & Meilman, 1992). Presley and Meilman (1992) suggest in their recommendations that, “Students need institutional support to create the drug free environment that is now a national priority” (p.20). The recommendations further stated that the study revealed students were in need of, “Intervention and treatment for substance abuse if they were to attain their educational goals and fulfill the educational mission of the institution, which they attend,” (Presley & Meilman, p.20).

Prentice and Miller (1993) conducted four studies among Princeton University undergraduate students to explore the relationship between the students' personal attitudes and their perception of the attitudes of their peers. The study revealed an overarching theme of pluralistic ignorance suggesting that students were uneasy with alcohol consumption on campus more than the average student. Studies one and two were conducted on more than 370 students. Students were asked in study one their level of comfort with the drinking habits of their peers. In study two, students were asked the level of comfort their peers had with the alcohol drinking habits of students at the university. The results revealed that students presumed that most students were at ease with consuming alcohol than they were with consuming alcohol themselves. Further, iterating that this public display of comfort and gratification affirms their true feelings when in fact their own behavior is in conflict with its "internal state".

Study three examined 50 students, 25 men and 25 women. Students were interviewed about the university's alcohol policies, the student's attitudes about drinking and the attitude of their peers. The findings indicated that the female student's questionnaire results were notably lower than that of the average students concerning alcohol consumption, suggesting alienation on the part of women. However, the ratings from the male students revealed that they altered their attitudes concerning alcohol and aligned it with the social norm, suggesting internalization on the part of men. Prentice and Miller (1993) suggest this discrepancy among genders may be contributed to the coercion men feel to consume alcohol. Study four included 94 students who participated in a questionnaire concerning the attitudes surrounding keg banning, alcohol consumption on campus and campus life. The results revealed that students surmised that the internal attitudes of their peers were more consistent with campus norms than their own

perceptions, thereby leading to pluralistic ignorance (Prentice & Miller, 1993). The following section will provide further discussion on the history of the Monitoring for the Future Survey.

### **Monitoring for the Future (MTF)**

Monitoring for the Future (MTF) research study has been conducting surveys at the University of Michigan, Ann Arbor since 1975. The purpose of the survey is to measure drug use and behaviors amid 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students. This is an extensive and comprehensive study that conducts follow-up studies of adolescents, college students, and adult high school graduates through the age of 55. This is one of three of the major studies utilized by the U.S. Department of Health and Human Services, which offers data trends on substance use among adolescents. The recent data in the 2015 MTF indicates that binge drinking (defined as five or more drinks in a row within the past two weeks) has decreased among high school seniors from 19.4% to 17.2 % in 2015. The study further revealed that in 2015, 37.7 % of seniors reported binge drinking in comparison to 41.4% in 2014 and 53.2 % in 2001(Johnston, O' Malley, Miech, Bachman, & Schulenberg, 2016). The former National Drug Control Policy Director Michael Botticelli stated, "This year's Monitoring for the Future data continues the promising trends from last year with declining rates of adolescent substance use, and support the value of evidence-based prevention" (National Institute on Drug Abuse, pg. 1, 2015).

Johnston et al. (2016) reported that alcohol use among adolescents between the years of 2014 and 2015 has continued to "Decline and are at the lowest level in the history of the survey" (p.6). According to Johnston et al. (2016), 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> grade students reported alcohol consumption at 10%, 22%, and 35% within the past thirty days. The study measured heavy drinking or binge drinking within a two-week period. The results revealed a "historic low over the life of the study" (Johnston et al., 2016, p. 37). The results were contributed to limited access to

alcohol, states, local communities and parental involvement regulating availability to minors. Increased awareness and perceived risk of unacceptable behavior of peers such as driving under the influence were greater among 12<sup>th</sup> grade (Johnston et al., 2016). The limited access and availability to alcohol is attributed to the enactment of the Minimum Legal Drinking Age law, which restricts youth possession of alcohol, designating 21 as the minimum age for purchasing and consuming alcohol (Mosher, 1980). The following section will provide further discussion on the history of the Minimum Legal Drinking Age Act.

## **Legislative Mandates**

### **Minimum Legal Drinking Age Act (MLDA)**

In 1984, President Ronald Reagan signed the National Minimum Legal Drinking Age Act (MLDA) that prohibited the purchase or public possession of alcohol of any person under the age of 21. As a condition, State highways were in jeopardy of losing funds for failure to enact the MLDA. In 1987, all 50 states were in compliance with the federal mandate (DeJong & Blanchette, 2014). The Alcohol Policy Information Systems indicates that the MLDA law varies from state to state. Some states do not unequivocally prohibit the consumption of alcohol by a person under 21. Additionally, in some states persons under the age of 21 could possess alcohol with parental (guardian) consent or for a parent/guardian to provide alcoholic beverages, and for persons under 21 to work as servers where alcohol is permitted (National Institute on Alcohol Abuse and Alcoholism, 2003). DeJong and Blanchette (2014) suggest that university leaders should impose functional policies, rigorous enforcement strategies and other evidence-based prevention efforts to pauperize underage drinking and alcohol related issues on campus (Fairlie, Erickson, & Wood, 2012; Saltz, 2011; Toomey & Lenk, 2009).

DeJong and Blanchette (2014) states the following:

Recent research on the age 21 MLDA has reinforced the position that the current law has served the nation well by reducing alcohol-related traffic crashes and alcohol consumption among youths while also protecting drinkers from long-term negative outcomes they might experience in adulthood, including alcohol and other drug dependence, adverse birth outcomes and suicide and homicide. The evidence is clear that absent other policy changes and improved enforcement of the nation's alcohol laws, lowering the legal drinking age would lead to a substantial increase in injuries, death, and other negative health-related consequences (DeJong & Blanchette, 2014, p.113).

In conjunction with the passage of the MLDA act was the Drug Free Schools and Communities Act. The impetus behind both legislative enactments was prevention. The MLDA act prohibited the sell and possession of alcohol to persons under the age of 21 and the Drug Free Schools and Communities Act implemented drug abuse prevention programs in elementary and secondary schools.

### **Drug Free Schools and Communities Act**

In response to the emerging trend of drugs on campus the federal government responded by implementing the Drug Free Schools and Communities Act of 1986. The enactment of this legislation along with the amendments of 1989 set aside money for drug prevention initiatives for improvement in institutions of higher learning. Additionally, in 2010 the United States government focused on national disease prevention and health promotion objectives. One of the primary health objectives was substance abuse (Malloy et al., 2002; Office of Disease Prevention & Health Promotion, 2009). Similarly, the American College of Health Association (ACHA) has recently

implemented the Healthy People 2020 objectives. The ACHA is a credentialing entity, which focuses primarily on health equity within educational institutions. In 1986, The Sober Truth on Preventing Underage Drinking Act (STOP ACT) of 2006 was implemented as the first global legislation initiative on underage drinking. One of the main concepts of the STOP ACT is the grant program, which affords funding to prevent and reduce the likelihood of alcohol use among youth and young adults between the ages of 12 and 20 (SAMSHA, 2017).

Underage drinking often leads to acute consequences including sexual assaults; car crashes, physical assault and death. Blanco, Okuda, Wright et al. (2008) affirms that 20 % of college students meet the criteria for alcohol use disorder (AUD). The NIAAA defines low risk drinking for developing AUD as, “For women, low-risk is defined as no more than 3 drinks on any single day and no more than 7 drinks per week. For men, it is defined as no more than 4 drinks on any single day and no more than 14 drinks per week. NIAAA research shows that only about 2 in 100 people drink within these limits have AUD” (NIAAA, 2017, pg. 1). The following section will provide further discussion on individual drinking patterns to include level of frequency, quantity, and prevalence.

### **Family Educational Rights and Privacy Act (FERPA)**

The Family Educational Rights and Privacy Act (FERPA) was enacted in 1974, additional amendments under this act became effective in January of 2012 which allowed for greater disclosures regarding personal identifiers, student directory information and the monitoring of social media accounts and student identification (Mendelsohn, 2012). FERPA allows parents to access their child’s educational records, request amendments to their records and assert control over disclosure of information granted.

After a student reaches the age of 18 years old the school must have the student's consent prior to the release of any educational records. Any student enrolled in a post-secondary institution is protected under this federal law regarding privacy of grades, student enrollment, and billing.

Throughout the years, several amendments have been made to FERPA one of which is section 952 of the Higher Education Reauthorization Act (HERA) of 1998. This act allows institutions to disclose information to parents or legal guardians of students who are under the age of 21 years of age that are found to be in violation of university rules or governing policies concerning the possession of alcohol or any controlled substance under the Drug and Alcohol Violation Disclosures. The amendments, HERA and the Higher Education Act of 1965, further details that an institution should not be prohibited from disclosing information to a student's parent or legal guardian concerning any Federal, State, or local laws or any institutional policy. Particularly, a policy that regulates the use or possession of alcohol or a controlled substance even if that information is contained within a student's educational file as long as that student is (1) under the age of 21 and (2) the institution believes a student committed a disciplinary action by using or possessing alcohol or a controlled substance (Palmer, Lohman, Gehring, Carlson, & Garret, 2001).

### **Binge Drinking Defined: Frequency, Quantity and Prevalence**

The consequences related to binge drinking are too dangerous to ignore (Malloy et al., 2002). Universities are experiencing alarming rates of binge drinking. The consequences are grave and include personal, academic, social and legal, which also includes dependency symptomology such as increased tolerance, withdrawal and loss of control (Wechsler et al., 2002; Malloy et al., 2002).

According to Malloy et al. (2002) as reported in “Healthy People 2010” goals were established that would reduce the consumption of binge drinking among college students from 39 percent to 20 percent by the end of 2010. The report suggests that binge drinking is aggregated contributing to burdensome economic and personal losses such motor vehicle crashes, domestic violence, other sexually transmitted diseases (STD’s), teen pregnancy, HIV/AIDS, child abuse, physical altercations, homicide, and suicide (Malloy et al., 2002).

In defining an individual’s drinking behavior, alcohol consumption includes two relatively important characteristics: frequency and quantity (Malloy et al., 2002). Frequency refers to how often a person drinks on any given occasion, the number of days during a specified interval such as a week, month or year. Quantity is how much a person consumes during any given occasion. Alcohol consumption is evaluated based on a “standard drink” in the U.S., which is 5 oz. of wine, 12 oz. of beer and 1.25 oz. of distilled spirits (Malloy et al., 2002). One must consider the variance in drinking behaviors and average size of drinks (Malloy et al., 2002). This accounts for the use of frequency and identifying persons who meet or exceed the criteria for “heavy” consumption on the basis frequency (Malloy et al., 2002).

Wechsler refers to this excessive consumption as “binges” and defines binge drinking as, “Five or more drinks in a row for men and four or more drinks in a row for women within a two-week period” (Wechsler et al., pg. 1676, 1994). The Surgeon General’s A Call to Action (2002) reports in their findings that previous literature indicates concern regarding the time frame in which the four to five drinks are consumed without specific guidelines and no consideration of the body mass index. Wechsler reports in his multi-campus national survey his efforts to study binge drinking with both male and female students with “sex specific measures considering dosage effects of ethanol” (Wechsler et al., p. 1673, 1994).

The Surgeon General defined binge drinking as consuming five or more drinks in a row for men and four or more drinks in a row for women (Malloy et al., 2002). The National Advisory Council redefined binge drinking in 2004 as, "A pattern of drinking alcohol that brings blood alcohol concentration (BAC) to 0.08-gram percent or above. The NIAAA suggests that this pattern is consistent with consuming 5 or more drinks (male) or 4 or more drinks (female) in about two hours" (NIAAA, 2008; Wechsler & Nelson, 2008). The NIAAA suggests that medical professionals use the four and five drink a day measurement to identify risk associated with alcohol consumption (NIAAA, 2007; NIAAA, 2015). The Center for Disease Control and Prevention defined binge drinking as "Four or more drinks for women and five or more drinks for men on an occasion during the past 30 days among U. S. adults aged 18 years or older in 48 states and the District of Columbia; and on the frequency (average number of episodes per month) and intensity (average largest number of drinks consumed on occasion) among binge drinkers (Centers for Disease Control and Prevention, p.1, 2012).

Wechsler reports in an earlier study that there is a variance in the rates of binge drinking on university campuses nationwide from 1 percent to more than 70 percent and asserts that studies often vary based on locations. A study conducted at one campus maybe counterproductive at another campus (Wechsler et al., 1994, 1998, 2000). Silveria (2012) reports that evidence suggests college students oftentimes will under report alcohol consumption based on inaccurate information regarding standard drinks and awareness of the potential dangers associated with excessive consumption (frequency and quantity) could help students identify personal drinking habits.

Wechsler and Nelson (2008) report that 2 out of 5 students (44%) who attend 4- year colleges reported binge drinking. Likewise, the study found that in correspondence with their literature was the CAS study from 1993 to 2001 (Wechsler et al., 1994, 1998, 2000b, 2002b), The CORE Survey (Presley et al., 1996, 1999), the Monitoring for the Future Survey (Johnston et al., 2005; O'Malley & Johnston, 2002), the National College Health Risk Behavioral Survey (CDC 1995; Douglas et al., 1997) and the National Survey on Drug Use and Health (SAMHSA, 2006), all reported consistent national findings associated with binge drinking with a rate of 40%, notwithstanding, the variance in sampling measures and methodologies.

In a study conducted by the Center for Disease Control and Prevention in 2010 it reported that an estimated 223.5 billion dollars was spent annually resulting from binge drinking and 80,000 deaths occurred related to excessive alcohol consumption. Likewise, the report further suggested that the frequency of excessive consumption of binge drinking was 4.4 episodes a month, and the intensity rate included 7.9 drinks on each occasion (Centers for Disease Control and Prevention, 2012). SAMHSA defines binge drinking as “Drinking five or more drinks on the same occasion on at least one day in the past thirty days” (SAMHSA, Full-Time College Students Drink More, But Smoke Cigarettes Less Than Other Young Adults, p.1, 2016).

In 2015 according to SAMSHA's recent National Survey on Drug Use and Health, underage drinking and substance use among the age groups of 12-17 and 18-25 continue to decline. Subsequently, the report states,

One out of five met the criteria for a mental illness or substance abuse disorder and only 39 percent of them received services. These are potentially life threatening, disabling conditions. Our country must redouble its efforts to provide evidence-based prevention and

treatment services in every community to ensure all Americans can get the help and hope they need to lead healthy and productive lives (Center for Behavioral Health Statistics and Quality, p.1, 2016).

Underage drinking commonly began at an early age, with the average age of consumption beginning at 16 (SAMSHA, 2014). Results from the 2013 National Survey on Drug Use and Health: Summary of national findings revealed that underage drinking is frequent and excessive. It is reported that 9 million 12-20-year old's self-reported current use in 2014, 5 million self-reported binge drinking and another 1 million self-reported excessive alcohol consumption. The study concludes that 3-5 engaged in binge drinking and 1 in 7 engaged in excessive alcohol use (Center for Behavioral Health Statistics and Quality, 2015). Alcohol is easily accessible to youth. In 2014 approximately 28 percent of the youth surveyed, self-reported purchasing alcohol themselves (8 percent) or having someone else purchase it for them (19 percent). Additionally, 70 percent self-reported that they received the alcohol without paying for it, unrelated persons over MLDA (26 percent), parents or other family members (20 percent), or taking it from their residence or the home of someone else (7 percent)(Center for Behavioral Health Statistics and Quality, 2015. Results from the 2014 National Survey on Drug Use and Health: Detailed Tables. Rockville).

SAMSHA outlined in their 2014 National Survey on Drug use and Health (2014) report that approximately 2 million 12- 17-year old's self-reported drinking alcohol for the first time within the past year, which estimates 6400 adolescents a day who initiated use. Three million 12-17-year old's self –reported current drinking, approximately 1.5 million reported binge drinking and 257,000 reported excessive alcohol consumption (Center for Behavioral Health Statistics and Quality, 2015). Johnston et al. (2016) reported that 10 percent of 8th grade students reported drinking within the last thirty days and 3 percent self-reported being intoxicated. Twenty-two percent

reported past use within the last thirty days and 21 percent self-reported intoxication. Additionally, 6 percent of 12th graders self-reported consuming more than ten + drinks consecutively and 4 percent more than 15+ consecutively within the previous two weeks' time span.

Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health (2016) asserts that 66.7 million people reported binge drinking in the United States in 2015 within the past month and 88,000 deaths were reported as a result of alcohol abuse. It is noted that the premise behind the report is not only to examine the prevalence of substance use and/or misuse but also to provide awareness among policymakers, healthcare professionals and the general public regarding progressive, functional and viable strategies to address the issues. The report further includes several exhaustive tenets to address issues related to substance use in the United States. These tenets include;

- 1.) Reinforcing community awareness regarding the issues surrounding substance use and imploring more efficacious policies and practices to manage them;
- 2.) Global enactment of evidence-based prevention policies and programs to avert substance misuse and subsequent harm;
- 3.) Enhanced admission to evidence-based treatment services, in concert with health care providers for those who are at risk or afflicted by substance use disorders;
- 4.) Recovery support services (RSS) to aid persons "in remission and preventing relapse";

5.) Research oriented policies and fiscal strategies to assure that substance misuse and use disorders are attainable, altruistic, proficient, and credible (Office of the Surgeon General, 2016, pgs. 1-3).

Adolescence is a time of transition, which involves physical, social and emotional changes. The brain is evolving and transforming as well. Research indicates that binge drinking during adolescence can impair normal brain development and further increase the risk of developing AUD. Essential structural and functional changes will occur throughout the course of transitioning from childhood to adulthood as described in the following section.

### **The Neuroscience Behind Underage Drinking**

Addiction according to The Surgeon General's report (2016) is a chronic brain disease that can inherently cause a person to relapse but also lead to recovery. During the progression of this cycle, tolerance increase and the brain chemistry diminishes self-constraint over substances. There are three stages that occur during the addiction cycle, according, The Surgeon General's Report on Alcohol, Drugs and Health, (2016):

- The Binge/Intoxication Stage: The stage at which an individual consumes an intoxicating substance and experiences its rewarding or pleasurable effects;
- Withdrawal/Negative Affect Stage: The stage at which an individual experiences a negative emotional state in the absences of the substance; and
- Preoccupation/Anticipation Stage: The stage at which one seeks substances again after a period of abstinence (The Surgeon General's Report on Alcohol, Drugs and Health, 2016, pg. 2-6).

Scientific evidence suggests that there are three specific areas of the brain that are affected during this period, the basal ganglia, the extended amygdala, and the prefrontal cortex.

The acute effects associated with these disruptions include,

- (1) Enabling substance-associated cues to trigger substance seeking (i.e., they increase incentive salience);
- (2) Reduce sensitivity of brain systems involved in the experience of pleasure or reward, and heighten activation of brain stress systems; and
- (3) Reduce functioning of brain executive control systems, which are involved in the ability to make decisions and regulate one's actions, emotions, and impulses (The Surgeon General's Report on Alcohol, Drugs and Health, 2016, pg. 2-2, 2016).

Further, evidence concludes that alterations in the brain continue well beyond substance abuse and literature is still unclear about reverting changes in the brain or the duration of those changes.

Alcohol use occurs during a period of transition, in adolescence when pivotal structural and functional changes are occurring in the brain (U.S. Department of Health and Human Services. The Surgeon General's A Call to Action: Changing the Culture of Drinking at U.S. Colleges, 2002; Silveria, 2012; The Surgeon General's Report on Alcohol, Drugs and Health, 2016). The Surgeon General's Report on Alcohol, Drugs and Health, (2016) suggests all "addictive drugs", particularly; alcohol and marijuana have potentially crippling effects on the adolescent brain. Gross changes in the cortical gray and white matter continue to occur throughout the brain between the ages of 4-20 years of age, which includes cortical changes in the anterior gray matter region in a matter of a seven-month time span with adolescents (Giedd, Snell, Lange, et. al., 1996; Pfefferbaum,

Mathalon, Sullivan, Rawles, Zipursky, & Lim, 1994). Magnetic resolution imagining has detected such changes occurring into adulthood up to the age 22.

The literature reveals that cognitive and intellectual functioning continue to advance during the first year of college (18.6 years) for the executive brain function, transitions that occur at the end of adolescence and into adulthood (Anderson, 2001; Williams, Ponesse, Schachar, Logan, & Tannock, 1999). During this age is improved functioning of the white matter connectivity with and between the cortical and subcortical brain regions (Pfefferbaum et al., 1994; Casey Giedd, & Thomas, 2000; Sowell, Thompson, & Toga, 2004). This age group has the greatest propensity to seek out risk taking behaviors perceivably due to naivety and immaturity in cognitive abilities to self-regulate. Silveria (2012) suggest that anatomical formation continue to emerge beyond the age of 18 and heavy consumption prior to the neurobiological adulthood (age 22) are damaging.

Evidence suggests based on research conducted in animal studies that adolescents may suffer from alcohol-related memory impairment and that these effects could be long term (Markwiese, Acheson, Levin, Wilson, & Swartzwelder, 1998; Swartzwelder, Wilson, & Tayyeb, 1995). Further studies suggest that rats exposed to increased levels of alcohol during adolescence experience more sensitivity to alcohol induced memory impairments later in life.

Likewise, human studies revealed cognitive impairments in adolescent's weeks after use.

Respectively, other animal studies found that adolescents lack the ability to exhibit outward signs of impairment as a result a greater intake is necessary, frequency and quantity, which later leads to an increased tolerance due to additional amounts of alcohol intake in order to receive the same desired effects (Silveria, 2012; Malloy et. al., 2002).

Literature suggests that, “Addiction may begin to emerge as alcohol intake escalates and tolerance develops, with the periods between episodes of alcohol use now including craving, or increased desire, for alcohol. As craving for alcohol increases, symptoms can lead to alcohol addiction, characterized by compulsive drinking, loss of control over drinking, and impairments in social, behavioral, and cognitive functioning” (Adinoff, 2004; Koob, & Volkow, 2010; Silveria, 2012, p.193; Yucel & Lubman, 2007).

Silveria (2012) recommended that based on the findings in the literature particular focus should be noted to the paradigm that focuses more attention on brain development, its functioning capacity to engage in better decision making and an integration of reformed screening tools for early intervention of alcohol use for both early onset and identifying treatment disorders. Collaborative efforts should be made with post-secondary institutions, and policy makers to incorporate campus based intervention strategies to help reduce binge drinking on college campuses.

In 2002, the NIAAA endorsed and administered research on behalf of the Task Force on College Drinking, which was the first comprehensive and exhaustive research to conduct a 3-year study to examine behaviors and consequences associated with college drinking (Malloy et al., 2002). The recommendations sought to change the culture of drinking on campus and encourage college presidents and administrators to adopt strategies and modify them to compliment the needs of their schools. The following section will discuss the enactment of the NIAAA’s globalized initiatives on best practice strategies to reduce student drinking on college campuses.

**A New Paradigm Shift:  
Changing the Culture, One Student, One Step at a Time**

Public policy initiatives are advancing to create globalized strategic efforts to reduce excessive amounts of consumption. A Call to Action: Changing the Culture of Drinking at U.S. Colleges (2002) states:

One reason for the lack of success of prevention efforts is that, for the most part, schools have not based their prevention efforts on strategies identified and tested for effectiveness by research. Research on college drinking is a relatively young field, and the data are incomplete. Until the recent formation of the Task Force on College Drinking, administrators and researchers did not typically collaborate on this topic. Without the expertise of the research community, administrators were at a disadvantage in trying to identify and implement strategies or combinations of strategies to address alcohol problems specific to their schools (Malloy et al., p. 2, 2002).

The NIAAA is one out of the 27 leading agencies that make up the National Institute for Health (NIH). It is responsible for endorsing and administering research on the effects of alcohol use and is the largest funder of alcohol research in the world (About NIAAA. National Institute on Alcohol Abuse and Alcoholism, n.d.). The Task Force was initiated by the National Advisory Council on Alcohol Abuse and Alcoholism and received additional support from the NIAAA (Malloy et. al., 2002). The Task Force on College Drinking was the first comprehensive project to conduct a lengthy, three-year study to examine the behaviors and consequences associated with college drinking (Malloy et al., 2002). Likewise, it is the first study to provide recommendations based on

extensive analysis on research of literature, to offer Tiered recommendations based on credible research to college presidents, administrators, staff and the NIAAA on evidence-based initiatives and to provide exhaustive research programming to address gaps in research (Malloy et al., 2002).

In 2002, the Task Force presented an overarching, 3-in-1-framework prevention strategy to address individuals, including “at-risk and /or alcohol-dependent drinkers, the student population as a whole, and lastly, the college and neighboring communities” (Malloy et al., p.14, 2002). There are four recommended Tiers and each Tier includes identified strategies that were implemented to assist institutions in offering integrated strategies to remedy the culture of binge drinking on campus (Malloy et al., 2002). To address the culture of binge drinking on college campuses the following recommendations located in tables 5.1, 5.2, 5.3 and 5.4 have been implemented by the Task Force to encourage college presidents, administrators, community leaders and prevention specialists to modify these evidence-based intervention strategies to compliment the needs of their schools.

**NIAAA Task Force 4-Tier Evidence-Based Recommendations**

**Table 5.1**

<b>Tier 1: Evidence of Effectiveness among College Students;</b>
<b>Strategy I:</b> Combining cognitive-behavioral skills with norms clarification and motivational enhancement interventions (Malloy et al., 2002, p.16).
<b>Strategy II:</b> Offering brief motivational enhancement interventions (Malloy et al., 2002, p.17).
<b>Strategy III:</b> Challenging alcohol expectancies (Malloy et al., 2002, p.17).

*Note:* Evidence-based strategies in Tier I from table 5.1 have proven effective among college students in reducing drinking on campus.

**Table 5.2**

<b>Tier 2: Evidence of Success with General Populations That Could Be Applied to College Environments;</b>
<p><b>Strategy I:</b> Increased enforcement of minimum drinking laws (Malloy et al., 2002, p.18).</p>
<p><b>Strategy II:</b> Implementation, increased publicity, and enforcement of other laws to reduce alcohol-impaired driving (Malloy et al., 2002, p.18).</p>
<p><b>Strategy III:</b> Restrictions on alcohol retail outlet density (Malloy et al., 2002, p.19).</p>
<p><b>Strategy IV:</b> Increased price and excise taxes on alcoholic beverages (Malloy et al., 2002, p.19).</p>
<p><b>Strategy V:</b> Responsible beverage service policies in social and commercial settings (Malloy et al., 2002, p.19).</p>
<p><b>Strategy VI:</b> The formation of a campus and community coalition involving all major stakeholders may be critical to implement these strategies effectively (Malloy et al., 2002, p.19).</p>

*Note:* Evidence-based strategies from Tier II table 5.2 have evidence of success in general populations that could be modified and implemented by college presidents, staff and administrators to reduce student drinking.

**Table 5.3**

<b>Tier 3: Evidence of Logical and Theoretical Promise, but Require More Comprehensive Evaluation;</b>
<b>Strategy I:</b> Adopting the following campus-based policies and practices that appear to be capable of reducing high-risk alcohol use (Malloy et al., 2002, p. 20).
<b>Strategy II:</b> Increasing enforcement at campus-based events that promote excessive drinking (Malloy et al., 2002, p. 21).
<b>Strategy III:</b> Increasing publicity about and enforcement of underage drinking laws on campus and eliminating “mixed messages” (Malloy et al., 2002, p. 21).
<b>Strategy IV:</b> Consistently enforcing disciplinary actions associated with policy violations (Malloy et al., 2002, p. 22).
<b>Strategy V:</b> Conducting marketing campaigns to correct student misperceptions about alcohol use (Malloy et al., 2002, p. 22).
<b>Strategy VI:</b> Provision of “safe rides” programs (Malloy et al., 2002, p. 22).
<b>Strategy VII:</b> Regulation of happy hours and sales (Malloy et al., 2002, p. 22).
<b>Strategy VIII:</b> Informing new students and their parents about alcohol policies and before arrival and during orientation periods (Malloy et al., 2002, p. 23).

*Note:* Strategies in Tier III table 5.3 requires additional research to prove effectiveness on college campuses but have some evidence of theoretical promise.

**Table 5.4**

<b>Tier 4: Evidence of Ineffectiveness.</b>
<b>Strategy I:</b> Informational, knowledge-based, or values clarification interventions about alcohol and the problems related to its excessive use, when used alone (Malloy et al., 2002, p. 23).
<b>Strategy II:</b> Providing blood alcohol content feedback to students (Malloy et al., 2002, p. 23).

*Note:* Strategies in Tier IV table 5.4 report evidence of ineffectiveness when used in isolation.

Nelson et al. (2010) administered a national survey entitled “Implementation of NIAAA College Drinking Task Force Recommendations: How Are Colleges Doing 6 Years Later” to college administrators in an effort to follow up on the recommendations issued by the NIAAA College Drinking Task Force. The findings revealed that college administrators were mindful of the recommendations issued on behalf of the NIAAA Task force on college drinking, however, 22% were ill informed. Ninety-eight percent of the colleges’ utilized educational interventions to address alcohol misuse, although the NIAAA report “Found strong evidence that educational programs, by themselves were ineffective in reducing student alcohol use and related problems “(Nelson et al., 2010, p.5; Malloy et al., 2002).

Further, a reported 50% of the colleges provided intervention programs with written efforts of proficiency. Nelson et al. (2010) reported in their findings that a limited amount of colleges utilized “evidence-based strategies, community based- alcohol control strategies to include compliance checks to monitor illegal alcohol sales (33%), instituting mandatory responsible

beverage service (RBS) training (15%), restricting alcohol density outlets (7%), or increasing the price of alcohol (2%)” (pg.1).

Malloy et al. (2002) reported in their evidentiary findings on the Task Force in A Call to Action: Changing the Culture of Drinking at U.S. Colleges the following commentary on ineffectiveness of intervention strategies:

The Task Force recognizes that it is difficult or impossible to “prove” that a specific intervention approach is universally ineffective. Nevertheless, when there are consistent findings across a wide variety of well-designed studies, it is possible to conclude that an approach is not likely to be effective and limited resources should be used in other ways. Additionally, if there is strong evidence that an intervention approach is actually harmful or counterproductive, recommendations not to use it can be made based on fewer studies (Malloy et al., 2002 p. 23).

The Task Force notes that some interventions may be ineffective when used in isolation, but might make an important contribution as part of a multicomponent integrated set of programs and activities. However, until there is evidence of a complementary or synergistic effect resulting from inclusion with other strategies, college administrators are cautioned against making assumptions of effectiveness without scientific evidence.

For instance, “Two strategies sometimes are labeled as ineffective- the TIPS server-training program and Prime for life! On Campus (Talking about Alcohol) OCTAA-when not used with other strategies. However, there is no scientific evidence that these programs actually work

well if used in conjunction with other complementary strategies” (Larimer & Cronce, 2002; Sammon, Smith, Cooper, & Furnish, 1991; Malloy et al., 2002 p. 23).

Wechsler et al. (1994) recommended in their findings of their national CAS study of 140 US college campuses that universities should be committed to implementing comprehensive and thorough intervention strategies that include behavior modification and referrals to appropriate treatment interventions for alcohol misuse. Literature further suggests that alcohol misuse on college campuses is comparable to alcohol abuse outside the college campus and abusers may often be resistant and deny a problem exist and the safety of the university including traditions may limit identifying the problem. Wechsler et al. (1994) continues by recommending that additional due diligence should be made to focus on those students who suffer negative consequences as a result of binge drinkers.

Wechsler et al. (1998) concluded in their findings of their CAS study that was conducted to examine alcohol use among college students between 1993 and 1997 that a relatively small decrease existed among binge drinking, however of those who drank, they drank with prevalence, frequency and intensity. They exhibited a greater desire to drink to get inebriated. Further, the study suggest that fraternities and sororities are at the focal point of the drinking culture and 2 out of 3 members are binge drinkers (Wechsler et al., 1998). Likewise, for those Greek members that are housed in fraternity and sorority living binge drinking is even more severe with 4 out 5 students misusing alcohol.

Wechsler et al. (1998) suggests that colleges must change the drinking customs that have been established on college campuses that are influencing the college population. Additionally,

researchers convey that alcohol use among high school students is an indicator of future use in college (Wechsler et al., 1998).

Toomey, Lenk, and Wagenaar (2007) suggests that the implementation of any new intervention strategies in an effort to reduce excessive use and prevent a culture of binge drinking among college students should be monitored and evaluated rigorously in an effort to measure their efficacy. Researchers suggests the most arduous task of imposing sanctions related to underage use is assessing the impact of policy implementation, educational awareness, treatment interventions, behavioral modifications and enforcement of trends on drinking behaviors (Wechsler, Lee, Nelson, & Kuo, 2002c).

The Surgeon General's Report on Alcohol, Drugs, and Health (2016) revealed that contrary to the efforts being made to address substance misuse and binge drinking there is a need for evidenced-based public health strategies to prevent and treat alcohol related problems. The report further noted evidenced-based policies (EBI's) that include scientific literature particularly those addressing the efforts to reduce excessive alcohol consumption. These are comprehensive and exhaustive methods utilized for the purposes of outlining initiatives that can be implemented for effective alcohol control. The following section outlines these policies as defined in The Surgeon General's Report on Alcohol, Drugs, and Health that were specifically created to reduce underage consumption and driving under the influence (The Surgeon General's Report on Alcohol, Drugs and Health, 2016, pgs. 3-17).

## **The Surgeon General's Report on Alcohol, Drugs, and Health: Evidence-Based Recommendations:**

### **Price and Tax Policies:**

Evidence suggests that an elevation in alcoholic beverages is connected with a decrease in alcohol misuse and driving under the influence. One 2009 review examined 1,003 separate estimates from 112 studies. The authors concluded, "We know of no other prevention intervention to reduce drinking that has the numbers of studies and consistency of effects as seen in the literature on alcohol taxes and prices (Wagenaar, Salois, & Komro, 2009; Office of the Surgeon General, 2016, pg. 3-17). Similarly, a 2010 review of 73 taxation studies found consistent evidence that higher alcohol prices and alcohol taxes are associated with reductions in both alcohol misuse and related, subsequent harms (Office of the Surgeon General, 2016, pg. 3-17; Elder, Lawrence, Ferguson, Naimi, Brewer, & Chattopadhyay, 2010).

### **Policies Affecting Alcohol Outlet Density:**

Research suggests that an increase in the number of retail alcohol outlets in an area called higher alcohol outlet density-is associated with an increase in alcohol-related problems in the area, such as violence, crime and injuries (Office of the Surgeon General, 2016, p. 3-18; Campbell, Hahn, Elder, Brewer, Chattopadhyay, Fielding, & Middleton, 2009; Xu, Yu, Scribner, Theall, Scribner, & Simonsen, 2012; Anderson et al., 2009). Four longitudinal studies of communities that reduced the number of alcohol outlets showed consistent and significant reductions in alcohol-related crimes, relative to comparison communities that had not reduced alcohol outlet density (Zhang, Hatcher, Clarkson, Holt, Bagchi, Kanny, & Brewer, 2015; Yu, Scribner, Carlin, Theall, Simonsen, Ghosh-Dastidar,

Mason, & ....2008; Xu,, Yu, Scribner, Theall, Scribner, & Simonsen, 2012; Office of the Surgeon General, 2016, p. 3-18).

### **Commercial Host (Dram Shop) Liability Policies:**

Liability allows alcohol retailers- such as the owner or server(s) at a bar, restaurant, or other retail alcohol outlet to be held legally liable for harms resulting from illegal beverage service to intoxicated or underage customers (Mosher, 1979). In a systematic review, 11 studies assessed the association between dram shop laws and alcohol-related health outcomes (Office of the Surgeon General, 2016, pg. 3-18). The review found a median reduction of 6.4 percent (range was 3.7 percent to 11.3 percent) in alcohol-related motor vehicle fatalities associated with these policies. Two studies on the effects of these laws did not find reductions in binge drinking (Office of the Surgeon General, 2016, pg. 3-18).

### **Policies to reduce Days and Hours of Alcohol Sales:**

A review of 11 studies changing days of sale (both at on premise alcohol outlets such as restaurants and bars, and off-premise outlets such as grocery, liquor, and convenience stores) indicated that increasing the number of days alcohol could be sold was associated with increases in alcohol misuse and alcohol-related harms. Reducing days alcohol is sold was associated with decreases in alcohol related harms, while policies decreasing hours of sale by at least two hours reduced alcohol-related harms (Office of the Surgeon General, 2016, pg. 3-18; Middleton, Hahn, Elder, Brewer, Chattopadhyay, & Lawrence, 2010). One study found that lifting a ban on Sunday sales of alcohol led to an estimated 41.6 percent increase in alcohol-related fatalities on Sundays during the period from 1995 to 2000, equating to an additional cost of more than \$6 million in medical care and lost productivity

per year in one state. Banning sales of alcohol on Sundays has been recognized as a cost-effective strategy (Hahn, Kuzara, Elder, Brewer, Chattopadhyay, Fielding, & ... Lawrence, 2010; McMillan, & Lapham, 2006).

### **State Policies to Privatize Alcohol Sales:**

Privatization of alcohol sales involves changing from direct governmental control over the retail sales of one or more types of alcohol, and allowing private, commercial entities to obtain alcohol licenses, typically to sell liquor in convenience, grocery, or other off premise locations. A systemic review of studies evaluating the impact of privatizing retail alcohol sales found that such policies increase per capita alcohol sales in privatized states by a median of 44.4 percent. Studies show that per capita alcohol sales are known to be a proxy for alcohol misuse (Cook, 2012; Office of the Surgeon General, 2016, pg. 3-18).

### **Policies to Reduce Drinking and Driving:**

It has been estimated that reductions in driving after drinking prevented more than 300,000 deaths during this time period. Declines in traffic deaths due to reductions in drinking and driving have exceeded declines from the combined effects of increased use of seat belts, airbags, and motorcycle and bicycle helmets. From 1982 to 2013, alcohol-related traffic deaths decreased by 67 percent, whereas non-alcohol-related deaths decreased by only 14 percent. Several policies and law enforcement approaches have been found to reduce rates of drinking and driving and related traffic crashes, injuries, and deaths within the general population, among both youth and adults. These DUI policies and enforcement approaches create deterrence by increasing the public's awareness of the consequences of drinking and driving, including the possibility of arrest.

Some of these strategies include:

0.08 percent criminal per se legal blood alcohol content (BAC) limits, meaning that no further evidence of intoxication beyond a BAC of 0.08 percent is needed for a DUI case (Fell, Fisher, Voas, Blackman, & Tippetts, 2009; Voas & Tippetts, 1999).

Sobriety Check Points (Bergen, Pitan, Qu, Shults, Chattopadhyay, Elder, & Calvert, 2014; Lenk, Nelson; Toomey, Jones-Webb, & Erickson, 2016).

Other proven DUI prevention strategies fall under the rubric of indicated interventions as they target drivers who have been convicted of DUI to reduce recidivism:

Lower legal blood alcohol limits for people convicted of DUI (Hingson, Heeren, & Winter, 2000; Goodwin et al., 2013).

Mandatory ignition interlock laws for all convicted offenders, including first offenders (Goodwin et al., 2013; Elder, Voas, Beirness, Shults, Sleet, Nichols, & Compton, 2011; Kaufman & Wiebe, 2016).

DUI courts (Goodwin et al., 2013).

Continuous 24/7 alcohol monitoring of persons with one or multiple DUI charges, and vehicle impoundment or immobilization (Goodwin et al., 2013; Office of the Surgeon General, 2016, pgs. 3-18, 3-19, 3-20; Goodwin, Kirley, Sandt, Hall, Thomas, O'Brien & Summerlin, 2013).

### **Policies to Reduce Underage Drinking: Raising the Minimum Legal Drinking Age;**

In the 1982 Monitoring for the Future annual national survey of middle and high school students, 71.2 % of high school seniors reported that they drank in the past 30 days and 42 percent reported binge drinking in the past 2 weeks (Miech et al., 2015). In 2014 these same statistics were 37.4 percent and 19 percent respectively (Hingson, & White, 2014). These declines may be partially attributed to the MLDA along with other policy and behavioral change interventions (Office of the Surgeon General, 2016, p. 3-20; Fell et al., 2009).

**MLDA Compliance Checks:**

Adjacent to the MLDA laws is the compliance checks, which monitors the compliance of sales of alcohol to persons under the age of 21 and penalizes (including fines and license suspension) outlets for selling to minors. Literature suggests this is an effective strategy in reducing alcohol misuse among minors (Elder, Lawrence, Janes, Brewer, Toomey, Hingson, & Fielding, 2007; Office of the Surgeon General, 2016).

**Zero Tolerance Laws:**

Every state has enacted the zero-tolerance law, which makes it illegal for any person under the age of 21 to drive with any measurable amount of blood alcohol content within their system. Literature indicates that after the application of this law there was a 19 percent decline in driving under the influence and a 23 percent decline in driving after having consumed “five or more drinks” (Office of the Surgeon General, 2016, pg. 3-22; Wagenaar, O’Malley, & LaFond, 2001).

**Use/Lose Laws:**

This law allows states to suspend the driver’s license of any person who is underage and has received a violation for alcohol misuse. Cavazos-Rehg et al. (2012) revealed in an examination of the Youth Risk Behavior Surveillance System Survey that between the years of 1999 and 2009 there was a reduction in drinking within the past month after the laws were implemented. The survey also revealed that respondents were less likely to self-report driving under the influence as they had done before the laws were implemented (Office of the Surgeon General, 2016; Cavazos-Rehg, Krauss, Spitznagel, Chaloupka, Schootman, Grucza, & Bierut, 2012).

**Criminal Social Host Liability Laws:**

Social host liability laws allow law enforcement to hold adults accountable for underage drinking for persons who knowingly or unknowingly host underage drinking parties on their property that they own, lease, or otherwise control (Office of the Surgeon General, 2016, 3-22). Approximately, thirty states have enacted or adopted some portion of this law. In isolation, social host laws were linked with a decrease in binge drinking by 3 percent, driving under the influence by 1.7 percent and DUI fatalities by 9 percent (Dills, 2010).

**Civil Social Host Liability Laws:**

Contrary to criminal liability, “social host” laws, (civil liability) allows for a lesser burden of proof but still diverts alcohol misuse for underage youth. This is a relatively new area of research, however current findings suggest that social host liability has caused a reduction in DUI fatalities and alcohol misuse (Paschall, Grube, Thomas, Cannon, & Treffers, 2012; Office of the Surgeon General, 2016, 3-22).

**Proposals for Reductions in Alcohol Advertising:**

Literature has found a link between progressive marketing strategies and elevated alcohol use. The research is unclear whether alcohol advertising will in fact affect or influence the attitudes of underage drinkers. One study indicated, there is a lack of robust evidence for or against recommending the implementation of alcohol advertising restrictions (Siegfried, Pienaar, Ataguba, Volmink, Kredon, Jere, & Parry, 2014). Yet, other literature suggests, a 28 percent decrease in alcohol marketing in the United States could lead to a decrease in the monthly prevalence of adolescent drinking from 25 percent to between 21 and 24 percent” (Saffer & Dave, 2006; Office of the Surgeon General, 2016, 3-22).

The Surgeon General's Report on Alcohol, Drugs, and Health (2016, pg. 3-24) purports that:

Data suggest that effective alcohol control policies are not being widely implemented in the United States despite the well-documented, scientific evidence on the effectiveness of such policies for reducing alcohol misuse and related harms. To have maximum impact on the public health, it is critical to implement effective policy interventions that address alcohol misuse and related harms, and recognize the widespread nature of the problem and the strong relationship between alcohol misuse, particularly binge drinking, and related harms among adults and youth in state (Nelson, Naimi, Brewer, & Wechsler, 2005; Xuan, Blanchette, Nelson, Nguyen, Hadland, Oussayef, Heeren, & Naimi, 2015; Office of the Surgeon General, 2016, pg. 3-24).

The Surgeon General's Report on Alcohol, Drugs and Health (2016) reveals, "The dissemination and implementation of evidence-based prevention programs have been studied extensively; less research has been conducted on evidence-based policy formation and implementation" (2016). Moreover, the report seeks to increase surveillance of the potential risk and protective factors associated with underage drinking by increasing prevention and program policy efficacy. It further suggests that based on a survey of school administrators 8 to 10 percent reported utilizing evidenced-based interventions to prevent or treat substance use.

Likewise, the Executive Summary reveals, "Untested or ineffective prevention programs are used more often than evidence-based interventions, and when they are used, evidenced-based interventions are often poorly implemented, do not serve large numbers of participants, and are not sustained" (The Surgeon General's Report on Alcohol, Drugs and Health, 2016, p. 3-29). The Surgeon General's Report on Alcohol, Drugs and Health indicates that evidence-based

interventions that are improperly administered “Tend to have weak or no effect on participants” (p. 3-29).

It further iterates that school administrators have minimal application of fidelity, including inability to deliver all mandatory lessons, content, and materials; to administer the required instructional policy; to address the appropriate targeted population of students, and to ensure all personnel, teachers and administrators receive adequate training. The following chapter will provide an overview of the methodological overview to include subsections on research design, data sources and collections, validity and trustworthiness.

### **III. Methodology**

#### **Introduction**

The purpose of this qualitative, purposeful multiple campus case study was to gain an understanding of the current alcohol policy initiatives among four post-secondary institutions in the State of Kentucky. First, six Alcohol & Drug Educators were identified to determine the content of their current alcohol policies and if they contained evidence-based strategies to include treatment and prevention. The secondary purpose of this study examined university policies to determine if those said policies were being monitored for fidelity and effectiveness, as well as to assess Alcohol and Drug Educators' perceptions of these policies. The central data collection method used was semi-structured interviews; the objective of this study was to establish an in-depth understanding (Rubin & Rubin, 2005). Patton (2002) suggests, "The purpose of interviewing is to allow us to enter into the other person's perspective. We interview to find out what is in and on someone else's mind" (p. 341). Conducting semi-structured interviews with Alcohol & Drug Educators permitted the researcher to, according to Patton (2002) "Capture how those being interviewed view their world, to learn their terminology and judgments, and to capture the complexities of their individual perceptions and experiences" (p. 348).

Alcohol and Drug Educators are entrusted with the role of implementing the alcohol policies at their respective institutions. According to PIRE (2011), 42% of college students reported having incidents of binge drinking which, is consistent with the stifling rate of 44% of binge drinking among students within the last twenty years (Douglas et al., 1997; Hingson et al., 2009; Johnston et al., 2005; O' Malley & Johnston, 2002; Presley et al., 1999; SAMHSA, 2006, Wechsler et al., 2002b, 2002c; U.S. Centers for Disease Control, 1997).

The NIAAA endorsed and commissioned a Task Force to conduct a 3-year study to examine and explore factors that influenced college drinking. As a result, the first comprehensively and exhaustive evidence-based research study was implemented. A 3-in-1 Framework four Tier strategy was developed with recommendations of evidence-based strategies that could be modified to meet the demands of the colleges. College presidents, college administrators, policy makers, constituents, legal experts and the like may benefit from these research questions:

1. Are post-secondary institutions in Kentucky applying evidence-based strategies to include treatment and prevention programs for high-risk student drinkers?
  - a.) What, if any, strategies are in place to meet the needs of student drinkers who are not identified as high-risk drinkers?
  
2. What are the Alcohol & Drug Educators' perceptions about binge drinking and the current alcohol policies?
  - b.) What are the current alcohol policies?
  - c.) How do you measure them?
  - d.) What do you think of them?

### **Background of the Study**

Binge drinking among college students between the ages of 18-24 years old can lead to risky and perilous consequences. The NIAAA reported approximately 696,000 students among the ages of 18-24 are, "Assaulted by a student who is drinking each year, more than 97,000 students between the ages of 18-24 are victims of alcohol related sexual assault or date rape" (NIAAA, pg.

1, 2007). Results from the 2015 National Survey on Drug Use and Health revealed that 7.7 million people between the ages of 12 to 20 reported alcohol use within the past month, 5.1 million reported binge drinking and 1.3 million reported heavy consumption (Center for Behavioral Health Statistics and Quality, 2016). According to the Center for Behavioral Health Statistics and Quality (2015) approximately 60 percent of college students between the ages of 18-22 self-reported consuming alcohol within the last thirty days and approximately 2 out of 3 reportedly engaged in excessive alcohol consumption (Center for Behavioral Health Statistics and Quality, 2015).

Nelson, Toomey, Lenk, Erickson and Winters (2010) reported in their findings of “NIAAA College Drinking Task Force Recommendations: How Are Colleges Doing 6 Years Later” that 78 percent of college administrators had knowledge of the evidence- based recommendations to decrease alcohol usage, however the primary strategy colleges chose to implement was education (Nelson et al., p. 5, 2010). The Task Force report concluded with strong evidentiary findings that education programs in isolation were ineffective measures to reduce college drinking and alcohol-related problems (Nelson et al., 2010). It further suggests that collaborative efforts with local officials to counteract access to alcohol should be implemented by using the following strategies, compliance monitoring, alcohol outlet density, mandatory responsible beverage service training, and increasing alcohol prices (Nelson et al., 2010; Malloy et al., 2002).

### **Purpose of the Study**

The purpose of this study was to understand the current alcohol policy initiatives among four post-secondary institutions in the State of Kentucky. First, an Alcohol & Drug Educator was identified to determine the content of their current alcohol policies and if they contained evidence-based strategies to include treatment and prevention.

A secondary purpose of this study examined the university policies to determine if those said policies were being monitored for fidelity and effectiveness, as well as to assess Alcohol and Drug Educators' perceptions of these policies. The qualitative data collection method chosen and utilized for evaluating the university policies consisted of the following:

- A. Individual prescreen interview questions were used to collect demographic information from each of the participants utilizing the demographic questionnaires,
  - a. Telephone interviews were conducted with each participant to confirm receipt of the demographic questionnaires.
- B. Researcher conducted scheduled telephone interviews with the participants.
  - b. Each of the interviews was transcribed using a transcription service and reviewed by the researcher for accuracy.
  - c. Transcribed interviews were coded, revisited and sorted, identifying themes and placing them into categories and subcategories.
  - d. Researcher conducted member checking by submitting final summarizations of the transcripts to each of the participants for credibility and verbatim accounts of the events transcribed.

### **Statement of the Problem**

Binge drinking is commonly seen as an integral part of the college culture and students often enter post-secondary institutions with their own established patterns of drinking that is exacerbated by their newfound autonomy and environment. Researchers suggest that many

students have already experienced alcohol use in high school prior to their entry into post-secondary institutions but their frequency and consumption increases upon college (Wechsler, Kuh & Davenport, 2009; Wechsler, Davenport, Dowdall, Moeykens, & Castillo, 1994; White, Labouvie, & Papadaratsakis, 2005; White, McMorris, Catalano, Fleming, Haggerty, & Abbott, 2006; Johnston, O'Malley, & Bachman, 1993). This heavy episodic pattern of drinking is often associated with risk that includes sexual assault, aggressive behaviors, engaging in high risk sexual encounters, missing class, academic problems, health concerns, motor vehicle accidents, physical assault, acute myocardial infarction, and poor peer relationships (NIAAA, 2003; Wechsler et al., 2009; O'Grady, Arria, Fitzelle, & Wish, 2008; Fuertes & Hoffman, 2016). Literature suggests the term "binge drinking" is often analogous with other descriptive words such as underage drinking, college drinking and high-risk students when discussing a population of students who consume alcohol based on heavy consumption which Wechsler refers to as "binges" (NIAAA, 2007; NIAAA, 2003; Weitzman, Nelson, & Wechsler, 2003b; Wechsler et al., 2009; Malloy et al., p. 6).

Additional literature indicates that this level of drinking among college students causes students to fall behind in school work, spend less time studying, earn lower grade point averages, engage in anti-social behavior including vandalism and having encounters with the police (Powell, Williams, & Wechsler, 2004; Wechsler, Lee, Kuo, & Lee, 2000b; Wechsler, Lee, Kuo, Seibring, Nelson, & Lee, 2002b). Likewise, Wechsler and Wuethrich (2002) report that although sorority houses have routinely been known to be dry, sorority members, particularly freshman, will place themselves at greater risk by drinking in excess trying to keep up with their male counterparts. As a result, Wechsler et al. (2002) indicate sorority members are more inclined (twice as likely) than non-members to become victims of date rape, sexual assault and unwanted sexual advances.

Literature suggests a correlation among Greek activities and increasing rates of binge drinking. Similarly, studies indicate shared characteristics among at-risk student populations for increased alcohol consumption, frequency, and negative outcomes. This includes residing in Greek housing, bidding for sorority and/or fraternity systems and having any Greek affiliation (Klein, 1989; Lo & Globetti, 1993; Werner & Greene, 1992). College athletes and college students who were involved in high school sports are at the greatest risk of binge drinking, running second to Greek members (Ford, 2007; Hildebrand, Johnson, & Bodle, 2001; Martens, Dams- O'Connor, & Beck, 2006; Turrisi, Mallet, Mastroleo, Larimer & Kilmer, 2007; Wechsler & Nelson, 2001). According to Weitzman, Nelson, and Wechsler (2003b) first year college students are identified as another at-risk group. Although there is a history of drinking prior to their arrival, first year college students often engage in binge drinking as part of the college culture.

Fuertes and Hoffman (2016) contend that freshman and sophomore college students are at the greatest risk of alcohol dependence. They recommend college administrators provide interventions to target these populations during their transition from high school to college to limit their potential risk of harm associated with binge drinking. Likewise, students who are unaffiliated with Greek and athletic organizations are at the greatest risk for binge drinking. These students lack additional supportive services, targeted interventions, and community involvement. Fuertes and Hoffman (2016) concludes that a freshman who is unaffiliated with a Greek or athletic organization, and is attending school in a rural community on a wet campus is at the highest risk of alcohol dependence. The literature further surmises that college campuses with dry alcohol policies have not eliminated excessive student drinking or abuse, however evidence reveals a lower onset of alcohol dependence (Fuertes & Hoffman, 2016).

One of the most notable and tragic cases of binge drinking on a college campus to involve a first-year college student and Greek Fraternity member is the death of Scott Krueger. In 1997, Scott Krueger was a freshman at MIT and accepted a bid to pledge in the Iota Mu Chapter of Phi Gamma Delta fraternity. As part of the initiation he along with the other pledges were required to consume “a minimum of two cases of beer and a fifth of whiskey” (A fifth is equivalent to 25.5 ounces). He was then required to consume an additional fifth of rum that he was to share with his “big brother”. During the initiation, Scott became nauseated, vomited and lapsed into unconsciousness (Krueger v. Fraternity Phi Gamma Delta, 2001). His reported blood alcohol content (BAC) was .401. Fraternity members moved Scott to the basement, placed him on a couch, and left him there. They continued to drink, and Scott aspirated, vomited, and stopped breathing. Scott Krueger was in a coma for two days before his death. According to court documents, the autopsy report revealed that Scott Krueger died from acute alcohol intoxication with terminal aspiration of gastric contents (Krueger v. Fraternity Phi Gamma Delta, 2001). The aftermath of Scott’s death led to two major changes at MIT. First, all freshmen are required to live in residence halls during their first year of college and second, all fraternity and sororities are required to have resident advisors residing on site (Wechsler, et al., 2002).

Correspondingly, twenty years later, on February 3<sup>rd</sup>, 2017, Penn State University sophomore, Tim Piazza died after pledging Beta Theta Pi fraternity. Piazza consumed lethal amounts of alcohol during a hazing ritual known as “the gauntlet.” After falling down a flight of stairs, he received a lacerated spleen, his abdomen filled with blood and he received multiple traumatic brain injuries. He was taken to the couch after reportedly falling head first down a flight of stairs where pledges continued to pour more alcohol on his face and his lethargic body. Medical attention was not sought until 12 hours later the following day where Tim Piazza died from his fatal

injuries. His blood alcohol level (BAC) was .36. Tim was required to consume a 1.75 liter of Vodka, a 30 –can pack of beer and a box with several liters of wine along with other pledges. (*In Re: Application of Stacy Parks Miller, District Attorney of Centre County Requesting an Order Directing That An Investigating Grand Jury Be Summoned*, 2017). Hank Nuwer, a member of HazingPrevention.org, reported that there have been 33 hazing deaths within the last ten years. The Beta Theta Pi house was required to be alcohol free at the time of Tim Piazza’s death. University administrators shared during an interview that “Reform only works if fraternity members follow them” (Reilly, 2017, pg. 61).

### **Research Questions**

1. Are post-secondary institutions in Kentucky applying evidence-based strategies to include treatment and prevention programs for high-risk student drinkers?
  - a.) What, if any, strategies are in place to meet the needs of student drinkers who are not identified as high-risk drinkers?
  
2. What are the Alcohol & Drug Educators’ perceptions about binge drinking and the current alcohol policies?
  - b.) What are the current alcohol policies?
  - c.) How do you measure them?
  - d.) What do you think of them?

## Participants

In August of 2017, an Internet search was conducted to gather a listing of all colleges/universities within the State of Kentucky. The Internet search resulted in a list of colleges/universities found on Wikipedia of public, private, community and technical colleges located in the Commonwealth of Kentucky. The purpose of qualitative research is to describe and explore. Literature contends that there are no defined guidelines regarding sample sizes. Sandelowski (as cited in Litchman, 2013) suggests, "That determining sample size is a matter of judgment" (pg. 193).

## Sample Population

The researcher contacted fifteen colleges/universities for the purposes of this study. There were eleven (N=11) potential participants referred to the researcher by college administrators and staff as possible candidates for the study. One (N=1) potential participant opted out of the study. Seven (N=7) did not respond to the email invitations to participate, follow-up emails nor telephone calls. Three (N=3) completed the demographic questionnaires (**Appendix A**) and the IRB Consent to Participate Forms (**Appendix B**) but did not continue with the study. Four (N=4) potential participants responded to the email invitations, completed the demographic questionnaires and the IRB Consent to Participate Forms.

The final total response rate representing the colleges/universities yielded a total of six (N=6) potential participants willing to participate in this study. There were three (N=3) participants representing (N=1) post-secondary college/university and one (N=1) participant representing each of the three (N=3) additional colleges/universities participating in the study.

Upon receiving IRB approval, college/university websites were accessed individually via the Internet and contact information for each potential participant was identified, including name,

title, telephone number, and email address. An initial email invitation to participate was sent to all fifteen (N=15) potential participants representing the colleges/universities. Three (N=3) follow-up reminder emails were sent to potential participants. The first (N=1) reminder email was to confirm receipt of the email invitation to participate, the demographic questionnaires sent to those who responded to the initial email, and to increase the response rate from the initial mailing. The second (N=2) email was sent to those who were referred by administrators/staff of the college/university to participate in the study as content experts and a demographic questionnaire was sent based on their response rate. The third (N=3) email was sent to confirm and remind potential participants of their scheduled telephone interviews.

Three (N=3) follow-up telephone calls were made to each potential participant. The first (N=1) telephone call was to confirm receipt of the email invitation, the demographic questionnaires sent to those who responded to the initial email invitation, to increase the response rate and to discuss the purpose of the study and the IRB Consent to Participate Form. The second (N=2) telephone call included contacting those who were referred by administrators/staff of the college/university to participate in the study as content experts. The third (N=3) telephone call was made to review the protocol for the IRB Consent to Participate Form, obtain consent to tape the telephone interview, answer any questions related to the study and schedule the telephone interview.

There is a total of four (N=4) colleges/universities participating in this multiple campus case study. The first participating college/university is a small private Christian institution, which offers pre-professional, undergraduate and graduate programs. The university also provides online learning and accelerated degree programs as well as providing satellite campuses within the state. The second participating institution is a public co-educational university and is a large research

institution. The university includes graduate, undergraduate, masters, doctoral and professional programs. The third participating institution is also a public co-educational university. The university offers, associate, undergraduate, graduate and doctoral degrees. The fourth participating institution is a public regional institution. The university provides more than 40 online undergraduate and graduate programs options for students.

### **Instrumentation**

An interview guideline (**Appendix C**) was designed utilizing a semi-structured format. According to Lichtman (2013) "An interview guide is a guide, and it is not a predetermined list of questions that you follow in a certain order. Rather, it is a rubric you can use as you plan to conduct an interview" (p. 203). Patton (2002) suggests, "The guide will help make interviewing a number of different people more systematic and comprehensive by delimiting in advance the issue to be explored" (p. 343). The aid of the guide helped to identify the perspectives of each of the Alcohol & Drug Educators as it relates to the alcohol policies at their respective college/universities. The semi-structured format permitted allowance for flexibility and inclusion of relevant questions based on the perspectives of each participant. Each of the potential participants was asked if permission would be granted to the researcher to tape the interview for reliability and validity purposes. To further refine the interview guideline, content experts conducted an analysis and review to authenticate the protocol prior to commencement. The interview questions were submitted to, the Institutional Review Board (IRB), the dissertation committee chair and dissertation committee members for examination and approval.

Each participant was asked questions regarding their level of understanding regarding their college/university's current alcohol policy. Secondly, the questions examined the participants' perspectives regarding the level of effectiveness of those alcohol policies in reducing high-risk student drinking, and targeted populations such as, freshman, athletes, Greek and sororities and to identify any treatment and/or prevention programs implemented to address student drinking. Thirdly, the interview probed the participants on the content of the alcohol policy that contained evidenced-based strategies and what provisions were included to monitor content fidelity. Lastly, the interview explored collaborations with community partners to reduce student drinking and any barriers or limitations in the application of the alcohol policy to include fiscal or budgetary concerns. Although the interview guide was utilized as an instrument to assist with conducting the interview process, Rubin and Rubin (2005) contends, "Responsive interviewing design is flexible and adaptive" (p. 36).

Following the interview, each of the semi-structured interviews were transcribed by transcribe wreally audio transcription services. Hays and Singh (2012) suggests that, "If you have to hire transcriptionists, we encourage you to work closely with him or her to ensure the accuracy and thoroughness of the transcript. It is important to review the transcript immediately to add pertinent information or correct any misplaced punctuation or missed utterances" (p. 260). Each transcription was reviewed by the researcher along with the audiotape, five times for purposes of validity and accuracy within a week of the initial interview. Hays and Singh (2012) assert, "Transcripts, the typed responses of recorded interview data, are the main interview data sources. They are used not only as physical evidence of collected data but also as important data management and analysis tools" (pg. 257).

The transcript was then sent to each of the participants with a request to review for accuracy and verbatim accounts of the interview and for final summarization of the events transcribed. Researcher advised each participant to modify record and make any changes to the transcript as needed. According to Hays and Singh (2012) "First, have the participant review the transcript for accuracy. Encourage him or her to make corrections directly to the transcript. Second, request that the participant make notes to expand on any responses he or she would like to say more about in the existing transcript" (pgs. 260-261). During the review and audit of each of the transcripts, none of the participants returned the transcriptions with modifications, amendments, commentary or questions.

### **Data Collection**

In early September of 2017, participants from four (N=4) colleges/universities in the State of Kentucky agreed to participate in an individual telephone interview between mid to late September. According to Lichtman (2013) an individual interview allows engagement and conversation with participants. The interview was semi-structured in nature, which provided flexibility and a general guideline to follow. A rapport was established with participants prior to the interview based on two previous telephone conversations concerning the purpose and protocol of the study and receipt of paperwork. At the genesis of each interview participants were provided with preliminary information. Each participant was again reminded of the purpose of the study, what would be done with the information collected, how the information would be treated, and the IRB Consent to Participate Form was discussed in its entirety. Participants were each advised that the interview would take approximately 60 minutes in length, it was comprised of approximately thirteen open-ended questions, and participants were asked if permission to conduct the interview would be granted. Once permission was granted, participants were asked if permission would be

granted to use a recording device. Participants all agreed. Participants were asked if permission would be granted to publish the information, participants all agreed.

The interview proceeded with the researcher initiating a greeting and stating his/her name for the record. Participants were permitted to ask questions anytime during the interview process for purposes of clarity. Participants also expanded responses to questions or made commentaries on personal perspectives not specifically related to inquiries. Participants were well versed and eager to participate in the study with minimal to no resistance or reluctance and willingly engaged in dialogue. There was no noticeable detection of avoidance concerning any topics of discussion, most spoke with relative ease, however, one noted difference was some areas were not applicable to all participants. In concluding the interview participants were asked if there was anything else they would like to share, any concerns or questions... and each participant was thanked for their time and participation in the study. They were also reminded that the interview would be transcribed and a copy of the transcriptions would be sent for their approval for final summarizations, clarification and verbatim accounts of the events transcribed. Each participant agreed to review the transcribed copies and return with any corrections noted.

### **Data Analysis**

Researcher began the process of analysis by reviewing all transcribed data from each of the participant's interviews. According to Lichtman (2013) "Key concepts are derived from the data through a process of coding, sifting, sorting and identifying themes" (p. 243). After finalizing transcription summarizations, researcher, "Pulled out coherent and consistent descriptions, themes and theories that speak to" (p. 202) the "research questions" (Lichtman, 2013, p. 248; Rubin & Rubin, 2005). All participant transcriptions were reviewed with the use of the audio recording concurrently, to enhance validity and accuracy. Lichtman (2013) suggests, "Once you have gathered some data, you need to put it into a format that is useful for analysis. I recommend that

you place each item in a separate file, using a word processing package. It is helpful to insert your comments in brackets and in a different font or color” (p. 251).

The first step was the inclusion of a systematic approach to data analysis that included the selection of a coding strategy, which implemented an electronic word processing file(s) for each piece of data to be coded. Lichtman (2013) purports, “Whether you approach data analysis via a generic coding strategy or select one of several specific strategies ----some of which I mention subsequently ----and whether you use computer software or not, I believe you will have the most success with a systematic approach. A systematic approach to analysis brings order and understanding to your qualitative research project (p.264). The advantage of adopting systematic coding was according to Rubin and Rubin (2005) “To quickly locate excerpts from all the interviews that refer to the same concepts, theme, event, or topical marker and then examine them together” (p. 219).

Once the transcripts were initially coded, the initial coding was revisited due to the large number of codes and redundancy. The revisited codes were modified and an initial list of categories was formed. A review of the list of categories was done to remove any elements of redundancy or areas of irrelevance. Lastly, identifiable key concepts and emergent themes were noted from reviewing the data. The data analysis process was not linear but annular and repetitious as stated by Lichtman (2013) ...”it is iterative, circular, and can be entered at any point “(p. 255). Lichtman (2013) suggests, while there are no definitive rules for the number of concepts you might identify, I believe very strongly that fewer well-developed and supported concepts make for a much richer analysis than many loosely formed ideas. As you read and reread your data you will see that some ideas appear richer and more powerful than others” (p. 254).

## **Trustworthiness**

Trustworthiness is essential in ascertaining the worth of a qualitative study (Lincoln & Guba, 1985) (as cited in Hays & Singh, 2012). The researcher utilized credibility, member checking, and transferability as criterion for trustworthiness. The credibility was established through the strategy of member checking. According to Guba and Lincoln (1989) (as cited in Hays & Singh, 2012) "It is a key strategy for establishing trustworthiness" (p. 206). Each of the participant's interviews was transcribed and was submitted to the participants for final review of the summarizations for clarification and verbatim accounts of the events transcribed. Johnson (1997) (as cited in Hays & Singh, 2012) suggest the purpose of transferability is to ensure that the readers are provided with enough "detailed description" concerning the research they can draw conclusions regarding the findings. Thick descriptions of the participant's interviews were created during the transferability process. Each theme ascribed provided thick, rich details of the participant's individual accounts of particular events and perspectives relative to the nature of interview.

## **Limitations of the Study**

One limitation of the study was getting enough participants to partake in the multiple campus case study. The study was extended to include a larger pool due to the lack of email responses. To minimize this limitation the researcher contacted 15 colleges/universities within the State of Kentucky and conducted a purposeful multiple campus case study with four colleges/universities. A second limitation of the study was administrators found it difficult to ascertain who specifically would be identified as the content expert for the study at their college/university with the appropriate knowledge and skill. To minimize this limitation a general term was implemented for the study, Alcohol and Drug Educators, to encompass all faculty and contract employees working within positions who had direct knowledge related to the

implementation of alcohol policies within their colleges/universities. Using this globalized term provided a forum for all university departments to engage and participant in the study who represented specific knowledge related to the implementation of alcohol policies.

### **Delimitations of the Study**

The purpose of this study was to understand the current alcohol policy initiatives among four post-secondary institutions in the State of Kentucky. First, an Alcohol & Drug Educator was identified to determine the content of their current alcohol policies and if they contained evidence-based strategies to include treatment and prevention. A secondary purpose of this study examined the university policies to determine if those said policies were being monitored for fidelity and effectiveness, as well as to assess Alcohol and Drug Educators' perceptions of these policies. The qualitative data collection method chosen and utilized for evaluating the university policies consisted of the following:

- A. Individual prescreen interview questions were used to collect demographic information from each of the participants utilizing the demographic questionnaires,
  - a. Telephone interviews were conducted with each participant to confirm receipt of the demographic questionnaires,
- B. Researcher conducted scheduled telephone interviews with the participants,
  - b. Each of the interviews were transcribed using a transcription service and reviewed by the researcher for accuracy.

- c. Transcribed interviews were coded, revisited and sorted, identifying themes and placing them into categories and subcategories.
- d. Researcher conducted member checking by submitting final summarizations of the transcripts to each of the participants for credibility and verbatim accounts of the events transcribed.

This study was designed to include a purposeful selection of a population to include college administrators, staff, and faculty and/or contract employees from post-secondary institutions in the State of Kentucky. The study intentionally excluded the student population as the purpose of the study was to gain an in depth understanding from the perspectives of Alcohol and Drug Educators who implement the alcohol policies within those institutions that directly impact students who consume alcohol in excessive amounts. Literature suggests that students who self-report may oftentimes report “Inflated definitions of binge drinking” and have more liberal attitudes about underage use (PIRE, 2011). Additionally, the conceptual framework of the literature and the premise of the study is solely grounded on evidence-based strategies. This was established at the genesis of the study, to utilize the NIAAA’s 3-in-1 Framework four Tier strategies as a standard of measurement concerning the content of the alcohol policies. This is the first comprehensive and exhaustively studied research commissioned to examine and explore factors that influence college drinking.

### **Resulting Actions**

This research study may provide significant insight to policy makers, government officials, constituents, college presidents, college administrators and legal experts. Collective collaboration may secure allocated funding to eliminate the fiscal and budgetary concerns that are prohibiting effective interventions. Creating a better partnership with Alcohol and Drug Educators may

increase the urgency of the stifling conditions that are leading to hazardous drinking environments with increased consequential risks.

### **Participant Demographic Summary**

Two participants did not complete the demographic questionnaire. Three were approximately thirty years of age and one above 50 but below 60 years of age. All the participants reported that they each were married. Two of the participants were new to their roles, integrating into their current position with less than one year reflecting an internal promotion. The other two participants at their respective university for approximately 2-3 years and all of the participants earning a master's degree. Two of the participants noted direct involvement with Greek organizations on campus as well as athletics and sports teams all directly related to programming, alcohol policies and conduct monitoring. Likewise, the other two participants indicated no involvement with either Greek organizations or athletics or sports. One participant worked at an institution where there was no Greek or Sorority membership or activities on campus.

### **Summary**

This chapter provided a brief overview of the introduction and methodology used in this qualitative multiple campus research case study. The following chapter will provide a synopsis of an overview and discussion of key findings, emergent themes, trustworthiness and corroboration and a summary of findings.

#### **IV. Findings**

For the purposes of this study, the term Alcohol and Drug Educators is being used as a global term to include persons in various positions working in post-secondary institutions and/or colleges who have an extensive working knowledge related to current alcohol policies. A Director of Counselor Services, a Dean of Students and a Director of Residential Life were all participants representing one college/university. A Judicial Hearing Officer, a Director of Student Conduct and a Mental Health and Substance Abuse Counselor were participants who represented the remaining three colleges/universities who participated in the study. Alcohol and Drug Educators have the task of imposing sanctions and reinforcing alcohol policies. Their knowledge, expertise and perspectives were invaluable during this study considering 5.1 million people between the ages of 12-20 reported binge drinking within the past month (NSDUH, 2015). The NIAAA endorsed a task force in 2002 on college drinking which was the first comprehensive study to research the behaviors and consequences associated with college drinking (Malloy et al., 2002). The task force introduced the 3-in-1 framework prevention strategy with four recommended Tiers to address the culture of drinking on college campuses, which included recommendations to encourage college presidents, administrators, community leaders and prevention specialists to modify these evidence-based strategies to complement their schools.

The Surgeon General's Report on Alcohol, Drugs, and Health (2016) revealed based on survey results that 8 to 10 percent of school administrators reported implementing evidence-based interventions to prevent or treat substance abuse use. Moreover, the Executive Summary reports further that, "Untested or ineffective prevention programs are used more often than evidence-based interventions, and when they are used, evidence-based interventions are often poorly, implemented, do not serve large numbers of participants, and are not sustained" (p.3-29).

Likewise, the report suggests that evidence-based interventions that are improperly administered “tend to have weak or no effect on participants” (p. 3-29). It further iterates that school administrators have minimal application of content fidelity, including inability to deliver all mandatory lessons, content, and materials; to administer the required instructional policy; to address the appropriate targeted population of students, and to ensure all personnel, teachers and administrators receive adequate training (The Surgeon General’s Report on Alcohol, Drugs and Health, 2016).

Stakeholders including, college presidents, college administrators, school officials, policy makers, community leaders, and legal experts may benefit from the results of this study navigated by the following research questions:

- 1.) Are post-secondary institutions in Kentucky applying evidence-based strategies to include treatment and prevention programs for high-risk student drinkers?
  - a.) What if any, strategies are in place to meet the needs of student drinkers who are not identified as high-risk drinkers?
- 2.) What are the Alcohol & Drug Educators’ perceptions about binge drinking and the current alcohol policies?
  - b.) What are the current alcohol policies?
  - c.) How do you measure them?
  - d.) What do you think of them?

## Overview of Key Findings

This study revealed seven emerging themes based on a cross-analysis of four transcripts derived from the semi-structured interviews of each participant who represented the four colleges/universities within the State of Kentucky. The following themes were identified:

*Understanding of Alcohol Policies, Perceived Effectiveness of Alcohol Policies, Targeted Populations (freshman, Greek, Sorority, Athletes and entire population), Treatment and Prevention Programming, Implementation of Evidence-Based Strategies, Barriers, Limitations and/or Fiscal Concerns, and Culture/Tradition.* There is a brief discussion of the identified themes below followed by thick descriptions of each emerging theme:

**Understanding of Alcohol Policies.** Participants shared their individual perspectives regarding their level of understanding relative to the alcohol policies at their specific college/university. All participants shared a similar tenant of no underage drinking on campus. There was a shared perspective among all participants concerning off-campus drinking by underage students as an alternative mode of choosing where to drink.

**Perceived Effectiveness of Alcohol Policies.** Participants voiced varying perceptions regarding the level of effectiveness of the alcohol policies in reducing high-risk student drinking. Nonetheless, the overarching theme among them all was it is “very effective” however; it does not “prevent use”.

**Targeted Populations.** Participants shared varying degrees of perspectives regarding how the alcohol policy applies to the freshman population. One participant indicated that the alcohol policy in place does not apply to the freshman population while yet another participant shared that there were orientation practices in place to meet the needs of this student population. Three of the participants were in agreeance that the athletic department implemented their own level of

“programming” related to alcohol use with the exception of one participant who shared that there was no Greek and/or sorority involvement on their college/university campus. One participant shared that their alcohol policy implemented specific rules pertaining to Greek and Sorority events while yet another participant shared if the delivery of the services were being managed effectively the college/university would meet the needs of those targeted student populations.

**Treatment and Prevention Programming.** All participants revealed an “intervention” strategy was implemented to address the student’s drinking behavior based on the results of their individual assessment administered by the Counseling Center of the college/university.

**Implementation of Evidence-based Strategies.** Consistent themes of minimal awareness concerning the application and implementation of evidence-based strategies contained within the alcohol policy and curriculum development.

**Barriers, Limitations and/or Fiscal Concerns.** Insufficient resources, including both, adequate staffing and budgetary concerns were common themes among participants. Fiscal challenges limited opportunities to train staff, and the demands of meeting the required student to staff ratio for appropriate treatment, were additional concerns noted by participants.

**Culture/Tradition.** Each participant shared a variety of perspectives relative to underage drinking spanning from the student’s perceptions of traditions and culture, being away from home, memberships in organizations, athletics, fraternities and sororities.

## Discussion Themes and Findings

**Theme One: Understanding of Alcohol Policies.** Participants each provided a level of insight into the processes and variations of the alcohol policy specific to their university/college by defining their policy. Five of the participants cited that their college/university was a dry campus with only one indicating that their campus was both, dry and moist.

“Currently, the policy is in the student handbook for the university. The policy states, that this is a dry campus free from alcohol and drug and tobacco and if people are found to be in violation of that policy, if there are to be drugs found on campus or in the dorm room then there are variations of student codes of conduct that they should be met with”.

“Our policy here at the university is zero tolerance for alcohol or anywhere on campus so”.

“Well alcohol of course, alcohol is not permitted to any student under the age of 21. If you are 21 or older you are permitted to drink alcohol on [REDACTED] residence hall, tailgating and very specific and designated places on the university. And also, it is against university policy to be intoxicated on campus whether or not you are a student on campus”.

“My understanding is pretty in depth. It is my role as the Director of Student Conduct to ensure compliance from a student perspective with the policy. Our administrative regulation around alcohol which, is the [REDACTED], have some specifics about faculty and staff usage as well on campus but have a lot of information regarding student usage, student organization usage, and that then funnels into the code of student conduct and it is overseen from a student perspective through that process or that then is overseen from a student. org perspective in that process”.

**Theme Two: Perceived Effectiveness of Alcohol Policies.** The participants shared a similar acuity regarding the effectiveness of the policy suggesting it was more about the consciousness and self-awareness of the choices the students choose to make rather than the actual policy itself. Further, suggesting some of the choices rendered included students choosing to go off-campus to drink to prevent consequences of underage use.

"I feel that it is very effective obviously it doesn't stop students from going off campus to drink but uh but they do know our policy and our stance on it and why and we also publish it in the handbook. There is no, I guess you can say grace periods. If they are caught with it there is a minimal sanction and if they are caught with it again, in them, on them, or even around them, on campus, off campus, there are sanctions for that. We explain that to all of our students. To answer your question, I think it's effective as far as preventing students from drinking, especially binge drinking".

"I think if we didn't have the policy I'm sure we would have more of course. We have always had the policy so I don't know. It is hard to say what it would be like without it, a hundred percent of what it would be like if we did not have it. I do believe that from our conversations that students' who do drink, a lot of them decide to drink off campus so they don't get in any kind of trouble with the university. I think it does prevent some underage drinking but we still do have a lot of alcohol cases it doesn't completely prevent it".

"I would argue that it is difficult to tell. We have to measure and know the difference between low-risk and high-risk drinking. There are specific parts of the policy that are designed to help students manage the risk, particularly student organizations. So, you'll see that there is information regarding tailgating and administrative regulations that are specifically designed to help student organizations manage some of the risk but also manage some of the behaviors that's already occurring. And, then from that perspective there are a lot of our policies that reflect federal and local laws, specifically the drinking age from that perspective. Some policies exist in the residence halls regarding public intoxication and what not. All of this is designed to create a response at the end of the day from an official in my case, a conduct officer to get students to the resources to better evaluate their own drinking habits and ultimately help the student where they are. And, so we see a vast amount of students from different walks of life with different usage and different perspectives that come to the university like this size. From that perspective and ineffectiveness of managing heavy drinking, is as reliable as the student is honest throughout the entirety of the process including engaging in what we call the [REDACTED]. If found responsible in the conduct process and if they engage in that and they are open and honest, I think it's quite effective and if they're not then it will only be as effective as the student's engagement".

"I'm not sure that the policy itself, I'm not sure of the effect of the policy itself and people reading it what effect that has on drinking. I believe it can potentially affect where students choose to drink. I know right now they're making renovations to housing and just in conversations I've heard people will say, well they might plan something off campus to make high-risk choices rather than on campus so it might affect the location of which they might make the high-risk choice".

**Measure Effectiveness of Alcohol Policy.** Two participants discussed the universities efforts to measure the level of effectiveness regarding the alcohol policy. One participant noted that “some measurement” was being conducted but they are in the genesis of that process. While yet another participant reported that qualitative assessments were being done to monitor the number of students receiving services.

“We know what our statistics are and our funding. I wouldn't say that is a measure of effectiveness of our findings so I wouldn't look to deeply into that from an effectiveness standpoint. From the perspective of if the policy is effective I think it becomes really complex and so we've done some work around when we refer students to other offices how well they do from a retention standpoint. I think the reality is we're not really measuring how well they do from an alcohol usage standpoint and so there is some work. I know it's done in other parts of the campus but from the Office of Student Conduct perspective I'm more concerned about the student success here, which oftentimes translates to more of retention and so from that perspective there are some measurements. Some other offices may be doing like Counseling for instance or we refer students to our Alcohol Prevention Program which are Coach and Connect out of the [REDACTED]. They're doing some measurements to understand where students are but there is not from my understanding a lot of follow-up measurements like longitudinal studies happening across the board but what we can see, is to some extent, students are thinking about what they are experiencing from some of those classes. Which they arguably should lead to an effective practice but we're beginning the process of measuring some of those things now to better inform our practice moving forward”.

“I guess it's a qualitative assessment. We also keep track of how many people we have. We do different codings to see how many people are actually utilizing the service through the year and things like that”.

**Content Fidelity.** Only two participants in the study responded to whether provisions were included to monitor the alcohol policy for content fidelity. One participant indicated several revisions have been made throughout the years with on-going feedback and collaboration with the Dean of Students and other university offices on campus to determine what is working within the policy but those efforts are not formalized. The other participant also indicated collaboration with the Dean of

Students and other collaborating departments to discuss possible revisions within the policy as well as conducting qualitative assessments on how many students are being served by the policy.

"Hmm. I think it's largely feedback. A less formal conversation about what's working and what's not working. The policy does go through a review. The policy has gone through several revisions. If you look at the policy when it first came to be in 1988, it was revised in 1998, 2012, and 2015. The policy continues to go through revisions as necessary and then there is continuous feedback from the Dean of Students, Office of Legal Counsel and so forth, and campus Partners who are in the community but how that's working and how that's not working. So, some of that comes from a behavioral standpoint, from a perspective probably from a wellness perspective of what we're trying to do with this population and helping them with resources. I don't know that it is formalized outside of the actual revision. Of whether there's usually some sort of revision committee and to be honest I'm probably not the best resource".

"I know that we meet with the Dean of Students and he meets with the Vice President at different points of the academic year to see how the policy is being upheld and if any changes need to be made to that based on the information they gather throughout the year and the semester".

**Theme Three: Targeted Populations.** Participants shared varying degrees of perspectives in relation to the application of the alcohol policy concerning targeted populations such as freshman, Greek, sorority, athletics and the entire student population as a whole, which is reflected in the thick descriptions below:

"Well for our freshmen....we explain that to all students but to break that down. For our freshmen, we have orientation stuff for every freshman that comes through. We go over these policies, especially the drug and alcohol policies to let them know what that is and what it states according to the university. Most of those freshmen also hear from the athletic side from the directors and the coaches which they have their own stipulations and sanctions for alcohol on top of ours so ...the athletic department coincides with ours because it's campus wide so they also go over that as well with the athletes. For all of our returning students uh sophomores, juniors and seniors umm. We go over it in dorm meetings so it's not like they hear it freshman year and never again. So we're constantly reminding them of the policy".

"We do not have Greek and Sorority members on our campus so".....

"We don't have a specific offense or policy geared towards those groups"

"We don't have any written policies but we do have initiatives with freshman orientation we have an alcohol speaker that comes to freshman orientation that they are all required to attend. Freshmen are the ones that we have the most alcohol cases with and I believe the Greek chapters take that upon themselves with education and athletics have renewed a grant for alcohol education and they have a speaker coming up that they are requiring all the athletes to attend. So, the university doesn't have a specific policy gear towards those populations but there are some educational initiatives geared towards those groups".

"Well by addressing the freshman when they come in by doing it that way you can reach the entire student population unless they are transfer students by doing it that way you can reach the most students. Then they can receive additional education after that".

"Uh, Yeah that's a good question. I'll start with two that are targeted first. And, so specifically when we think about athletics and first-year students, freshman students it is as targeted to them as it is to anyone else in the university. In other words, from an individual standpoint the policy is the same across the board. Athletics has their own set of programming. They have their own resources around some of that. They have conversations with athletes and around their usage and what that means and other topics as well. From a first-year perspective many of our first-year students are traditional age college students, which means that they are under 21, it's not true for all of them but for many of them they are under 21, therefore the alcohol policy applies. They are not to consume or possess under the age of 21.

From the perspective of fraternities and sororities, which, is another conversation. The alcohol policy specifically targets the types of events that they could have, where they can have them, and who approves them and how they can have them and it is relatively complex in the [REDACTED] specifically talks about when and where they can have events at their house, which are alumni, based. They are not undergraduate based, they talk about BYOB policies, and it talks about off-campus policies. This isn't just true just for fraternities and sororities but this is true for all registered student organizations, but given that our fraternities and sororities engage in more social type events it tends to apply to them more and also because they have houses on campus that are part of the policy specifically applies to them as well. The goal of some of this was to allow some of the alumni to have some of these events if they were willing and there are specific rules and regulations around how those events are to be approved and how they are to be administered".

"This policy has been referred to in 2015 as a moist policy or a damp policy for campus. So we went from a completely dry policy to having some structured events that can be registered and also managing some of the tailgating and whatnot that occurs from around athletic events and so the goal is to help promote responsible drinking and it also still reinforces the fact that we are for the most part, a dry campus. But all residence halls for instance which houses 7,000 students are dry for the most part and I say that because there's one part of one of them and I think it's graduate housing but I'm not the content expert in this area but for our graduate students they're dry but still attempting to make sure that we are not having... we have the ability to enforce the alcohol policy on campus and have conversations with students regarding alcohol usage on campus regardless of their age. We understand that it is a part of college campus life, right students who are using alcohol or they personally believe that they should be

using alcohol, and we can have those conversations through our different processing that we have on campus including the conduct process. And, so from that perspective just giving the nature of how our policy is structured and how restrictive it is it gives us a lot more opportunity to have some of these conversations. But it has also opened us up to have more conversations about what does a responsible event look like with alcohol. And I think that that's also an important conversation to be had and so the policy has begun to strike a balance and open up conversations around both as opposed to being just dry or just opposed to being wide open. Right within the scope of the law and so from that perspective we've had a lot of conversations around alcohol on campus and I can see that growing in the future”.

“Ideally, we would deliver Choices to those programs. Right now, not getting off into another tangent, but if everything were operating, as it should I believe that would happen. Right now, the Counseling and Health Services Department only has two counselors to attend to 10,000 students so there definitely needs to be more. We need more counselors of course but ideally we would need a student to counselor ratio like we should have but I feel like we would be able to do more of those programming and educational components delivering Choices to those targeted populations more so than we are actually getting to do now”.

“There is two times an academic year and one time that we...I think it comes out once before school starts in August and then once before school starts in January, a mass email providing the link to the alcohol and drug policy at the university”.

**Binge Drinking.** One participant shared their perspective regarding how the university addresses the issues of heavy binge drinking that occurs off campus:

“In the student code handbook, it addresses that. In many ways students are responsible for their own behavior whether they are on or off campus as long as they are enrolled as a student here and so that's important to look at but also, it's also important to look at it from a student organization standpoint. What constitutes a student organization, no event is under the code and activity, right which falls under several regulations including regulations for alcohol and for regulations for student organizations and so there are several policies that oversees activities as well and things of that nature. Anything that the activity has falls under our policy but also students that are enrolled fall under our policy and so looking at that you pay attention to the scope of the code and by in large where it applies in some of that specifically when you ask a question about binge drinking. All the colleges that talk about underage drinking not as much about the way in which students drink and so the way in which students consume and so the preventive type of measures coming from some of these other offices or binge drinking that we're having specifically that's happening, right. As I mentioned earlier with the examples just going with the six-pack versus the student with an intentional blackout experience we're going to address that at an individual level. The conduct process as well we're certainly having the conversations as well as much as we can. With .org and with our individual students, what it means to consume alcohol responsibly in a safe way”.

**Theme Four: Treatment and Prevention Programming.** Each participant shared an existing treatment and/education programming method(s) currently at use at their respective college or university. Two participants reported the use of an educational component as the central ideology used to lower the risk of alcohol consumption among students. Three participants reported utilizing counseling as an intervention strategy and one participant reported using both evidence-based education and brief alcohol intervention strategies. Students would receive a referral possibly from the Dean of Students Office (or other collaborating offices) to the Counseling Center for an individual assessment based on a or 2<sup>nd</sup> offense sanction or case by case basis to determine the level of on-going care.

“Well under a 1<sup>st</sup> offense it’s under the sanction that you saw under the policy. If it’s a 2<sup>nd</sup> offense then they must come to counseling services and we would do an alcohol and drug assessment with them. If at that time we feel that it is a problem we may deal with it in-house or if we feel it is a serious enough problem then we would get them the help that they need”.

“What they do is ...if it’s a 2<sup>nd</sup> offense the Dean of Students or the person who is designated for them would have to make an appointment with Counseling Services they usually do that that day. And they would meet with a counselor and we would do an assessment with them with some assessment tools that we have”.

“Well we have a Blackboard Education Program, information about binge drinking, the peer educators work with students teaching students about alcohol and binge drinking, we have speakers coming into athletics occasionally there is one coming up in a couple of weeks to speak. We have the driver of a vehicle where his friend was killed so we have that experience for the students. The Counseling Center has small group for substance abuse, students were concerned about getting an alcohol assessment, and they can get an alcohol assessment at the Counseling Center, a lot of times we will have students write a tailored paper on alcohol, a reflection paper, so there are some tailored pieces that we do as well”.

“It’s a case-by-case basis. If there’s addiction, if they have drank recently, if they’ve been drinking more than they should, if there’s a student who wants help, so it just depends on that student. It just depends on that student”.

“Yeah that question is primarily suited for a [REDACTED] we are ever so large right but no one office can tackle issues around alcohol and drugs alone from our perspective I wouldn’t call it prevention as it is intervention and then that is like I said our Coach Programs that we will

send students to. We will send students to [REDACTED] as well just for an initial assessment to see if they would be willing to take place. We can't mandate that people enter counseling here but we can introduce them to the Resource Center assessment process. If they choose to continue to report to it they do and if they choose not to then they don't, that's the student's choice. We can mandate that they go to off campus counseling and provide us with some documentation and we have done that before. So, the Dean of Students Office has implemented initiatives to better understand alcohol prevention framework. This work has been on-going in other offices but the Dean of Students Office recognizes that it has a huge part in this. Even the population that we work with specifically including sororities, freshman, student organizations, residence halls, and then of course conduct work is in there too, so we have a big, from the Dean of Students perspective, chunk of the student pie so to speak when it comes to alcohol usage. We work closely with our [REDACTED] partners and so from that perspective we are trying to understand what can we do better than what we have been doing. What can our programming look like, our framework, how does our fraternity and sorority life look, how does our resident life look, and try to create a strong message around alcohol usage on campus and what that means. And, so I'm not sure that we have prevention programming on campus that is actively effective we are starting a lot of that right now but it's not mandated in the policy. The policy is about if, when, and where you can use. The prevention work is something that is in addition".

"Yeah, I can provide a [REDACTED] Plan most universities you may hear them call them sanctions. I can provide [REDACTED]. Say that a student needs to go and see someone for off-campus treatment and if they don't comply with that they now have a hold on their account. They won't be able to register but once again that's the intervention measure not so much prevention and that's something we only really do in cases where we say they have a severe level. We won't normally do that for the average student, the average students will likely go to a Coach-Class for the first-time alcohol violation, which is one-time alcohol educational course".

"In 2015 toward the end we implemented the Choices. I've been trained to deliver Choices and BASICS while; there developed by the same people I had to have two separate trainings. So, Choices is the education piece, it is 90 minutes in a group setting with interactive journaling. There is a facilitator's guide to follow the format; the student will then do the interactive journaling piece. We will talk about it in a group setting and then there is an optional 90-minute follow up session I believe to be done 2 or 3 weeks after the initial and that is 90 minutes as well. It kind of reviews if they do choose to drink what is that like and did they recall the education that they learned before in the previous group and how did it affect their choices or did it. The Choices is educational. So, the BASICS is a Brief Alcohol Inventory tool for college students and that is a brief intervention up to three individual sessions with a student. It involves a substance abuse assessment and then them filling out and participating in an Alcohol E-Check up to go screening tool so they will input their personal drinking choices and the second session they are discussed with the counselor. Then the third is about a month later just to see what choices they made between their very first session and then now. So that's a brief intervention. And, so those are the ones we have and we also have CASICS, which is C-A-S-I-C-S (spelling out the word). That is the Cannabis version for BASICS and it operates the same way".

**Education: Most Effective?** The commentary surrounding the educational component is twofold:

it is either connected to a “wellness or health issue” or student’s engagement with their peers as peer education is deemed better than engaging with adults and thus they will respond better.

Participants also reveal how the severity and number of incidents affect the level of care as well.

“From an educational course perspective, we only have two options, there is Coach and Connect and those are coming out of our [REDACTED] Those are our primary go to for alcohol and we also have an educational course for students with marijuana. Connect is more of an education course that is for students with the goal of that is to say, okay there must be a wellness issue going on so let's talk about your health in decision making from that perspective, we try to approach that from a different angle. From a [REDACTED] we do like policy reviews, what alcohol issues come up so we'll meet with an entire student organization and have conversations around now what's the policy and what does it mean and also some individual responsibility as well.

We also may have them bring in an off-campus speaker to talk about alcohol or we have some speakers on campus that may do that and our field screening program for student organizations which is kind of neat so there are things that we can do like that as well. Pretty much our educational options are reflective assignments that tend to be geared around behavior reflecting on policy, on the interview depending on the situation, interviews so we have some reflection, police officers and/or something involving a case, we have a couple of officers that solely work with the community and do education on campus, so they can meet with them and have a conversation or someone from Wellness and have a conversation so we try to keep our options open”.

“The [REDACTED] facilitates all of that I don't believe they rely on the university for that I believe it's through another organization NASPA and that's who they are certified through. And the students are certified through them. That class is taught by a certified peer educator so the students have gone through a special course so they could teach other students because peer education is probably more effective than one of us talking to the students because they usually relate better to their peers. It last about an hour long and they talk to students about binge drinking, what can happen, safety, what can happen when they're drinking, those sorts of things and it's a one-time class and the peer educators are certified”.

“Okay, so it's really about the severity of incidents and possibly about the number of incidents, and it's time sensitive. They may need help with two things. If a student comes in let's say if they had alcohol in the residence halls and that's it, they really weren't intoxicated maybe they had one beer and they have five unopened beers in the fridge with a six pack of beer, right that's considered a pretty low incident but the potential for [REDACTED]. That will send them to a Coach Course and they would filter that with the reflective type of an assignment for something like that or giving students an educational action it matters to us right. Let's say the first-time educational violation is a deliberate, over intoxication and during

their meeting the student admits to alcoholism. From that perspective we know that things like Coach is not going to help that student right, we will reach out to a Counseling Center for help or we may recommend off campus counseling and pursue that in relation to the outcome we're trying to match the behavior that's occurring with the outcome does that make sense”?

**Theme Five: Implementation of Evidence-Based Strategies.** Some of the participants indicated in their commentary surrounding the evolution of the alcohol policies that the implementation of those policies was prior to their arrival at the university while others stated that the policy was based solely on scripture.

Yet another participant indicated that other collaborative departments within the university were more affiliated with implementing “Best Practice” standards for evidence-based strategies. As their department focused mainly on student conduct and student retention. Likewise, Choices, BASICS and CASICS were all noted by one participant as evidence-based programs utilized for alcohol intervention.

“These policies were here when I came on board. So, I don't know that that's been done. I know they've been tweaked, as far as the evidence-based, or were they obtained; I'm not sure”.

“I guess the only thing that we can say as far as evidence-basing, is that, again I didn't write the policy, we are a Christian institution and a lot of our policy is derived from the Holy Bible and what scripture says about it so all of our policies are derived from that. But again, I wasn't here when we wrote them but, that is what we base our policies and everything we do that is sort of our, I guess you can say our moral compass, our decisions, everything that we do, and how we act”.

“I'm not sure. Like I said we don't really, we don't facilitate, the courts do. Like I said, I really don't have all the ins and outs”.

“Well, when you say policy our policy is pretty long and within that there are two paragraphs or two offenses basically towards alcohol and one of those. The policy was derived and implemented decades ago there probably was a policy in place since the university was established and since then every couple of years it is updated and revised so I have no idea what the implementation or the original writing, I don't even know what the original writing looks

like. I know that it was last revised a year ago and every couple of years its look at and updated”.

“Because we're primarily a referral agency I would argue that the question is better answered by our partners that I work with because they are developing this content based on their professional expertise area, right. In Counseling or even in [REDACTED] and in other programs based on best practices, based on evidence and information we receive and sources based on student's usage, so from our perspective we will get to the best resources as possible and primarily those look like something out of [REDACTED] or something out of Counseling, currently to have those conversations. I would also argue that we are spending time doing some work around evaluating how effective some of our classes are, it would not surprise me from a conduct perspective we're continuing to work with our partners to evaluate from that perspective and a student caseload as well but we are not quite there yet”.

“Choices, BASICS and CASICS are all evidence-based programs”.

“In 2015 toward the end we implemented the Choices. I've been trained to deliver Choices and BASICS while; there developed by the same people I had to have two separate trainings. So, Choices is the education piece, it is 90 minutes in a group setting with interactive journaling. There is a facilitator's guide to follow the format; the student will then do the interactive journaling piece. We will talk about it in a group setting and then there is an optional 90-minute follow up session I believe to be done 2 or 3 weeks after the initial and that is 90 minutes as well. It kind of reviews if they do choose to drink what is that like and did they recall the education that they learned before in the previous group and how did it affect their choices or did it. The Choices is educational. So, the BASICS is a Brief Alcohol Inventory tool for college students and that is a brief intervention up to three individual sessions with a student. It involves a substance abuse assessment and then them filling out and participating in an Alcohol E-Check up to go screening tool so they will input their personal drinking choices and the second session they are discussed with the counselor. Then the third is about a month later just to see what choices they made between their very first session and then now. So that's a brief intervention. And, so those are the ones we have and we also have CASICS, which is C-A-S-I-C-S (spelling out the word). That is the Cannabis version for BASICS and it operates the same way”.

**Theme Six: Barriers, Limitations and/or Fiscal Concerns.** Lack of adequate staffing and financial barriers were two of the most noteworthy constraints revealed by participants that led to other pivotal concerns such as sexual assault, drunk driving and personal liability issues. Additional barriers discussed were concerns related to diversity, assimilation to culture and policy and complying with the MLDA act as it applies to students under the age of 21 as noted below:

"Yes, money is always a concern ..... so, we have to be very mindful and we have budget cuts every year and we have less staff. If we had more money and staff I think we could provide more and ultimately, we want to provide them an education so they don't break the policy. We much rather be proactive than reactive".

"I think we do the best we can. I know it's a big change for everyone on campus but alcohol issues can lead to a lot of other concerns sexual assault, vandalism, and drunk driving, so it's definitely a priority that's why we use education to teach them how to be responsible. I think we've done a good job. I think we need to do more but that may take resources that we don't have".

"I'm not sure that there are barriers to the policy. I feel like there are barriers as far as resources go as far as adequate staffing, for example, if we were adequately staffed as counselors by IAC recommendations where there would be one counselor for every 1000 to 1002 to 500 students then I feel like the efforts for alcohol and drug then would really be able to flourish.

But because there are only two of us and the growing mental health, you know nationally need. Unfortunately, the barriers are they would have to provide adequate staffing to provide adequate resources especially as it concerns alcohol and drugs services".

"One day at a time, yeah. (Laughter) I feel like we are meeting the needs of the population. I haven't had to cancel the Choices class or anything like that people are able to make BASICS appointments but they're not in the ideally timely fashion. Choices is every week and it happens every week but if someone were to call and say like hey I've met with the Dean of Students and I need to do a substance abuse assessment and have a BASICS session, they may have to wait 2 or 3 weeks unfortunately because of lack of staff. We are not able to go into all the freshmen residence, the first-year seminar classes which are comprised of freshman students to do the Choices interactive journaling like we would like to do".

"Yes, we have you know it's hard to tell what is exactly going on but that's the answer we keep getting that higher education has suffered budget cuts so therefore, blah, blah, blah, so that's always the answer that we get because of budget problems. We are not able to provide the services that we need. Which to me is a liability and dangerous, but they don't ask me."  
(Laughter)

"I know on my end one of the barriers is when students turn the age of 21. They feel like they are an adult and they should be able to do what they want to do. But again, we still have to constantly remind them that um obviously it is legal and they are of legal age to drink. But um no matter how old they are the university has policies that all students, staff and faculty must go by whether we agree with them or not because they represent the university. That's one barrier" ...

"Here is another barrier I just thought of ...we're a very diverse campus.. we represent 50 or 60 countries so cultures. So, cultural barriers. A lot of students come from other countries here. They think it's accepted here, it's nothing wrong with it, and when they get here they think it's

the same, obviously our policy is totally against that, so that's a barrier we face. It's just trying to help them understand that although it may be fine where they are from the university doesn't feel that way. Another barrier we face is trying to help them understand is where there from the university doesn't accept that and that is definitely a barrier as well".

"I think that there is a reality that they are never perfect and that you'll never have what you need for any individual case. That is the reality of policy no matter what it is, specifically to alcohol, the struggle with the alcohol policy that I tend to have, is the conversation of what students are actually doing and being in a larger culture of the United States and what they are technically allowed to do here on campus, right. We can't allow students to drink under the age of 21 and I think that there is a fair amount of dissonance between what they're allowed to do and what they are not allowed to do and what students are told about the college experience before they get here. It's before the university experience students are told they're going to come here and they're going to party. You're going to come here and they're going to have this experience and when I talked about the larger issues that are beyond just kegs this is the issue, this idea, the college experience of what you're supposed to be, and do in college, but I think college is a pretty big issue. But I believe the policy limits our ability to have some of those conversations but we don't get a choice in that, right. It's either state law or federal law or regulation so from that perspective we have that responsibility as an institution to talk to students from a policy or a legal perspective, right so for us it's about policy.

But I think it's the underage because it's about that perspective as well so that's where we're constantly having this conversation of why do you drink and what does this mean to you, so you have to have both of those conversations. The policy conversation resonates with a traditional 18 or 19-year old's too, right, because it's black or white. The majority does not, right or you didn't violate it. The deeper conversation is, who are you and why are you doing this. I think sometimes it's overshadowed by policy and so I think it's a tough life and I understand why it is but it's a tough fit as practitioners have to be comfortable in that area, comfortable with the reality and be able to have both conversations with students which is not always easy".

**Theme Seven: Culture/Tradition.** Stigma, location, clubs, participation in Greek fraternities, sororities and organizations, party schools, trends, being away from home, perceptions, culture, traditions these are some of the sentiments versed by the participants as they described excessive alcohol consumption on college campuses as noted below:

"No. The percent that we have....all three of us agree, no".

"I don't know I remember back I grew up here I remember in High School this was supposed to be like one of the top five party schools in the country or something pretty bad reputation as far as that goes. I wouldn't say that it's a trend. I would say students think or perceive that there is a trend and they get away from home and they think it's a big deal to drink and they find out

that they were wrong, that we do have policies in place for that. Unless there's something I don't know about. I don't think there is a trend here. I think that all colleges struggle with the student's perception of drinking.”

“Like I said before, I think most universities have a culture or tradition of some drinking. I have been at a series of institutions this is the first R One and Division 1 institution that I've been at and I have seen this elsewhere that didn't have all those things right, since I think the answer to your question is yes, but I think it is something that is larger than one person. I think that our tailgating is significant here and that has to do with the large support and you will find that at most Division 1 big schools, so from that perspective our tailgating is pretty up there but from general student drinking it's similar to like institutions.”

“Possibly geographic location, possibly because of the stigma that comes with college in and of itself. A lot of people tell me well there's nothing else to do so I think those are the reasons that people give for drinking. First time being away from home, being involved in clubs and organizations and other things where drinking might be a part of that culture. I don't know the stigma is the college life and all that stuff but it happens and you know inside Greek organizations and outside of great organizations and in side Athletics and out outside of Athletics you can't really generalize it to a certain population of student, yeah.”

Lastly, some of the participants recommended an overarching summary of what would be important factors to consider when implementing evidence-based strategies in an alcohol policy:

“How we respond to policy violations. What is the best prevention for students? How we respond or provide education to students to prevent alcohol violations by including staff monitoring, police, reporting violations, including a risk assessment for every student”.

“I think making sure they're doable programs, taking into consideration the population that you're serving you know I think we live in a time where people want to, they want to get as much information as they can in the short amount of time. They're not interested in really doing something that takes several weeks just because I feel like you lose people in that, and evidence shows that. I did a review on what the other universities were doing. I called the other universities. I asked their opinion, I talked with the Directors of Clinical Staff and Directors of like for instance UK, they have a Clinical Counseling Staff Department and Alcohol and Drug stuff that handles a different department so I talked to both of those people and I just did my research. I called different places. I talked to the University of Boston and got some good direction there and did research myself to see what seems to working, and based on studies that were done and what other schools were doing and benchmarking what others were doing at schools. I think with selecting intervention you have to be mindful of the population and their needs, yeah”.

### **Trustworthiness and Corroboration Strategies**

Each of the participants was emailed copies of their transcriptions for final summarizations, accuracy and verbatim accounts of the interviews transcribed. Only one of the participants responded with a reply stating that they were awaiting approval from the university's president. The remaining participants had no additional commentary or remarks regarding the receipt of the transcriptions. Researcher received no commentaries from any of the participants for changes, additions or deletions.

### **Summary of Findings**

In this multiple campus, qualitative case study six Alcohol and Drug Educators presented their perspectives on alcohol policies in post-secondary institutions in the State of Kentucky. Each shared their understanding of the content of those policies and the evidence-based strategies contained within those policies to include treatment and prevention. Secondly, the findings of this study examined college/university policies to determine if those said policies were being monitored for fidelity and effectiveness, as well as to assess Alcohol and Drug Educators' perceptions of these policies. The findings that emerged during this study indicated that there is a shared belief among those responsible for implementing the alcohol policies on college campuses regarding the strategic efforts to prevent underage drinking on campus to students who are under the age of 21. Reportedly, they oftentimes experience limitations and barriers that extend beyond the policies and create immense challenges in their efforts to maintain a "dry campus". Each of the Alcohol and Drug Educators provided varying perspectives regarding the content of evidence-based strategies implemented within parts of the curriculum with only one sharing with a level of certainty that all treatment and education administered to students contained evidence-based strategies.

The following chapter will discuss the results of analysis, recommendations and final conclusions that commenced from the findings to serve as a catalyst to encourage college presidents, college administrators, stakeholders, legal experts and policy makers to review alcohol policies for evidence-based strategies and to minimize the limitations and barriers that prevent effective interventions.

## V. Conclusions and Recommendations

The following seven themes were discussed in Chapter four. This overview of key findings illustrates a synopsis of the interviews that were conducted with each of the Alcohol and Drug Educators. A cross-analysis of each transcript was derived from the semi-structured interviews of each participant. The following themes were identified:

**Understanding of Alcohol Policies.** Participants shared their individual perspectives regarding their level of understanding relative to the alcohol policies at their specific university/college. All participants shared a similar tenant of no underage drinking on campus. Shared perspectives of off-campus drinking by underage students as an alternative mode of choosing where to drink.

**Perceived Effectiveness of Alcohol Policies.** Participants voiced varying perceptions regarding the level of effectiveness of the alcohol policies in reducing high-risk student drinking. Nonetheless, the overarching theme among them all was it is “very effective” however; it does not “prevent use”.

**Targeted Populations.** Participants shared varying degrees of perspectives regarding how the alcohol policy applies to the freshman populations. One participant indicating that the alcohol policy in place does not apply to the freshman population while yet another participant shared that orientation practices were in place to address these concerns. Three of the participants were in agreeance that the athletic department implement their own level of “programming” related to alcohol use with the exception of one participant who shared that there was no Greek and/or sorority involvement on their university campus.

One participant shared that their alcohol policy implemented specific rules pertaining to Greek and Sorority events while yet another participant shared if the delivery of the services were being

managed effectively the university would meet the needs of those targeted students. Only one athletic department alcohol policy and two tailgating alcohol policies could be accessed via the Internet.

**Treatment and Prevention Programming.** All participants revealed an “intervention” strategy was implemented to address student drinking based on the results of an individual assessment administered by the Counseling Center of the college/university.

**Implementation of Evidence-based Strategies.** Participants shared consistent themes of minimal awareness and application concerning the role of evidence-based strategies within the alcohol policy and curriculum development. Only one participant exhibited current knowledge of specific evidence-based policies and reported all of their intervention programs currently in use were evidence-based. Notwithstanding, findings suggest that as a matter of practice all participants are utilizing some of the evidence-based strategies particularly in Tiers 2 and 3 without having knowledge of practice.

**Barriers, Limitations and/or Fiscal Concerns.** Insufficient resources, including both, adequate staffing and budgetary concerns were common themes among participants. Fiscal challenges limited opportunities to train staff, and meet required student to staff ratio for appropriate treatment,

**Culture/Tradition.** Each participant shared a variety of perspectives relative to college and underage drinking spanning from the student’s perception, being away from home, organization involvement and stigma.

## Interpretation and Analysis of Key Findings

**Understanding of Alcohol Policies.** All participants shared corresponding views concerning their understanding of the alcohol policies at their respective university/college, no underage drinking on campus more specifically no drinking under the age of 21. This is consistent with the Minimum Legal Drinking Act (MLDA) that prohibits the purchase or public possession of alcohol of any person under that age of 21. DeJong and Blanchette (2014) suggest that university leaders should impose functional policies, rigorous enforcement strategies and other evidence-based prevention efforts to reduce underage drinking and alcohol related issues on campus. However, it was noted during the interviews that while there were similarities each policy varied. According to Wechsler, “no single set of policies works best across all institutions (as cited in PIRE, 2011) (p.18). He suggests that policies should be implemented based on the environment. Indicating that while college drinking may be excessive in its entirety the drinking behavior may vary based on the college as reported by each of the participants in the study.

Wechsler further asserts that colleges that allow students access to low cost alcohol outlets may have fewer policies limiting access to alcohol, minimized enforcement of existing policies thereby creating a culture of binge drinking. During this research study, none of the participants reported information related to the alcohol outlets, neither proximity nor restrictions were contained within the alcohol policies.

Nelson et al. (2015) suggests that effective alcohol policies are politically shunned and less efficacious policies are more favorable. They further assert that legislatures were willing to adopt legislation respectively, for underage drinking and impaired driving but were disinclined to address the same drinking problems with the general population.

One of the most notable Alcohol Researchers, Robin Room, has asserted that, “The effective strategies for reducing the public health burden of alcohol are generally unpopular with legislators and the public and therefore are less likely to be implemented, while politically popular strategies are generally not very effective” (Nelson et al., 2015, pg. 59). Researchers further revealed the most “effective” policies are those that are created to reduce excessive consumption; the consequences associated with use and reduce drinking in general. Globalized implementation of effective alcohol policies will adversely affect the alcohol sales and therefore will be contested by the alcohol retail industry. Findings revealed that there is spirit rigidity between the interest of the public health and fiscal management when instituting alcohol control policies. The alcohol industry will attempt to influence the community sentiment and the interests of the legislators regarding policy enactment (Nelson et al., 2015). This finding is inconsistent with the recommendations of researchers who suggest that increasing the price of alcohol sales including raising taxes can reduce the use of excessive consumption. Additionally, reducing the number of alcohol outlets is consistent with a reduction in alcohol-related crime (Zhang et al., 2015; Yu et al., 2008; Xu et al., 2012; Office of the Surgeon General, 2016, p. 3-18; Wechsler, 2008; Malloy et al., 2002).

During the interview, one participant shared there was a “zero tolerance policy”, drinking wasn’t allowed anywhere on campus, or off campus including trips and group related activities. This included alcohol related offenses by state or local authorities on or off campus as well as empty containers. This participant was the only Christian university interviewed in the study. Increased enforcement of this policy, the fact that this institution affirms strong historical scriptural principles, and the fact that students who are in attendance may uphold the fundamental values and beliefs of the institution may play into the reportedly low-risk drinking. The NIAAA (2002) reports based on several studies that, “Students who are more religious and more committed to

traditional values drink less than their peers who are less religious” (p. 22). Another participant reported that their campus was a “dry campus” free from alcohol, tobacco and drugs while yet two other participants stated drinking was permitted during tailgating and in designated areas, with one of the same participants sharing that their campus was both “dry” and “moist”. PIRE (2011) reports that students who are subjected to “wet” environments have an increased likelihood of binge drinking than peers who are in different environments. Further suggesting that “wet” environments include an increased prevalence of access to social and residential drinking that is less expensive and students have a dismissive attitude about age appropriate drinking. In contrast, Fuertes and Hoffman (2016) assert that college campuses with dry alcohol policies have not eliminated excessive student drinking or abuse, although evidence suggest a lower onset of alcohol dependence.

All the participants had a clear understanding of the premise behind the policy as it relates to the population of students served, the purpose and intent of the policy and the areas of deficiency such as where a student chooses to drink as an alternative to campus. What was most concerning was students were choosing to drink off-campus to evade the penalties and sanctions associated with use. The alcohol policies did not extend off-campus unless students were taking part in an activity associated with the university. One participant shared that their policy had very definitive guidelines surrounding targeted student organizations, alumni, Greek, fraternity and sorority members. Each participant discussed the sanctions each student would receive based on failure to comply with the alcohol policy. The sanctions typically began with a first offense and graduated to a third offense with elevated fines and penalties ranging between \$50-\$250. Only one participant noted that the university used what they called a “restorative action plan” which was comparable to a sanction.

**Perceived Effectiveness of Alcohol Policies.** Each of the participants voiced similar opinions concerning the level of effectiveness of the alcohol policy in reducing high-risk- student drinking. They suggested that the policy was as effective as was the students' behavior suggesting that it was more about the students' willingness to choose low-risk choices and learning how to manage risky behaviors. One participant stating, "It is effective as long as the students are engaged". Another participant asserts, "It's very effective but it doesn't stop students from going off campus to drink", however, they continued and stated that "It was very effective especially binge drinking". Another participant regarded that, "It was better than not having a policy in place" and he/she believed that without it they would have more incidents of underage use. Further, he/she indicated, "A lot of them decide to drink off campus so they don't get into any trouble with the university". Moreover, stating it does help with prevention but not completely. While yet another participant shared that the policy itself wasn't effective in reducing drinking, as he/she believed it just changed the location of where students choose to drink. Students often have conversations regarding going off campus to make high-risk choices according to the participant. The overall emerging theme noted by the six participants was that students are not making low-risk choices but instead they are changing the location (off-campus) to continue to make high-risk choices without receiving consequences for those choices.

Dr. Henry Wechsler (2008) suggests there is "no one size fit all" solution to underage drinking on college campuses however; he asserts that those colleges that have implemented the following recommendations have had minimal problems:

- A comprehensive set of state minimum drinking-age laws (possession, sale, age of workers at outlets)
- Stronger enforcement of these laws (e.g., through identification checks and keg registrations)

- Fewer alcohol outlets
- More laws controlling high-volume sales (drinks served in pitchers, fish bowls, boots, buckets; limits on so-called happy hours)
- Limits on irresponsible marketing practices (e.g., prohibit 25-cent beers, all-you-can-drink specials, and “ladies nights,” when women drink for free)

According to the College Alcohol Study, schools with the following cultural factors have an increasing binge-drinking rate:

- Have many sororities and fraternities
- Have highly competitive athletic programs as members of National Collegiate Athletic Association (NCAA) Division I
- Normalize student drinking as historical tradition

Only one of the participants in this study reports not having sorority or fraternity memberships on campus, nor a culture or tradition of drinking this is the only reported Christian college/university in the study. They are the only participants to report that the implementation of the alcohol policy at their university has been very effective in reducing high-risk drinking, especially binge drinking on campus. Thus, maintaining an alignment with Wechsler’s (2008) theory suggesting that if you change one’s environment you affect change on their behavior. Another participant represents a college/university with both, sororities and fraternities located on and off campus. Their alcohol policy is designed to include specifics around tailgating, alumni, limited off campus policies concerning the management of events only, BYOB, all registered student organizations regarding the types of events they could have, when, where, who approves them, and where they can have them. Two other participants in the study reported sororities and fraternities on campus. Literature suggests that there is a correlation between alcohol outlet density and alcohol-related problems suggesting that campuses with higher outlets should partner with local police and to enforce state and local laws (Weitzman et al., 2003a).

**Targeted Populations.** There is both a variance and shared congruence among the participants concerning the application of the university's alcohol policy towards targeted populations on college campuses to include the freshman, athletes, Greek, sororities and the entire population as a whole. At least two of the participants shared similar perspectives regarding applications around educational initiatives geared towards each of these populations.

**Freshmen.** One of the participants indicated that freshmen were addressed during the orientation process and an overview of the drug and alcohol policies were reviewed. Another indicated that their alcohol policy did not address targeted populations, however there were initiatives that addressed the students during a required freshman orientation and they oftentimes had speakers who would speak with the students. Moreover, continuing with the statement that freshmen have the most alcohol related offenses on campus particularly binge drinking.

**Athletes.** All participants except for one shared the same perspective of athletes reporting that the athletic departments had their own programming, stipulations and or sanctions.

**Greek and Sororities.** One participant shared that their university did not have any Greek or sorority memberships on campus. Another participant stated that their Greek and sorority chapters were responsible for educating their members themselves, as the university did not have alcohol policies geared towards targeted groups. One participant stated that their alcohol policy was very specific in targeting fraternities and sororities and the types of events they could have including where, how they could have them, getting the events approved, when they could have them and the location at their house, which was alumni based.

**Entire Population.** One participant stated that the alcohol policies are discussed during dorm meetings for all students thereby reinforcing the policy with the entire population. Another stated by addressing the alcohol policy with the freshman population they reach all students in its entirety with the exception of transfer students.

Literature suggests a correlation among Greek activities and increasing rates of binge drinking. Similarly, studies indicate shared characteristics among at-risk student populations for increased alcohol consumption, frequency, and negative outcomes. This includes residing in Greek housing, bidding for sorority and/or fraternity systems and having any Greek affiliation (Klein, 1989; Lo et al., 1983; Werner & Greene, 1992). College athletes and college students who were involved in high school sports are at the greatest risk of binge drinking, running second to Greek members (Ford, 2007; Hildebrand et al., 2001; Martens et al., 2006; Turrisi, et al., 2007; Wechsler et al., 2001). According to Weitzman et al. (2003b), first year college students are identified as another at-risk group. Although there is a history of drinking prior to their arrival, first year college students often engage in binge drinking as part of the college culture. Fuertes and Hoffman (2016) contend that freshman and sophomore college students are at the greatest risk of alcohol dependence. They recommend college administrators provide interventions to target these populations during their transition from high school to college to limit their potential risk of harm associated with binge drinking. Likewise, students who are unaffiliated with Greek and athletic organizations are at the greatest risk for binge drinking. These students lack additional supportive services, targeted interventions, and community involvement. Fuertes and Hoffman (2016) concludes that a freshman who is unaffiliated with a Greek or athletic organization, and is attending school in a rural community on a wet campus is at the highest risk of alcohol dependence. Only

two participants in this study addressed the entire student population indicating that no specific targeted interventions were provided for these students.

Wechsler et al. (1998) concluded in their findings of their CAS study that was conducted to examine alcohol use among college students between 1993 and 1997 that a relatively small decrease existed among binge drinking, however of those who drank, they drank with prevalence, frequency and intensity. They exhibited a greater desire to drink to get inebriated. Further, the study suggest that fraternities and sororities are at the focal point of the drinking culture and 2 out of 3 members are binge drinkers (Wechsler et al., 1998). Likewise, for those Greek members that are housed in fraternity and sorority living binge drinking is even more severe with 4 out 5 students misusing alcohol. Wechsler et al. (1998) suggests that colleges must change the drinking customs that have been established on college campuses that are influencing the college population. Additionally, researchers convey that alcohol use among high school students is an indicator of future use in college (Wechsler et al., 1998).

Wechsler and Wuethrich (2002) reports that 73 percent of fraternity and 57 percent of all sorority members report binge drinking. It is alarming, consequential and dangerous that one participant reported that their alcohol policy has no definitive guidelines specified towards targeted populations, specifically Greek, and sorority membership. They are responsible for educating themselves regarding alcohol prevention, which increases the risk of potential liability. Wechsler and Wuethrich (2002) contend that 58 percent of male athletes and 47 percent of female athletes are binge drinkers. There is a consensus among all but one of the participants regarding the athletic departments own alcohol prevention programming or sanctions for students, however the uncertainty is whether this compliments the existing alcohol policy already in place and what if any specific training is provided to monitor sanctions.

There was a level of uncertainty regarding the specifics of the strategies used for this high-risk drinking population which is concerning considering the research of increased prevalence among this group for binge drinking. A spirit of ambiguity exists among the participants concerning the level of effectiveness of the alcohol policy in reducing binge drinking among the majority which was evident in the participants remarks and commentaries. It is disturbing that one of the most prevalent and targeted populations on campus to have the highest number of alcohol related offenses related to binge drinking (freshman) and possibly other consequential risks is not addressed specifically in the alcohol policy as a required population to serve. There is a disconnect between the requirements associated with the Drug Free Schools and Communities Act which imposes sanctions for alcohol and drug related behavior and a lack of urgency to provide those very services students may be sanctioned for. One participant stated that their alcohol policy is the same across the board with the inclusion of the freshman while yet another indicated that a mass email was sent out twice a year regarding the drug and alcohol policy to all students.

**Treatment and Prevention Programming.** The participants each shared their own perspectives relative to their college/universities treatment and prevention programs that were implemented to address student drinking. The overall theme suggests that education was the preferred method of “Intervention”. Only one participant shared that all the treatment and educational components involved were evidence-based. All participants shared a systematic approach to the referral process under the alcohol policy as a result of a sanction or a restorative action, each indicating that the process was based on an individual basis suggesting frequency and intensity. First, there would be an initial referral based on 1<sup>st</sup> or multiple offenses, which could come from the Office of Student Conduct, Housing, the Dean of Students, or other designated reporters and an assessment would be conducted. Some participants indicated students would be referred to the

Counseling Center while another stated a referral to the Wellness Office. Blackboard Education, Coach and Connect, Choices, BASICS and CASICS were all resources that were identified with Choices, BASICS, CASICS and E-check up to go being noted as evidence-based programming. Other options identified were reflection papers, and tailored assignments. The participants all agree that they provide intervention not prevention programming. It is important to note that the size of some universities constitute on-going collaboration among other departments for successful interventions.

Nelson et al. (2010) administered a national survey entitled “Implementation of NIAAA College Drinking Task Force Recommendations: How Are Colleges Doing 6 Years Later” to college administrators in an effort to follow up on the recommendations issued by the NIAAA College Drinking Task Force. The findings revealed that college administrators were mindful of the recommendations issued on behalf of the NIAAA Task force on college drinking, however, 22% were ill informed. Ninety-eight percent of the colleges’ utilized educational interventions to address alcohol misuse, although the NIAAA report “found strong evidence that educational programs, by themselves were ineffective in reducing student alcohol use and related problems “(Nelson et al., 2010, p.5; Malloy et al., 2002). Further, a reported 50% of the colleges provided intervention programs with written efforts of proficiency. Nelson et al. (2010) reported in their findings that a limited amount of colleges utilized “evidence-based strategies, community based- alcohol control strategies to include compliance checks to monitor illegal alcohol sales (33%), instituting mandatory responsible beverage service (RBS) training (15%), restricting alcohol density outlets (7%), or increasing the price of alcohol (2%)” (pg.1).

In contrast to this finding, this study revealed none of the participants reported having specific knowledge or awareness of the NIAAA’s Task Force 3-in-1 framework prevention strategy

that included the 4 Tier evidence-based recommendations. Notwithstanding, two participants reported implementing educational strategies as an intervention. Each participant implemented strategies from Tiers 2, 3, and 4 as a matter of practice without having specific knowledge of the NIAAA' s recommendations. Tier 1 included brief motivational interventions and Tier 2 included increased enforcement of the minimum legal drinking age laws by all participants and several others are discussed in Tier 3 in the following section. Nonetheless, none of the participants shared during their commentaries any strategic efforts regarding alcohol control monitoring, RBS training, restrictions of alcohol density outlets or the increase of alcohol pricing to reduce student drinking.

Wechsler et al. (1994) recommended in their findings of their national CAS study of 140 US college campuses that universities should be committed to implementing comprehensive and thorough intervention strategies that include behavior modification and referrals to appropriate treatment interventions for alcohol misuse. Literature further suggests that alcohol misuse on college campuses is comparable to alcohol abuse outside the college campus and abusers may often be resistant and deny a problem exist and the safety of the university including traditions may limit identifying the problem. Wechsler et al., (1994) continues by recommending that additional due diligence should be made to focus on those students who suffer negative consequences as a result of binge drinkers. Wechsler et al. (1994) recommends long and short-term behavioral intervention strategies should be included in the implementation of university policies of alcohol treatment. One out of four participants in the study utilized both long and short-term behavioral interventions, while others indicated that students could be referred off-campus based on the individual need of the student at the student's expense. These three evidence-based programs were offered in conjunction with off-campus referrals, Choices, BASICS, CASICS and E-check up to go.

**Implementation of Evidence-based Strategies.** As it relates to the content of the alcohol policy or any parts of the curriculum, containing any evidence-based strategies the participants with the exception of one, had marginal knowledge. The overarching theme was this is an existing policy that was already in place or someone else is more versed in that area. One participant stated that their fundamental beliefs and values were based solely on scripture, the Holy Bible because they are a Christian university while yet another stated that all of their programs including the intervention and education programs were all evidence-based.

Choices is the educational intervention that is delivered in 90 minutes in a group setting with an interactive journal. There is a facilitator's guide to follow the format; the student will then do the interactive journaling piece. There is a discussion in a group setting and then there is an optional 90-minute follow up session to be conducted in 2 or 3 weeks after the initial assessment and that is 90 minutes as well. It reviews their high and low risk choices if they do choose to drink and did they recall the education learned before in the previous group and if it affected their choices. This is an educational component.

BASICS is a Brief Alcohol Inventory tool for college students and it is a brief intervention up to three individual sessions with a student. It involves a substance abuse assessment and then filling out and participating in an alcohol E-Check up to go screening tool so they will input their personal drinking choices and the second session they are discussed with the counselor and then the third session is about a month later to follow up on the choices they made in between their very first session and currently. C-A-S-I-C-S is the Cannabis version for BASICS and essentially works the same as BASICS.

In 2002 the Task Force presented an overarching, 3-in-1-framework prevention strategy to address individuals, including “at-risk and /or alcohol-dependent drinkers, the student population as a whole, and lastly, the college and neighboring communities” (Malloy et al., p.14, 2002). There are four recommended Tiers and each Tier includes identified strategies that were implemented to assist institutions in offering integrated strategies to remedy the culture of binge drinking on campus (Malloy et al., 2002). To address the culture of binge drinking on college campuses the following recommendations have been implemented by the Task Force to encourage college presidents, administrators, community leaders and prevention specialists to modify these evidence-based intervention strategies to compliment the needs of their schools. Noted below are the following four Tiers identified by the Task Force as recommended evidence-based strategies. Each recommendation includes an identified strategy as reportedly used by participants of the study. Participants in this research study are currently implementing the following evidence-based strategies;

- **Tier 1: Evidence of Effectiveness Among College Students:**
  - **Strategy II:** Brief motivational interventions (**1 university- BASICS**)
- **Tier 2: Evidence of Success with General Populations that Could be Applied to College Environments:**
  - **Strategy I:** Increased enforcement of minimum drinking age laws (**4 universities**)
  - **Strategy V:** Responsible beverage service policies in social and commercial setting (**3 universities, Tips/Star**)

- **Tier 3: Evidence of Logical and Theoretical Promise, but Require More**

- **Comprehensive Evaluation:**

- **Strategy I:** Adopting the following campus-based policies and practices that appear to be capable of reducing high-risk alcohol use.
- Establishing alcohol free dormitories (**2 universities have alcohol free dorms;**
- **2 universities have designated dormitories where alcohol is permitted),**
- Banning alcohol on campus including at faculty and alumni events (**2 universities)**
- Further controlling or eliminating alcohol at sports event and prohibiting tailgating parties that model heavy alcohol use; (**2 universities have exempted alcohol from sporting events), 3 universities have specific and separate tailgating polices and only 2 tailgating policies could be accessed via the websites)**
- Refusing sponsorship gifts from the alcohol industry to avoid any perception that underage drinking is acceptable (**1 university),**
- **Strategy IV:** Consistently enforcing disciplinary action associated with policy violation (**4 universities)**
- **Strategy VIII:** Informing new students and their parent about alcohol policies and penalties before arrival and during orientation (**1 university during orientation)**

- **Tier 4: Evidence of Ineffectiveness:**

- **Strategy I:** Informational, knowledge-based, or values clarification intervention about alcohol and the problems related to its excessive use when used alone (**3 universities: Coach & Connect; Peer Education; Reflection assignments, Individualized assignments, CHOICES & CASICS)**
- **Strategy II:** Providing blood alcohol content feedback to students (**1 university)**

During the telephone interviews, none of the participants reported any efforts to restrict alcohol outlets, any efforts of collaboration to increase the price of alcohol sales or the implementation of mandatory beverage service training. This is consistent with the findings reported by PIRE (2011), which suggest that 79 percent of administrators reported they had not enforced any plans towards restricting alcohol outlets, 86 percent had not increased alcohol sales and 73 percent had not provided mandatory beverage training. Only 2 out of 3 college administrators, a reportedly 67 percent stated they provided intervention for high-risk drinkers which is a Tier 1 strategy with only 50 percent of colleges providing intervention programs. This study revealed that 3 out of the 6 participants indicated that based on an individual need and the outcome of an assessment for high-risk drinking with a defined problem that students would be referred out for additional intervention services as needed. Only 1 out of 6 participants in this study utilized a Tier 1 strategy for high-risk drinking and 3 participants utilized a Tier 4 strategy for high-risk drinking.

According to PIRE (2011) 98 percent of the colleges reported that they used one or more methods to educate the students about the risks associated with the misuse of alcohol. This finding is consistent with the results of this study as each of the participants of this study reported utilizing one or more of the recommended Tiers in an effort to engage students in the intervention process to reduce binge drinking. However, only 1 out of 6 participants was knowledgeable of those evidence-based strategies while the other participants were uncertain regarding the application of those strategies.

**Barriers, Limitations and/or Fiscal Concerns.** Participants shared concerns resulting in barriers and limitations including fiscal concerns that prohibited or limited the availability of either services or the application of the policy. Insufficient resources including adequate staffing and budget cuts

were consistent themes limiting services. Participants voiced concerns of potential dangers of appropriate student to staff ratio limiting effective interventions, which led to concerns of provider liability. Another participant was concerned about the increased risk associated with alcohol use such as sexual assault, vandalism and drunk drinking. The frequent budget cuts led to less staff and ultimately less resources.

The NIAAA (2007) reported that more than 696, 000 students between the ages of 18-24 are assaulted by someone who was binge drinking and more than 97,000 additional students within the same age group are victims of sexual assault or rape as a result of alcohol use (NIAAA, 2007). Hart (2013) & Sloan (1994) suggest that college campuses are comparatively safe with limited violent crime with the exception of sexual assault (Allen & Jacques, 2014). More of the major crime offenses involve property crimes, burglary and larceny. However, the most common type of them all is underage drinking (Dowdall, 2013). In 2010, over 30,000 arrests were made nationally, for alcohol related student offenses. Of those arrests, 90% were on college campuses (USDOE, 2010; Dowdall, 2013; NCHA, 2011). Likewise, violent and property crimes that occurred on college campuses were committed by an intoxicated offender or victim (Dowdall, 2013; NIAAA, 2012). Researchers suggest that the typical population is largely made up of 18-24-year-old white middle-class or above background and campus police report high rates of binge drinking (Trends in Higher Education, 2011; USDOE, 2011).

In light of the fiscal and budgetary concerns and the consequential risk associated with increased use, lack of adequate staffing and the apparent violent crimes associated with underage drinking college administrators must collaborate with community coalitions and create partnerships to engage representatives and develop action plans to increase funding to change their campus culture. Administrators admit to stifling conditions that are prohibiting effective interventions that

ultimately can create hazardous drinking environments that can lead to alcohol poisoning and the like. A lack of urgency to this need feeds into an on-going culture/tradition of drinking that is exacerbated and may led to student deaths.

**Culture/Traditions.** Each participant shared varying perspectives regarding the culture or tradition of binge drinking associated with their college/university. One suggested that their university had a title of a “party school” years ago and had a bad reputation. He/she believes that all colleges struggle with the student’s perception of what college drinking looks like. Another participant stated, after working at several universities he/she found that most have a culture or tradition of some drinking.

However, it was noted that at larger Division 1 schools the tailgating events would be significant. Location, stigma, the college environment itself, first time being away from home, involvement with sports, clubs, organizations and any culture where drinking is a social norm including Greek, sororities and athletic membership were all perspectives shared relative to underage drinking.

The overarching theme demonstrated during the telephone interviews was three out of the four participants discussed a culture or tradition of drinking resulting in a student’s belief or perception of what college drinking looks like and or the expectation to drink within a particular social norm or setting. This is consistent with the findings of the CAS study that represented a diversion from focusing primarily on the students and instead addressed the college environment that influenced the behavior. Wechsler et al. (2008) suggest that clinicians should focus primarily on shifting a behavioral change towards the majority rather than focusing on the individual behavior of the heaviest drinker. Literature suggest additional changes would also include limiting the

availability of alcohol (including proximity to campus), limits on irresponsible advertising, price and marketing, reevaluation of university policies, university drinking cultures/customs and enforcing local and state polices controlling the sale of alcohol (NIAAA, 2010; Malloy et al., 2002; Dowdall & Wechsler, 2002).

### **Summary**

Alcohol and Drug Educators each have a role in the application of their institution's alcohol policy. The delivery and oversight of each policy yield similarities and variances as demonstrated throughout the overview, nonetheless these policies were implemented to reduce the prevalence of high-risk student drinking, binge drinking and underage use. Adjacent to that are the consequential risk associated with the excessive consumption that includes sexual assault, alcohol poisoning, vandalism, physical assault, missed classes, death, harassment and other risky behaviors. The NIAAA aligned with the Task Force to implement reduction strategies to include the implementation of evidence-based strategies that could be modified to assist college presidents, college administrators, constituents, legal experts and others in an effort to change the culture of drinking on college campuses.

It is important to note that institutions may be implementing evidence-based strategies on college campuses particularly from Tiers 2 and 3 without intentional knowledge of the application, as they are unfamiliar with evidence-based strategies as identified with the findings of this research study. There was also a disconnect among the administration concerning who was the content expert within the institution or the "go to person" concerning the alcohol policies. The overarching theme among the 15 colleges/universities contacted was ambiguous at best in seeking out a subject matter expert at their institution regarding their policy. This is distressing considering that

the Drug Free Schools and Communities Act and the amendment under the FERPA Act, 952 of the Higher Education Act (HERA) requires that (1) schools enact policies to prevent a culture of alcohol and illicit drug use and provide notification annually to students of the ramifications of conduct related to alcohol and drug related behaviors that could result in sanctions and violations, and (2) that parents/legal guardians of students under the age of 21 be notified of such violations of university policies involving possession of alcohol or drugs.

Notwithstanding, the Alcohol and Drug Educators demonstrated a wealth of knowledge during their participation in this study as they formally discussed their perspectives concerning the alcohol policies at their respective institutions. Each of their responses when compared to the university policies were reflective of the actual policies being reviewed. The policies were reviewed in isolation and compared with the findings reported by the Alcohol and Drug Educators. The findings were more extensive and comprehensive in nature with the exception of the alcohol policy that is governed under the athletic departments and the tailgating policy, which is a separate policy.

Alcohol and Drug Educators face great challenges in the surveillance and administering of these strategies. Fiscal and budgetary concerns have caused a lack of adequate staffing and potential liability concerns, ineffective intervention programming for students, particularly those at higher risks for binge drinking and a lack of compliance with the federal guidelines of U.S. Drug Free Schools and Communities Act which calls for enforcement of student codes of conduct. These concerns are alarming, consequential and dangerous. A more in depth understanding regarding the evidence-based strategies, how it is modeled and the reduction strategies towards minimizing alcohol consumption among college students would be useful in helping presidents, college administrators, legal experts, constituents and the like reduce the prevalence of dangerous drinking behaviors among college students.

One limitation of the study was getting enough participants to partake in the multiple campus case study. The study was extended to include a larger pool due to the lack of email responses. To minimize this limitation the researcher contacted 15 colleges/universities within the State of Kentucky and conducted a purposeful multiple campus case study with four colleges/universities. A second limitation of the study was administrators found it difficult to ascertain who specifically would be identified as the content expert for the study at their college/university with the appropriate knowledge and skill. To minimize this limitation a general term was implemented for the purposes of this study. The term Alcohol and Drug Educators was used to encompass all faculty and contract employees working within positions who had direct knowledge related to the implementation of alcohol policies within their respective colleges/universities. Using this globalized term provided a forum for all university departments to engage and participant in the study who represented specific knowledge related to the implementation of alcohol policies.

### **Recommendations for Future Research**

The outcome of this study has revealed unanticipated findings that may be explored in future research studies. An overarching theme discussed among participants revealed that the student's level of compliance with university alcohol policies were not based on the policy itself nor their strict adherence to the policy but on how students were choosing to implement particular choices. Participants continued by stating that students were just choosing a different location of where to drink and not necessarily making low-risk choices. Students were engaging largely in drinking off-campus.

Future research should examine the prevalence of off-campus underage student drinking and the challenges that colleges face in implementing alcohol policies. This is a dangerous concept and underage students are engaging more with choosing “where” to drink to evade detection of binge drinking. Another particularly challenging research strategy that could be explored for future implications is fiscal barriers that affect alcohol policy. It was revealed during the study that budgetary concerns have created liable external factors that could not be ignored by participants. Participants voiced concerns about the lack of staff and the implications this has on providing effective interventions. In addition, the potential and dangerous liability concerns surrounding inappropriate staff to counselor ratio’s. Future research should examine whether or not there is a correlation between increased student deaths related to alcohol poisoning on college campuses as a result of lack of funding in alcohol prevention efforts to reduce student consumption. Additional, findings revealed a lower prevalence of binge drinking at the Christian institution participating in this study. The outcomes reported by these participants further indicated a greater use of evidence-based strategies in Tiers 2 and 3. Future research may want to examine the religious attitudes and beliefs of students at Christian institutions to explore their perceptions about college drinking behaviors. Binge drinking on campus continues to be a globalized public health concern rigorous monitoring, strategic planning and implementation is necessary in the efforts to reduce excessive consumption.

## References

- About NIAAA. National Institute on Alcohol Abuse and Alcoholism. Retrieved from:  
<https://www.niaaa.nih.gov/about-niaaa>
- Adinoff, B. (2004) Neurobiological processes in drug reward and addiction. *Harvard Review Psychiatry* 2004; 12: 305–20.
- Allen, A., & Jacques, S. (2014). Police officers' theories of crime. *American Journal of Criminal Justice: The Journal of the Southern Criminal Justice Association*, 39(2), and 206-227. Doi: 10.1007/s12103-013-9219-1
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorder*. (5<sup>th</sup> Ed.). Washington, DC: Author.
- Anderson, P., Chisholm, D., & Fuhr, D., C. (2009). Effectiveness and cost-effectiveness of policies and programmes to reduce the harm caused by alcohol. *The Lancet*, 373(9682), 2234-2246.
- Anderson, V. (2001). Assessing executive functions in children: biological, psychological, and developmental considerations. *Pediatric Rehabilitation*, 2001; 4:119–36.
- Arria, A., Caldeira, K. M., O'Grady, K. E., Vincent, K. B., Fitzelle, D. B., Johnson, E. P., Wish, E. D. (2008). Drug exposure opportunities and use patterns among college students: Results of a longitudinal prospective cohort study. *Substance Abuse*, 29(4), 19.  
Doi:01080/08897070802418451

- Bergen, G. Pitan, A. Qu, S. Shults, R. A. Chattopadhyay, S. K. Elder, R. W., ... Calvert, W. B. (2014). Publicized sobriety checkpoint programs: A community guide systematic review. *American Journal of Preventive Medicine*, 46(5), 529-539. Doi:101016/j.amepre.2014.01.018.
- Blanco, C. Okuda, M. Wright, C. et al., (2008). Mental health of college students and their non-college-attending peers: Results from the national epidemiologic study on alcohol and related conditions. *Arch Gen Psychiatry*. 2008; 65:1429–1437.
- Campbell, C. A., Hahn, R.A., Elder, R. Brewer, R. Chattopadhyay, S. Fielding, J.,...Middleton, J.C. (2009). The effectiveness of limiting alcohol outlet density as a means of reducing excessive alcohol consumption and alcohol-related harms. *American Journal of Preventive Medicine*, 37(6).
- Casey, B.J., Giedd, J.N., Thomas, K.M. (2000). Structural and functional brain development and its relation to cognitive development. *Biological Psychology*. 2000; 54:241–57.
- Cavazos-Rehg, P. A., Krauss, M. J., Spitznagel, E.L., Chaloupka, F.J., Schootman, M., Gruzca, R.A., & Bierut, L. J. (2012). Associations between selected state laws and teenagers' drinking and driving behaviors. *Alcoholism Clinical and Experimental Research*, 36(9), 1647-52. Doi:10.1111/j.1530-0277.2012. 01764.x
- Center for Behavioral Health Statistics and Quality. (2015). Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health (HHS Publication No. SMA 15-4927, NSDUH Series H-50). Retrieved from <http://www.samhsa.gov/ data/>

Center for Behavioral Health Statistics and Quality. (2016). Key substance use and mental health indicators in the United States: Results from the 2015 National Survey on Drug Use and Health (HHS Publication No. SMA 16-4984, NSDUH SeriesH-51) Retrieved from <http://www.samhsa.gov/data/>

Centers for Disease Control and Prevention. (2016). *Alcohol and Public Health*. Fact sheets- underage drinking.

Centers for Disease Control and Prevention (CDC). (2012). Vital signs: binge drinking prevalence, frequency, and intensity among adults- United States, 2010. *MMWR. Morbidity and Mortality Weekly Report*, 61(1)14-9.

Centers for Disease Control and Prevention (CDC) (1995) *Youth Risk Behavior Surveillance: National College Health Risk Behavior Survey—United States, 1995*. *MMWR* 46 (SS-6): 1-54, 1997.

Centers for Disease Control and Prevention (2014). *Youth Risk Behavior Surveillance—United States, 2013 Surveillance Summaries*. *Morbidity and Mortality Weekly Report*, 63, SS-4, 1-168 From <http://www.cdc.gov/mmwr/pdf/ss/ss6304.pdf>

College drinking: Changing the culture. (2015). National Institute on Alcohol Abuse and Alcoholism. (NIAAA).

Cook, P. J. (2012). Alcohol retail privatization. *American Journal of Preventive Medicine*, 42(4), 430-432.

- DeJong, W. & Blanchette, J. (2014). Case closed: research evidence on the positive public health impact of the age 21 minimum legal drinking age in the United States. *Journal of Studies on Alcohol and Drugs Supplement*.75, 108-15.
- Dills, A. K. (2010). Social host liability for minors and underage drunk-driving accidents. *Journal of Health Economics*, 29(2), 241-249. Doi: 10.1016/j.jhealeco.2009.12.001
- Douglas, K. A., Collins, J. L., Warren, C., Kann, L., Gold, R., Clayton, S., Ross, J.G., & Kolbe, L. J. Results from the 1995 National college health risk behavior survey. *Journal American College Health* 46: 55-66, 1997.
- Dowdall, G. W. (2013). The role of alcohol abuse in college student victimization. In B. S. Fisher & J. J. Sloan III (Eds.), *Campus crime: Legal, social, and policy perspectives* (3rd ed., pp. 184–210). Springfield: Charles C. Thomas Publisher.
- Dowdall, G. W., & Wechsler, H. (2002). Studying college alcohol use: Widening the lens, sharpening the focus. *Journal of Studies on Alcohol*. Supplement No. 14:14-22, 2002.
- Drug use trends remain stable or decline among teens. (2016). National Institute on Drug Abuse. NIH's 2015 Monitoring the Future survey shows long term decline in illicit drug use, prescription opioid abuse, cigarette and alcohol use among the nation's youth.
- Elder, R.W., Lawrence, B., Ferguson, A., Naimi, T. S., Brewer, R. D., Chattopadhyay, S. K.... Task force on community preventive services (2010). The effectiveness of tax policy interventions for reducing excessive alcohol consumption and related harms. *American Journal of Preventive Medicine*, 38(2), 217-229.

- Elder, R.W., Lawrence, B., Janes, G., Brewer, R.D., Toomey, T.L., Hingson, R.W., Naimi, T.S., Wing, S.G., Fielding, J (2007). Enhanced enforcement of laws prohibiting sale of alcohol to minors: Systematic review of effectiveness for reducing sales and underage drinking. Retrieved from: <http://onlinepubs.trb.org/onlinepubs/circulars/ec123.pdf>
- Elder, R. W., Voas, R., Beirness, D., Shults, R. A., Sleet, D. A., Nichols, J. L., & Compton, R. (2011). Effectiveness of ignition interlocks for preventing alcohol-impaired driving and alcohol-related crashes: A community guide systematic review. *American Journal of Preventive Medicine*, 40(3), 362-376. Doi: 10.1016/j.amepre.2010.11.012
- Fairlie, A. M., Erickson, D. J., & Wood, M. D. (2012). Campus and community interventions to reduce alcohol use, abuse and consequences.
- In C. J., Correia, J. G., Murphy & N. P. Barnett (Eds.), *College student alcohol abuse: A guide to assessment, intervention, and prevention*. Hoboken, NJ: John Wiley and Sons.
- Fell, J.C., Fisher, D.A., Voas, R.B., Blackman, K., & Tippetts, A.S. (2009). The impact of underage drinking laws on alcohol-related fatal crashes of young drivers. 0277.2009.00945. x
- Filce, R., Hall, S. A., & Phillips, D. (2016). Stadium alcohol management: A best practices approach. *International Journal of Sport Management, Recreation & Tourism*, 2148-65.
- Ford, J. A. (2007). Alcohol use among college students: A comparison of athletes and nonathletic. *Substance Alcohol Actions Misuse*, 42, 1367-1377.
- Fuertes, J.N., & Hoffman, A. (2016). Alcohol consumption and abuse among college students: Alarming rates among the best and the brightest. *College Student Journal*, 50(2), 236-240.

- Giedd, J. N., Blumenthal, J., Jeffries, N.O., Castellanos, F. X., Liu, H., Zijdenbos, A, Rapoport, J.L. (1999). Brain development during childhood and adolescence: A longitudinal MRI study. *Nature Neuroscience*, 2 (10), 861-3.
- Giedd, J. N., Snell, J.W., Lange, N., et al. (1996). Quantitative magnetic resonance imaging of human brain development: ages 4–18. *Cerebral Cortex*. 1996; 6:551–60.
- Gogtay, N., & Thompson P. M. (2009). Mapping gray matter development: Implications for typical development and vulnerability to psychopathology. *Brain Cogn* 2009; 72: 6–15.
- Goodwin, A., Kirley, B. B., Sandt, L., Hall, W., Thomas, L., O'Brien, N., ... University of North Carolina (System). (2013). Countermeasures that work: A highway safety countermeasure guide for state highway safety offices (Seventh edition.). Washington, DC: National Highway Traffic Safety Administration. <http://www.nhtsa.gov/staticfiles/nti/pdf/811727.pdf>
- Guba, E. G. (1978). Toward a methodology of naturalistic inquire in educational evaluation. Monograph 8. Los Angeles: UCLA Center for the Study of Evaluation.
- Hahn, R. A., Kuzara, J. L., Elder, R., Brewer, R., Chattopadhyay, S., Fielding, J... Lawrence, B., (2010). Effectiveness of policies restricting hours of alcohol sales in preventing excessive alcohol consumption and related harms. *American Journal of Preventive Medicine*, 39(6), 590-604
- Hart, T.C. (2013). The violent victimization of college students: Findings from the National Crime Victimization Survey. In B. S. Fisher & J. J. Sloan III (Eds.), *Campus crime: Legal, social, and policy perspectives* (3rd ed., pp. 141–157). Springfield: Charles C. Thomas Publisher.

Hays, D. G., & Singh, A. A. (2012). *Qualitative inquiry in clinical and educational settings*. New York: Guilford Press.

Hedden, S. L., United States, & RTI International. (2015). Behavioral health trends in the United States: *Results from the 2014 National Survey on Drug Use and Health* (HHS publication, no. SMA1 5- 4927; HHS publication, no. (SMA) 5-4927). Rockville, MD: Substance Abuse and Mental Health Services Administration, Department of Health & Human Services.

Hildebrand, K., Johnson, D. J., Bodle, K. (2001). Comparison of patterns of alcohol use between high school and college athletes and non-athletes. *College Studies Journal*, 35, 358-376.

Hingson, R., Heeren, T., Winter, M., & Wechsler, H. (2005). Magnitude of alcohol-related mortality and morbidity among U.S. college students ages 18–24: Changes from 1998 to 2001. *Annual Review of Public Health*, 26(1), 259-279. Doi: 10.1146/annurev.publhealth.26.021304.144652

Hingson, R., Zha, W., & Weitzman, E. (2009) Magnitude of and trends in alcohol-related mortality and morbidity among U.S., college students ages 18-24, 1998-2005. *Journal of Studies on alcohol and Drugs*, 16, 12-20.

Hingson, R., Winter, M., & Heeren, T. (2000). Effects of recent 0.08% legal blood alcohol limits on fatal crash involvement. *Injury Prevention*, Vol. 6, No. 2, June 2000, P. 109-114.

Hingson, R., & White, A. (2014). New research findings since the 2007 Surgeon general's call to action to prevent and reduce underage drinking: A review. *Journal of Studies on Alcohol and Drugs*, 75(1), 158-169.

*In Re: Application of Stacy Parks Miller, District Attorney of Centre County Requesting An Order Directing That An Investigating Grand Jury Be Summoned*, 2017

Johnston, L., O'Malley, P. M., & Bachman, J. G., National Institute on Drug Abuse, & University of Michigan. (1993). *National Survey Results on Drug Use From the Monitoring the Future Study, 1975-1992* (NIH publication, no. 93-3597, 93-3598; NIH publication, no. 93-3597, 93-3598). Rockville, Md.: National Institute on Drug Abuse, U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health.

Johnston, L.D., O'Malley, P.M., Bachman, J.G., & Schulenberg, J.E. (2005). *Monitoring the Future: National Survey Results on Drug Use, 1975- 2004, Vol. 1*, NIH Publication No. 05-5727, Bethesda, MD: National Institute on Drug Abuse, 2005.

Johnston, L., D., O' Malley, P. M., Miech, R. A., Bachman, J. G., & Schulenberg, J. E. (2016). *Monitoring the Future national survey results on drug use, 1975-2015: Overview key findings on adolescent drug use*. Ann Arbor. MI: Institute for Social Research, University of Michigan. From <http://monitoringthefuture.org/pubs/monographs/mtf-overview2015.pdf>

- Kaufman, E.J., & Wiebe, D. J. (2016). Impact of state ignition interlock laws on alcohol-involved crash deaths in the United States. *American Journal of Public Health, 106* (5), 865-71.  
doi:10.2105/AJPH.2016.303058
- Klein, H. (1989). Helping the college student problem drinker. *Journal of College Student Development, 30* 323-331.
- Koob, G. F., & Volkow, N. D. (2010). Neurocircuitry of addiction. *Neuro psychopharmacology 2010*; 35:217–38.
- Krueger v. Fraternity of Phi Gamma Delta, 2001
- LaBrie, J. W., Huchting, K., Pedersen, E. R., Hummer, J. F., Shelesky, K., & Tawalbeh, S. (2007). Female college drinking and the social learning theory: An examination of the developmental transition period from high school to college. *Journal of College Student Development, 48*(3), 344-356.
- Larimer, M.E., Cronce, J.M. (2002). Identification, prevention, and treatment: A review of individual-focused strategies to reduce problematic alcohol consumption by college students. *Journal of Studies on Alcohol Supplement 14*:148-163, 2002
- Lenk, K.M., Nelson, T.G., Toomey, T.L., Jones-Webb, R., & Erickson, D.J. (2016). Sobriety checkpoint and open container laws in US: Associations with reported drinking-driving. *Traffic Injury Prevention*.
- Lichtman, M. (2013). *Qualitative research in education: A user's guide*. Third Edition.

- Lipari, R & Jean-Francois, B. (2016). Trends in perception of risk and availability of substance use among full-time college students. *The CBHSQ Report: August 16, 2016*. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Rockville, MD.
- Lo, C. C., & Globetti, G. (1993). A partial analysis of the campus influence on drinking behavior: Students who enter college as nondrinker. *Journal of Drug Issues, 23*, 715-725
- Malloy, E. A., Goldman M., & Kingston, R. (2002). A call to action: Changing the culture of drinking at U.S. colleges. National Institute on Alcohol Abuse and Alcoholism: Task Force of the National Advisory Council on Alcohol Abuse and Alcoholism, Washington, DC.
- Markwiese, B.J., Acheson, S.K., Levin, E.D., Wilson, W.A., & Swartzwelder, H.S. (1998). Differential effects of ethanol on memory in adolescent and adult rats. *Alcohol Clin Exp Res 1998; 22:416–21*.
- Martens, M. O., Dams-O'Connor, K. & Beck, N. C. (2006). A systematic review of college student-athlete drinking: Prevalence rates, sport-related factors, and interventions. *Journal of Substance Abuse and Treatment, 31*, 305-316.
- McMillan, G., P., & Lapham, S. (2006). Effectiveness of bans and laws in reducing traffic deaths: Legalized Sunday packaged alcohol sales and alcohol-related traffic crashes and crash fatalities in New Mexico. *American Journal of Public Health, 96(11)1944-1948*.

McMillan, J. H., & Schumacher, S. (2006). *Research in education evidence-based inquiry*. 6<sup>th</sup> Ed. Boston: Pearson, Allyn and Bacon.

Mendelsohn, Stephen A. (2 January 2012). "[U.S. Department of Education Amends its FERPA Regulations to Allow for Certain Additional Student Disclosures](#)". *The National Law Review*. Retrieved 9 March 2014.

Middleton, J. C., Hahn, R.A., Kuzara, J. L., Elder, R., Brewer, R., & Chattopadhyay, S, ... Task force on community preventive services. Effectiveness of policies maintaining or restricting days of alcohol sales on excessive alcohol consumption and related harms (2010). *American Journal of Preventive Medicine*, 39(6), 575-89. Doi: 10.1016/j.amepre.2010.09.015

Miech, R.A., Johnston, L.D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J.E., (2015). *Monitoring the Future national survey results on drug use, 1975-2014: Volume 1, secondary school students* (Vol. 1). Ann Arbor, MI: Institute for Social Research, the University of Michigan.

Mitchell, R. J., Toomey, T. L., & Erickson, D. (2005). Alcohol Policies on College Campuses. *Journal of American College Health*, 53(4), 149-157.

Mosher, J. F. (1979). Dram Shop liability and the prevention of alcohol-related problems. *Journal of Studies on Alcohol*, 40(9), 773-798.

Mosher, J.F. (1980). *The history of youthful-drinking laws: Implications for current policy*. In: Wechsler, H., ed. *Minimum Drinking-Age Laws*. Lexington, MA: Lexington Books, 1980. pp. 11-38.

Mosher, J.F., & Jernigan, D.H. (1989). New directions in alcohol policy. *Annual Review of Public Health, 10*(1), 224-279.

National Center for Education Statistics (NCHA). (2011). Digest of education statistics, 2010. Washington, DC: U.S. Department of Education.

National Institute on Alcohol Abuse and Alcoholism (NIAAA) (2002). *A call to action: Changing the culture of drinking at U.S. colleges*. Bethesda, MD: NIAAA, 2002. Available online at:  
[http://www.collegedrinkingprevention.gov/NIAAACollegeMaterials/TaskForce/TaskForce\\_TOC.aspx](http://www.collegedrinkingprevention.gov/NIAAACollegeMaterials/TaskForce/TaskForce_TOC.aspx).

National Institute on Alcohol Abuse and Alcoholism (NIAAA)(2008). Alcohol alert. Alcohol research: A lifespan perspective. Number 74, January 2008.

National Institute on Alcohol Abuse and Alcoholism (U.S.). (2003). Alcohol policy information system: A project of the National Institute on Alcohol Abuse and Alcoholism. Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism.  
<http://www.alcoholpolicy.niaaa.nih.gov/>

National Institute on Alcohol Abuse and Alcoholism (NIAAA) (2015) College drinking; Changing the culture.

National Institute on Alcohol Abuse and Alcoholism. (2007). Helping patients who drink too much: A clinician's guide, updated 2005 Edition, NIH Publication No. 07- 3769, Bethesda, MD:

National Institute on Alcohol Abuse and Alcoholism, (2007) (available at: <http://pubs.niaaa.nih>.

National Institute on Alcohol Abuse and Alcoholism (U.S.). (2007). What colleges need to know now: An update on college drinking research (NIH publication, no. 07-5010; NIH publication, no. 07-5010). Bethesda, Md.: U.S. Dept. of Health and Human Services,

National Institute on Alcohol Abuse and Alcoholism (2017). Alcohol facts and statistics.

National Institute on Drug Abuse (2015). Drug use trends remain stable or decline among teens. NIH's 2015 Monitoring the Future survey shows long term decline in illicit drug use, prescription opioid abuse, cigarette and alcohol use among the nation's youth.

Nelson, T.F., Naimi, T.S., Brewer, R.D., & Wechsler, H. (2005). The state sets the rate: The relationship among state-specific college binge drinking, state binge drinking rates, and selected state alcohol control policies. *American Journal of Public Health, 95*(3), 441-6.

Nelson, D.E, Naimi, T.S., Brewer, R.D., & Nelson, H.A. (2009). State alcohol-use estimates among youth and adults, 1993-2005. *American Journal of Preventive Medicine, 36*(3), 218-24. doi: 10.1016/j.amepre.2008.10.018

Nelson, T.F., Toomey, T.L., Lenk, K.M., Erickson, D.J., & Winter, K.C. (2010). Implementation of NIAAA college drinking task force recommendations: How are colleges doing 6 years later? *Alcoholism, Clinical and Experimental Research, 34*(10), 1687-93.

Doi: 10.1111/j.1530-0277.2010. 01268. x

Nelson, T. F., Xuan, Z., Blanchette, J. G., Heeren, T, C., & Naimi, T. S. (2015). Patterns of change in implementation of state alcohol control policies in the United States, 1999-2011. *Addiction (Abingdon, England) 110* (1), 59-68. doi:10.1111/add.12706

NIDA (2015). Drug use trends remain stable or decline among teens. Retrieved December 29, 2016, from <https://www.drugabuse.gov/news-events/news-releases/2015/12/drug-use-trends-remain-stable-or-decline-among-teens>.

Office of Disease Prevention & Health Promotion, U.S. Department of Health and Human Services. *Healthy people 2020 public meetings*. 2009.

O'Grady, K. E., Arria, A. M., Fitzelle, M. B., & E. D., Wish. (2008). Heavy drinking and poly drug use among college students. *Journal of Drug Issues*, 38(2), 45-465 Doi: 10.1177/002204260803800204

O'Malley, P.M., and Johnston, L.D. (2002). Epidemiology of alcohol and other drug use among American college students. *Journal of Studies on Alcohol Supplement No. 14*, pp. 23-39, 2002.

Palmer, C. J., Lohman, G., Gehring, D., Carlson, S., Garrett, O. (2001). Parental notification: A new strategy to reduce alcohol abuse on campus. Garrett Article Source: *NASPA Journal* v38 n3 (2001): 372-385

Paschall, M.J., Grube, J.W., Thomas, S., Cannon, C., & Treffers, R. (2012). Relationships between local enforcement, alcohol availability, drinking norms and adolescent alcohol use in 50 California cities. *Journal of Studies on Alcohol and Drugs* 73(4), 657-65.

Patton, M.Q. (2002). *Qualitative research and evaluation method*, (3<sup>rd</sup> Ed.) Thousand Oaks, CA: Sage.

PIRE. (2011). Environmental strategies to prevent alcohol problems on college campuses.

Pfefferbaum, A. Mathalon, D.H., Sullivan, E.V., Rawles, J. M., Zipursky, R.B., & Lim, K.O.

Quantitative magnetic resonance imaging study of changes in brain morphology from infancy to late adulthood. *Arch Neurol* 1994; 51:874–87.

Powell, L.M., Williams, J., & Wechsler, H. (2004). Study habits and the level of alcohol use among college students. *Educ. Econ.* 12: 35-149, 2004.

Prentice, D., A., & Miller, D. T. (1993). Pluralistic ignorance and alcohol use on campus: some consequences of misperceiving the social norm. *Journal of Personality and Social Psychology*, 64(2), 243-256.

Presley, C. A., Lechliter, J. S., & Meilman, P.W. (1999). Alcohol and drugs on American college campuses: A report to college presidents, Third in a series 1995, 1996, and 1997, Carbondale, IL: Core Institute, Southern Illinois University, 1999.

Presley, C. A., Meilman, P. W., Cashin, J. R., & Lyerla, R. (1996). Alcohol and drugs on American college campuses: Use, consequences, and perceptions of the campus environment, Volume III: 1991-93, Carbondale, IL: Core Institute, Southern Illinois University, 1996.

Presley, C. A., & Meilman, P. W. (1992). Alcohol and drugs on American college campuses: A report to college presidents. Carbondale, Ill.: Southern Illinois University.

- Presley, C. A., Meilman, P. W., & Lyster, R. (1993a). Alcohol and drug use among residents of Greek house. *Discoveries: A bulletin of the Core Institute* (Available from the Core Institute, Student Health Programs, Southern Illinois University at Carbondale, Carbondale, IL 62901).
- Reilly, K. (2017). A deadly campus tradition. *Time* 190 (16/17), 56.
- Rubin, H.J., & Rubin, I.S. (2005). *Qualitative Interviewing: The art of hearing data*. Thousand Oaks, CA: Sage.
- Saffer, H., & Dave, D. (2006). Alcohol advertising and alcohol consumption by adolescents. *Health Economics*, 15(6), 617-637.
- Saltz, R. F. (2011). Environmental approaches to prevention in college settings. *Alcohol Research & Health*, 34, 204–209.
- SAMHSA. (2014). *National Survey on Drug Use and Health (NSDUH). Table 6.89B-Binge alcohol use in the past month among persons aged 18-22, by college enrollment status and demographic characteristics: Percentages, 2013-2014*.
- SAMHSA. (n. d.) Substance Abuse and Mental Health Services Administration. Training intervention strategies. U.S. Department of Health and Human Services.
- SAMHSA. (2016) Substance Abuse and Mental Health Services Administration. Full-time college students drink more but smoke cigarettes less than other young adults. U.S. Department of Health and Human Services.

- Sells, D. (2002). Parents and campus safety. *New Directions for Student Services*, 2002 (99), 25-36. Doi: 10.1002/ss.58
- Siegfried, N., Pienaar, D. C., Ataguba, J.E., Volmink, J., Kredo, T., Jere, M., & Parry, C.D. (2014). Restricting or banning alcohol advertising to reduce alcohol consumption in adults and adolescents. *The Cochrane Database of Systematic Reviews* (11), CD 010704. Doi:10.1002/14651858.CD010704.pub2
- Silveri, M. M. (2012). Adolescent brain development and underage drinking in the United States: Identifying risks of alcohol use in college populations. *Harvard Review of Psychiatry* (Taylor & Francis Ltd), 20(4)189-200.
- Sammon, P., Smith, T., Cooper, T., & Furnish, G. (1991). On campus talking about alcohol and drugs (OCTAA). *Journal of Dental Education* 55:30-31, 1991.
- Sloan, J. J. (1994). The correlates of campus crime: an analysis of reported crimes on college and university campuses. *Journal of Criminal Justice*, 22, 51–61.
- Sowell, E.R., Thompson, P.M., & Toga, A.W. (2004). Mapping changes in the human cortex throughout the span of life. *Neuroscientist* 2004; 10:372–92.
- Straus, R. Bacon. (1953) *Drinking in college*. New Haven, Conn: Yale University Press: 1953.
- Substance Abuse and Mental Health Services Administration (Office of Applied Studies) (2006). *Results from the 2005 National Survey on Drug Use and Health: National Findings*, DHHS Publication No. SMA 06- 4194, Rockville, MD: SAMHSA, 2006.

Substance Abuse and Mental Health Services Administration. (2014). *Results from the 2013 National Survey on Drug Use and Health: Summary of national findings*: NSDUH Series H-46, HHS Publication No SMA 13-4795. Rockville, MD

Substance Abuse and Mental Health Services Administration (SAMHSA )(2015) *National Survey on Drug Use and Health (NSDUH). Table 5.5A— Substance Use Disorder in Past Year among Persons Aged 12 to 17, by Demographic Characteristics: Numbers in Thousands, 2014 and 2015*. Available at: <https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015.htm#tab5-5a>.

Substance Abuse and Mental Health Services Administration (2015). Risk and protective factors and initiation of substance use: *Results from the 2014 National Survey on Drug Use and Health*. NSDUH Data Review. Rockville, MD.

Substance Abuse and Mental Health Services Administration (2017). Underage drinking. STOP act legislation. Retrieved from:  
: [www.samhsa.gov/underage-drinking-topic/stop-act-legislation](http://www.samhsa.gov/underage-drinking-topic/stop-act-legislation)

Suicide Prevention Resource Center. (2018). Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services

Swartzwelder, H. S., Wilson, W.A., & Tayyeb, M.I. (1995). Age-dependent inhibition of long-term potentiation by ethanol in immature versus mature hippocampus. *Alcohol Clin Exp Res* 1995; 19:1480–5.

- Thompson, K. D., Stockwell, T., & MacDonald, S. (2012). Is there a 'low-risk' drinking level for youth? The risk of acute harm as a function of quantity and frequency of drinking. *Drug And Alcohol Review* 31(2), 184-193. Doi: 10.1111/j.1465- 3362.2011. 00378.x
- Toomey, T.L., Lenk, K.M., & Wagenaar, A.C. (2007). Environmental policies to reduce college drinking: An update of research findings. *J. Stud. Alcohol Drugs* 68: 208-219, 2007.
- Toomey, T. L., Nelson, T. F., & Lenk, K. M. (2009). The age-21 minimum legal drinking age: A case study linking past and current debates. *Addiction*, 104, 1958–1965.
- Trends in Higher Education (2011). Family income by selected characteristics, 2011. Retrieved from [http:// trends.collegeboard.org/college-pricing/figures-tables/family-income-selected-characteristics-2011](http://trends.collegeboard.org/college-pricing/figures-tables/family-income-selected-characteristics-2011).
- Turrisi, R. Jaccard, J., Taki, R., Dunnam, H., & Grimes, J. (2001). Examination of the short-term efficacy of a parent intervention to reduce college student drinking tendencies. *Psychology of Addictive Behaviors*, 15, 366-372.
- Turrisi, R., Mastroleo, N. R., Mallett, K. A., Larimer, M.E., & Kilmer, J. R. (2007). Examination of the mediational influences of peer norms, environmental influences and parent communications on heavy drinking in athletes and non-athletes. *Psychology and Addictive Behavior*, 21, 452-461.
- U. S. Centers for Disease Control. (1997, November 14) Youth risk behavior surveillance: *National college health risk behavior survey United States, 1995. MMWR surveillance summaries*, 46(6), 1-56.

U.S. Department of Education, Office of Safe and Drug-Free Schools, Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention, *Complying With the Drug-Free Schools and Campuses Regulations [EDGAR Part 86]: A Guide for University and College Administrators*, Washington, D.C., 2006.

U.S. Department of Education. Office of Postsecondary Education. (2010). Campus safety and security data analysis cutting tool. Washington, DC: United States Department of Education.

U. S. Department of Education. National Center for Education Statistics. (2011). Fast facts: Enrollment. Alexandria: Government Printing.

U. S. Department of Education. Family Educational Rights and Privacy Act (FERPA) (2015).

U.S. Department of Health and Human Services Alcohol and Health. Rockville, Md.: National Institute on Alcohol Abuse and Alcoholism, 1990.

U.S. Department of Health and Human Services Alcohol and Health. Rockville, Md.: National Institute on Alcohol Abuse and Alcoholism. National Advisory Council on Alcohol Abuse and Alcoholism. Task Force on College Drinking. April 2002. *High Risk Drinking in College: What We Know and What We Need to Learn. Final Report of the panel on Context and Consequences.*

U.S. Department of Health and Human Services (HHS)(2016), *Office of the Surgeon General, Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*, Washington, DC: HHS, November 2016.

- U.S. Department of Health and Human Services (2002) *The Surgeon General's A Call to Action: Changing The Culture of Drinking at U.S. Colleges*, 2002.
- U.S. Department of Health and Human Services (2007). *The Surgeon General's Call to Action To Prevent and Reduce Underage Drinking*. U.S. Department of Health and Human Services, Office of the Surgeon General, 2007.
- U.S. Department of Health and Human Services. (2016). *Report to Congress on the Prevention and Reduction of Underage Drinking*. Rockville.MD:
- Voas, R.B., & Tippetts, A.S., (1999). The relationship of alcohol safety laws to drinking drivers in fatal crashes. (0001-4575). Washington, DC: National Highway Traffic Safety Administration.
- Voas, R.B., & Tippetts, A; Furr-Holden, C. (2006). Drinking status and fatal crashes: which drinkers contribute most to the problem? *Journal of Studies on Alcohol*, 67(5): 722.
- Wagenaar, A.C., O'Malley, P.M., & LaFond, C. (2001). Lowered legal blood alcohol limits for young drivers: Effects on drinking, driving, and driving-after-drinking behaviors in 30 states. *American Journal of Public Health*, 91(5), 801-4.
- Wagenaar, A.C., Salois, M.J., & Komro, K.A. (2009) Effects of beverage alcohol price and tax levels on drinking: A meta-analysis of 1003 estimates from 112 studies. *Addiction*, 104(2), 179-190

- .Wagenaar, A. C., & Toomey, T. L. (2002). Effects of minimum drinking age laws: Review and analyses of the literature from 1960 to 2000. *Journal of Studies on Alcohol Supplement 14*, 206–225.
- Wechsler, H. & Austin, S.B. (1998). Binge drinking: The five/four measure. *J. Stud. Alcohol* 59: 122-124, 1998.
- Wechsler, H., & Davenport, A. (1994). Health and behavioral consequences of binge drinking in college. *JAMA: Journal of the American Medical Association*, 272(21).
- Wechsler, H, Davenport, A., Dowdall, G., Moeykens, B., & Castillo, S., (1994). Health and behavioral consequences of binge drinking in college: A national survey of students at 140 campuses. *JAMA*. 1994; 272(21):1672-1677.
- Wechsler, H., Dowdall, G., W., Davenport, A., & DeJong, W. (2002) Binge drinking on campus: Results of a national study. The higher education center for alcohol and other drug prevention, [Bulletin Series: *Alcohol and other Drug Prevention*] 1-8.
- Wechsler, H., Dowdall, G, W., Maenner, G., Gledhill-Hoyt, J., & Lee, H. (1998). Changes in binge drinking and related problems among American college students between 1993 and 1997. *Results of the Harvard School of Public Health College Alcohol Study. Journal of American College Health* 47(2):57–68, 1998.
- Wechsler, H., Kuh, G., & Davenport, A. E. (2009). Fraternities, sororities and binge drinking: Results from a National Study of American Colleges. *NASPA Journal*, 46(3), 395-416.

- Wechsler, H., Lee, J.E., Kuo, M., & Lee, H. (2000b) College binge drinking in the 1990s: A continuing problem. Results of the Harvard school of public health 1999 college alcohol study. *J. Amer. Coll. Hlth* 48: 199-210, 2000b.
- Wechsler, H., Lee, J. E., Kuo, M., Seibring, M., Nelson, T.F., & Lee, H. (2002b). Trends in college binge drinking during a period of increased prevention efforts: Findings from 4 Harvard School of Public Health College Alcohol Study surveys: 1993-2001. *J. Amer. Coll. Hlth* 50: 203-217, 2002b.
- Wechsler, H., Lee, J.E., Nelson, T.F., & Kuo, M. (2002c). Underage college students' drinking behavior, access to alcohol and the influence of deterrence policies. *Findings from the Harvard School of Public Health College Alcohol Study. Journal of American College Health: J of ACH*, 50(5), 223-236.
- Wechsler, H., & Nelson, T. F. (2001). Binge drinking and the American college student: What's five drinks? *Psychology of Addictive Behaviors*, 15, 287-291.
- Wechsler, H., & Nelson, T.F. (2008). What we have learned from the Harvard school of public health college alcohol study: Focusing attention on college student alcohol consumption and the environmental conditions that promote it. *Journal of Studies on Alcohol and Drugs*, 69(4), 481-90.
- Wechsler, H., & Nelson, T. F. (2010). Will increasing alcohol availability by lowering the minimum legal drinking age decrease drinking and related consequences among youths? *American Journal of Public Health*, 100, 986–992.

Wechsler, H., & Wuethrich, B. (2002). *Dying to drink: Confronting binge drinking on college campuses*. [Emmaus, Pa.]: Rodale; [New York]: Distributed to the Book trade by St. Martin's Press, ©2002.

Weitzman, E. R., Nelson, T.F., & Wechsler, H. (2003b). Taking up binge drinking in college: The influences of person, social group and environment. *Journal of Adolescent Health, 32*, 26-35.

Werner, M.J., & Greene, J.W. (1992). Problem drinking among college freshmen. *Journal of Adolescent Health, 13*, 487-492.

What we have learned from the Harvard School of Public Health College Alcohol Study:

Focusing attention on college student alcohol consumption and the environmental conditions that promote it. *Journal of Studies on Alcohol and Drugs, 69*(4), 481-90.

Williams, B.R., Ponesse, J.S., Schachar, R.J., Logan, G.D., & Tannock, R., (1999). Development of inhibitory control across the life span. *Dev Psychol 1999; 35*:205–13.

White, H. R., Labouvie, E. W., & Papadaratsakis, V. (2005). Changes in substance use during the transition to adulthood: A comparison of college students and their noncollege age peers. *Journal of Drug Issues, 35* (2)

- White, H.R., McMorris, B.J., Catalano, R.F., Fleming, C.B., Haggerty, K.P., & Abbott, R.D. (2006). Increases in alcohol and marijuana use during the transition out of high school into emerging adulthood: The effects of leaving home, going to college, and high school protective factors. *Journal of Studies on Alcohol*, 67 (6), 810-22
- Xu, Y., Yu, Q., Scribner, R., Theall, K., Scribner, S., & Simonsen, N. (2012). Multilevel spatiotemporal change-point models for evaluating the effect of an alcohol outlet control. *Epidemiology*, 3(2), 121-128. Doi: 10.1016/j.sste.2012.04.005
- Xuan, Z., Blanchette, J.G., Nelson, T.F., Nguyen, T. H., Hadland, S.E., Oussayef, N.L., Heeren, T.C., & Naimi, T.S.(2015). Youth drinking in the United States: Relationships with alcohol policies and adult drinking. *Pediatrics*, 136(1)8-27.
- Yucel, M., & Lubman, D. I. (2007). Neurocognitive and neuroimaging evidence of behavioral dysregulation in human drug addiction: Implications for diagnosis, treatment and prevention. *Drug Alcohol Rev* 2007; 26:33–9.
- Yu, Q., Scribner, R., Carlin, B., Theall, K., Simonsen, N., Ghosh-Dastidar, B., ... Mason, K. (2008). Multilevel spatio-temporal dual changepoint models for relating alcohol outlet destruction and changes in neighbourhood rates of assaultive violence. *Geospatial Health*, 2(2), 161-172.
- Zhang, X., Hatcher, B., Clarkson, L., Holt, J., Bagchi, S., Kanny, D., & Brewer, R. (2015). Changes in density of on-premises alcohol outlets and impact on violent crime, Atlanta, Georgia, 1997–2007. *Preventing Chronic Disease*; 12(E84) DOI: <http://dx.doi.org/10.5888/pcd12.140317>.

## APPENDICES

**Appendix A:  
Demographic Questionnaire**

## Demographic Questionnaire

**Instructions:** Please provide a response for each of the following questions:

1. What is your age? \_\_\_\_\_

2. What is your sex?

Female  Male

3. What is your marital status?

Single  Married  Separated  Divorced  Widowed

4. What is your annual income (or combined annual income if you have a spouse)?

Less than \$60,000  \$60,001 to \$70,000  \$70,001 to \$80,000

\$80,001 to \$90,000  \$90,001 to \$100,000  Greater than \$100,000

5. With which racial or ethnic category do you identify?

African American  Asian/Pacific Islander  Caucasian  Latino

Other: \_\_\_\_\_

6. What are your academic qualifications?

Diploma  Bachelor  Master  Ph.D  Ed. D  M.D.   
Other

7. What is your current position? \_\_\_\_\_

8. How long have you held this position? \_\_\_\_\_

9. What was your previous role? \_\_\_\_\_

10. How long have you been employed as a tenure-track faculty member or contract employee? \_\_\_\_\_

11. What is your current academic rank?

Assistant Professor

Full Professor

Distinguished Professor

Associate Professor

Other: \_\_\_\_\_

12. To which school or college do you belong? \_\_\_\_\_

13. Do you have any involvement with Greek organizations on campus? \_\_\_\_\_

If so, how? \_\_\_\_\_

14. Are you involved with any of the athletics/sports on campus? \_\_\_\_\_

**Appendix B:  
IRB Consent to Participate Form**



## **Consent to Participate in a Research Study**

### **Alcohol Policy Initiatives on Post-Secondary Institutions: An Evaluation of Best Practice Strategies to Reduce Student Drinking**

#### **Who is doing the study?**

The person in charge of this study is \_\_\_Deniece Bell\_\_\_ (Principal Investigator) at \_\_\_Eastern Kentucky University\_\_\_ (Affiliation). She is being guided in this research by \_\_\_Dr. Sherwood Thompson\_\_\_ [Advisor]). There may be other people on the research team assisting at different times during the study.

#### **What is the purpose of the study?**

The purpose of this study is to examine the current alcohol policy initiatives among four select Post-Secondary institutions. First, an Alcohol & Drug Educator will be identified to determine what the content of their current alcohol policies are and if they contain evidence-based strategies to include treatment and prevention. A secondary purpose of this study is to learn about Alcohol & Drug Educators perceptions of alcohol policies. The study will also examine the university policies to determine if those said policies are being monitored for effectiveness.

#### **What will I be asked to do?**

You will be asked approximately 5-10 questions during a 60-90 minute telephone interview. In addition, some demographic questions will be sent to you prior to the interview, followed by a telephone call to ensure receipt of the demographic questions. During the interview, you will be asked your thoughts, feelings, and opinions about the current alcohol policies at your university/college and if they contain evidence based strategies, to include treatment and prevention.

The total duration from start to finish that you will be asked to volunteer for this study is one year. One demographic questionnaire, a telephone call to follow-up and answer any inquires or questions, one full, 60-90 minute interview, and final summarizations of data for clarity, validity and authenticity. Please note that the study may end at any time prior than the indicated one-year time frame.

#### **What are the possible risks and discomforts?**

There are no anticipated risks or discomforts, although you may request that the interview stop at any time without penalty. In such a case, all interview notes and digital recording data will be destroyed and not used in the study.

**Will I benefit from taking part in this study?**

There are no anticipated direct benefits to you for your participation in this study. There may be indirect benefits of the study as results of this study may be used when you annually review your institution’s alcohol policies.

**If I don’t take part in this study, are there other choices?**

If you do not want to be in the study, there are no other choices except to not take part in the study.

**What will it cost me to participate?**

There are no costs associated with taking part in this study.

**Will I receive any payment or rewards for taking part in the study?**

You will not receive any payment or reward for taking part in this study.

**Who will see the information I give?**

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. For example, your name will be kept separate from the information you give, and these two things will be stored in different places under lock and key.

**Can my taking part in the study end early?**

If you decide to take part in the study, you still have the right to decide at any time that you no longer want to participate. You will not be treated differently if you decide to stop taking part in the study.

**What if I have questions?**

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the investigator, Deniece Bell [REDACTED]. If you have any questions about your rights as a research volunteer, contact the staff in the Division of Sponsored Programs at Eastern Kentucky University at 859-622-3636. We will give you a copy of this consent form to take with you.

You will be told if any new information is learned which may affect your condition or influence your willingness to continue taking part in this study.

*I have thoroughly read this document, understand its contents, have been given an opportunity to have my questions answered, and agree to participate in this research study.*

\_\_\_\_\_  
Signature of person agreeing to take part in the study

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed name of person taking part in the study

\_\_\_\_\_  
Name of person providing information to subject

**Appendix C:  
Interview Guideline**

**INTERVIEW GUIDELINE**  
**SEMI-STRUCTURED INTERVIEW QUESTIONS FOR MULTIPLE CAMPUS CASE STUDY**

1. WHAT IS YOUR UNDERSTANDING OF THE UNIVERSITY/COLLEGE CURRENT ALCOHOL POLICY?
2. HOW EFFECTIVE DO YOU THINK THE ALCOHOL POLICY IS IN REDUCING HIGH- RISK STUDENT DRINKING?
3. HOW DOES THE UNIVERSITY/COLLEGE ALCOHOL POLICY ADDRESS TARGETED POPULATIONS SUCH AS FRESHMEN, ATHELETES, GREEK AND SORORITY MEMBERS?
4. HOW DOES THE UNIVERSITY/COLLEGE ALCOHOL POLICY ADDRESS THE ENTIRE STUDENT POPULATION IN AN EFFORT TO REDUCE STUDENT DRINKING?
5. WHAT SPECIFIC TREATMENT AND/OR PREVENTION PROGRAMS HAVE BEEN IMPLEMENTED TO ADDRESS STUDENT DRINKING? HOW DO STUDENTS ACCESS THESE PROGRAMS?
6. DOES THE CONTENT OR ANY PARTS OF THE CURRICULUM CONTAIN ANY EVIDENCE-BASED STRATEGIES? IF NO, HOW WAS THE POLICY IMPLEMENTED? IF YES, WHAT ARE THE IDENTIFIED EVIDENCE-BASED STRATEGIES?
7. WHAT ARE IMPORTANT FACTORS TO CONSIDER WHEN DECIDING WHICH EVIDENCE-BASED STRATEDGIES TO IMPLEMENT?
8. WHAT PROVISIONS ARE INCLUDED TO MONITOR THE POLICY FOR CONTENT FIDELITY?
9. DOES THE UNIVERSITY/COLLEGE COLLABORATE WITH COMMUNITY PARTNERS AND LOCAL POLICE TO IMPLEMENT REDUCTION STRATEGIES TOWARD STUDENT DRINKING?
10. CAN YOU DESCRIBE WHAT BARRIERS OR LIMITATIONS YOU HAVE EXPERIENCED IN THE APPLICATION OF THE ALCOHOL POLICY? (THAT MAY HINDER EFFECTIVE PREVENTION FOR STUDENT DRINKING?)
11. IN YOUR EXPERIENCE, HAS THERE BEEN ANY FISCAL OR BUDGETARY CONCERNS THAT MAY PROHIBIT OR LIMIT THE AVAILABILITY OF SERVICES
12. DOES THE COLLEGE OR UNIVERSITY HAVE A CULTURE OR TRADITION OF STUDENT DRINKING?
13. IN YOUR OPINION, DOES THE UNIVERSITY HAVE A CULTURE OR TRADITION OF STUDENT DRINKING?
14. IS THERE ANYTHING ELSE YOU WOULD LIKE TO SHARE? ANY COMMENTS, STATEMENTS...