Prevention efforts to reduce undergraduates' high-risk alcohol use at a small, private, urban research University in the Northeast: a 20-year case study

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SCHOOL OF PUBLIC HEALTH

Dissertation

PREVENTION EFFORTS TO REDUCE UNDERGRADUATES' HIGH-RISK ALCOHOL USE AT A SMALL, PRIVATE, URBAN RESEARCH UNIVERSITY IN THE NORTHEAST: A 20-YEAR CASE STUDY

by

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ABSTRACT

High-risk alcohol use by U.S. undergraduates has been a widely studied topic over the past 25 years, and there are numerous individual- and environmental-level strategies being implemented at colleges and universities nationwide. Nonetheless, high-risk alcohol use by college students remains a pervasive and seemingly intractable challenge for health practitioners employed at institutions of higher education, one that they have made a priority due to the severe consequences that undergraduates can experience during a sensitive time in their physical, cognitive, and emotional development.

This dissertation uses a case study approach to develop a chronology of the alcohol prevention efforts implemented at a small, private, urban research university in the Northeast between 1996 and 2016 and a rich, thick description of the historical alcohol-related events and contextual conditions that occurred during that time. The study’s primary aim is to identify the factors that have sustained positive gains from the University’s alcohol prevention programs.

This is a mixed-methods study, predominantly qualitative but also including an additional quantitative approach. Qualitative methods included intensive interviews of
current University employees with knowledge of the prevention efforts implemented during the study period, plus a review of internal and publicly available documents and reports, newspapers and other publications, and online media content from University and local community sources. Existing annual survey data collected between 1997 and 2016 were examined to assess the relationship between the chronology of prevention efforts and the trends and fluctuations observed in student alcohol use and its negative consequences over time.

The data and lessons learned from this case study informed a framework for how health practitioners in higher education can assess: 1) the degree to which their institution is implementing a comprehensive mix of evidence-based prevention efforts – which collectively operate at all levels of the Social-Ecological Model – to reduce high-risk alcohol use by undergraduates; and 2) the presence of factors that can increase their institution’s capacity to sustain positive gains from these efforts over time.
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<th>Description</th>
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<td>ACHA-NCHA II</td>
<td>American College Health Association – National College Health Assessment II</td>
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<tr>
<td>AMOD</td>
<td>&quot;A Matter of Degree&quot; Initiative</td>
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<td>BAC</td>
<td>Blood Alcohol Content</td>
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<tr>
<td>BASICS</td>
<td>Brief Alcohol Screening and Intervention for College Students</td>
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<td>CAS</td>
<td>College Alcohol Study</td>
</tr>
<tr>
<td>CollegeAIM</td>
<td>College Alcohol Intervention Matrix</td>
</tr>
<tr>
<td>CRM</td>
<td>Community Readiness Model</td>
</tr>
<tr>
<td>HSPH</td>
<td>Harvard School of Public Health</td>
</tr>
<tr>
<td>IHI</td>
<td>Institute for Healthcare Improvement</td>
</tr>
<tr>
<td>MLDA</td>
<td>Minimum Legal Drinking Age</td>
</tr>
<tr>
<td>NCHIP</td>
<td>National College Health Improvement Project</td>
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<tr>
<td>NIAAA</td>
<td>National Institute on Alcohol Abuse and Alcoholism</td>
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<tr>
<td>NSDUH</td>
<td>National Survey on Drug Use and Health</td>
</tr>
<tr>
<td>PDSA</td>
<td>Plan-Do-Study-Act</td>
</tr>
<tr>
<td>PO</td>
<td>Prevention Office</td>
</tr>
<tr>
<td>PSAT</td>
<td>Program Sustainability Assessment Tool</td>
</tr>
<tr>
<td>PSF</td>
<td>Program Sustainability Framework</td>
</tr>
<tr>
<td>SAMHSA</td>
<td>Substance Abuse and Mental Health Services Administration</td>
</tr>
<tr>
<td>SEM</td>
<td>Social Ecological Model</td>
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<tr>
<td>SSAO</td>
<td>Senior Student Affairs Officer</td>
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CHAPTER ONE: INTRODUCTION

This introductory chapter begins with an overview of the problem of high-risk alcohol use by U.S. undergraduate college students. The next section summarizes the literature on past and current strategies that have been used to address high-risk alcohol use by U.S. undergraduate college students with a focus on a multi-level approach to alcohol prevention, evidence-based practice, and the sustainability of those efforts. The chapter then presents the dissertation’s study aims and central research questions, followed by a description of its potential implications for public health practice. Finally, the chapter ends with an overview of the rest of the dissertation chapters.

High-Risk Alcohol Use by U.S. Undergraduate College Students

Definition

The focus of this dissertation is on high-risk alcohol use by undergraduates, effective prevention efforts to reduce risk, and institutional factors needed to sustain positive gains from these efforts. The terms to describe and define high-risk alcohol use have varied in the literature and between experts in the field as new ways to measure the problem have emerged. Terms such as “binge drinking,” “dangerous drinking,” and “heavy episodic drinking” will appear in this dissertation, primarily as I discuss the prevalence of high-risk alcohol use (1) (2) (3).

However, as I will subsequently describe, high-risk alcohol use by undergraduates is a complex and multi-dimensional social problem that must take into account the consequences of individuals’ behaviors. Therefore, this dissertation assumes the following composite definition of high-risk alcohol use when discussing the problem more broadly: the consumption of alcoholic beverages to excess, either on individual
occasions or as a regular practice, which harms a person’s health, interpersonal relationships, or ability to work or study, or adversely affects society (4) (5).

Scope of the Problem

High-risk alcohol use by undergraduates ages 18–22 years is a complex and seemingly intractable public health problem in the U.S. Over the past 25 years high-risk alcohol use has become widely known as the number one public health problem for college students and health practitioners employed at institutions of higher education (6). Confirming its importance as a high-priority health issue for the nation, the U.S. Department of Health and Human Services’ Healthy People initiative included a goal to reduce the proportion of college students engaging in heavy episodic drinking in both the 2010 and 2020 editions (7). In 2014, the National Prevention Council’s National Prevention Strategy also recommended the development of policies and programs to decrease the use of alcohol and other drugs on college campuses (8).

According to the Substance Abuse and Mental Health Services Administration’s (SAMHSA) 2014 National Survey on Drug Use and Health (NSDUH), 59.8% of full-time college students ages 18–22 years drank alcohol in the past month; 37.9% engaged in heavy episodic drinking (five or more drinks for men and four or more for women per occasion) in the past month; and 12.2% engaged in frequent heavy drinking (heavy episodic drinking on five or more occasions per month). Full-time college students drink more than their same-aged peers who are not enrolled in college full-time; their comparative rates were 51.5, 33.5, and 9.5 percent, respectively (9).

This disparity between full-time college students and their same-aged peers
suggests that there are contextual factors common to the nation’s colleges and universities that can intensify the alcohol problem. Although some of this disparity may reflect demographic differences between the two populations (6), contextual factors such as unstructured time, lenient boundaries, greater accessibility to alcohol, and limited interactions with parents and non-parental role models may be influential (10). Additionally, despite all states having an age 21 minimum legal drinking age (MLDA), many undergraduates, including those who are underage, consider alcohol use to be a normal part of college life (11) (6).

Longitudinal NSDUH data show that progress has been slow in reducing high-risk alcohol use by undergraduates. Figure 1 shows that the percentage of full-time college students who engaged in heavy episodic drinking in the past month decreased only modestly between 2002 (44.4%) and 2014 (37.9%) (12) (9).

Figure 1. Percentages of Full-Time College Students Who Engaged in Heavy Episodic Drinking in the Past Month, 2002–2014. Source: SAMHSA, 2014; SAMHSA, 2015
Predictors of Risk and Consequences

While some campus administrators consider alcohol use to be a harmless rite of passage for undergraduates, it is the intensity of their drinking that is particularly concerning to health practitioners. Unsurprisingly, high-risk alcohol use is strongly associated with adverse primary consequences for the student-drinker (13). High-risk alcohol use also results in secondary consequences for their peers who may or may not choose to drink, plus adverse consequences for institution of higher education (13).

Primary and secondary consequences for students include death, unintentional injury, suicide attempts, assault, relationship violence, sexual abuse, unsafe sex, health problems, drunk driving, vandalism, property damage, police involvement, academic problems (e.g., missing class, falling behind in class, doing poorly on exams or papers, and receiving lower grades overall), and alcohol abuse or dependence (13). Adverse consequences for institution of higher education include a damaged reputation, compromised ability to attract and retain excellent students, increased legal liability, lower academic ranking, the financial and opportunity costs associated with staff time and the stress experienced by college personnel, and strained relationships between the university and surrounding communities (14).

Predictors of risk include individual and family factors (e.g., genetics, race/ethnicity, parental drinking behavior, age of drinking onset, high school drinking, drinking motives, expectations of the benefits and negative effects of alcohol, parent attitudes about drinking while at college), environmental factors (e.g., membership in Greek-letter social organizations or intercollegiate athletics, campus drinking norms, accessibility and affordability of alcohol in the campus community, campus policies and
penalties for alcohol violations, public policies and penalties for drinking, and marketing and media influences) (6) (15).

_A Social Problem for Higher Education_

High-risk alcohol use by undergraduates has been a widely studied topic. Although studied empirically since the 1920’s, research and newspaper coverage of this problem has increased dramatically since the 1990’s (6). In 1993, researchers from the Harvard School of Public Health conducted the College Alcohol Study (CAS), a national survey representative of four-year colleges and universities in the U.S. (16). One of the most notable findings was that almost half (44.0%) of undergraduates engaged in heavy episodic drinking at least once in a two-week period (16). This study (and its subsequent administrations in 1997, 1999, and 2001) heightened public awareness of the prevalence of high-risk alcohol use by undergraduates (17). These studies also revealed adverse primary and secondary consequences reported by students (16) (17) (18). These data began to generate new thinking about high-risk alcohol use as “an institutional issue that occurs in a particular environment” (6 p. 25)

In 1997, a series of high-profile student deaths by alcohol poisoning drew mass media attention and public interest from parent advocacy groups (19) (20). These fatalities put high-risk alcohol use by undergraduates on the national agenda and made it a priority for higher education administrators to expand prevention and safety efforts on campus (21). Together, the emerging data and media attention started a movement to reframe high-risk alcohol use from a personal problem to a public health issue, and as a social problem for higher education that is widespread, potentially dangerous, and linked
to the college population and its environment (6).

In 1999, the National Advisory Council on Alcohol Abuse and Alcoholism (NIAAA) commissioned a Task Force on College Drinking (Task Force) (22). Comprised of educators, researchers, and students, the Task Force worked over three years to review the research on high-risk drinking by undergraduates (22). In 2002, the NIAAA released *A Call to Action: Changing the Culture of Drinking at U.S. Colleges (A Call to Action)* that summarized the Task Force’s findings (22). This landmark document acknowledged student alcohol use as a “pervasive and persistent” social problem and described the tradition of drinking as a “culture – beliefs and customs – entrenched in every level of college students’ environments” (22 p. 1).

**Past and Current Strategies to Reduce High-Risk Alcohol Use**

*Multi-Level Approach to Alcohol Prevention*

Historically, the majority of alcohol prevention efforts for undergraduates were individually-focused, designed “to increase student awareness of alcohol-related problems, to change individual attitudes and beliefs, to foster each student’s determination to avoid high-risk drinking, and to intervene to protect other students whose substance use has put them in danger” (20 p. 141). The reframing of high-risk alcohol use as a broader social problem necessitated a new approach.

*A Call to Action* summarized two major themes: 1) in order to change the culture of alcohol use on campus, alcohol prevention efforts must target three audiences simultaneously: individuals, including at-risk or alcohol-dependent drinkers; the student
population as a whole; and the college and the surrounding community; and 2) all prevention policies and programs are not equally effective (22). The Task Force’s 3-in-1 Framework combines these two themes by listing specific strategies that can be used to address all three audiences (22). These strategies were grouped into four tiers of effectiveness: 1) effective among college students; 2) effective with general populations; 3) promising; and 4) ineffective (22).

The 3-in-1 Framework was, in effect, an early attempt to apply evidence-based practice to the field of college alcohol use prevention by helping health practitioners to focus their efforts. Examples of effective strategies included: interventions that combine cognitive-behavioral skills training with norms clarification and motivational enhancement; offering brief motivational enhancement in student health centers and emergency rooms; challenging alcohol expectancies; increased enforcement of minimum drinking age laws; implementation, increased publicity, and enforcement of other laws to reduce alcohol-impaired driving; restrictions on alcohol retail density; increased price and excise taxes on alcoholic beverages; responsible beverage service policies in social and commercial settings; and the formation of a campus/community coalition (22).

In 2007, the NIAAA published the report, What Colleges Need to Know Now: An Update on College Drinking Research to update the 3-in-1 Framework’s list of effective and promising strategies that reflected advances in the field (e.g., measures to reduce drinking among “mandated” students, online alcohol education programs) (23).

A Call to Action also emphasized that presidential leadership “is crucial to set [prevention] plans in motion and support the actions needed to reverse the culture of drinking on campus” (22 p. 25). The importance of presidential leadership has since been
a topic of expert commentary (24) (25) and will be discussed later in this chapter with regard to the sustainability of campus alcohol prevention efforts.

In an article commissioned by the Task Force to supplement *A Call to Action*, researchers from the U.S. Department of Education’s Higher Education Center for Alcohol and Other Drug Prevention (HEC) presented an environmental management approach to reducing high-risk alcohol use. The authors acknowledged the importance of individual-focused efforts, but urged campus administrators “to adopt a comprehensive approach to prevention that goes beyond individually focused health education programs to include strategies designed to change the campus and community environment in which students make decisions about alcohol use” (20 p. 141).

The environmental management approach is informed by the Social Ecological Model (SEM) which considers the interrelationships and interdependencies between individual and environmental factors (26). The SEM serves as a framework for examining and addressing major influences on health behavior: 1) intrapersonal; 2) interpersonal; 3) institutional; 4) community; and 5) public policy (see Table 1) (27).

<table>
<thead>
<tr>
<th>Level of Influence</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Intrapersonal</td>
<td>Individual characteristics that influence behavior, such as knowledge, attitudes, beliefs, and personality traits</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Interpersonal processes involving family, friends, and peers that provide social identity, support, and role definition</td>
</tr>
<tr>
<td>Institutional</td>
<td>Rules, regulations, policies, and informal structures, which may facilitate or inhibit recommended behaviors</td>
</tr>
<tr>
<td>Community</td>
<td>Social networks, norms, or standards that exist among collectives of individuals, groups, and organizations</td>
</tr>
<tr>
<td>Public Policy</td>
<td>Local, state, and federal policies and laws that regulate or support healthy actions and practices for disease prevention, early detection, control, and management</td>
</tr>
</tbody>
</table>

*Table 1. Social Ecological Model – Multiple Levels of Influence. Source: McLeroy et al., 1988.*
Building upon the institutional, community, and public policy levels of the SEM, the HEC recommended that institutions of higher education use five key environmental management strategies: 1) offer and promote social, recreational, extracurricular, and public service options that do not include alcohol; 2) create a social, academic, and residential environment that supports health-promoting norms; 3) limit alcohol availability both on and off campus; 4) restrict marketing and promotion of alcoholic beverages both on and off campus; and 5) develop and enforce campus policies and local, state, and federal laws (20). The introduction of a framework for environmental management was an important milestone for the field. Although case studies of environmental management efforts had previously been presented in the literature (28), the HEC framework was the first published planning model based on the SEM specifically for alcohol prevention and health promotion in higher education. Application of the SEM has since been adopted as a standard of practice by national professional organizations (29) (30) (31).

The HEC further proposed that community-based coalitions of civic and governmental officials could serve as models for the development of campus-community coalitions to promote environmental management, and they presented evidence of early successes from institutions of higher education that had already begun to develop such coalitions (20).

Most notably, the environmental management approach was applied and examined as the cornerstone of *A Matter of Degree*, a national prevention effort funded by the Robert Wood Johnson Foundation in partnership with the Harvard School of Public Health and the American Medical Association (32). Ten institutions of higher
education were selected to receive five-year grants to build campus-community coalitions, use environmental management strategies, and monitor student alcohol use via the CAS survey (32). Evaluation results showed improvements in alcohol consumption and related harms at five of the 10 colleges that most closely implemented the environmental model. The evaluation researchers concluded that “fidelity to a program model conceptualized around changing alcohol-related policies, marketing, and promotions may reduce college student alcohol consumption and related harms” (32 p. 188).

Evidence-Based Practice

Although the 3-in-1 Framework was a helpful first step in advancing the use of evidence-based practice in alcohol use prevention work, it provided only limited guidance and eventually became outdated. Health practitioners in higher education wanted a more robust, easily accessible, and searchable clearinghouse of evidence-based alcohol prevention programs for college students, analogous to the National Registry of Evidence-based Programs and Practices (NREPP) for prevention programs targeting adolescents (33). In 2015, the NIAAA launched the College Alcohol Intervention Matrix (CollegeAIM), an extensive online registry of evidence-based prevention programs for college students (34). In effect, CollegeAIM is the compilation of decades of scientific literature on the effectiveness of prevention efforts to reduce high-risk alcohol use by undergraduates (34). Although CollegeAIM catalogues evidence-based interventions in two categories (i.e., individual- and environmental-level), this dichotomy should not
suggest that they are mutually exclusive. In alignment with the SEM, the NIAAA emphasizes that a combination of strategies has the greatest likelihood for success (34).

Examples of individual-level interventions of “higher effectiveness” include electronic/mailed personalized normative feedback, self-monitoring/self-assessment, eCHECKUP TO GO, goal/intention-setting, Alcohol Skills Training Program, Brief Alcohol Screening and Intervention for College Students (BASICS), and AlcoholEdu® for College (34). These interventions target students, including those in higher-risk groups such as first-year students, intercollegiate athletes, members of Greek-letter social organizations, and mandated students (34).

Examples of environmental-level interventions of “higher effectiveness” include restricting happy hours/price promotions, supporting existing bans on Sunday sales of alcohol for offsite consumption, retaining the age-21 drinking age, enforcing the legal drinking age through compliance checks, and increasing alcohol taxes (34). These interventions target the campus community and student body as a whole, and are designed to change the campus and community environments in which student drinking occurs (34).

Sustainability of Alcohol Prevention Efforts

With greater access to evidence-based programs and policies through CollegeAIM, more health practitioners will now have clearer ideas about where to focus their efforts. Of course, in order to achieve positive gains, health practitioners must implement evidence-based programs with fidelity. Although choosing the right
prevention efforts is an important component of a successful comprehensive alcohol program, implementation does not happen in a vacuum. Health practitioners are often limited in their abilities to advance the overall alcohol program by restraining institutional factors such as lack of buy-in from university leaders and key campus constituents, financial limitations, and insufficient staffing.

Of particular importance, alcohol prevention efforts are likely to fail when university leaders and staff are not ready to address high-risk alcohol use on their campuses and adopt new strategies (35). They may be unaware or in denial about the magnitude of the alcohol problem, resistant to new change efforts, or unwilling to commit resources to prevention efforts (35). Accordingly, working from an understanding of a university’s level of readiness can increase the likelihood that a new prevention effort will be adopted and successful.

Similar to the Transtheoretical Model of Behavior Change, which determines an individual’s level of readiness to act on a new behavior, the Community Readiness Model (CRM) determines a community’s level of readiness to address an issue and take action (26) (35). The CRM is comprised of five dimensions that can affect a university’s level of readiness: 1) leadership; 2) community climate; 3) community knowledge; 4) community efforts; and 5) resources (35). The CRM is a helpful framework for assessing a university’s willingness and preparedness to implement evidence-informed programs, policies, and other changes designed to reduce high-risk alcohol use and related harms (35). Table 2 presents the CRM dimensions and their definitions.
Table 2. Dimensions of the Community Readiness Model. Source: Tri-Ethnic Center for Prevention Research

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Definition</th>
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<tr>
<td>Leadership</td>
<td>Appointed leaders and influential community members are supportive of the issue.</td>
</tr>
<tr>
<td>Community Climate</td>
<td>The prevailing attitude of the community toward the issue is one of responsibility and empowerment.</td>
</tr>
<tr>
<td>Community Knowledge</td>
<td>Community members know about the causes of the problem, its consequences, and how it impacts the community.</td>
</tr>
<tr>
<td>Community Efforts</td>
<td>There are efforts, programs, and policies in place to address the issue.</td>
</tr>
<tr>
<td>Resources</td>
<td>Sufficient resources (e.g., people, time, money, space, etc.) are committed to support efforts.</td>
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</table>

Even when university members and leaders are ready to address high-risk alcohol use and have successfully implemented prevention efforts, positive gains are often short-lived. These prevention efforts can only deliver benefits if they are sustained over time (36). Sustainability is “the active process of establishing your initiative – not merely continuing your program, but developing relationships, practices, and procedures that become a lasting part of the community” (37). This truism, together with other best practices previously discussed, calls for health practitioners not only to implement a comprehensive mix of evidence-based programs and policies at all levels of the SEM, but also to ensure that they are readily adopted by the campus community and that any positive gains that may be derived from these programs and policies – or combinations of such efforts – are sustained over time. The community’s readiness to initially adopt these efforts initially must evolve into an on-going commitment to sustainability.

Over the years, alcohol prevention experts have written numerous commentaries and editorials to call attention to the need for presidential leadership, among other factors, to effectively change the culture of drinking on college campuses (38) (39) (25). A recent
viewpoint article in the *Journal of American College Health* explained that the likelihood for sustainability may be greater at institutions of higher education that have the following characteristics: boards of trustees that make alcohol prevention a priority; senior administrators who are champions for alcohol prevention *before there is a campus tragedy that necessitates action*; an experienced health practitioner, positioned within the organization at a senior level, who can set a campus-wide alcohol prevention agenda and engage a broad range of multidisciplinary partners to work together as a community with shared responsibility for this issue; alcohol-related objectives that are tied to the institutional mission; a permanent prevention budget that is complemented by fund-raising; a permanent campus task force; and student alcohol data collection and tracking systems (24). Although these commentaries are inspiring, and conceptual work has been done on defining sustainability, there is a dearth of research with regard to the sustainability of positive gains that may be derived from effective campus alcohol programs and policies, especially in light of the unique contextual factors common to the nation’s colleges and universities.

In 2013, researchers from the Center for Public Health Systems Science at Washington University (MO) published a planning model that outlines organizational and contextual factors that can help build a community’s capacity for sustainability, which they defined as the ability to maintain programming and its benefits over time (40). This model, later named the Program Sustainability Framework (PSF), has been refined since 2013 and now includes eight key domains: 1) environmental support, 2) funding stability, 3) partnerships, 4) organizational capacity, 5) program evaluation, 6) program adaptation, 7) communications, and 8) strategic planning. Table 3 presents the PSF domains and
definitions (40). The PSF may be appropriate for methodically assessing an institution of higher education’s capacity for sustaining alcohol prevention efforts. To date, there have been no studies published in peer-reviewed journals that apply the PSF to programming intended to target high-risk alcohol use by undergraduates.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Support</td>
<td>Having a supportive internal and external climate for the program</td>
</tr>
<tr>
<td>Funding Stability</td>
<td>Establishing a consistent financial base for the program</td>
</tr>
<tr>
<td>Partnerships</td>
<td>Cultivating connections between the program and its stakeholders</td>
</tr>
<tr>
<td>Organizational Capacity</td>
<td>Having the internal support and resources needed to effectively manage the program</td>
</tr>
<tr>
<td>Program Evaluation</td>
<td>Assessing the program to inform planning and document results</td>
</tr>
<tr>
<td>Program Adaptation</td>
<td>Taking actions that adapt the program to ensure its ongoing effectiveness</td>
</tr>
<tr>
<td>Communications</td>
<td>Strategic communication with stakeholders and the public about the program</td>
</tr>
<tr>
<td>Strategic Planning</td>
<td>Using processes that guide the program’s direction, goals, and strategies</td>
</tr>
</tbody>
</table>

Table 3. Domains of the Program Sustainability Framework. Source: Washington University Center for Public Health Systems Science

**Dissertation Aim and Research Questions**

This dissertation aims to examine fluctuations in undergraduates’ high-risk alcohol use that occurred as different prevention efforts were introduced and sustained at a small, private, urban research university in the Northeast between 1996 and 2016. Four central research questions guide the study:

1) What prevention efforts to reduce undergraduates’ high-risk alcohol use were implemented at the University between 1996 and 2016?
2) To what degree were these prevention efforts evidence-based and designed to address high-risk alcohol use at all levels of the SEM?

3) What is the relationship between the implementation of these prevention efforts and fluctuations in student alcohol use and its negative consequences?

4) Which factors contributed to the University’s capacity for sustainability?

I used a case study approach to develop a chronology of the alcohol prevention efforts implemented at the University between 1996 and 2016 and a rich, thick description of the alcohol-related events and contextual conditions that occurred during that time (41).

**Overview of Subsequent Chapters**

Chapter Two describes the rationale for conducting a case study as the chosen study method, plus the multiple data collection techniques used to develop an in-depth analysis of the history of the University’s alcohol prevention efforts. Chapter Three presents the qualitative data analysis of the University’s prevention efforts, with a focus on those that are evidence-based and address high-risk alcohol use at all levels of the Social Ecological Model. The chapter also presents the results of time series analyses of student survey data. Chapter Four presents the qualitative data analysis regarding the presence of known facilitating and inhibiting factors that affect program sustainability. Chapter Five summarizes the case study’s major findings with respect to the four central research questions. Chapter Six discusses the lessons learned from the case study and describes two frameworks for college alcohol programs that the lessons learned from the study served to inform.
CHAPTER TWO: METHODS

This chapter discusses the methodology used to describe the University’s prevention efforts to reduce their undergraduates’ high-risk alcohol use between 1996 and 2016. It begins with a description of the University setting, and then provides the rationale for the case study method as the preferred approach to achieve the study’s specific goals. The next section identifies the qualitative methods used to inform the case study and describes the tools used for data collection, which are presented in the appendices. Finally, the chapter describes the quantitative methods used to analyze longitudinal trends and fluctuations in the University’s alcohol survey data that were collected during the study period.

The University Setting

Founded over 150 years ago, the University is a private, coeducational, and non-denominational research university located in a city of 75,000 people in eastern Pennsylvania (42) (43). The campus encompasses 2,358 acres (43). Admission to the University is considered to be more selective¹, with a 30.4% acceptance rate in 2015 (44) (42). For the 2015–2016 academic year, 5,054 undergraduates (55.5% men, 44.5% women) and 1,979 graduate students (54.8% men, 45.2% women) were enrolled. The full-time undergraduate tuition for the 2016–2017 academic year is $47,920 (42).

Typically, more than 50% of undergraduates receive financial aid (42). Almost one-quarter (23.6%) of undergraduates are University “legacies” as they have a mother,

¹The U.S. News Best Colleges Rankings designates institutions of higher education as "most selective," "more selective," "selective," "less selective" or "least selective," based on a formula that accounts for enrollees' test scores and class standing and the school's acceptance rate, the percentage of applicants the school accepts (44).
father, grandparent, aunt, uncle, and/or sibling who attends or attended the University (45).

The University has four colleges: 1) the College of Engineering and Applied Science, 2) the College of Arts and Sciences, 3) the College of Business and Economics, and 4) the College of Education. Of these, the College of Engineering and Applied Science has the largest undergraduate enrollment (36% in 2015). The University offers numerous degrees: Bachelor of Arts, Bachelor of Science, Master of Arts, Master of Science, Master of Business Administration, Master of Engineering, Master of Education, and Doctor of Philosophy (42). The University is regionally accredited by the Middle States Association of Colleges and Schools (46).

The University attracts students from 44 states, plus Puerto Rico and Washington, D.C., and 25 countries across the world, but nearly one-fourth (24% in 2015) are New Jersey residents (42). In 2015, most University undergraduates were White (62%) and lived in housing owned, operated, or affiliated with the University (67%) (42) (47). In 2015, 29.1% of undergraduate men and 34.4% of women participated in one of the University’s 32 Greek-letter social organizations (42) (48). In 2015, 13.0% of undergraduate men and 12.0% of undergraduate women participated in one or more of the University’s 25 NCAA Division I intercollegiate sports (42). University policy requires first- and second-year students to live on campus.

The University is an ideal setting for this case study for two reasons: 1) the magnitude of high-risk alcohol use by students and the large proportion of students who are at greatest risk for negative consequences; and 2) the varying level of community readiness for program adoption that was apparent over time and could be confirmed by a
retrospective analysis. This case study site makes it possible to observe fluctuations in undergraduates’ high-risk alcohol use that occurred as different prevention efforts were introduced and sustained over the course of two decades.

*Alcohol Risk Profile*

Alcohol is the most commonly used drug among the University’s students, but it is the intensity of their drinking that is particularly concerning. In 2015, more students at the University engaged in heavy episodic drinking in the past two weeks (66.1% of drinkers) than college students nationally (44.2% of drinkers) (45) (49). For men, this represents having five or more drinks on a single occasion at least once in a two-week period, and for women having four or more drinks. The University attracts many students with established drinking habits: in 2014, 29.0% of incoming first-year students had already engaged in heavy episodic drinking before arriving at the University compared to 20.0% nationally (50). Alcohol use among these experienced students increases during their time at the University, particularly during the first year (50).

As previously described, high-risk alcohol use is highest among college students who have the greatest access to alcohol and are exposed to group norms that foster high-risk drinking, such as members of Greek-letter social organizations and college athletes (51). Table 4 shows that the University, compared to its peer institutions, has a greater percentage of undergraduates who participate in Greek-letter social organizations and a greater percentage who participate in one or more intercollegiate sports (52) (53) (54) (55) (56) (57) (58).²

² The Office of Institutional Research at the University provided the list of comparable peer institutions.
<table>
<thead>
<tr>
<th>Institution of higher education</th>
<th>Undergraduates who participated in Greek-letter social organizations (%)</th>
<th>Undergraduates who participated in one or more intercollegiate sports (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston College</td>
<td>0.0</td>
<td>9.2</td>
</tr>
<tr>
<td>Brandeis University</td>
<td>0.0</td>
<td>9.8</td>
</tr>
<tr>
<td>College of William and Mary</td>
<td>25.4</td>
<td>10.9</td>
</tr>
<tr>
<td>George Washington University</td>
<td>28.8</td>
<td>4.9</td>
</tr>
<tr>
<td>“The University”</td>
<td><strong>31.5</strong></td>
<td><strong>16.2</strong></td>
</tr>
<tr>
<td>University of North Carolina at Chapel Hill</td>
<td>19.0</td>
<td>5.4</td>
</tr>
<tr>
<td>University of Rochester</td>
<td>24.0</td>
<td>11.2</td>
</tr>
<tr>
<td>University of Virginia</td>
<td>35.0</td>
<td>5.6</td>
</tr>
<tr>
<td>Vanderbilt University</td>
<td>43.6</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Table 4. Percentages of Undergraduates Participating in Greek-Letter Social Organizations and in One or More Intercollegiate Sports, A Comparison of Peer Colleges and Universities. Sources: U.S. News & World Report; Forbes Media LLC; Boston College; Brandeis University; College Of William And Mary; George Washington University; University Of North Carolina At Chapel Hill; University Of Rochester; University Of Virginia; Vanderbilt University


**Study Design**

As stated previously, this case study was designed to examine fluctuations in undergraduates’ high-risk alcohol use that occurred as different prevention efforts were introduced and sustained at a small, private, urban research university in the Northeast between 1996 and 2016. The four research questions informed the choice of study design, development of the data collection methods and tools, and the organization of the collected data:

1) What prevention efforts to reduce undergraduates’ high-risk alcohol use were implemented at the University between 1996 and 2016?

2) To what degree were these prevention efforts evidence-based and designed to address high-risk alcohol use at all levels of the SEM?
3) What is the relationship between the implementation of these prevention efforts and fluctuations in student alcohol use and its negative consequences?

4) Which factors contributed to the University’s capacity for sustainability?

I used a case study approach to develop a chronology of the alcohol prevention efforts implemented at the University between 1996 and 2016 and a rich, thick description of the historical alcohol-related events and contextual conditions that occurred during that time (41). A case study is an investigation of “a bounded system (case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information (for example, observations, interviews, audiovisual material, and documents and reports), and reports a case description and case-based themes” (41 p. 73). A bounded case study has clarity about the time period covered; the social group, organization, or geographic area of interest; and the type of evidence to be collected (59). Such a case study can draw conclusions only about the studied community and its particular context (59). The goal in case study research is not to identify universal, generalizable truths, rather to explore and describe the complexity of the behavior patterns observed within the bounded system (59).

Yin (2014) describes four types of case study designs: 1) holistic (single unit of analysis) single-case designs; 2) embedded (multiple unit of analysis) single-case designs; 3) holistic multiple-case designs; and 4) embedded multiple-case designs. Figure 2 presents a graphical representation of these four study types.
Case study is the preferred method for this investigation because the stated research questions are descriptive (questions 1 and 2) and explanatory (questions 3 and 4) in nature; the study is retrospective; and the focus of study – high-risk alcohol use by undergraduates – is a contemporary phenomenon within a real-life context (59).

Compared to the other major qualitative approaches – ethnography, phenomenology, field research, and grounded theory – the case study method is best the approach for a wholly retrospective study (41).

Yin lists three steps for outlining a case study’s methods: 1) defining the case, 2) selecting the case study design, and 3) using theory to inform the scope of the investigation. I followed these steps, being careful to ensure that the case was well-
bounded, with clarity about the time period covered; the relevant social group, organization, or geographic area of interest; and, the type of evidence to be collected (59).

**Step 1: Case Definition**

The case is defined as the University’s prevention efforts to reduce high-risk drinking by undergraduates over a 20-year time period (1996–2016). A case study that covers such a wide time period could be expected to yield a tremendous amount of information, making it imperative to articulate clearly the scope of evidence to be collected. It is particularly important to define what qualifies as a “prevention effort” that should be included in this study’s chronology of University efforts. Prevention efforts were included in the chronology if they met the following three criteria:

1) **The prevention effort was implemented by the University or by the neighboring community in collaboration with the University.** As described below, I also researched local efforts that were conducted independent of the University as well as State- and National-level efforts. These were not included in the chronology of the University’s efforts, but were considered as relevant historical-related events.

2) **The prevention effort could be categorized as a program or policy.** Although infrastructure and institutionalization efforts can be considered under the umbrella of alcohol prevention, these were examined as potential factors leading to the University’s capacity for sustainability.

3) **The prevention effort could be considered “core” to the alcohol prevention mission, specifically if its short-term learning and development goals were directly alcohol-related.** For example, an online alcohol education program that is
administered to first-year students might aim to correct students’ misperceptions about their university’s alcohol use norms. This program would be considered a core alcohol prevention effort and would qualify for inclusion in the chronology of University efforts. In contrast, efforts that are secondary to the alcohol prevention mission would not be included. For example, a residence-based advising and community-building program might be in the service of a long-term reduction in high-risk alcohol use by undergraduates, but its short-term goals are mainly focused on increasing a sense of community and other closely related factors. The contributions of these kinds of secondary efforts are discussed in Chapter Four.

**Step 2: Case Study Design**

This investigation a single-case and embedded case study (see Figure 2). The case is limited to a single university and each year of the 20-year study period represents an embedded subcase within the overall case.

**Step 3: Theoretical Framework/Planning Models**

Organization of the case study was guided by the Social Ecological Model (SEM), Community Readiness Model (CRM), and Program Sustainability Framework (PSF). As previously described, the SEM considers the inter-relationships and inter-dependencies between five levels of influence on health behavior: 1) intrapersonal, 2) interpersonal, 3) institutional, 4) community, and 5) public policy (26) (27). Health practitioners in higher education have argued that prevention efforts that address all levels of the SEM would be more successful than less comprehensive efforts (16). Using
the SEM as a framework to organize the University’s alcohol prevention efforts can reveal any gaps in their alcohol prevention portfolio.

The CRM is comprised of five dimensions that can affect a university’s level of readiness: 1) leadership; 2) community climate; 3) community knowledge; 4) community efforts; and 5) resources (35). The CRM is a helpful framework for assessing a university’s willingness and preparedness to implement evidence-informed programs, policies, and other changes designed to reduce high-risk alcohol use and related harms (35). The PSF specifies eight organizational and contextual factors that can help to build a community’s capacity for sustainability: 1) environmental support, 2) funding stability, 3) partnerships, 4) organizational capacity, 5) program evaluation, 6) program adaptation, 7) communications, and 8) strategic planning (40). The CRM and PSF can be used to organize the qualitative data and to examine the presence of known facilitating and inhibiting factors that affect sustainability. Any outlying data regarding sustainability that arise from the case study – that is, data that do not fall within one of the five CRM domains or the eight PSF domains – may serve to increase understanding of the impact of the university-specific context on the sustainability of its alcohol prevention efforts.

Data Collection

This is a mixed methods study, predominantly qualitative with an additional quantitative approach (60). This is common for a single-case, embedded case study as such investigations “may rely on holistic data collection strategies for studying the main case and then call upon surveys or other quantitative techniques to collect data about the embedded unit(s) of analysis” (59 p. 66). In this instance, the qualitative data will reveal the comprehensiveness of the University’s alcohol prevention efforts during the study
period. The availability of existing secondary alcohol survey data takes the study one step further, allowing an examination of the impact of these efforts and the relationship between the chronology of prevention efforts and any annual trends or fluctuations in student alcohol use and its negative consequences. The trustworthiness of the data can be a limitation of qualitative research, but in this instance triangulation through the use of multiple data sources will support the validity of the study (61). Table 5 displays the indicators and data collection methods used to answer each of the study’s four research questions. All of these methods are described below in greater detail.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Indicators</th>
<th>Data Collection Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>What prevention efforts to reduce undergraduates’ high-risk alcohol use were implemented at the University between 1996 and 2016?</td>
<td>List of prevention efforts that meet the inclusion criteria, presented in chronological order</td>
<td>Intensive interviews Document review</td>
</tr>
<tr>
<td>To what degree were these prevention efforts evidence-based and designed to address high-risk alcohol use at all levels of the SEM?</td>
<td>Number of prevention efforts deemed to be of higher effectiveness Integrated prevention efforts across the spectrum of SEM levels</td>
<td>Search of the NIAAA’s CollegeAIM registry Assignment of prevention efforts to SEM levels</td>
</tr>
<tr>
<td>What is the relationship between the implementation of these prevention efforts and fluctuations in student alcohol use and its negative consequences?</td>
<td>N/A</td>
<td>Available CAS and ACHA-NCHA II student alcohol data, 1997 –2016</td>
</tr>
<tr>
<td>Which factors contributed to the University’s capacity for sustainability?</td>
<td>N/A</td>
<td>Intensive interviews Document review</td>
</tr>
</tbody>
</table>

Table 5. Overview of Data Collection Strategies by Research Question.
Intensive Interviews

Intensive interviewing involves “open-ended, relatively unstructured questioning in which the interviewer seeks in-depth information about the interviewee’s feelings, experiences, and perceptions” (62 p. 12). This information is used to provide context to other collected data and to create a more complete understanding of what happened in the program. Although intensive interviews follow an a priori outline of topics, the content and order of questions may vary, as appropriate, from one interview to another (63). In this manner, intensive interviews are more similar to guided conversations than tightly structured inquiries (59).

Interview Guide

Appendix A presents the intensive interview guide. The primary concern during the interviews was to describe the University’s alcohol prevention program between 1996 and 2016, specifically the alcohol prevention efforts implemented at the University during the study period, factors leading to success, obstacles that needed to be overcome, and factors that helped long-standing efforts be sustainable. This initial set of topics was refined and developed into four main questions with associated probes to be used as necessary:

1) Because I am asking about a very long time period, I am going to show you a very loose timeline of programs and policies that occurred at [University]. [Show brief chronology and leave it on the table for reference throughout the interview]
   a. Can you think of other alcohol-related programs, policies, and processes that occurred during this time? Please list.
2) Which of these prevention efforts worked particularly well?
   a. Please tell me why you chose to single out these efforts.
   b. What factors made them work well? Please elaborate.
      i. Probes: Leadership support? Funding stability? Strong staff?
         Strong partnerships? Public (student) support? Strong program
         management? Good planning?
   c. Were there any obstacles that you needed to overcome in order to
      implement these efforts? Please describe.
   d. If any are long-standing efforts, why do you think that they have persisted
      so well at [University]?
3) Please tell me about other prevention efforts that were not as successful or that
   you wanted to see happen at [University] but didn’t?
      staff/staff turnover? Lack of/weak partnerships? Lack of public (student)
      support? Poor program management? Poor planning?
4) If you could go back in time and re-live the past 20 years all over again, what
   would you do differently (with regard to alcohol prevention of course)? Please
   explain why.

The interview guide was reviewed by a University student affairs administrator
and other employees knowledgeable about the institution’s alcohol prevention efforts to
gauge its appropriateness and utility. As indicated in the first question, I created a
preliminary timeline of alcohol prevention efforts that were evident through a cursory
review of University annual reports. Because the interviewees were asked to reflect retrospectively upon a very long time period, having a visual timeline for reference was an important time-saving step.

The interview was designed to be completed in approximately 1–1 ½ hours. All of the main questions were open-ended rather than closed-ended in order to encourage the respondents to share all of their thoughts about the University’s prevention efforts. The first was intentionally designed to be a factual question so as to put the interviewees at ease before asking reflective and opinion questions.

**Procedure**

Intensive interviews were held to distinguish individual, as opposed to group, opinions about the University’s prevention efforts and their context. I am trained in interview facilitation procedures and personally conducted all of the interviews. Aware of my own biases, ideas, and beliefs, I was careful to avoid leading the interviewees in any particular direction and to curtail any non-verbal signals that could encourage or discourage certain responses (smiling, grimacing, nodding, rolling eyes, etc.) (64).

Due to the exploratory nature of these interviews, I recruited interviewees using a purposive, snowball sampling strategy beginning with the Senior Student Affairs Officer (SSAO). This is the most common strategy used to recruit participants for intensive interviews (65). I asked the SSAO to suggest current or former University employees who were knowledgeable about the University’s alcohol prevention efforts, would be open to talking, and would represent a range of perspectives (63). The SSAO provided the names of three potential interviewees, all currently working at the University. At the
end of each interview I asked if there were anyone else whom I might want to interview which led to additional names of potential interviewees. I continued to select new interviewees until I reached the saturation point – that is, when little additional information was being uncovered during the interviews (63). I reached the saturation point after five interviews. All interviewees were current University employees; it was unnecessary to interview any former employees, and in fact no one recommended that I do so. Table 6 presents the characteristics of the sample participants.

<table>
<thead>
<tr>
<th>Job function</th>
<th>Years employed at the University during the study period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior student affairs officer</td>
<td>1996 – 2016</td>
</tr>
<tr>
<td>Student affairs administrator – Judicial/Greek Life</td>
<td>1999 – 2016</td>
</tr>
<tr>
<td>Student affairs administrator – Special Projects</td>
<td>1997 – 2016</td>
</tr>
<tr>
<td>Athletics administrator</td>
<td>1996 – 2016</td>
</tr>
<tr>
<td>Health promotion professional</td>
<td>2013 – 2016</td>
</tr>
</tbody>
</table>

**Table 6. Characteristics of Sample Participants.**

Appendix A presents the email invitation that I personalized and sent to all potential interviewees. The email explained the purpose and parameters of the study and informed them of its voluntary and confidential nature. I reassured them that their identities would be kept anonymous. With that and because the risks to participants were minimal, a formal consent form with all the required elements of consent was not required (66). I did read a consent statement and asked the interviewees to verbally indicate agreement to participate (see Appendix B). Interviewees did not receive an incentive for their participation.

All individuals who agreed to participate were scheduled to meet face-to-face in a conference room on the University campus. The interviews ranged from 45 to 90 minutes.
in length. The interviews were audio-recorded and transcribed; I also took limited notes during the discussions. On a separate page, I kept a list of responses from earlier interviews so that I could check others’ opinions about the same matters. On several occasions I had follow-up discussions with the SSAO to provide clarification and to help me reflect on my interpretations of the data.

Documentation

A thorough review of documentary evidence is a key activity in case study research (59). The most important uses of documentation are to verify and augment evidence from other sources and to generate new information that may be worthy of further inquiry (59). Specifically, I reviewed internal and publicly available documents and reports (hard copy and e-file), newspapers and other publications, and online media content from both University and local area sources. I also identified State-level efforts that may have influenced University efforts or important contextual factors.

First, I reviewed the University’s internal documents and reports about its alcohol prevention efforts. The SSAO and a student affairs administrator provided me with any e-documents and reports that were not in their boxed files. The SSAO also provided me with all of the Student Affairs annual reports submitted from 1996 through 2016.

Second, I reviewed external documents and reports related to national prevention efforts in which the University had participated, specifically “A Matter of Degree,” AlcoholEdu for College, the NIAAA College Presidents Working Group, and NCHIP. I also conducted an Internet search using these titles as key terms to find additional documentation.
Third, I reviewed archives for the University’s daily student newspaper. Online and multimedia content produced after July 2014 was searchable by keyword at the student newspaper’s website. Content from August 2011 through July 2014 was found by visiting a regional news website and using a keyword search. Student newspaper items from 1996 to 2011 were found at the University library via searchable PDF archives. I searched these databases using the following key search terms: alcohol, drinking, intoxicated, drunk. I also reviewed archived news items from a University bulletin published by the Office of Communications quarterly. Back issues produced after the Winter 2014 edition were available on the University’s website; previous editions from 1996 to 2013 were available on hard copy in the Office of Communications.

Fourth, I reviewed archived news items from a local daily newspaper in a nearby city to ensure that there were no other events that may have affected students’ alcohol use. All past articles were searchable by keyword at the newspaper’s archives website.

Finally, I sought assistance from a colleague at the State’s alcohol beverage control agency who had ready access to relevant State-level policies, programs, and media campaigns that may have influenced the University’s efforts.

Available Survey Data

From 1997 to 2016 the University administered two similarly-focused national health and alcohol-related surveys, the College Alcohol Study (CAS) and the American College Health Association’s National College Health Assessment II (ACHA-NCHA II), to simple random samples of undergraduates in the spring of each calendar year. The
student affairs administrator provided access to the e-files containing the de-identified survey results for the study years.

From 1997 to 2012 the University administered the CAS, a national survey on alcohol, tobacco, illicit drug use, unsafe sex, violence, and other behavioral, social, and health problems facing college students (67). The Harvard School of Public Health (HSPH), which developed the instrument, documented that the CAS is reliable and valid for use with U.S. college students (67). HSPH implemented the CAS in 1993, 1997, 1999, and 2001 to random samples of full-time undergraduates drawn from over 100 institutions of higher education, including the University. In partnership with the AMOD project, HSPH also administered the CAS to grantee institutions in the years 1998, 2000, and 2002–2005. After AMOD ended in 2005, HSPH granted the University permission to continue administering the survey independently of the project. At that time, the University’s Office of Special Projects and Institutional Research Office shared responsibility for administering the survey. The mode of data collection varied across the years. The CAS was initially delivered via U.S. mail and later only via the Internet, following a transition period that included both methods. From 1997 to 2012, CAS completion rates at the University averaged 42.0%, with a range of 27.0% to 58.0%, rates that are typical for college student surveys on these topics (68).

From 2013 to 2016 the University administered the ACHA-NCHA II (69) to simple random samples of all University undergraduates. The ACHA-NCHA II is a nationally-recognized research survey that collects data about college students’ health habits, behaviors, and perceptions. The instrument covers the following major topics: alcohol, tobacco, and other drug use; sexual health; weight, nutrition, and exercise;
mental health; and personal safety and violence. The American College Health Association has documented that the ACHA-NCHA II is both reliable and valid (70).

The ACHA-NCHA II was delivered over the Internet, with the survey responses sent directly to ACHA to ensure confidentiality. It takes approximately 30 minutes to complete the ACHA-NCHA II, but it can be done across multiple sittings. Each year, the University’s Office of Research and Sponsored Programs selected a 50% random sample of all undergraduate students and sent their email addresses to ACHA. Each email address was then associated with a unique ID number.

ACHA sent a personalized electronic letter of invitation, customized by the University’s principal investigators, to each student in the random sample. This letter provided a short description of the survey and directions for accessing it. The letter also explained that respondents had been randomly selected and then specified the confidentiality of their responses, their right to refuse participation, and the incentives being offered. The unique ID number was embedded in the survey URL sent to each student. ACHA sent two customized reminder emails to non-responders. From 2013 to 2016, ACHA-NCHA II completion rates at the University averaged 17.2%, with a range of 14.0% to 21.0% — rates that are lower than those obtained for the CAS but not uncommon for college student surveys on these topics (68).

**Human Subjects Approval**

The Institutional Review Board at Boston University reviewed the study protocol and determined that the study qualified for exemption under the policies and procedures of the Human Research Protection Program.
Data Analysis

Qualitative Data Analysis

I used a thematic approach to analyzing the intensive interview data. I reviewed audio recording transcriptions and then working line-by-line, manually coded the information into pre-determined categories derived from the research questions (71). Each category included numerous codes that were based in part on the Social Ecological Model, Community Readiness Model, and Program Sustainability Framework. I also applied an inductive process to specify new codes and categories as they emerged during the analysis (71), moving from narrowly defined concepts to general themes (64). Appendix C presents the master list of codes, including those that emerged from this inductive process. These categories and codes provided a helpful level of granularity for organizing the extensive amount of document review information.

To increase the trustworthiness of the qualitative results, I included “member checking” as part of the data analysis process (41). Specifically, I asked the senior student affairs officer and one student affairs administrator to review portions of the dissertation results section, now presented in Chapter Three, that pertained to the interview themes (41).

Next, I created a timeline diagram of the University’s alcohol prevention efforts for the years 1996 through 2016. I included historical alcohol-related events to the timeline only if the event had the potential for large-scale impact. I later examined this visual aid in relationship to the quantitative data.

Finally, I completed the following steps to analyze the degree to which the University’s overall portfolio of alcohol prevention efforts was evidence-based and
designed to address high-risk alcohol use at all levels of the SEM:

1) I searched the NIAAA’s CollegeAIM registry for the prevention efforts that met the case study’s inclusion criteria. I designated an effort as evidence-based if it was found to be of “higher effectiveness.”

2) As appropriate, I assigned each prevention effort to one of the SEM levels (intrapersonal, interpersonal, institutional, community, or public policy) based on the type of effort, the target population, and its intended outcomes.

_Time-Series Examination_

I accessed the University’s CAS and ACHA-NCHA II survey data for 1997 through 2016 and integrated the data into a new database. The analysis focused on the following variables chosen to highlight both the prevalence and impact of high-risk alcohol use by University undergraduates:

1. **Heavy episodic drinking**: Defined as consuming five or more drinks in a row in the past two weeks.\(^3\)

2. **Primary consequences**: A composite variable created by averaging responses to the following consequences: did something you later regretted, forgot where you were or what you did, did not use protection when you had sex, got into trouble with the campus or local police, and got hurt or injured.

3. **Secondary consequences**: A composite variable created by averaging the responses to the following consequences: been insulted or humiliated, had a serious argument or quarrel, been pushed, hit or assaulted, had your property

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\(^3\) This is the ACHA-NCHA II definition for heavy episodic drinking, but it is not the CAS definition. For the data integration to work I needed to use the ACHA-NCHA II definition.
damaged, had to babysit or take care of another student who drank too much, found vomit in the halls or bathroom of your residence, had your studying or sleep interrupted, experienced an unwanted sexual advance, and been a victim of sexual assault or rape.

I then created separate run charts for each of these three variables, with year on the X-axis and mean scores on the Y-axis. I used visual inspection to interpret the run charts and noted any trends or fluctuations in the data. Visual inspection has been found to be a useful and reliable data analysis tool for single-subject data (72). Next, I visually compared all three run charts to identify commonalities in the data patterns. I also compared run charts for the University data and National Survey on Drug Use and Health (NSDUH) data on heavy episodic drinking for the years 2002 through 2014 to determine whether the University data followed a pattern similar to the national data.

Finally, to analyze the relationships between the chronology of the University’s alcohol prevention efforts and fluctuations in student alcohol use and its negative consequences, I superimposed the chronology of prevention efforts on the run charts and visually inspected the relationship. This methodology was developed for the purposes of this case study.

To address research questions one through three, this chapter presents the findings of the qualitative data analysis for prevention efforts that are evidence-based and address high-risk alcohol use at all levels of the Social Ecological Model (SEM), plus the results of the time series examinations. It begins with a brief description of the University’s alcohol culture at the start of the case study period. Next, it presents an inventory of the prevention efforts that were implemented at the University between 1996 and 2016. Then it organizes the alcohol prevention efforts by SEM level and indicates which are evidence-based. Finally, it presents the run charts for heavy episodic drinking and both primary and secondary consequences and maps these charts to the chronology of prevention efforts.

Introduction to the Case

A case study approach was used to develop a chronology of the alcohol prevention efforts implemented at the University from 1996 to 2016 and a rich, thick description of the alcohol–related events and contextual conditions that occurred during that time. An extensive document review was conducted of internal and publicly available documents and reports, newspapers and other publications, and online media content from University and local community sources. Intensive interviews were also conducted with five currently employed University administrators with knowledge of the alcohol prevention efforts that were implemented during the study period.
All interviewees agreed that the case study’s time period represents the modern history of the University’s alcohol prevention efforts. They also agreed that it is important first to understand the campus’s alcohol culture leading up to the study period. They described the social scene before 1996 as being “contained” to campus fraternity parties.

“Our Greek chapter houses were our alcohol outlets. Here, it was just like throw your jeans on and walk up the hill.”

They also agreed that excessive drinking was the campus norm.

“Beer was on tap around the clock in fraternities. Major parties were held on any night of the week. Grain alcohol punch was offered as the alternative beverage. This kind of excessive drinking was ubiquitous, but not considered problematic. Students and alumni felt that excessive drinking was an acceptable campus norm, an expected part of [the University’s] social traditions and work hard, play hard ethos.”

This “strong legacy of alcohol abuse” frustrated several University administrators who “wanted to have conversations about drinking as a campus problem, but were met with resistance.”

In 1993, the University participated in the Harvard School of Public Health’s College Alcohol Study (CAS), which provided empirical evidence of the University’s alcohol problem. The data revealed that University undergraduates were engaging in heavy episodic drinking at levels far greater than the national average (68% at the University vs. 42% nationally) and experiencing a range of adverse consequences due to both their own drinking and others’ drinking. These findings generated new thinking
about high-risk alcohol use on campus and “set the stage for a greater level of awareness and receptivity to address the issue.” One interviewee reflected, “We acknowledged that change would not be easy and wouldn’t happen overnight, but considering the anecdotal and new empirical evidence, maintaining the status quo was not truly an option.”

“The data was a game changer for [the University]. The data sort of said here's your reality. Your students are drinking well above the national norm. Your Greek students are really, really drinking well above the national norm.”

“I would sit with students or alumni, and they would tell me about why it was really important to preserve all these traditions, and I would talk to them about being in the hospital with a student on life support, and we would be talking past each other, and both of us thought we were right. And one night, it just came to me clearly that we're talking about dueling anecdotes. I'm telling you my story; you're telling me your story, but we're not connecting. And when we moved to data, it wasn't my opinion or their opinion. It was what students were telling us, and that became the foundation for our — it guided our approaches — our strategies. It guided our conversations, and it gave me a very solid platform to say: This is what's happening. Here is the number of students in the hospital. Here is the number of kids puking in the residence hall room. This is the number of students who stay up all night with a drunken roommate. And so identifying those first and secondhand effects and capturing that in a statistical format was very powerful and helped us move forward.”
This case study documents the University’s efforts to create a healthier and safer environment in which undergraduates can live and learn, as well as the University’s pursuit of a “social renaissance” when campus social life would be attractive to students without relying on alcohol abuse.

**Prevention Efforts to Reduce Undergraduates’ High-Risk Alcohol Use Implemented at the University between 1996 and 2016**

The University implemented numerous alcohol prevention initiatives from 1996 to 2016. These efforts are described below for five separate time periods identified during the interviews: 1) Fall 1996–Spring 2001, 2) Fall 2001–Spring 2005, 3) Fall 2005–Spring 2010, 4) Fall 2010–Spring 2013, and 5) Fall 2013–Spring 2016. The present section lists and briefly defines these prevention efforts. Contextual conditions related to leadership, resources, community support, knowledge of the issue, and other factors are described in the section on sustainability. Historical events directly related to alcohol use (e.g., State laws) are included in this section, while indirectly related historical events (e.g., Presidential transitions) are included in the section regarding sustainability.

The interviews and archival research produced a tremendous amount of information about the University’s population-level prevention efforts during the past two decades, which are the focus of the case study. Smaller-scaled programs not intended to produce broad institutional change and efforts not qualifying as primary prevention⁴ are not included. I do wish to acknowledge that the University’s Counseling Center

⁴In 1957, the Commission on Chronic Health described three levels of public health prevention: primary (early levels of prevention), secondary (treatment), and tertiary (maintenance). Health prevention practitioners in higher education work to prevent the development of both individual and population-level health problems, while enhancing individual, group and institutional health and safety. Secondary prevention efforts occur following a clinical diagnosis.
consistently offered individual and group treatment for students presenting with alcohol concerns during the study period. Local Alcoholics Anonymous and Al-Anon groups were also available to students, sometimes provided on campus but not organized by the University. Moreover, a local community hospital provided emergency treatment for acutely intoxicated students.

**Fall 1996 – Spring 2001**

Figure 3 presents a high-level timeline of the University’s alcohol prevention efforts that were implemented from Fall 1996 to Spring 2001. The descriptions for these efforts are presented below.

**Figure 3. Timeline of the University’s Alcohol Prevention Efforts, Fall 1996 to Spring 2001**

In 1996, the University was one of six universities nationwide selected by the Robert Wood Johnson Foundation to participate in the A Matter of Degree (AMOD)

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5 The number of participating universities was subsequently increased to 10.
initiative, a five-year grant to build a campus-community coalition to reduce alcohol abuse and foster a healthy and safe living and learning environment.

Although all interviewees agreed that “the real shift in addressing high-risk drinking began with AMOD,” the document review revealed that a 1996 University report on the residential environment preceded AMOD efforts and generated stricter policies regarding on-campus parties. These reforms included: banning drinking games and the use of grain alcohol; requiring age checks based on student IDs and party registration; limiting the serving of alcohol to certain locations and during limited hours; requiring dry fraternity rush; and deploying roving security guards to check parties for compliance. Also, the Interfraternity Council enacted a closed-fraternity party policy, banned kegs, and implemented a BYOB policy (73).

As an AMOD grantee, the University was required to create a campus-community coalition, develop a strategic plan, and implement programs and policies guided by the environmental management framework.

“We embarked on a cultural transformation that was more than just putting out fires, but it was really thinking about how we could, over time, transform the culture to reduce the incidence of high-risk drinking and the consequences associated with it.”

The coalition implemented many prevention efforts during this period, both on campus and in the local community:

- **Historical Event (Spring 1997):** A new State law prohibited alcohol retailers from using off-premises advertising to promote the availability of alcoholic beverages or their prices to the general public. The State liquor control agency further
prohibited retailers from placing such advertising in any publications produced by or on behalf of any educational institution but did permit advertisements that provided only the retailer’s name and address. In Fall 1998, the University instituted a total ban on all alcohol advertising in University publications.

- **Substance-Free Housing (Fall 1997):** The University expanded the number of rooms for undergraduates who choose to live in an alcohol-, tobacco-, and drug-free residence. Due to low demand by upper-class students, substance-free housing was eventually limited to first and second-year students. In 2007, upper-class students petitioned successfully for their own substance-free housing so that today, separate substance-free housing is available to first-year students and upper-class students.

- **Alcohol-Free Events (Fall 1997):** The University began a multi-component effort that included Friday late-night entertainment at an on-campus café, free on-campus movies, free transportation to local shopping and movies, and monthly bus trips to accessible major cities. The University also offered financial support for student groups to create their own alcohol-free events; student interest in these events waned, and this program lost traction for several years. The University reinstituted alcohol-free programming in 2012.

- **Community Policing (Fall 1997):** To bolster enforcement, the University established several police “substations” in the local neighborhood where many off-campus students reside, thereby creating an ongoing presence and providing easier access to University officers. Bicycle patrols also began at this time. As a part of this community policing effort, a community liaison met with off-campus
students who violated alcohol policies to discuss their neighbors’ concerns, to remind them of the city’s resolve to prevent alcohol-related problems, and to convey the University’s expectations about their future conduct. In 2010, this effort was expanded. The neighborhoods surrounding the campus were divided into patrol zones. Officers assigned to each zone, patrolling on bicycles or on foot, engaged with students and local residents with a focus on both crime prevention and quality of life issues.

- **Alternative Spring Break (Spring 1998):** The University promoted opportunities for students to complete meaningful community service projects during spring break as an alternative to a traditional spring break with heavy drinking. This effort continues today.

- **Curriculum Infusion (Fall 1998):** With the assistance of Student Affairs staff, several academic departments began to offer formal opportunities to examine the topic of alcohol abuse through first-year student writing courses, public relations case studies, marketing classes, and independent study. Curriculum infusion is no longer actively pursued as a prevention strategy, but may continue informally if it relates to a professor’s area of academic interest. In 2014, Student Affairs staff proposed a “Don’t Cancel That Class” program, but the faculty voted it down.

- **Historical Event (Fall 1999):** The State liquor control agency prohibited the sale of grain/ethyl alcohol (190 proof) through its retail outlets.

- **Policy Changes (Fall 1999):** The University made significant revisions to the Student Code of Conduct and social policy. Table 7 outlines these policy changes.
• **TIPS for Servers (Spring 2000):** The University required student servers at fraternity parties to complete this responsible service program to learn how to prevent intoxication, drunk driving, and underage drinking when serving alcohol. This effort continues today.

• **Enforce Age-21 Drinking Age (Fall 2000):** The University sent birthday lists of students to local bar owners to combat fraudulent ID use. Today, the University provides these lists by request only.

• **Policy Changes (Fall 2000):** The University revised its social policy so that first-years students found to have consumed alcohol at an event affiliated with a fraternity or sorority would not be permitted to affiliate with a Greek-letter social organization for one year, and would not be permitted to live as a boarder in a chapter house during that time.

• **Historical Event (Fall 2000):** A new State law required local tavern owners, managers, and servers to complete responsible beverage service training that focuses on liability issues and how to identify fraudulent IDs, prevent sales to minors, and recognize and handle visibly intoxicated patrons. The University has partnered annually with the community and the State liquor control agency to deliver these trainings.

• **Landlord Ordinance (Fall 2000):** The University supported a new ordinance that requires landlords to evict tenants with three disorderly house violations, thus increasing landlord accountability for neighborhood disturbances. University officials also encouraged landlords to maintain and improve the quality of the rental housing within the community.
<table>
<thead>
<tr>
<th>Policy Change</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental notification</td>
<td>University will notify parents/guardians regarding a student younger than 21 any time that individual is found to have violated the University’s Code of Conduct relating to alcohol or drugs.</td>
</tr>
<tr>
<td>Second serious violation suspension policy</td>
<td>Students found guilty of two serious alcohol violations are to be suspended for a minimum of one semester (“two strikes and suspension”).</td>
</tr>
<tr>
<td>Social host regulations</td>
<td>Social function hosts must hire trained bartenders to serve alcohol at events. The amount of alcohol available at a social event is to be based on the number of persons 21 and older who are attending the event. Social events with alcohol cannot exceed four hours in duration. Two security guards, hired by the host, must be present at every social event with alcohol. Hosts must provide attractive and equally accessible food and non-alcoholic beverages. The closed-party policy for fraternities must be strictly enforced.</td>
</tr>
<tr>
<td>BYOB policy</td>
<td>BYOB parties or social events are prohibited.</td>
</tr>
<tr>
<td>Alcohol-free events by Greek-letter organizations</td>
<td>The University required Greek-letter social organizations to host at least one alcohol-free event per week. The University provided funding to support these efforts.</td>
</tr>
<tr>
<td>Tailgate policy</td>
<td>Tailgate parties with alcohol must have attractive and equally accessible food and non-alcoholic beverages. Hosts are responsible for the behavior of their guests and must monitor alcohol access and compliance with State law and University regulations. Drinking behavior that promotes alcohol abuse (e.g., &quot;shot-gunning&quot; or &quot;funneling&quot;) is not allowed. Police will check cars entering the tailgate area to ensure that no more than eight cases of beer or an equivalent quantity of wine and beer combined are present at one tailgate.</td>
</tr>
</tbody>
</table>

Table 7. Summary of Policy Changes Implemented by the University, Fall 1999.

Fall 2001 – Spring 2005

Figure 4 presents a high-level timeline of the University’s alcohol prevention efforts that were implemented from Fall 2001 to Spring 2005. The descriptions for these efforts are presented below.
Early evaluation results from the University’s AMOD initiatives showed positive results, with significant decreases in negative secondary consequences due to others’ drinking. Based on this success and the University’s commitment to the environmental management framework, the University received a four-year grant renewal to support AMOD’s continuation. During this second phase, the coalition sought to change campus drinking norms by bolstering student engagement and launching new initiatives targeted to high-risk groups, mainly first-year students.

Although the AMOD coalition was actively working toward its goals, all interviewees agreed that the effort “of greatest importance” during this time period was a secondary effort to reform and strengthen the University’s Greek system. This effort and its impact are reviewed in Chapter Four.

- **Social Norms Marketing Campaign (Fall 2002):** The University placed advertisements in the student newspaper to publicize students’ misperceptions of campus drinking norms. The University had implemented the CORE Alcohol and Other Drug Survey in 2001 to gather the data needed to create those messages.

- **Policy Changes (Fall 2002):** The University changed the Student Code of Conduct so that students who violated the drug and alcohol policy, unless they
were suspended or expelled, were required to meet with the University’s Counseling Center.

- **Online Education (Fall 2003):** The University’s Counseling Center offered the online brief intervention e-CHUG (now called e-CHECKUP TO GO) to students who presented at the Center with alcohol-related issues. The program provides students with personalized feedback about their drinking patterns and how their alcohol use might conflict with their health and personal goals.

- **Historical Event (Fall 2003):** The State’s new driving under the influence (DUI) State law lowered the legal definition of alcohol-impaired driving from .10% to .08% Blood Alcohol Content (BAC); created a tiered approach for DUI enforcement and treatment; and included many changes to the penalties (terms of license suspension, fines, incarceration) for DUI infractions.

- **Online Education (Fall 2004):** The University administered AlcoholEdu for College to all incoming first-year students. This online education program provides information about alcohol and its effects on the body and helps students make well-informed decisions about drinking. Using an implied mandate strategy, the University informed incoming students that they were “expected” to complete the program before arriving on campus. AlcoholEdu includes three surveys, a pretest, and a final exam to assess changes in students’ knowledge, beliefs attitudes, and behavior regarding alcohol. AlcoholEdu for College continues to be used today.
Fall 2005–Spring 2010

Figure 5 presents a high-level timeline of the University’s alcohol prevention efforts that were implemented from Fall 2005 to Spring 2010. The descriptions for these efforts are presented below.

With the end of the AMOD grant, the University took steps to institutionalize the AMOD initiatives. Documents revealed that the University immediately dissolved the campus-community coalition and two years later established an alcohol working group of student affairs staff. The rationale for these decisions is discussed below in the section on sustainability. All interviewees agreed that the University launched far fewer alcohol prevention efforts during this time period, but the University did successfully maintain existing efforts such as AlcoholEdu for College, the College Alcohol Study survey, substance-free housing, alcohol-free programming, and partnering with the local community and State liquor control agency to deliver responsible beverage service trainings. The interviewees most directly related to AMOD described this time period as a “quiet” time regarding alcohol prevention and a “time for reassessing and regrouping.”

Conversely, the interviewees least involved with AMOD referred to this time as
“transformative,” a time that “did not focus on alcohol but undoubtedly changed the way in which we thought about everything – including alcohol.” The interviews and documents revealed that “a tremendous ethos change” took place within student affairs during this time, due specifically to efforts to strengthen the University’s Greek system using an assets-based approach.

“With AMOD we decided we were going to [take] more of an active parental role in the Greek system. At first we tried to stop the bleeding, and then we realized that there were other problems besides alcohol. Not that the alcohol problem was solved, it was just that we weren’t focusing every ounce of our activity directly on alcohol. But alcohol was affected nonetheless. We went from focusing on rules and policy and ‘can’t to do this and can do that,’ to talking about expectations for community membership, leadership development, character development, and a focus on values. We gave [students] responsibility. This was an evolution from the last stages of absentee in loco parentis to a mentor relationship with our students.”

It is worth noting that this assets-based focus was reflected in a Fall 2006 rewrite of the Student Code of Conduct that changed the language from being “punitive” to communicating “expectations for our students around alcohol.”

- **Policy Changes (Fall 2007):** The University enacted a medical amnesty policy by which students who seek emergency medical attention for themselves or other students due to alcohol or other drug use will not be charged for violating the University Code of Conduct’s prohibitions regarding consumption. This policy
also extends to student organizations that seek immediate medical attention for intoxicated students. This policy exists today, although minor revisions have been made over the years.

- **Parent Involvement (Fall 2007):** The University invited parents of first-year students to complete AlcoholEdu for Parents, an online program designed to support parental conversations about alcohol that could help shape the decisions their students make regarding drinking. Because of disappointingly low participation, this effort was discontinued in 2013.

- **Substance-Free Housing (Fall 2007):** The University created a new substance-free community for upper-class students, separate from the substance-free residence for first-year students. This residential option is in place today.

- **Social Marketing (Fall 2008):** The University implemented a poster campaign targeting first-year students during the first six weeks of the academic year. The messaging focused on healthy decision-making in order to moderate alcohol use and thereby mitigate the upswing in drinking that occurs when students arrive on campus (the so-called “college effect”).

- **Invited Speaker (Fall 2008):** The University invited an alcohol expert to address all first-year students during orientation for new students. This effort was replaced with small group discussions in 2009.

- **Historical Event (Spring 2009):** The State liquor control agency required purchasers of beer kegs to complete a numbered form listing their name and address. The beer distributor then places an identification tag on the keg with the number from the completed form.
• Alcohol Speaker - Orientation (Fall 2009): During orientation, the University’s Counseling Center led a presentation for first-year students about alcohol and its effects on the body. This effort was discontinued in 2013.

Fall 2010–Spring 2013

Figure 6 presents a high-level timeline of the University’s alcohol prevention efforts that were implemented from Fall 2010 to Spring 2013. The descriptions for these efforts are presented below.

![Timeline of the University’s Alcohol Prevention Efforts, Fall 2010 to Spring 2013](image)

In 2011, the University joined 31 other colleges and universities in Dartmouth College’s National College Health Improvement Program (NCHIP), a learning collaborative on high-risk drinking. NCHIP applied the Institute for Healthcare Improvement’s (IHI) “Collaborative Model for Achieving Breakthrough Improvement” to identify, implement, and share strategies for reducing the incidence and consequences of high-risk drinking among college students (76, 77).

“NCHIP was the next major marker – our re-engagement in terms of advancing the environmental approach. It was...dormant for a while.”

As an NCHIP participant, the University was expected to form a
multidisciplinary campus improvement team; set a population-specific, time-bound, and measurable aim; create a “change package” of key interventions to advance that aim; and implement a scientific method for action-oriented learning, namely the Plan-Do-Study-Act (PDSA) process for quality improvement. The University’s “change package” included two efforts that targeted first-year students and were based on the environmental management framework.

- **Alcohol-Free Events (Fall 2012):** The University reinstituted a fund for student groups to host late-night alcohol-free events on Thursday, Friday, and Saturday nights between 10 p.m. and 2 a.m. This effort continues today.

- **Policy Changes (Fall 2012):** The University revised the Code of Conduct to include more severe sanctions for students who violated the hard alcohol policy. Students found in violation would not be permitted to affiliate with a fraternity or sorority during the semester when the violation occurred and the following semester. Also, the University’s judicial officers would be more likely to place students with hard alcohol violations on probation, as opposed to a warning.

- **Policy Changes (Fall 2012):** The Interfraternity Council amended its social policy to ban hard alcohol at education sessions for new members. Chapter funds could also no longer be used to purchase hard alcohol for parties.

*Fall 2013–Spring 2016*

Figure 7 presents a high-level timeline of the University’s alcohol prevention efforts that were implemented from Fall 2013 to Spring 2016. The descriptions for these efforts are presented below.
The University’s participation in NCHIP and its renewed focus on the environmental management approach provided the impetus to create a new department within the student affairs division, the Prevention Office, to address a wide range of student health issues and assume primary responsibility for the University’s alcohol prevention efforts. The development of this department is described below in the section on sustainability.

“It was all coming together. We recommitted to the environmental framework, or better yet to work at all levels of the socio-ecological model. NCHIP helped us to think in a true public health way about alcohol prevention – one where we set goals and measured outcomes. It was our desire to create a functional model in which the University could continue to be a leader in alcohol prevention, real prevention...public health prevention.”

There were several other important developments during this time period:

• **Alcohol Education (Fall 2014):** The Prevention Office displayed posters with alcohol-related information in the restroom stalls of all University buildings. This effort continues today.
• Peer Engagement - Small Group Discussions (Fall 2014): By request, student peer educators led small group discussions for Greek-affiliated students about alcohol and protective strategies. They also targeted all first-year students through the University’s first-year experience programming. These efforts continue today.

• TIPS for the University (Fall 2014): The University implemented TIPS alcohol service training for upper-class, Greek-affiliated students who live off campus, “because that’s where most of our social events happen [and it’s important that] they understand their liability.” Today, all Greek-affiliated sophomores are required to complete TIPS.

• Bystander Intervention (Fall 2014): Prevention Office staff members led the Red Watch Band program that trains students to recognize when another student may be experiencing alcohol poisoning and is in need of medical attention. This effort targets all undergraduates and is available by request.

• Peer Engagement - Tabling Event (Fall 2015): Student peer educators invited students to “pledge to choose one less of something,” such as “choosing to have one less drink when they go out.”

• Small Group Discussions (Fall 2015): By request, Prevention Office staff led small group discussions for first-year students in the residence halls two weeks after orientation. These discussions build upon lessons learned during AlcoholEdu for College.

• Personalized Feedback Intervention (Fall 2015): The University’s Conduct Office required “mandated” students who violate the University’s alcohol policy to
complete e-CHECKUP TO GO, which had been first introduced in 2003 on a more limited basis.

**Degree to Which Alcohol Prevention Efforts Were Evidence-Based and Designed to Address High-Risk Alcohol Use at All Levels of the Social Ecological Model**

Tables 8 and 9 present the chronology of alcohol prevention efforts listed by their initial years of implementation. Each prevention effort is assigned to one of the Social Ecological Model (SEM) levels (intrapersonal, interpersonal, institutional, community, or public policy) based on the type of effort, the target population, and intended outcomes. Those that are bolded have been designated of “higher effectiveness” by the NIAAA’s CollegeAIM registry. The tables do not show the length of time that each effort remained in place or its fidelity, nor do they indicate the degree of activity for each initiative over time, which ebbed and flowed.

A visual inspection of Tables 8 and 9 shows that during the study period the University implemented a variety of alcohol prevention efforts on all levels of the SEM, though the majority of these efforts were designed to address high-risk alcohol use at the institutional level. The University initiated more institutional and community level efforts before and during the AMOD grant (1997–2005) compared to the other time periods, whereas it initiated more intrapersonal and interpersonal-level efforts after AMOD concluded in 2005. The chart also shows that the University launched no new initiatives during 2001–2002, after the end of AMOD phase 1; 2005–2007, after the end of AMOD phase 2; 2010–2012, a planning period before the beginning of NCHIP; and 2013–2014, after the end of NCHIP.
The chart also highlights the fact that only two of the University’s efforts are rated as having “higher effectiveness” in NIAAA’s CollegeAIM registry. Both of these efforts, AlcoholEdu for College and judicially mandated e-CHECKUP TO GO, continue today. Expanding the examination to include programs and policies of “moderate effectiveness,” the number of evidence-based efforts increases, although not all were University-driven: brief motivational interviewing with group sessions (for students visiting the Counseling Center with alcohol-related concerns); prohibiting alcohol sales and consumption at campus sporting events; state-mandated responsible beverage service training; and retention of state-run alcohol retail stores (not shown).

6 There are 12 strategies of “higher effectiveness” listed in the CollegeAIM registry, many of which are individual-level strategies. Environmental-level strategies are more difficult to study, and many of the University’s efforts at this level are listed in the matrix as having “too few studies to rate effectiveness.”
<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Intrapersonal</th>
<th>Interpersonal</th>
<th>Institutional</th>
<th>Community</th>
<th>Public Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996–97</td>
<td>On-campus party restrictions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997–98</td>
<td>Substance-free housing</td>
<td>Alcohol-free events</td>
<td>Alternative spring break</td>
<td>Community policing</td>
<td>State law restricts alcohol advertising</td>
</tr>
<tr>
<td>1998–99</td>
<td>Curriculum infusion</td>
<td>Prohibition of all alcohol marketing in University publications</td>
<td></td>
<td></td>
<td>State law bans sale of grain alcohol to general public</td>
</tr>
<tr>
<td></td>
<td>TIPS server training</td>
<td>Parental notification</td>
<td>Tailgating policy</td>
<td></td>
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<tr>
<td>1999–00</td>
<td></td>
<td>Social host regulations</td>
<td>Second serious violation suspension policy</td>
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<td>2000–01</td>
<td>First-year rush restriction</td>
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<td>City landlord ordinance</td>
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<td></td>
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<td>Birthday lists sent to bar owners</td>
<td></td>
<td>State law requires responsible beverage service training</td>
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<td>2001–02</td>
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<td>2002–03</td>
<td>Mandated counseling by judicial referral</td>
<td>Social norms marketing campaign targets all students</td>
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<tr>
<td>2003–04</td>
<td>e-CHECK UP TO GO by counseling referral</td>
<td></td>
<td></td>
<td>State definition of alcohol-impaired driving set at.08% BAC</td>
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<tr>
<td>2004–05</td>
<td>AlcoholEdu targets first-year students</td>
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Table 8. University Alcohol Prevention Efforts by Year of Initiation and Social Ecological Model Level, 1996–2005. ¹ Efforts appear in bold if they have been designated of “higher effectiveness” by the NIAAA’s CollegeAIM registry
<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Intrapersonal</th>
<th>Interpersonal</th>
<th>Institutional</th>
<th>Community</th>
<th>Public Policy</th>
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<tr>
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<td>2006–07</td>
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<td>2007–08</td>
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<td></td>
<td>Substance-free housing for upper-class students</td>
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<td>Medical amnesty policy</td>
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<td>2008–09</td>
<td>Invited speaker at new student orientation</td>
<td>Social marketing campaign for first-year students during first six weeks</td>
<td>State law requires keg registration</td>
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<td>2009–10</td>
<td>Alcohol education presentation at new student orientation by Counseling Center staff</td>
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<tr>
<td>2010–11</td>
<td>Alcohol-free events</td>
<td>Hard alcohol policy</td>
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<td>2011–12</td>
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<td>2012–13</td>
<td>Alcohol education restroom stall posters</td>
<td>Peer-led small group discussions for Greek-affiliated students</td>
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<td>2013–14</td>
<td>TIPS training for Greek-affiliated students</td>
<td>Red Watch Band bystander intervention program</td>
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<td>2014–15</td>
<td>Peer engagement tabling event</td>
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<tr>
<td>2015–16</td>
<td><strong>e-CHECKUP TO GO by judicial referral</strong></td>
<td>Small group discussion targets first-year students</td>
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</table>

Table 9. University Alcohol Prevention Efforts by Year of Initiation and Social Ecological Model Level, 2006–2016. †
Efforts appear in bold if they have been designated of “higher effectiveness” by the NIAAA’s CollegeAIM registry.
Relationship between Implementation of Alcohol Prevention Efforts and Fluctuations in Student Alcohol Use and Its Negative Consequences

Time-Series Examination

The charts below present data from the University’s CAS and ACHA-NCHA II surveys from 1997 to 2016, as well as the NSDUH from 2002 to 2014. Visually inspecting the charts for outliers, it is evident that the 2004 result for the percentage of University undergraduates who engaged in heavy episodic drinking stands apart from the data for other years. This arouses suspicion, not because it is the most extreme observation, but because it deviates so much from the others.

The chronology of prevention efforts does not suggest that it can be explained by a program or policy change, and a comparison of University data to national data does not show a similar increase in heavy episodic drinking at colleges and universities nationwide during the same year. This data point is probably due to a deviation in sampling, data collection, or data entry.

Although it is generally preferable to remove outliers, I decided to retain this observation based on the following factors: 1) I am not conducting any statistical testing; 2) its inclusion does not distort the absolute rate of change between 1997 and 2016; and 3) although unlikely, I cannot be 100% certain that there is an alternative explanation. That said, I disregarded the 2004 observation when describing the fluctuations in the heavy episodic drinking run charts.

Figure 8 shows the fluctuation in the percentage of University undergraduates who consumed five or more drinks in a row in the past two weeks (heavy episodic drinking). The linear trend shows a 20.0% decrease between 1997 (67.6%) and 2016
(54.1%). The graph shows that the rate held steady between 1997 and 1999. After this, there was a sharp decrease (17.6%) between 1999 and 2000. This was immediately followed by a rapid “bounce back” rise (10.8%) in 2001. The rate continued to climb in 2002 and then held steady until 2010. After this, there was a sharp decrease (17.0%) between 2010 and 2011, which was again immediately followed by a slight “bounce back” rise (4.3%) in 2012. The years between 2010 and 2013 could have seen a trend of steady decline had it not been for the slight increase between 2011 and 2012. There was another sharp decrease (15.9%) between 2012 and 2013, which was immediately followed by the steepest “bounce back” rise of the series (25.2%) in 2014. Then the rate declined again in both 2015 and 2016.

Figure 9 shows the fluctuation in the mean percentage of undergraduates who experienced primary consequences due to their own drinking. This is a composite variable created by averaging the responses to the following consequences: did something you later regretted, forgot where you were or what you did, did not use protection when you had sex, got into trouble with the campus or local police, and got hurt or injured. These items are the ones used by researchers to operationalize the overall construct of primary consequences on the CAS and ACHA-NCHA II. The linear trend shows a 13.5% decrease between 1997 (33.2%) and 2016 (28.7%). The graph shows that the rate steadily decreased between 1997 and 1999, followed by a sharp decrease (26.1%) between 1999 and 2000. This was immediately followed by a rapid “bounce back” rise in

Figure 9. Mean Percentages of Undergraduates Who Experienced Primary Consequences Due to Their Own Drinking¹, 1997–2016. Source: University data from CAS 1997–2012; ACHA-NCHA II 2013–2016 ¹ This is a composite variable created by averaging the responses to the following consequences: did something you later regretted, forgot where you were or what you did, did not use protection when you had sex, got into trouble with the campus or local police, and got hurt or injured.
2001 and 2002, resulting in a 34.8% overall increase between 2000 and 2002. The rate held steady until 2006. After this, there was a sharp decrease (21.0%) between 2006 and 2007, which was immediately followed by a moderate “bounce back” rise (10.1%) in 2008. The rate held steady between 2008 and 2010. There was another sharp decrease (17.6%) between 2010 and 2011, which held steady for one year and then was followed by a dramatic overall increase (40.5%) between 2012 and 2014. The rate dropped again in 2015 and rebounded in 2016.

Figure 10 shows the fluctuation in the mean percentage of undergraduates who experienced secondary consequences due to others’ drinking. This is a composite variable created by averaging the responses to the following consequences: been insulted or humiliated, had a serious argument or quarrel, been pushed, hit or assaulted, had your property damaged, had to babysit or take care of another student who drank too much, found vomit in the halls or bathroom of your residence, had your studying or sleep interrupted, experienced an unwanted sexual advance, and been a victim of sexual assault or rape. These items are the ones used by researchers to operationalize the overall construct of secondary consequences on the CAS and ACHA-NCHA II. The linear trend shows a 61.6% decrease between 1997 (49.8%) and 2016 (19.1%). The graph shows that there was a sharp decrease (21.8%) between 1999 and 2000. This was immediately followed by a rapid “bounce back” rise in both 2001 and 2002, resulting in a 15.0% overall increase between 2000 and 2002. The rate held steady until 2006. After this, there was an overall decrease (25.8%) between 2006 and 2010 which was immediately followed by a steadily increasing “bounce back” rise through 2012, resulting in a 17.8% overall increase. There was another sharp decrease (36.5%) between 2012 and 2013,
which was immediately followed by a moderate “bounce back” rise (9.5%) in 2014. The rate declined steadily in both 2015 and 2016.

Figure 10. Mean Percentages of Undergraduates Who Experienced Secondary Consequences from Others’ Drinking, 1997–2016.¹ Source: University data from CAS 1997–2012; ACHA-NCHA II 2013–2016 ¹ This is a composite variable created by averaging the responses to the following consequences: been insulted or humiliated, had a serious argument or quarrel, been pushed, hit or assaulted, had your property damaged, had to babysit or take care of another student who drank too much, found vomit in the halls or bathroom of your residence, had your studying or sleep interrupted, experienced an unwanted sexual advance, and been a victim of sexual assault or rape.

Figure 11 compares the run charts for all three variables: heavy episodic drinking, primary consequences, and secondary consequences. The linear trend line for secondary consequences shows that the greatest decrease occurred between 1997 and 2016 (61.6% for secondary consequences, compared to 20.0% for heavy episodic drinking and 13.5% for primary consequences). Overall, the rates for heavy episodic drinking were greater than those for both secondary and primary consequences. The overall pattern remained
consistent until 2013, at which time the rate for primary consequences rate exceeded that for secondary consequences. All variables showed a sharp decrease between 1999 and 2000, which was immediately followed by a rapid “bounce back” rise in both 2001 and 2002. Heavy episodic drinking and secondary consequences also showed another sharp decrease between 2012 and 2013, which was immediately followed by a “bounce back” rise in 2014, although the rate of increase was steeper for heavy episodic drinking than for secondary consequences.

![Figure 11. Comparison of Heavy Episodic Drinking, Primary Consequences, and Secondary Consequences among University Undergraduates, 1997–2016. Source: University data from CAS 1997–2012; ACHA-NCHA II 2013–2016](image)

Figure 12 compares heavy episodic drinking run charts for the University and the national aggregate from 2002 to 2014. During this time, the University’s heavy episodic drinking rate was consistently greater than the national rate. Both showed an overall decrease between 2002 and 2014. Although the rate of decrease during this time period
was greater for the national aggregate (14.6%) than for the University (10.0%), a visual inspection of the linear trend lines shows a somewhat steeper decline for the University. The absolute difference between the two rates was greatest in 2008 (27.8 percentage points) and least in 2013 (10.2 percentage points). There does not appear to be any fluctuations or trends that the two run charts have in common. It is important to note that the definitions for heavy episodic drinking differ between the University surveys and the NSDUH, specifically related to the time period asked about. The University definition is the consumption five or more drinks in a row in the past two weeks, whereas the NSDUH uses five or more drinks per occasion in the past month.

Mapping

Appendices D, E and F show the relationships between the chronology of the University’s alcohol prevention efforts and fluctuations in the percentage of University undergraduates who consumed five or more drinks in a row in the past two weeks (heavy episodic drinking), experienced primary consequences due to one’s own drinking, and secondary consequences due to others’ drinking, respectively. These relationships are interpreted and discussed in Chapter Five.
CHAPTER FOUR: PROGRAM SUSTAINABILITY FACTORS

AT THE UNIVERSITY

This chapter presents the findings of the qualitative data analysis regarding the presence of facilitating and inhibiting factors and that affect program sustainability. It begins with a description of the categories and themes that were used to analyze the qualitative data. The next section describes the University’s readiness to address its alcohol problem. Finally, the chapter presents the data regarding sustainability, which are organized by the major categories applied during the data analysis. This chapter addresses the fourth research question.

Categories and Themes for Qualitative Analysis

The qualitative analysis revealed the presence of several well-understood sustainability factors operating at the University from 1996 to 2016. As presented in Chapter 2, I analyzed the data using pre-determined categories while also applying an inductive process to specify new codes and categories as they emerged during the analysis. The pre-determined categories are the Program Sustainability Framework’s (PSF) eight domains: 1) organizational capacity, 2) funding stability, 3) strategic planning, 4) program evaluation, 5) environmental support, 6) partnerships, 7) communications, and 8) program adaptation.

The PSF defines program adaptation as: “Taking actions that adapt the program to ensure its ongoing effectiveness.” Because of the case study’s 20-year time span, rather than assessing the University’s ability to modify each of its many alcohol prevention efforts, I instead considered the University’s ability to revise the overall scope of its
comprehensive alcohol program as new challenges arose during the study period. Examples of adaptation are woven throughout the chapter and therefore adaptation is not discussed in a stand-alone section. The University’s ability to adapt to challenges is discussed fully in Chapter Five.

One additional category emerged through the inductive process: leadership. Although leadership is part of the PSF’s definition of organizational capacity, it emerged so strongly as a sustainability factor during the interviews that it warranted being its own category. Numerous new codes materialized during the analysis, which were mainly related to issues that emerged from frequent leadership turnover during the study period. The volume of these codes substantiated the need for leadership as a general category.

**Campus Readiness to Address High-Risk Alcohol Use**

As previously stated, the University’s initial readiness to adopt evidence-informed programs, policies, and other changes designed to reduce high-risk alcohol use and related harms needed to evolve into an on-going commitment to sustainability. Hence, it is important first to understand the University’s level of readiness to address high-risk alcohol use leading up to the study period.

Recall that the University participated in the landmark 1993 College Alcohol Study (CAS), which raised national attention to this problem. University leaders were concerned to learn that their students were engaging in heavy episodic drinking and experiencing adverse primary and secondary consequences at rates much higher than the national aggregate. Acting as an early adopter, the University accepted an offer to participate in the *A Matter of Degree* (AMOD) initiative while several other institutions
chose not to do so.

The University’s level of readiness to address this drinking-related issues at the beginning of the study period was high as evidenced by the following characteristics:

1) **Leadership:** The University’s President and Senior Student Affairs Officer (SSAO) supported taking new steps to address the issue.

2) **Community Climate:** The community’s prevailing attitude toward the issue was one of responsibility and empowerment. Even students voiced appreciation for the University’s attention to the issue, although they were not pleased with the policy changes that were made later, as could be expected.

3) **Community Knowledge:** The 1993 CAS study provided empirical data to define the high-risk drinking problem among undergraduates.

4) **Community Efforts:** The University had a multi-year strategic plan to implement a comprehensive set of programs and policies in place.

5) **Resources:** AMOD provided stable and sufficient funding for at least five years.

This high level of readiness made the University a perfect setting for case study examination. The narrative below documents the University’s evolution over the ensuing 20 years.
Sustainability Factors

Organizational Capacity

As described below, the University had a variety of staffing models for its alcohol prevention efforts during the study period. Figure 13 shows the organization charts for all of these different arrangements.

Figure 13. Staffing Models for Alcohol Prevention at the University, 1996–2016

The University participated in the national *A Matter of Degree* (AMOD) initiative from 1996 to 2005. For the grant, the University benefitted from significant funding support (approximately $1.3M) and access to national alcohol experts and researchers. As an AMOD grantee, the University was required to create a campus-community coalition,
which expanded the University’s capacity to manage its prevention work and influence change. The number of coalition members varied over time, with the greatest participation standing at 95 members in 1999 (38.9% students, 34.7% staff members, and 25.3% community members).

The SSAO was widely regarded as the “the most influential factor” in the success of the University’s alcohol prevention efforts and the main reason why many of those efforts persisted over time. While the SSAO served as director for the AMOD grant, it was the AMOD Program Manager, a full-time, baccalaureate-level professional with experience in alcohol and other drug counseling, who was most directly responsible for coordinating the University’s AMOD efforts. A part-time, master’s-level Program Evaluator analyzed the University’s College Alcohol Study (CAS) survey data, working collaboratively with the AMOD evaluation team selected by the Robert Wood Johnson Foundation. Both the Program Manager and Program Evaluator reported directly to the SSAO, while an assistant and a communications specialist reported to the Program Manager. Several students also worked on the initiative over time. The University’s capacity was further expanded in 2002 when the Counseling Center hired a full-time licensed psychologist as a Clinical Alcohol Counselor to diagnose and treat students for issues related to alcohol and other addictions.

In an effort to institutionalize AMOD, the SSAO obtained permanent funding from the University in 2005 to retain the Program Manager in a new role as Special Projects Director. This position was initially part-time and later expanded to full-time. The Special Projects Director continued to report directly to the SSAO. An administrative assistant and student workers provided support. The SSAO also received a one-time
allocation to retain the Program Evaluator for two years. After AMOD ended, the
campus-community coalition was dissolved, “diminishing [the University’s] ability to
work as closely with the community and continue environmental management work.”

At this time, the Special Projects Director was asked to lead a small group of
colleagues on a benchmarking tour to learn about functional models for alcohol
prevention at other colleges and universities. The benchmarking process showed that the
University’s alcohol program was understaffed and underfunded. In 2007, the SSAO
proposed to “house prevention efforts under one umbrella, framed in terms of health and
wellness vs. alcohol problems, thus lending a positive framework to address prevention
issues.” This proposal requested a “fully staffed operation including a director,
prevention programmers, researchers, and peer educators with adequate resources for
programming efforts.” The Provost denied this request for expanded resources.

Unable to secure resources to fund a fully staffed alcohol prevention program, the
Special Projects Director then established an alcohol working group with a small number
of student affairs colleagues to “develop an integrated approach to address ongoing
alcohol issues, identify needs and opportunities, communicate progress to partners, and
effectively manage resources across the student affairs division.” This group was much
smaller than the AMOD campus-community coalition and was not interdisciplinary, but
was still preferable to having a solo practitioner be responsible for alcohol prevention.
The SSAO did not participate directly in this new working group. For reasons explained
below, the student affairs working group was unsuccessful and eventually disbanded.

In 2008, funding for the part-time Program Evaluator was discontinued and never
re-instated. One interviewee stated that a new collaboration with the Institutional
Research Office helped to overcome the loss of the Program Evaluator.

“The evaluator’s position was discontinued at this time, so we had to find a way to work with that. So we got involved with Institutional Research and [a representative] became part of our informal working team. They were willing and able and certainly helped us collect data. So we were moving along with that internal support.”

In 2011, the Special Projects Director was asked to assume a broader set of student affairs tasks. The SSAO transferred responsibility for alcohol prevention to the Clinical Alcohol Counselor, with the Special Projects Director serving as a close collaborator. The Counseling Center did not give the Clinical Alcohol Counselor extra salary, but added the funds to the Center’s general operating budget. The Clinical Alcohol Counselor implemented AlcoholEdu for College and otherwise worked with student affairs colleagues to educate first-year students about alcohol. The Clinical Alcohol Counselor reported directly to the Counseling Center director, who in turn reported to the SSAO. For the first time during the study period, the professional responsible for alcohol prevention did not report directly to the SSAO. Although not trained for primary prevention work, the Clinical Alcohol Counselor “had an interest in alcohol prevention, and it seemed reasonable to put prevention with the ‘alcohol person.’”

In 2011, the University joined 31 other colleges and universities in Dartmouth College’s National College Health Improvement Program (NCHIP), a Learning Collaborative on High-Risk Drinking. Unlike the AMOD national effort, which provided grant funds to the University, the NCHIP effort required that the University pay $10,000
to Dartmouth College in order to participate. Although the University did not receive monetary benefit from NCHIP participation, it did gain access to national alcohol experts and researchers, plus access to a community of colleagues from the other 30 colleges and universities.

As an NCHIP participant, the University was required to form a multidisciplinary Campus Improvement Team. Once again, this team approach helped to expand the University’s capacity to do prevention work. The Team was initially co-directed by the SSAO and the Clinical Alcohol Counselor. Five additional members rounded out the group: the Special Projects Director, a faculty member, a Communications Office professional, an Institutional Research professional, and a Staff Physician from the University’s Health Center.

“NCHIP wasn't a campus-community coalition; [there were] far less people involved. It was a different animal. But alcohol is front and center again because of our involvement in a national effort. [The SSAO] is back at the helm again. We’re back using the ecological model. We're having a group of people around a table taking a look at what's happening around these issues, strategically working on something to make it happen on our campus. [This model] is what we're really good at.”

The document review revealed that a temporary, part-time master’s-level Health Educator was employed at the University’s Health Center. In 2010, this position was made permanent at a 0.75 FTE level. None of the interviewees mentioned this professional during their interviews, and therefore this individual was not interviewed. The Health Educator did not participate on the Student Affairs alcohol working group or
on the NCHIP Campus Improvement Team.

In 2012, the SSAO hired a part-time master’s-level Assessment Specialist with alcohol prevention experience to work with the Campus Improvement Team. This professional reported directly to the SSAO. The Clinical Alcohol Counselor resigned shortly after the NCHIP Team’s work began, and the SSAO appointed the Assessment Specialist to co-direct the Team. The Assessment Specialist also assumed responsibility for AlcoholEdu for College.

A convergence of events – the University’s participation in NCHIP, the SSAO’s reintegration into alcohol prevention, a renewed focus on the environmental management approach, the departure of the Clinical Alcohol Counselor, and the need for greater attention to other student health issues such as mental health – provided the impetus to try again to create a functional model for prevention that would be well-resourced. The SSAO informally assessed the part-time Health Educator’s work and learned that she was mainly implementing individual-level education only programs that have low reach and low effectiveness. Appreciating the environmental approach, the SSAO knew that this was not a best practice supported by the research literature.

In 2012, the Prevention Office (PO) was created as a new department within the student affairs division “to address a wide range of student health issues and assume primary responsibility for alcohol prevention efforts.” In contrast to his previous effort in 2007 to create a robust hub for prevention, the SSAO reallocated internal resources rather than request additional funds from the Provost. The Health Educator position was eliminated, and the extra compensation given to the Clinical Alcohol Counselor for having assumed additional prevention duties was reallocated. Using these funds, the
University hired a full-time master’s-level prevention specialist with public health experience to serve as the PO Director, reporting directly to the SSAO. A part-time Administrative Assistant provided support. The creation of this new office concretized the SSAO’s recommitment to the environmental management approach. By reinstating a direct reporting relationship, the SSAO intended to “elevate the perceived importance of prevention on campus.”

Part of the PO Director’s charge was to institutionalize the gains achieved during the NCHIP initiative, specifically by diversifying and scaling up those efforts for a new Healthy Campus initiative. Healthy Campus is a “companion document” to the federal government’s Healthy People, which outlines the nation’s health goals and serves as a framework for improving the health status of students on campuses nationwide. The PO Director was expected to engage a wide range of campus constituents and lead them in creating a campus-wide agenda to advance student health in many areas, including alcohol. This model served to significantly increase the University’s capacity for prevention.

“The real sustainability plan for NCHIP was a Healthy Campus initiative...to bring people together, people who could really affect change, to look at the data, identify problems, develop goals, develop a plan, implement it, and evaluate it. We met with the President’s leadership team, the Board of Trustees, and the Provost’s Council, and it was supported unanimously. But the proposal that included funding for some staff, to really operationalize this, well...that has not been approved yet.”

In 2014, the PO Director convened a new interdisciplinary alcohol safety
committee comprised of 15 members. The PO Director was also placed in charge of the alcohol-free events committee that began as part of the NCHIP initiative. Both committees struggled to coalesce, for reasons described below, which became challenging for the PO Director.

In 2016, the SSAO examined the functioning of the new prevention model and found that lack of role clarity was a concern, even among student affairs staff members who were natural partners. The SSAO publicly reconfirmed the PO Director as the individual primarily responsible for overseeing alcohol prevention across the student affairs division. The SSAO also modified the position descriptions of student affairs staff from residence life, Greek life, student activities, and student conduct to include alcohol-related accountabilities. This increased the PO Director’s capacity to manage the program effectively. Further, the SSAO proposed to the Provost and received permanent funding for a full-time master’s-level Coordinator with public health experience to support the PO Director. A graduate assistant and student workers also support the office today. In addition, the PO Director relies on a team of 40 student peer educators to deliver alcohol prevention programs.

"Over this past year, the department grew exponentially by having another person on full-time. We were able to expand our programs. The peer health program is up and running which is now a for-credit class. With Healthy Campus potentially coming down the line, I requested support to create a new position which would be an [assistant director] and for us to hire an administrative assistant. That was approved last
semester, so that's really exciting. So I think we've been pretty fortunate in the short time we've been in business to have grown like we have.”

Leadership

Overall, the University’s appointed leaders during the study period have, in differing degrees, demonstrated their willingness to support alcohol prevention efforts. All interviewees agreed that the most prominent leaders were the Senior Student Affairs Officer (SSAO), a series of University Presidents, and the University Trustees. Only two of the five interviewees named the Special Projects Director and the PO Director as leaders. None of the interviewees named the Health Educator or the Clinical Alcohol Counselor as leaders, nor did they name any individual students, including student leaders (e.g., student government president, Interfraternity Council president), or any student groups as prominent players in these prevention efforts.

All interviewees agreed that SSAO’s leadership was “the most influential factor” in the University’s successful alcohol prevention efforts and the main reason why many of those efforts persisted over time. The SSAO acted as a champion for alcohol prevention, ensuring that it remained a priority issue for the Board of Trustees, University Presidents, and other members of the campus community. Two interviewees remarked that the SSAO’s investment in alcohol prevention was not driven by a student alcohol-related tragedy, which “is often the impetus for leadership to pay attention to the alcohol problem on campus.” The SSAO was referred to as “a pioneer – he was willing to go out ahead of the problem and before other schools.” One interviewee pointed out that the University was the only private university to participate in AMOD – many other colleges
and universities were invited but declined to participate despite the almost $1M that they would have received.

“Even before AMOD, [the SSAO] publicly claimed that this issue is important, that we are going to push on alcohol in a very, very big way... and that [the University] is going to step up and address it. That was a game-changer around here.”

All interviewees who worked at the University during the AMOD years agreed that the SSAO’s direct involvement in prevention efforts was of “vital importance” to the continued functioning of the campus-community coalition and maintaining the commitment of various partners.

“He was actively involved. He was not a figurehead leader. He was at pretty much every [coalition] meeting. He helped create the organizational structure. He even came up with the name for our project! He went and spoke about the data for our matching funding. He went to the Parent's Committee to secure matching funding. His active involvement was a key element of success. It was helpful to have a leader who can keep the group on task and mediate conflicts.”

Community buy-in was critical to the success of the University’s AMOD efforts. The SSAO’s leadership ability to “overcome resistance and inspire a shared vision” was instrumental in garnering that community support.

Interviewees also stated that the SSAO’s message did not waiver despite “the amount of anger that was pointed at [him]” and having had “to put up with so much garbage from alums and undergraduates.”
“[The message was that] this was not an issue that had reared its ugly head overnight, nor would it subside overnight, so we had to take a long-term view of this thing.”

After AMOD ended, the SSAO was recognized by a national public health organization for his “personal commitment” and innovation in college alcohol prevention, specifically having “taken an unusually long-term perspective in looking at how the campus and community cultures regarding alcohol could be changed.”

Following AMOD, the SSAO needed to shift his attention to new issues that emerged such as “creating a positive campus climate for women, underrepresented students, and low-income students” and “thinking about how to help students take advantage of life outside the classroom, in terms of promoting learning opportunities.”

Also, a new President arrived, whose on-boarding required significant time. As a result, the SSAO handed over responsibility for supervising alcohol efforts to the Special Projects Director. The Special Projects Director then convened an alcohol working group comprised of key student affairs members. “[The SSAO] was always committed and accessible” to the group, but did not attend meetings and was not a regular presence.

As previously discussed, the student affairs alcohol working group was unsuccessful and eventually disbanded. One interviewee stated that the Special Projects Director “could not sustain the same level of enthusiasm and engagement” among working group members, in part, because “the SSAO was seen as the leader for alcohol.” One interviewee suggested that a lack of accountability also contributed to the group’s ineffectiveness.
“This was an internal effort. If the driver was external, the accountability would have been different. And also, [the SSAO] probably would have been involved, which is another accountability issue.”

When the University joined the National College Health Improvement Project (NCHIP) in 2011, the SSAO reengaged to serve as the director of the Campus Improvement Team. Once again, the SSAO was directly involved, regularly attending bi-weekly meetings and frequently providing updates on NCHIP progress to his superiors. The SSAO regularly attended national NCHIP retreats and presented information on University efforts to the cohort of participating colleges and universities.

In an effort to institutionalize NCHIP and the environmental approach to alcohol prevention, the SSAO created the Prevention Office and hired a Director to serve as the lead person for prevention within student affairs. The PO Director was also charged with a greater leadership role as the campus alcohol expert while also being responsible for leading a wide range of campus constituents to create a campus-wide agenda for student health, including alcohol.

The PO Director met resistance and found it difficult to motivate his colleagues to adopt and act on a broader public health model for prevention.

“There was either a misunderstanding or [the SSAO] didn’t do a good enough job of communicating the idea of a public health model and that [the director] is really hired to be the orchestra leader. He’s not playing all the instruments. It’s a virtual coalition if you will, and he’s directing the work based on his expertise of the public health model.”

Unable to fully engage partners in this new model, the PO Director turned to an older,
“more tried and true” model and convened a smaller interdisciplinary working group to focus narrowly on alcohol and safety. The SSAO did not participate directly in this group. The PO explained the resistance he faced when trying to lead the group:

“There are certain individuals who need to be coming to the meeting, who should be coming to the meeting, whose input is highly valued and needed, whose programming decisions would be based upon the findings of this and vice versa. And so in that way, I would say I feel like it’s not successful because I have not secured the buy-in of those individuals through their participation at the meetings. If the [SSAO] said ‘This is important and we’ll be attending this meeting,’ I think that kind of high-level directive would be effective.”

Discovering that a lack of role clarity was interfering with the PO Director’s effectiveness, the SSAO publicly endorsed the Director’s role as the primary person responsible for guiding and overseeing alcohol prevention efforts within the student affairs division. The PO Director stated that this clarification helped him lead more effectively:

“It's been a struggle to build credibility [with] individuals across the division, let alone the University, to know that the office even exists. And with alcohol, it was never really clear what I was supposed to be doing and not doing. It's become more and more clear, and that has helped to navigate the alcohol arena in the [student affairs] division.”

Over the 20 years of this study, the University had four Presidents, plus two years of interim presidents, with varying levels of interest in alcohol prevention. The four
Presidents’ tenures were as follows: 1) 1996–1997 President #1, 2) 1998–2006 President #2, 3) 2006–2014 President #3, and 4) 2015–2016 President #4. Two interim Presidents served during the 1997–1998 and 2014–2015 academic years.

President #1’s (1996–1997) level of investment was described as “all in.” The SSAO spoke of this President’s understanding of the problem and his willingness to assume the risk of undertaking a high-profile prevention effort led by outside experts.

“Once invited by AMOD leaders to join, conversations took place on campus. One in particular that I think was instrumental was a discussion that I had with [President #1] in which we discussed some trepidation about participating in the A Matter of Degree program by some high-ranking Trustees and other officials. The concern they had was that it would shine a light on [the University’s] drinking problems. We agreed the headline story was not that [the University] has a drinking problem, but that [the University] is willing to step up and address it. We subsequently agreed to participate and that began the process of a systematic, comprehensive look at reducing the extent of high-risk drinking, but also the attendant consequences of that behavior. Many other schools declined to participate.”

After President #1 left the University, the “relationship with the Presidents was rocky – there wasn’t a lot of support for Student Affairs programs overall.” After President #1 left, “there was no deep abiding investment from any of the [other Presidents.” President #2 (1998–2006) arrived during the University’s early planning phase for AMOD.
President #2’s level of investment was characterized as follows: “He would say, ‘Good job, keep going’ but that’s it.”

President #3’s (2006–2014) level of investment was described as “lip service” or “cosmetic support.” In 2011, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) formed the College Presidents Working Group to follow up on to its historic publication *A Call to Action: Changing the Culture of Drinking at U.S. Colleges*. The Presidents Working Group addressed harmful student drinking by advising the NIAAA on the types of information that high-level college and university administrators need and how they want to receive it (74). President #3 was invited and agreed to participate in the Working Group’s first cohort of presidents, though two interviewees agreed that she was not an active participant in this group.

Also in 2011, President #3 accepted the Dartmouth College President’s invitation for the University to join NCHIP. Other than receiving periodic updates from the University’s Campus Improvement Team, President #3 was not involved in NCHIP. One interviewee stated that President #3 saw these efforts as “low-hanging fruit that she could agree to, and then not have to do anything.” When NCHIP ended, the Campus Improvement Team presented to the President a proposed sustainability plan so that NCHIP efforts would not be in vain.

“*[The efforts] were effective. We can scale them up and build upon this even further with the Healthy Campus initiative. We can look at a whole dashboard of priority health issues and not just alcohol. We can blow up the committee for it to [have] more campus-wide constituents. She agreed that we could return to her in six months with a full proposal.*”
Shortly thereafter President #3 resigned. None of the interviewees shared any opinions about President #4’s (2015–2016) level of investment.

The University’s Board of Trustees was also cited as having a leadership role during the study period. With respect to alcohol prevention, one interviewee characterized them over the years as “aware but not super involved.”

_The Student Affairs Committee [of the Trustees] spoke about alcohol issues regularly and they were supportive of making changes. But it was more of an administrative responsibility. It was not a Trustee-level responsibility. They have the responsibility for an institution; they were expecting the President and the student affairs people and the folks on campus to address this issue and so they were not actively engaged so - maybe appropriately - delegated this responsibility to the folks who were nearest to the circumstance. They were dealing with much bigger issues of campaigns, and building projects, and hiring presidents, and those kinds of things that Trustees do. So until it reached a point of significant concern, we weren't going to get their attention that way. And in no way is that malice or neglect on their part. It's wasn't on their radar screen as compared to the other issues they were dealing with._

In the late 1990’s, there were several safety-related incidents that involved the University’s Greek system. These events prompted the SSAO to write a white paper about the future of the Greek life on campus. Although “student behavior was not necessarily considered a trustee-level issue,” the SSAO was able to communicate that safety within the Greek system had “risen to the level of a major institutional issue.”
2002, the Trustees chose to invest in reforming and strengthening the University’s Greek system. Although the focus was not on alcohol, all interviewees still agreed that this effort was of great importance in changing the campus alcohol culture during the mid-2000’s.

One interviewee stated that this effort intentionally did not focus on alcohol because the Trustees were “concerned about impact – the consequence, the repercussions.”

“They wanted to talk about everything: hazing, the houses, but the minute the conversation turned to, ‘What are we going to do about managing alcohol in the houses?’ the conversation stopped.”

A final report included recommendations about Greek housing needs, financial responsibilities, academic support, risk management education, member development programming, community-wide recruitment practices, and University-provided professional advisement and oversight, but did not include a recommendation for “a deep dive into understanding the alcohol culture within the Greek community.” One interviewee stated that because the Greek system and alcohol issues are inextricably linked, “the Trustees missed an opportunity to further address alcohol among the Greeks.”

**Funding Stability**

All interviewees agreed that, behind the SSAO’s leadership, funding availability was the second most influential factor in the success of the University’s alcohol
prevention efforts and the maintenance of those efforts over time. In general, interviewees spoke of funding in terms of *availability* and not *sufficiency*.

From 1996 to 2005, funding for alcohol prevention was provided by the Robert Wood Johnson Foundation ($1.3M), plus matching funds from internal fundraising ($765,000) and the University budget ($200,000). The University received the majority of matching funds from the Parents’ Committee. Combining all sources, this represented an average annual budget of approximately $250,000 from 1996 to 2005. The University also received additional financial support from a local hospital trust fund and mini-grants from the State liquor control agency.

After the AMOD grant expired in 2005, which provided the University with $1.3M from 1996 to 2005, the Provost asked the SSAO “to maintain the minimal elements of the program while identifying steps needed in order to adequately address the problem of high risk drinking.” The Provost committed $150,000 for alcohol prevention in academic year 2005–2006, the year when the Special Projects Director led a small group of colleagues on a benchmarking tour to learn about functional models for alcohol prevention at other colleges and universities. The majority of this funding was earmarked as salary support for the Special Projects Director, although the position was decreased to part-time. One-time allocations supported the part-time Program Evaluator and a meager operating budget. Support staff was eliminated. In academic year 2006–2007, the Provost reduced the overall funding for alcohol prevention to $125,000 by reducing the Program Evaluator’s time.

“The permanent money was for [the Special Projects Director] position, which we've sustained [until] this day, which is good. The support for
program efforts was one-time, so we had to keep going back year to year to get that. And the first couple years, we got that. Then it began to diminish.”

“It was an uphill battle. It was a minor miracle that we got what we did. It guess it was support, but it was a qualified support because it was for one year at a time”

As noted previously, the benchmarking process confirmed that the University’s alcohol prevention program was under-funded and under-staffed. In 2007, the SSAO proposed that the University “house prevention efforts under one umbrella, positioned in terms of “health and wellness” as opposed to “alcohol problems,” thus providing a positive frame for addressing prevention issues.” The SSAO requested $300,000 for a “fully staffed operation including a director, prevention programmers, researchers, and peer educators with adequate resources for programming efforts.” The Provost denied the request. The money for the Special Projects Director continues today, but the budget for the Program Evaluator and general operating expenses was eliminated.

After 2008, the Special Projects Director appealed to the SSAO as needed to fund annual alcohol prevention efforts, including AlcoholEdu for College, the College Alcohol Study (CAS) survey, and smaller ad hoc efforts. The SSAO drew from the overall Student Affairs budget to fund these efforts.

In 2012, Provost approved a one-time allocation ($200,000) for the alcohol-free, late-night events program launched under the National College Health Improvement Project (NCHIP). The SSAO submitted budget requests annually thereafter and continued to receive year-to-year allocations for this program of $150,000 per year. This funding
level continues today, though the SSAO’s requests for the program to be permanently funded have been denied.

In 2012, the SSAO reallocated funds from the eliminated Health Educator position to support the newly created Prevention Office (PO) Director position at 75% time. This position was increased to 100% time in 2014, with the cost of the upgrade initially funded by a one-time salary savings within Student Affairs and later through a permanent allocation from the Provost. Today, the Prevention Office has permanent funding for a full-time Coordinator and just under $10,000 for programmatic and operating expenses. Each year the Director needs to request funding for a graduate assistant, printing the alcohol education posters placed in bathroom stalls, and other ad hoc programmatic expenses. The SSAO continues to fund annual administration of AlcoholEdu for College and the ACHA-NCHA II survey from the overall Student Affairs budget.

When discussing the time period after NCHIP, most interviewees raised concerns about the insufficiency of the available funding and the lack of permanent allocations for programmatic efforts and graduate assistantships. The interviewees did not raise these concerns about any other time period.

**Strategic Planning**

One of the main requirements of A Matter of Degree (AMOD) participation was to develop an action plan (75). The University hired an external consultant to put together a plan “that had every single thing that you could possibly do regarding alcohol in it.” The University’s goals were broad and mirrored those of the overall AMOD project: to
reduce the rate of high-risk drinking, reduce the consequences of high-risk drinking for students and others, improve the quality of academic and social life, and enhance the relationship between the University and the community (75). The University had an extensive AMOD work plan that included strategies, targets, and actions. The only behavioral objective was that “by September 1, 2001, the student-reported binge drinking rate – as measured by Harvard SPH [School of Public Health] methodology, will be reduced from 68% to 49%.” All other outcomes were process-oriented.

After AMOD ended in 2005, the University was without a strategic plan until 2007 when the Student Affairs alcohol working group created a new plan “for guiding and tracking alcohol prevention efforts.” This plan was process-oriented, outlining a list of existing efforts within the Student Affairs division and recommendations for new strategies. This plan did not include measurable goals.

As an NCHIP participant, the University was expected to: 1) set a population-specific, time-bound, and measurable Team aim; and 2) collect quantitative measures to evaluate whether the interventions lead to improvements (76). Using 2010 as a baseline year to measure change, the University’s aim was “to reduce the percentage of first-year University students who engage in high-risk drinking and their subsequent personal consequences and secondary harms by 15% in 2015 and 20% in 2020.” The University chose to focus its prevention efforts on first-year students only “because they are the most vulnerable population and represent our best chance at achieving lasting positive changes in the campus alcohol climate.”

The Assessment Specialist developed logic models to show the linkages between NCHP intervention activities (i.e., late-night alcohol-free events, hard alcohol policy
changes); performance, learning, and environmental change objectives; and the long-term outcomes specified in the Team aim. All performance, learning, and environmental change objectives were specific, measurable, and time-bound.

“This model, where you're getting people around the table, you're setting aims, you're setting goals, you're figuring out how you're going to do it, and to be part of a larger group of people who are doing this together is very helpful.”

Beyond that, the University did not have a strategic plan for its broader alcohol prevention effort during the NCHIP years. NCHIP strategic planning was limited to the initiatives that were directly tied to the Team’s aim.

One of the Prevention Office (PO) Director’s key responsibilities is to “set a campus-wide agenda to advance the health of University students [and] create and implement a high-level strategic plan with measurable goals and quantitative targets.” This campus-wide agenda was intended to be the product of the Healthy Campus initiative, which is currently unfunded and has not yet begun. Instead, since his arrival in 2012, the Director has created annual strategic plans for the PO itself, which are organized according to the Student Affairs division’s overarching goals. In many, but not all instances the plans have included measurable objectives.

The PO Director spoke about the need for strategic planning for the alcohol safety working group created in 2014 and for selecting interventions based on pre-determined goals.

“I’ve been trying to set long-term goals. So even if it's just 2020 goals for harms reduction for first-year students - actually thinking about what
those goals are, and to think about how a program fits in. Because if it doesn't match any of the goals that this group has set for the next five years, why are we doing it? They weren't even thinking that way. It was not written down anywhere. It was not clear how they were going to measure change. It was more about student satisfaction.”

Program Evaluation

The University’s participation in national alcohol prevention efforts was “probably the main reason why we did as much evaluation as we did.” As an AMOD grantee, the University was required to participate in the overall AMOD evaluation led by researchers at the Harvard School of Public Health (HSPH). The University hired a Program Evaluator to collect local data, carry out the directives of the HSPH team, and provide statistical and methodological assistance to the project.

After AMOD ended, the Program Evaluator position was maintained for two years and then eliminated and never reinstated. At this time, an Institutional Research colleague joined the student affairs working group. There is no evidence from the review to suggest that the University was conducting program evaluation from 2005 to 2012, other than monitoring annual CAS survey data.

As an NCHIP participant, the University was required to: 1) establish and collect quantitative measures to evaluate whether the interventions lead to improvements; and 2) use the Plan-Do-Study-Act (PDSA) process for quality improvement (76) (77). The Assessment Specialist convened a small group of five staff and students to design an extensive evaluation plan to measure the performance, learning, and environmental
change objectives outlined in the logic models for the NCHIP key interventions, late-night alcohol-free events and hard alcohol policy changes.

“There is a tendency to quickly jump to data collection methods from the outset – ‘let’s create a survey, or let’s create a feedback form’ – but instead we used a step-wise process to inform our plan which measures both process and outcome.”

The University’s participation in NCHIP did stimulate a greater focus on outcome evaluation.

“[NCHIP] definitely got us doing more evaluation than we ever had before. We thought we were doing evaluation but we were really just tracking CAS [data]. This really got us thinking about whether or not things actually work.”

The PO Director brought a public health approach and evaluation experience to the University. Each of the PO’s annual strategic plans listed the indicators and data collection methods to be used to evaluate each prevention effort. The PO Director has created more detailed and extensive evaluation plans for specific initiatives, including peer educator training and the late-night alcohol-free event program.

“His ability to think very strategically is a big thing here. And also he is grounding everything he does in data. Everything has to be quantifiable.”

Environmental Support

There were champions at the University, particularly the SSAO, who strongly supported the University’s prevention efforts and has been able to garner resources. On
the other hand, cultivating student and community support was at times “a demanding and frustrating experience.”

Student support for the University’s alcohol efforts was characterized as “generally resistant with small pockets of tolerant.” Interviewees spoke about the “strong, old culture of drinking ingrained in the University’s history and the firm desire among students to maintain the status quo.”

“Resistance clearly was coming from alumni and fraternities and students in general who perceived that what we were doing was trying to eliminate drinking from the campus, trying to eradicate traditions that they held dear. They're trying to take our rights away. They're trying to take this. They're trying to take that.”

Interviewees spoke of the lack of support from the influential Greek community, including alumni. This community was generally unsupportive of the University’s alcohol policy changes, which “disproportionally affected Greeks.”

“Given the extent of the influence of Greek life on our campus...the number of trustees who were Greek, the number of other alums who were Greek, if they had a Greek experience...they thought we were trying to totally ruin student life on campus. It was an assault on Greek life. I remember I went to a Greek alumni meeting and the guys in the front row were staring at me like - I was getting scared - they were so angry. This is based on these policy changes that went into place, like we were a bunch of draconian ogres imposing our will on these poor students.”
Interviewees stated that there is a great deal “of overlap between athletes and Greeks” at the University, which was leveraged to increase student support.

“The SSAO knew that [he] could not make sweeping improvements by addressing the situation head-on. He started looking for allies and worked with the athletes, focusing on peak performance to reduce high risk alcohol use. The idea was that the athletes would be amenable to harm reduction approach…and they would be a way to begin to permeate the Greek system.”

“We had a meeting with the coaches and team captains. We felt [that athletes] would be a receptive audience to model some behavior that would align with what our goals were, but also support their outcomes. So it was one of those win-win situations. And an event that took place [in 1998] in which over 300 athletes gathered outside on a Friday night for before a football game and had a great party dancing. It brought the athletic groups together and put a positive spin on [our alcohol efforts].”

Interviewees agreed that a general sense of student resistance persisted during the study period, particularly related to alcohol policy changes, but it “eased up a bit” after the University made an effort to strengthen the Greek system and change the Student Code of Conduct to reflected an overall shift in the language from “punitive” to “expectations for students around alcohol.” Students have also been “overwhelmingly supportive” of the University’s reconceived effort to expand social opportunities for students through the late-night alcohol-free events program.
As an AMOD grantee, the University was required to create a campus-community coalition (75), which necessitated significant support from the local community. Interviewees agreed that it took some time to overcome a “long-standing history of tension and mistrust between the campus and community.” Community members wanted “to enjoy a high quality of life and feel safe in their homes and neighborhoods,” but questioned the University’s ability and commitment to address an alcohol problem that had existed for many years.

“Our community people didn't know what we [had been] doing. They assumed we were doing it wrong, or not doing anything.”

Interviewees agreed that AMOD was “an invaluable opportunity” to increase community support.

“The development of a task force inviting folks from the community to participate, partner with the university, was really critical…Its effectiveness was up and down, but the fact that we were able to coalesce and move around this issue sent a huge message to the community, both at the political level - mayor and community folks - as well as our neighbors in the areas where students live, if you will, finally willing to take this on in a serious way. And so their participation was as much symbolic as it was contributing to the ultimate outcomes.”

Support from the community “waned” over the years, especially after student parties migrated from [the University’s] on-campus [fraternity] houses to the surrounding neighborhoods in response to University alcohol policy changes. The improved community policing program in 2010 helped to ease these tensions.
Interviewees stated that parents were supportive of the University’s alcohol efforts. As one interviewee put it, parents were “enthusiastic about the program and eager for [the University] to address their concerns regarding high-risk drinking.” As noted previously, the Parents Committee was an early supporter of the University’s AMOD initiative and provided matching funds throughout the course of the grant.

Only one interviewee spoke about faculty support for the University’s alcohol efforts. This support was limited to the two faculty members who participated on the University’s NCHIP Campus Improvement Team and one faculty member who has helped the Prevention Office director to champion the proposed Healthy Campus initiative. As a part of NCHIP, professors were encouraged to take attendance in Friday morning classes to reduce the severity and pervasiveness of Thursday night drinking, but faculty support was lacking.

**Partnerships**

Interviewees stated that several key partnerships – involving students, faculty, the University’s Presidents and Trustees, alumni, parents, community members, external alcohol experts, and other institutions of higher education – were essential to the success of the University’s alcohol prevention efforts. Among the University’s administrative offices, Institutional Research and Athletics were cited as essential partners, along with Residence Life, Greek life, Student Activities, and Student Conduct. The nature and strength of these relationships have already been described in this chapter.

The University strove to engage a wide variety partners in developing its alcohol prevention efforts. Work was “rarely done in isolation” by any one professional or
office. The University led some type of coalition, task force, or working group during 18 of the 20 years examined in this case study. One interviewee described the value of using these strategies to cultivate diverse partnerships that “might not have otherwise existed.”

“I do think having, although it was extremely hard and challenging work, having multiple key stakeholders really actively involved was probably a big deal. And also to do this through a campus-community coalition that included students, where we easily could have done most of it on our own, I did see the benefit of involving others.”

Interviewees stated that it was often challenging to get partners on board.

“There was clearly an interest in being involved but, as is typical, each constituent brought their own agenda to the table and their own experience and bias to it. The ideas that came from the community partners ranged...from interesting and perhaps effective to almost absurd. So managing those different perspectives, over time we lost some people because they realized that their agenda was not going to dictate our agenda, so that partnerships were sometimes sporadic and challenging.”

Interviewees cited the fact that students served on the AMOD coalition and the committee to strengthen the Greek system. They were not included on the alcohol working groups were formed after AMOD, but did participate in various program-specific planning committees, such the one for late-night alcohol-free events. Other examples of student partnerships are described elsewhere in this chapter.

Athletics was a key partner, in large part because of the “power and influence” of the Athletics Director, a University alumnus who has worked at the University for over
two decades. The SSAO’s pitch to Athletics focused on “peak performance and the impact of alcohol abuse with regard to [athletes’] primary goal, which was to win games.” Numerous prevention efforts were targeted at athletes during the study period: 1) The Core Alcohol and Other Drug Survey was administered to athletes and athlete-specific data were used to inform a series of prevention workshops. 2) Coaches were encouraged “to develop team covenants” around health and safety, including alcohol. 3) In 2008, the University formalized an athletics leadership development program in conjunction with Student Affairs. Although not directly focused on alcohol prevention, this effort was another demonstration of the emerging strengths-based ethos within Student Affairs. The Athletics Director served on the AMOD campus-community coalition, the committee to strengthen the Greek system, and an early committee to reinvigorate the University’s late-night alcohol-free events program, for which the Athletics Director contributed some funding.

Institutional Research was a key partnership that developed after AMOD. When the Program Evaluator position was eliminated in 2008, an Institutional Research professional joined the alcohol working group. When the University agreed to participate in NCHIP, “[NCHIP researchers] encouraged us to include someone who knew the data on the Campus Improvement Team].” NCHIP cemented the partnership between Institutional Research and the Prevention Office, which led to expanded surveying and the ability to “connect alcohol use data with other student success outcomes that they were already collecting” such as the National Survey of Student Engagement.

Faculty partnerships were mentioned only very specifically – two faculty members who participated on the University’s NCHIP Campus Improvement Team and
“one faculty member in particular who does a lot of health research and has become the strongest faculty advocate for Healthy Campus.”

Parents were also heavily involved. The SSAO appealed to parents’ “apprehension about their children’s new levels of independence” and “desire for a healthy and safe college experience.” Parents’ contributions included providing matching funds for AMOD efforts, completing AlcoholEdu for Parents, and supporting parental notification policies.

Community partnerships were stronger during the AMOD period and have since “waned.” Since AMOD ended, the University has not included community members on any task forces or working groups. Tensions and feelings of mistrust among community members resurfaced as student parties moved off-campus. The 2010 community policing partnership between the University and the local police was cited as an important recent effort to develop “a trusting relationship between officers, residents, and students.”

As previously described, the University has participated in very major national initiatives implemented over the past two decades, each of which tested innovative approaches to reduce the prevalence and consequences of high-risk alcohol use by undergraduates – AMOD, NCHIP, NIAAA Presidents Working Group, and a national coalition of colleges and universities using AlcoholEdu for College. Partnerships with national alcohol experts and researchers “opened our eyes to some of the possibilities” and kept the University “on the cutting edge of what was going on at the time.” Participating in collaborative learning environments with other colleges and universities led to “relationships where we could just pick up the phone” for conversations with “like-minded people who were also trying to solve this problem.”
“So there was some wisdom, I think...being in a coalition with other universities, being in the boat for something like this with other people.”

Communications

Overall, the University has strategically communicated with stakeholders about alcohol prevention efforts. University efforts to communicate with stakeholders were strategic and plentiful during the first AMOD grant. There was also a great deal of effort made to educate the community about environmental-level prevention. Interviewees stated that it was “challenging to get partners on board” with this approach.

“People still believed – many still do – that we just need more education. We just need to tell students what they're doing wrong. We just need to tell them the danger and then they'll change their behavior, which, of course, we know does not work.”

The University marketed individual programs via existing communication channels (e.g., student event websites, listservs) to generate interest. After AMOD, intentional messaging about alcohol prevention efforts decreased until 2007 when the SSAO hired a professional from the Communications Office to promote Student Affairs initiatives, including alcohol prevention, in the University media. The SSAO recognized that alcohol prevention “is not just a once and done thing” and that “on-going communication and updates” would be helpful.

“We need to educate, and re-educate, again, more than once, so that people are in the loop and they get the relevancy of what we're doing to their work. Because that was the challenge with all of this...unless were in it, you didn't really quite get it.”
Communication efforts regarding policy changes were not well-sustained after their initial year of implementation. Descriptions of the policies were included in the Student Code of Conduct, listed in AlcoholEdu for College, and shared during new student orientation. There is no evidence to indicate that the University widely promoted policy enforcement efforts to the community.

Once the PO Director was hired in 2012, he has routinely created communication plans as part of his program development process. These plans include social media as a key health promotion communication strategy. The PO Director also used student peer educators to communicate updates and health-related information to students.
CHAPTER FIVE: RESULTS

This chapter summarizes the case study’s major findings with respect to the four central research questions. It begins with a brief review of the study. Next, it describes the results, organized by the four research questions. Finally, the chapter concludes with a review of the study’s limitations.

Study Overview

This dissertation used a case study approach to develop a chronology of the alcohol prevention efforts implemented at a small, private, urban research university in the Northeast between 1996 and 2016, and a rich, thick description of the historical alcohol-related events and contextual conditions during that time. Five University administrators who had knowledge of the prevention efforts implemented during the study period participated in intensive interviews. Information from these interviews was complemented by an extensive review of internal and publicly available documents and reports, newspapers and other publications, and online media content from University and local community sources. Existing annual survey data collected between 1997 and 2016 were also examined to assess the relationship over time between implementation of key prevention efforts and student alcohol use and its negative consequences. Four central research questions guided this study:

1) What prevention efforts to reduce undergraduates’ high-risk alcohol use were implemented at the University between 1996 and 2016?

2) To what degree were these prevention efforts evidence-based and designed to address high-risk alcohol use at all levels of the SEM?
3) What is the relationship between the implementation of these prevention efforts and fluctuations in student alcohol use and its negative consequences?

4) Which factors contributed to the University’s capacity for sustainability?

The case study’s findings are discussed below, organized by the four central research questions. The first research question is addressed in Chapter Three, with the University’s alcohol prevention efforts listed and described in chronological order. Therefore, this chapter continues with the findings for the second research question.

**Question 2**

**To what degree were prevention efforts evidence-based and designed to address high-risk alcohol use at all levels of the SEM?**

This study showed that the University implemented numerous efforts to reduce undergraduates’ high-risk alcohol use between 1996 and 2016. Taken as a whole, the efforts do address all levels of the SEM, but they were not comprehensive or synergistic at all times during the study period. Overall, the University initiated more institutional and community level-efforts before and during the first AMOD grant (1997–2001) compared to the other time periods, whereas it initiated more intrapersonal and interpersonal-level efforts after AMOD. This suggests strongly that a commitment to building upon and amplifying the environmental approach was not sustained at the University.

There are five possible explanations for this discontinuity. First, the University no longer had a commitment to an overarching prevention philosophy which had provided a strategic focus for all efforts. AMOD provided a clear philosophy – the
environmental framework – that drove the University to implement an integrated and comprehensive set of prevention efforts. After AMOD, however some efforts were discontinued and new efforts seemed scattershot and disjointed. Efforts that do not match up with an overarching philosophy and are not part of an integrated approach can be more easily discontinued one by one, and may also dilute the effect of stronger prevention interventions. And, in fact, many of the University’s programs were discontinued because it was not clear that they were an essential part of a master plan.

Second, the University did not develop long-term plans for sustainability before the grant ended, and as a result there was a two-year lapse in the basic structure necessary for high-level alcohol prevention work. The effort lost momentum, and the resources and partnerships needed to support it dissipated over time.

Third, the Special Projects Director was self-admittedly “burnt-out” and may not have had the will or resources to champion alcohol prevention efforts on her own. Furthermore, she may not have built up enough political capital to maintain stakeholder engagement and persuade others about the need for additional environmental change efforts without the SSAO’s direct involvement.

Fourth, the University may have developed a dependence on external forces to drive its prevention efforts, and may have had insufficient intrinsic motivation to continue without the structure, guidance, and financial resources provided by the grant. This hypothesis is supported by the fact that staff energy and engagement for alcohol prevention seemed to reignite when the University participated in NCHIP.

Fifth, the presidential transition between years 2005 and 2006 appears to have diverted attention away from alcohol prevention. Also, there were other historical events,
namely, the emergence of diversity-related issues that may have drawn attention away from alcohol prevention at the very time when the AMOD grant had ended.

In addition to the potential factors noted above, the University implemented relatively few evidence-based efforts during the study period, as per the NIAAA’s criteria for “high effectiveness.” This requires explanation. The University implemented several environmental-level efforts, consistent with the public health model’s emphasis on environmental change. Accordingly, both the ACHA Standards of Practice for Health Promotion in Higher Education (30) and the Council for the Advancement of Standards in Higher Education (CAS), Standards for Health Promotion Services (31) support the need to create supportive environments for health, and call for institutions to focus primarily on population-level initiatives. Yet, environmental-level efforts do not necessarily have evidence of effectiveness to support them. The NIAAA indicates that the majority of environmental-level efforts listed in the registry have “too few robust studies to rate effectiveness – or mixed results.” The impacts of environmental-level efforts are more difficult to measure because randomized control trials need to use universities as the unit of allocation, which makes them extremely expensive, as opposed to individual strategies for which the unit of allocation is individual students. Given the limited number of environmental-level efforts recognized by the NIAAA CollegeAIM registry, strictly doing what is evidence-based would be self-limiting, especially when in pursuit of a comprehensive approach to alcohol prevention at all levels of the SEM. Secondarily, focusing solely on prevention interventions that are already proven does not serve to widen the repertoire of effective practice available to campuses and their surrounding communities.
Question 3

What is the relationship between the implementation of alcohol prevention efforts and fluctuations in student alcohol use and its negative consequences?

This study showed that over the past 20 years the University significantly reduced its rates of high-risk alcohol use, primary consequences due to one’s own drinking, and secondary consequences due to others’ drinking. However, this linear downward trend does not offer a complete picture. A visual inspection of the run charts suggests that the University had difficulty sustaining positive gains over time. In particular, frequent fluctuations in the data – sharp decreases, immediately followed by rapid “bounce back” increases – meant that any large positive gains that occurred were short-lived.

These fluctuations raise doubts that the University’s alcohol prevention efforts were primarily responsible for the downward linear trend. Solid and actively sustained alcohol efforts would not result in such dramatic fluctuations.

This suggests that the underlying downward trend may have been due to other factors. One plausible explanation is that the decrease in high-risk drinking and its negative consequences were due to changes in the alcohol-risk profiles of the students themselves. Data from the Monitoring the Future Study support this explanation. Nationally, the percentage of 12th grade students who consumed any alcohol in the past 30 days decreased by 29.5% (from 50.1% in 1991 to 35.3% in 2015); the percentage who have been drunk in the past 30 days decreased by 33.1% (30.8% in 1991 to 20.6% in 2015) (78). The University is likely to have reaped the benefits of this national trend, which would have affected the risk profile of its incoming first-year students.
Although not intentionally focused on reducing alcohol use, the University undertook additional initiatives that may have contributed to the downward trend in high-risk drinking that emerged despair the large fluctuations caused by its inconsistent focus on alcohol prevention. “A tremendous ethos change” took place within Student Affairs, beginning with the 2004 effort to strengthen the University’s Greek system using an assets-based approach. This led to the 2006 rewrite of the Student Code of Conduct that changed the language and tone from being “punitive” to focusing on students taking “responsibility for self and others.” Also around this time, the University began targeted programming around the first six weeks of school for first-year students in an effort to mitigate the “college effect” through assets-development. In 2013, the University implemented a strengths-based developmental curriculum for undergraduates that begins during orientation and continues up to graduation. This initiative, in particular, has grown significantly since its inception and is now well-integrated into all elements of campus life (e.g., Residential Life, Greek life, First-Year Experience, Summer Programs, Student Activities). The assets-based approach has become “the hallmark of the Student Affairs division.”

Developmental assets are the positive attributes, experiences, and attitudes that have been deemed essential for successful psychosocial development (79). The literature on developmental assets indicates that youth who possess more assets are more likely to engage in thriving behaviors and less likely to engage in high-risk behaviors, including alcohol use (79). Research has also suggested that building developmentally appropriate environments which embrace the unique strengths of emerging adults will allow them to maximize the assets that they possess. The literature suggests that the University’s
community-focused and assets-based efforts, though not expressly implemented for this purpose may have contributed to the underlying downward trend in high-risk drinking.

**Question 4**

*Which factors contributed to the University’s capacity for sustainability?*

This study showed the presence of both facilitating and inhibiting factors that can affect sustainability. The Program Sustainability Assessment Tool (PSAT) (40) was used as a guide to identify any known facilitating factors that were not present but, if implemented, could still expand the University’s capacity for sustainability.

This section is organized according to the eight PSF domains: 1) environmental support, 2) funding stability, 3) partnerships, 4) organizational capacity, 5) program evaluation, 6) program adaptation, 7) communications, and 8) strategic planning, as well as a study-specific additional domain – leadership. As stated in Chapter Four, leadership emerged as such a strong sustainability factor during the qualitative data analysis that it warranted being elevated to its own category.

*Environmental Support*

University-internal and external support for the alcohol program fluctuated during the study period. As program and policy changes were implemented, students voiced resentment and became frequently disgruntled with policy changes and other efforts that they perceived to diminish the traditions and social life of the University. The lack of support from Greek-letter social organizations was particularly influential on the overall student climate and support for the program. The prevailing attitude of the local
community was frustration, particularly due to the impact of off-campus student drinking on their quality of life.

Efforts to educate both students and local community members about the problem, and to engage them in addressing the issue, helped to foster a supportive climate. However, education and engagement efforts were inconsistent during the study period, and were mainly implemented as part of a major initiative, such as the AMOD campus-community coalition. This coalition was disbanded and not replaced when the grant ended. When alcohol-related problems resurfaced in the community years later, trust that had been built as a result of the coalition had eroded and support from the local community was low. The gains from participating in AMOD were not sustained.

The University’s capacity for sustainability could be expanded by developing and maintaining regular and permanent channels to create a supportive internal and external climate for the program. The University should educate students and local community members about the causes of high-risk alcohol use, its consequences, and how it impacts the community on an on-going basis. The University should also provide updates about its alcohol prevention efforts, highlight good work, and communicate positive gains from its prevention efforts. This level of transparency would reassure students and community members that the institution is actively addressing the issue, highlight the outcome of community involvement, and invite their support.

**Funding Stability**

During the first nine years of the study, the AMOD grant provided consistent and sufficient funding for alcohol prevention personnel and programs. After the grant
expired, the financial base for the University’s alcohol program was neither consistent nor sufficient. The Special Projects Director and Prevention Office (PO) Director were permanently funded in 2005 and 2012, respectively. All other post-grant funding was provided through year-to-year allocations, which were decreased and, in some cases eliminated over time (e.g., salary for the Program Evaluator). The SSAO submitted annual budget proposals to the Provost for all intervention-related efforts, including even long-standing programs (e.g., late-night alcohol-free events). This instability made it incredibly difficult for the SSAO, the Special Projects Director, and the PO Director to develop and commit to a long-term strategic plan.

The University’s capacity for sustainability could be expanded by creating a permanent operating budget for alcohol prevention that is sufficient to meet the programs’ goals and objectives. The University should continue to apply for one-time dollars as needed and seek external grants to advance top priority health areas, but the program should not be forced to rely on “soft” money to continue its efforts longer time.

Partnerships

A large number of Student Affairs colleagues, staff, faculty, students, parents, and local community members worked collaboratively on alcohol prevention efforts during the study period. The strength of these partnerships varied over time. Overall, partnerships were stronger when the University was committed to a national initiative or when there was a specific effort that required collaboration, such as late-night alcohol events. Barriers to strong partnerships during the “off times” included a lack of clarity regarding the alcohol program’s scope, purpose, and essential functions; insufficient communication with partners regarding current efforts; and the University’s failure to
engage other parties in alcohol prevention. Note that both the student affairs working
group in 2007 and the alcohol safety committee in 2014 did not include students, faculty,
or community members. The strongest student partnerships were with peer educators, but
only after 2014.

The University’s engagement in national initiatives paved the way for exciting
partnerships with national alcohol experts and researchers, as well as other prevention
professionals from other colleges and universities nationwide. These relationships were
sustained to some degree after AMOD and NCHIP ended.

The University’s capacity for sustainability could be expanded by engaging a
wider range of campus and community partners, with the partnerships strategically
selected in order to advance the program’s specific goals. The PO Director should
cultivate these partnerships by assessing potential partners’ readiness to engage with the
University, appealing to their own interests, and addressing any barriers that require extra
attention. In this way, the program is also managed as a process of complex community
change and development. Partners should be clear about the program’s scope, purpose,
and essential functions, as well as what is expected of them as collaborators. The PO
Director should intentionally develop partners’ sense of ownership and commitment to
alcohol prevention efforts by providing regular updates about the program and
opportunities to provide ongoing input and feedback. The University can expand
partnerships and opportunities for strategic collaboration by formalizing the proposed
healthy campus coalition, with the PO Director playing an integral role in its
development and management.
Organizational Capacity

Constant bureaucratic reshuffling and unstable resources created a situation where the University was unable to settle on a functional model for prevention that could work effectively. It was not until the PO Director was hired in 2012 that the University employed a well-qualified alcohol prevention professional with solid public health skills.

The University’s capacity for sustainability could be expanded by ensuring that a senior official (the SSAO or someone in a similar position of authority) is assigned to lead the alcohol prevention effort and publicly champion the work. If instead this responsibility is delegated to the PO Director, then he must be placed within the University’s organizational structure so as to underscore the value of alcohol prevention in achieving the institution’s academic mission and to retain access to the resources needed to support effective programs and services. Ideally, the PO Director’s position would be elevated within the University’s organizational structure and he would assume a greater level of responsibility. The University should continue to hire well-qualified prevention professionals, consistent with the standards of the field, which stipulate that they should possess skills and competencies consistent with a master’s or doctoral degree in public health (80).

Program Evaluation

The University was more strongly engaged in program evaluation when it was required to do so by the AMOD and NCHIP national initiatives. During these times, the University conducted surveillance surveys of student alcohol behavior and short-term program evaluations to gauge the impact of its prevention efforts on gains in student knowledge and attitude and behavior change.
The University employed a Program Evaluator during AMOD, but did not sustain the position long-term once grant funds expired. The Special Projects Director and Clinical Alcohol Counselor continued the annual surveys, but restricted their evaluation activities to process evaluations with a narrow focus on attendance and participant satisfaction.

When participating in NCHIP, the University employed an Assessment Specialist who conducted extensive process and outcome evaluation to inform program planning and quality improvement efforts. After NCHIP ended, the University sustained its capacity for program evaluation by hiring a permanent PO Director with strong public health and evaluation skills. The PO Director was the first to connect alcohol prevention outcomes to measures of student success.

The University’s capacity for sustainability could be expanded by hiring a well-qualified professional who has program evaluation expertise to measure the effectiveness of its alcohol prevention efforts. Based on this information, the University should also create quality improvement plans to improve the effectiveness and efficiency of those efforts over time.

Program Adaptation

Formative evaluation was not a key element of the University’s alcohol prevention program before NCHIP, which required use of the Plan-Do-Study-Act model of quality improvement (77). Additionally, there were no intentional sustainability plans drafted during the different phases of the alcohol program’s evolution. At the end of the AMOD grant, the SSAO largely failed to maintain the basic elements of the alcohol program, and as a result the program lost resources and the positive momentum for
change that had been building.

As the institution also underwent senior leadership changes, each presidential change presented a new threat to the University’s readiness to address high-risk alcohol use; the degree to which each President would prioritize alcohol prevention only gradually became clear during those transitions in leadership. The SSAO did make a point to communicate the importance of alcohol prevention to each incoming President, though the University never did take steps to institutionalize its programs in case a new President’s interest in the issue proved to be low.

Additionally, as the SSAO shifted responsibility for oversight of the alcohol prevention program, natural partners within Student Affairs were not particularly motivated to act when they were no longer directly involved – they seemed to have developed a reliance on the SSAO’s direction and active participation regardless of his actual availability. The lack of sufficient succession plans prevented newly or differently engaged student affairs professionals from acting with the same level of authority as the SSAO. During the entire study period, the only clear sustainability plan was to institutionalize the modest gains achieved during NCHIP, specifically by diversifying and scaling up those efforts for the new Healthy Campus initiative.

The University’s capacity for sustainability could be expanded by including sustainability plans in the University’s initial program planning process so that there is continuity of prevention efforts once grant funds end or other foreseeable transitions occur. Succession planning must be intentional part of the University’s staff transitions, especially because its prevention effort has become overly dependent on the SSAO. The University should conduct formative evaluation during the program implementation
phase to inform decision-making about which efforts are ineffective and should not be put in place or continued. Quality improvement plans should also be in place to improve the efficiency of the University’s alcohol prevention efforts.

Communications

University efforts to communicate with stakeholders were strategic and plentiful during the first AMOD grant, with a focus on educating the community about the environmental approach. After AMOD, intentional messaging about alcohol prevention decreased until 2007 when the SSAO hired a professional from the Communications Office to promote Student Affairs efforts, including alcohol prevention, in the University media.

It is unknown whether planning for new programs included explicit communication plans, but, the University did market its programs via existing channels (e.g., student event websites, listservs) to generate student interest. Communication efforts regarding policy changes were not well-sustained after their initial year of implementation. Descriptions of the policies were limited to the Student Code of Conduct, AlcoholEdu for College, and new student orientation. Moreover, although these policies were likely well-enforced, the University did not do a good job publicizing these enforcement efforts, which is a critical component of the environmental change approach. Once the PO Director was hired in 2012, he created extensive communication plans as part of his program development process.
Throughout the study period, the SSAO provided regular updates on alcohol prevention efforts to the President. It is unclear how widely, if at all, the SSAO communicated with other stakeholders on a regular basis.

The University’s capacity for sustainability could be expanded by developing and implementing detailed plans to communicate with stakeholders about the following: the nature and extent of the alcohol problem using campus data when available, the mission for alcohol prevention efforts, the staff responsible for overseeing the institution’s prevention efforts, the value of those prevention efforts to the public, and gains achieved from these efforts, including targeted gains in the community. Specific to policy changes, the University should publicize enforcement efforts so that students are aware that the policy cannot be ignored without consequence, and to ensure that community members hold the University accountable.

Strategic Planning

As was the case with program evaluation, the University was more strongly engaged in strategic planning when it was committed to its national initiatives, AMOD and NCHIP. During these times, the University had in place multi-year strategic plans with measurable goals. In the years between AMOD and NCHIP, there was no evidence of any strategic planning processes. After NCHIP ended, the University developed and sustained its capacity for strategic planning by hiring a permanent PO Director with strong public health and management skills. This PO Director was the first to intentionally align alcohol prevention efforts with overall Student Affairs goals. However, constant bureaucratic reshuffling and unstable resources continued to make it
difficult for the University to implement a strategic plan, have long-term financial and sustainability plans, or collaborate effectively with strategic partners to the best effect.

The University’s capacity for sustainability could be expanded by establishing a strategic plan for alcohol prevention that align with larger University priorities and comply with federal regulations. The University’s mission, vision, goals, and objectives for alcohol prevention must be clearly articulated and drive both short- and long-term planning. Strategic planning documents must include long-term financial and sustainability plans, clearly outline the roles and responsibilities of partners, and identify evaluation priorities. The University should also review the alcohol prevention mission regularly as part of a strategic planning process.

Additional Category: Leadership

Over the 20 years of this study, the University had four Presidents, plus two interim presidents, with varying levels of interest in alcohol prevention. This frequent turnover in leadership and vacillating commitment to the issue challenged the University’s ability to manage the program effectively and engage a wide range of campus partners. Further, the Board of Trustees’ position that alcohol prevention is not an institutional issue, but is a student life responsibility also limited resource allocation and campus-wide support for the program.

During the study period, the SSAO was strongly committed to addressing high-risk alcohol use and championed the University’s alcohol prevention efforts. The SSAO withstood opposition from students and others who were resistant to change; took a long-term approach to alcohol prevention, and did not get diverted by a search for quick fixes.
The SSAO was directly involved when the University participated in national projects, serving as the team leader for AMOD and NCHIP and regularly attending team meetings to ensure that these projects stayed on track and to mediate any conflicts that arose. This level of SSAO involvement is uncommon in higher education, as SSAOs often act as figureheads or delegate leadership of these types of efforts to mid-level student affairs professionals or campus prevention specialists. It was also helpful that there was no turnover in this role during the entire study period.

The University’s capacity for sustainability could be expanded by adding responsibility for alcohol prevention to the University President’s job description (24). This would require the University’s Board of Trustees to understand the integral connection that high-risk drinking has with academic and institutional success, to deem alcohol prevention an institutional-level issue, and hold the President accountable for making progress in reducing high-risk alcohol use and its attendant consequences (24).

The University’s capacity for sustainability could also be expanded by assigning a senior official (the SSAO or similar) to lead the alcohol prevention effort and publicly champion the work. This individual should be someone who is able to inspire and articulate a shared vision with a wide range of constituents, stand up to opposition and overcome obstacles, challenge people to try to new approaches and takes risks, advocate for resources, and motivate others to act, all while providing a trusting and secure environment for lower-level staff who will manage day-to-day program and policy efforts.
Limitations

Although this study adds to the limited research on the sustainability of campus alcohol prevention efforts, it is not without its limitations. Overall, the main limitation of the case study design, which inherently relies on qualitative data collection, is that the findings may not be generalizable to other institutions of higher education (63). Case study research may be particularly prone to the limitation of generalizability, as compared to other types of qualitative research, because it focuses on a single unit – here, a single university (71). In addition, this type of case study, conducted by a single investigator, does not lend itself to tests of inter-rater reliability (71). Note, however, that a member-checking strategy was used to increase the trustworthiness of the data (41).

There are also limitations to the chosen data collection methods and sampling. First, interviewing can be extremely time-intensive and may be prone to recall and social desirability biases (71). These biases can affect the validity of the research findings. Procedures such as member-checking can help to reduce the effects of these biases (41). Second, snowball sampling is a non-random technique, and the first participants heavily influence the nature and scope of the total sample which may bias results toward a particular perspective (63). Third, documents and archival records may be inaccurate, and older documents and records may difficult to retrieve. Fourth, the University changed survey instruments during the study period. While this usually would be a limitation, fortunately the alcohol use variable of interest was consistent across the two surveys. Finally, visual inspection of longitudinal data can be subjective, though it has been found to be a useful and reliable data analysis tool for single-subject data (72).
It is also important to note two additional factors that might not have directly impacted sustainability, but may have influenced the rate of high-risk alcohol use. First, this study highlighted only the overall patterns in the SEM distribution of new initiatives during the study period. It did not identify the length of time that these efforts remained in place, their fidelity, or their level of activity over time, which ebbed and flowed. It would require a much deeper level of examination, beyond the scope of this study, to determine whether the University’s efforts were operating at all levels of the SEM at any given time during the 20-year study period. Second, the study did not gather information about any policy directives from the Greek national chapters. This would have been a challenging task given the University’s large Greek system and the frequent changes in chapter standing among the University’s fraternities and sororities.
CHAPTER SIX: DISCUSSION

This chapter discusses the case study’s findings and implications for practice. It begins with a summary of the case, followed by the lessons learned from the case study. Next, it describes two frameworks for college alcohol programs that the lessons learned served to inform. Finally, the chapter concludes with a discussion of implications for future alcohol prevention in higher education practice.

Summary of the Case

The University has a long history of alcohol prevention. University data show that the rate of high-risk alcohol use and its attendant consequences decreased during the study period, but fluctuations in the data raise doubts whether the University’s alcohol prevention efforts were primarily responsible for the downward linear trend. The analysis of the University’s portfolio of alcohol prevention efforts shows that the University did not consistently implement a comprehensive mix of evidence-based efforts at all levels of the Social Ecological Model (SEM). The analysis of facilitating and inhibiting factors for sustainability shows that many of the University’s prevention efforts, particularly environmentally-focused ones, were not sustained once the A Matter of Degree (AMOD) grant expired. During AMOD, the University had a high level of readiness to address the alcohol problem, an overarching philosophy to guide the development and implementation of a comprehensive mix of alcohol efforts (i.e., the environmental framework), and many facilitating sustainability factors. When the AMOD grant expired, the University largely failed to maintain the basic elements of the alcohol program, and as a result the program lost resources and the positive momentum for change that had
been building during the grant’s nine-year run. Some efforts were discontinued, and new efforts seemed scattershot and disjointed. Constant bureaucratic reshuffling and unstable resources continued to make it difficult for the University to maintain strong support from leadership, implement a strategic plan, have long-term financial and sustainability plans, or collaborate effectively with strategic partners to the best effect.

**Lessons Learned**

Four important lessons have been learned from this study, which can be applied to alcohol prevention in higher education:

1) **Institutions of higher education must implement effective programs and policies** – that is, a strategic and comprehensive mix of evidence-based efforts at all levels of the Social Ecological Model (SEM). This study confirmed that the SEM (27) and CollegeAIM registry (34) can be used to assess the quality of an institution of higher education’s alcohol prevention program.

2) **Institutions of higher education must ensure that alcohol prevention programs and policies are readily adopted by the campus community.** This study confirmed that the Community Readiness Model (CRM) can be used to assess a university’s willingness and preparedness to implement evidence-informed programs, policies, and other changes designed to reduce high-risk alcohol use and related harms (35).

3) **Institutions of higher education must sustain effective programs and policies over time and any gains derived from these efforts.** This study confirmed that the Program Sustainability Framework (PSF) (40) can be used to assess the
presence of known facilitating and inhibiting factors that affect sustainability, although sustainability is highly influenced by sometimes idiosyncratic contextual factors that should also be considered when applying the framework to the higher education setting.

4) **These four models – the Social Ecological Model, evidence-based practice, community readiness, and program sustainability – are interrelated and must be applied synergistically.** These models are already widely used in public health practice and can be applied to higher education settings, but this study shows that the concepts that each model highlights are interdependent, and therefore that the connections between the models should be included as part of a unified conceptual framework.

**New Frameworks for Alcohol Prevention in Higher Education**

The lessons learned from this case study serve to inform two new frameworks for use in college alcohol programs. The first is a new conceptual framework that integrates the Social Ecological Model, evidence-based practice, community readiness, and program sustainability into one framework. The second is a practical framework that institutions of higher education can use to assess the presence of factors that can increase or impede their institution’s capacity for sustainable alcohol prevention.

**A New Integrated Conceptual Framework for Alcohol Prevention in Higher Education**

Figure 14 presents a new conceptual framework that considers the interrelationships and interdependencies between the Social Ecological Model, evidence-
based practice, community readiness, and program sustainability, as applied to alcohol prevention in higher education. I developed this framework based on the results of this study.

Figure 14. A New Integrated Conceptual Framework for Alcohol Prevention in Higher Education

The literature supports a conceptual alignment of community readiness, evidence-based practice, and sustainability, and suggests that sustainability be viewed as the next stage in the translation of evidence-based programs into practice (81). This view considers sustainability to be related to earlier stages of the diffusion of innovation framework, including adoption and implementation (81). This suggests that community readiness, evidence-based practice, and sustainability are stages to be addressed in step-wise manner. However, this dissertation found that these are not distinct, unrelated steps but instead are interrelated and interdependent processes.
Similar to a logic model, this conceptual framework shows the linkage between institutional readiness as an input; the portfolio of alcohol prevention efforts as the output; and short- and long-term outcomes. Sustainability is dependent on a set of factors that must be present throughout the life of the program, and on the institution being ready to move from adopting new prevention efforts to an on-going commitment to maintain and improve them. Unlike a logic model, however, the process shown in this framework is not completely linear. Specifically, institutional readiness is not a steady state, and must be continually reassessed in order to stay ahead of changes and mitigate both internal and external threats to the program (81). Based on the study’s findings, and supported by the standards of the field (30) (31), the outcomes are listed as “decreases in high-risk drinking and primary and secondary consequences,” and “increases in student success measures.” These outcomes follow a simple if-then logic.

The institution’s portfolio of alcohol prevention efforts is at the center of the diagram. The diagram shows that the overall portfolio should be a comprehensive mix of efforts at all levels of the SEM that is also evidence-based. Institutions can follow a process similar to the one used in this dissertation – that is, to use a matrix that shows the intersection of SEM levels of influence with its current prevention approaches, and then search whether their particular programs and policies appear in the CollegeAIM registry and can be designated as evidence-based.

_A Program Sustainability Assessment Tool for Higher Education Settings_

Institutions of higher education must routinely assess their alcohol prevention program’s capacity for sustainability. Appendix H presents a program sustainability
assessment tool that I created specifically for the higher education setting, for assessing the presence of known facilitating and inhibiting factors that affect the sustainability of comprehensive alcohol prevention efforts. This framework is adapted from the Program Sustainability Assessment Tool (PSAT), which is the companion tool to the PSF. The PSAT has eight sustainability domains (the domains in the PSF) and 40 items (five items per domain). Researchers from the Center for Public Health Systems Science, George Warren Brown School of Social Work, Washington University, who developed the instrument, tested the PSAT with various community and state public health programs and have documented its reliability (82).

A measurement development study, having found differences in mean sustainability scores among state programs and community public health programs, called for future research and evaluation work to determine the PSAT’s usefulness for different fields and types of interventions (82). The authors acknowledged that “there will be nuances of setting and situation that the PSAT cannot capture” and recommended that practitioners who wish to study the PSAT in other settings discuss “the domains as a whole, rather than limiting discussions to the 5 indicators of sustainability capacity identified for each domain.” (83 p. 5) It is on this basis that I modified the framework for use in higher education settings.

Appendix G and H present the current PSAT framework and the adapted framework, respectively. I made six changes to the framework:

1) I added leadership as a new domain, defined as “having a supportive internal climate for your program.” I did this to show that all levels of program leadership, including the institution’s Board of Trustees and President, should be considered
internal. This addition also better aligns the PSF with the CRM, which includes leadership as one of its five dimensions (35).

2) I revised the definition for environmental support to “having a supportive external climate for your program.”

3) I relocated two items in the original framework (Appendix G, items #18 and #19) to the new leadership domain (Appendix H, items #41 and #42).

4) I adapted three items from the environmental support domain (Appendix G, items #2–4) and included them in the leadership domain to assess the program leader’s ability to garner resources, and to make explicit the need for leadership support from the Board of Trustees and President (Appendix H, items #43–45).

5) Based on the study’s findings, I added two new items to the organizational capacity domain to assess the program’s location within the organization and staff qualifications (Appendix H, items #16 and #20).

6) Based on the study’s findings, I added three new items to the environmental support domain to assess the external climate for the program (Appendix H, items #3–5). This addition also better aligns the PSF with the CRM, which includes community knowledge as one of its five dimensions (35).

The most significant of these six changes is the addition of the leadership domain to the framework. A driving force for the addition of “leadership” as a separate domain is to ensure that this factor receives the priority necessary for effective sustainability and to prevent this critical area from being overlooked. Over the years, alcohol prevention experts have written numerous commentaries and editorials to call attention to the need for leadership from university Presidents and Boards of Trustees to effectively change the
culture of drinking on college campuses (36) (37) (25). In the original framework, leadership is operationalized in the PSAT as: “Leadership effectively articulates the vision of the program to external partners,” and “Leadership efficiently manages staff and other resources.” These definitions imply that “leadership” is the person most directly responsible for the alcohol program, but given the important steps that university Presidents and Boards of Trustees can take in advancing campus alcohol prevention efforts, their critical leadership roles should not be overlooked.

**Contributions to the Field**

This case study is the first to examine the alcohol prevention efforts implemented at an institution of higher education and its capacity to sustain those efforts over two decades. The study’s findings underscore the importance of strategic and sustainable alcohol prevention practice. Moreover, the conceptual framework I created will be useful to well-qualified prevention professionals, plus other professionals who serve in prevention-related roles but do not have foundational public health skills. Specifically, the new conceptual framework can help these various professionals be mindful of the several factors that drive the effective development, implementation, and maintenance of comprehensive prevention efforts that are grounded in evidence-based practice and to create better informed strategic plans.

The current standards of practice, the ACHA Standards of Practice for Health Promotion in Higher Education (30) and the Council for the Advancement of Standards in Higher Education (CAS), Standards for Health Promotion Services (31), state the need

7 A recent benchmarking study showed that fewer than half (44%) of directors of wellness and health promotion programs in higher education have public health degrees (84).
to implement “evidence based strategies to the development of initiatives designed to
improve the health of individuals and the campus environment” and “strategies that
address the individual- and population-level factors that influence health behavior and
outcomes.” (31) The adapted program sustainability framework, plus this study’s process
for assessing the alcohol prevention, will be useful practical tools for determining how
well an institution’s program meets these standards of practice.

It is important to also note that these standards of practice do not include any
reference to community readiness or sustainability. This is an area for future research, as
many of the evidence-based strategies do call for town-gown cooperation, and other
strategies that can work independently on campus and in the community would be more
effective in reducing alcohol-related problems if they operated in tandem.
APPENDIX A: Intensive Interview Guide

Please see document on the following pages.
Intensive Interview Guide

Thank you for your willingness to be interviewed today as part of my dissertation research study. I would like to talk about the alcohol prevention efforts that were implemented at [University] from 1996 to 2016. Specifically, I am trying to get a deep understanding of what factors during this time period may have helped or hindered the success of these programs. Please consider what was going on at [University] during this time as well as what was going on in the local community or national landscape. Your recollections, comments, and opinions are extremely important. Examples and illustrations will be particularly helpful.

The interview should take about 1.5 hours. I will be audio-recording our discussion today. Although I will be taking some notes during the session, I don’t want to miss any of your comments. Because we’re being recorded, please make sure to speak up.

Your comments will be used to prepare a case study report. All of your comments are anonymous. Nothing you say will be connected with your name or title. In fact, I will remove all names and other identifying information from the written transcripts.

Your participation is voluntary and if you have any questions you may ask me or my advisor Dr. William DeJong. Dr. DeJong may be reached at wdejong@bu.edu. Do you have any questions?

Do you agree to participate? Great, let’s get started.

[Now turn on tape recorder]

1. Because I am asking about a very long time period, I am going to show you a very loose timeline of programs and policies that occurred at [University]. [Show brief chronology and leave it on the table for reference throughout the interview]
   a. Can you think of other alcohol-related programs, policies, and processes that occurred during this time? Please list.

2. Which of these prevention efforts worked particularly well?
   a. Please tell me why you chose to single out these efforts.
   b. What factors made them work well? Please elaborate.


   c. Were there any obstacles that you needed to overcome in order to implement these efforts? Please describe.
d. If any are long-standing efforts, why do you think that they have persisted so well at [University]?

3. Please tell me about other prevention efforts that were not as successful or that you wanted to see happen at [University] but didn’t?

4. If you could go back in time and re-live the past 20 years all over again, what would you do differently (with regard to alcohol prevention of course)? Please explain why.

We’ve come to the end of our discussion. Is there anything more that you would like to add?

I’ll be analyzing the information you and others gave me and integrating it into my case study for the dissertation.

Before we wrap up, is there anyone else whom you think I might want to interview?

Okay, thank you, again, for your participation. Your opinions and comments have been very helpful and I greatly appreciate your time.
APPENDIX B: Sample Recruitment Email

Please see document on the following pages.
Dear [Name],

As you may know, I am in the process of writing my dissertation for a Doctor of Public Health degree from Boston University. In brief, the purpose of my dissertation is to document the prevention efforts to reduce undergraduates’ high-risk alcohol use that were implemented at [University] from 1996 to 2016. This study aims to identify the factors that have sustained positive gains from the university’s prevention efforts.

The study design is mainly qualitative and I will be conducting in-person interviews to help inform the case study. I wish to interview past or current University employees who have knowledge about the alcohol prevention efforts conducted at the University during this time period. [SSAO Name] suggested that you would have valuable information to contribute.

Your participation is voluntary. If you agree, the interview should take about 1.5 hours. All of your comments will be anonymous. Nothing you say will be connected with your name or title. In fact, I will remove all names and other identifying information from the written transcripts.

If you have any questions you may ask me or my advisor, Dr. Bill DeJong. Dr. DeJong may be reached at wdejong@bu.edu.

I hope that you will agree!

Thank you very much for your consideration.

Most sincerely,
Gina Abrams, MPH, EdM, LSW, MCHES
APPENDIX C: Master Code List for Intensive Interviews

Please see document on the following pages.
<table>
<thead>
<tr>
<th>Major Theme</th>
<th>Category</th>
<th>Code</th>
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<td>Prevention Efforts</td>
<td>Individual-level program</td>
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<td>Curriculum infusion</td>
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<td>TIPS</td>
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<td>Limiting alcohol advertising</td>
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<td>Partners – parents</td>
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<td>Inspires a shared vision</td>
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<td>Challenges people to try to approaches</td>
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<td>Takes risks</td>
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<td>Looks outside University for way to improve</td>
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<td>Takes initiative to overcome obstacles</td>
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<td>Enables others to act</td>
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<td>Recognizes contributions/show appreciation</td>
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<td>Community knowledge</td>
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<td>Problem understood by community</td>
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APPENDIX D: Relationship between the Chronology of the University’s Alcohol Prevention Efforts and Fluctuations in the Percentage of University Undergraduates Who Consumed Five or More Drinks in a Row in the Past Two Weeks (Heavy Episodic Drinking), 1996–2016

*Please see document on the following pages.*
APPENDIX E: Relationship between the Chronology of the University’s Alcohol Prevention Efforts and Fluctuations in the Mean Percentages of Undergraduates Who Experienced Primary Consequences Due to Their Own Drinking, 1996–2016

Please see document on the following pages.

- Curriculum Infusion
- Community policing
- First-year rush restriction
- On-campus party restrictions
- Birthday lists to bar owners, TIPS for servers
- Landlord ordinance
- State law requires responsible beverage service training
- State prohibits sale of grain alcohol
- Tailgate policy, second serious violation suspension policy, social host regulations, parental notification
- Prohibition of all alcohol marketing in University publications
- Alternative spring break, substance-free housing, alcohol-free events
- AlcoholEdu for College
- State DUl law
- Medical amnesty policy
- AlcoholEdu for Parents
- Peer engagment tabling
- Mandated e-CHECKUP TO GO, professional-led small groups for first-year students
- Peer-led small groups for Greeks, Red Watch Band, TIPS for Greeks, restroom stall posters
- Hard alcohol policy
- Reinstituted alcohol-free events
- Orientation presentation by Counseling Center
- Orientation invited speaker, first 6 weeks poster campaign
APPENDIX F: Relationship between the Chronology of the University’s Alcohol Prevention Efforts and Fluctuations in the Mean Percentages of Undergraduates Who Experienced Secondary Consequences Due to Others’ Drinking, 1996–2016

*Please see document on the following pages.*
APPENDIX G: Program Sustainability Assessment Tool Domains and Items

Please see document on the following pages.
PROGRAM SUSTAINABILITY ASSESSMENT TOOL DOMAINS AND ITEMS (ORIGINAL) (82)

Seven-point Likert scale ranging from “too little or no extent” to “to a very great extent”

Environmental Support: Having a supportive internal and external climate for your program
1. Champions exist who strongly support the program.
2. The program has strong champions with the ability to garner resources.
3. The program has leadership support from within the larger organization.
4. The program has leadership support from outside of the organization.
5. The program has strong public support.

Funding Stability: Establishing a consistent financial base for your program
6. The program exists in a supportive state economic climate.
7. The program implements policies to help ensure sustained funding.
8. The program is funded through a variety of sources.
9. The program has a combination of stable and flexible funding.
10. The program has sustained funding.

Partnerships: Cultivating connections between your program and its stakeholders
11. Diverse community organizations are invested in the success of the program.
12. The program communicates with community leaders.
13. Community leaders are involved with the program.
14. Community members are passionately committed to the program.
15. The community is engaged in the development of program goals.

Organizational Capacity: Having the internal support and resources needed to effectively manage your program
16. The program is well integrated into the operations of the organization.
17. Organizational systems are in place to support the various program needs.
18. Leadership effectively articulates the vision of the program to external partners.
19. Leadership efficiently manages staff and other resources.
20. The program has adequate staff to complete the program’s goals.

Program Evaluation: Assessing your program to inform planning and document results
21. The program has the capacity for quality program evaluation.
22. The program reports short-term and intermediate outcomes.
23. Evaluation results inform program planning and implementation.
24. Program evaluation results are used to demonstrate successes to funders and other key stakeholders.
25. The program provides strong evidence to the public that the program works.
Program Adaptation: Taking actions that adapt your program to ensure its ongoing effectiveness
26. The program periodically reviews the evidence base.
27. The program adapts strategies as needed.
28. The program adapts to new science.
29. The program proactively adapts to changes in the environment.
30. The program makes decisions about which components are ineffective and should not continue.

Communications: Strategic communication with stakeholders and the public about your program
31. The program has communication strategies to secure and maintain public support.
32. Program staff members communicate the need for the program to the public.
33. The program is marketed in a way that generates interest.
34. The program increases community awareness of the issue.
35. The program demonstrates its value to the public.

Strategic Planning: Using processes that guide your program’s directions, goals, and strategies
36. The program plans for future resource needs.
37. The program has a long-term financial plan.
38. The program has a sustainability plan.
39. The program’s goals are understood by all stakeholders.
40. The program clearly outlines roles and responsibilities for all stakeholders.
APPENDIX H: Program Sustainability Assessment Tool Adapted for Higher Education Settings

Please see document on the following pages.
PROGRAM SUSTAINABILITY ASSESSMENT TOOL DOMAINS AND ITEMS
(ADAPTED FOR HIGHER EDUCATION SETTINGS)

Seven-point Likert scale ranging from “too little or no extent” to “to a very great extent”

Environmental Support: Having a supportive external climate for your program
1. Champions exist in the community who strongly support the program.
2. The program has support from the community.
3. The community understands the mission of the program.
4. The community views the program favorably.
5. The community trusts the program.

Funding Stability: Establishing a consistent financial base for your program
6. The program exists in a supportive state economic climate.
7. The program implements policies to help ensure sustained funding.
8. The program is funded through a variety of sources.
9. The program has a combination of stable and flexible funding.
10. The program has sustained funding.

Partnerships: Cultivating connections between your program and its stakeholders
11. Diverse community organizations are invested in the success of the program.
12. The program communicates with community leaders.
13. Community leaders are involved with the program.
14. Community members are passionately committed to the program.
15. The community is engaged in the development of program goals.

Organizational Capacity: Having the internal support and resources needed to effectively manage your program
16. The program is placed within the organizational structure to underscore its value to the mission of the institution.
17. The program is well integrated into the operations of the organization.
18. Operational systems are in place to support the various program needs.
19. The program has adequate staff to complete the program’s goals.
20. The program staff members are well-qualified for their positions as per the standards of the field.

Program Evaluation: Assessing your program to inform planning and document results
21. The program has the capacity for quality program evaluation.
22. The program reports short-term and intermediate outcomes.
23. Evaluation results inform program planning and implementation.
24. Program evaluation results are used to demonstrate successes to funders and other key stakeholders.
25. The program provides strong evidence to the public that the program works.
Program Adaptation: Taking actions that adapt your program to ensure its ongoing effectiveness
26. The program periodically reviews the evidence base.
27. The program adapts strategies as needed.
28. The program adapts to new science.
29. The program proactively adapts to changes in the environment.
30. The program makes decisions about which components are ineffective and should not continue.

Communications: Strategic communication with stakeholders and the public about your program
31. The program has communication strategies to secure and maintain public support.
32. Program staff members communicate the need for the program to the public.
33. The program is marketed in a way that generates interest.
34. The program increases community awareness of the issue.
35. The program demonstrates its value to the public.

Strategic Planning: Using processes that guide your program’s directions, goals, and strategies
36. The program plans for future resource needs.
37. The program has a long-term financial plan.
38. The program has a sustainability plan.
39. The program’s goals are understood by all stakeholders.
40. The program clearly outlines roles and responsibilities for all stakeholders.

Leadership: Having a supportive internal climate for your program
41. Program leadership effectively articulates the vision of the program to external partners.
42. Program leadership efficiently manages staff and other resources.
43. Program leadership has the ability to garner resources.
44. The program has leadership support from the President.
45. The program has leadership support from the Board of Trustees.


11. NIAAA. APIS - Underage Drinking: Possession/Consumption/Internal Possession of Alcohol [Internet]. [updated 2015 Jan; cited 2016 Sept 2]. Available from:


42. Lehigh University. Lehigh at a Glance [Internet]. [updated 2016; cited 2016 Mar 31]. Available from: http://www1.lehigh.edu/about/glance


70. ACHA. Generalizability, Reliability, and Validity Analysis [Internet]. [updated 2014; cited 2016 May 15]; Available from: http://www.acha-ncha.org/grvanalysis.html


CURRICULUM VITAE

Gina Baral Abrams, Dr.P.H., Ed.M., L.S.W., M.C.H.E.S.

E-mail: ginababal@gmail.com

EDUCATION

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<td>Macro Practice</td>
<td>M.S.W.</td>
<td>Boston University</td>
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<tr>
<td>2000</td>
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<td>M.P.H.</td>
<td>Boston University</td>
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<td>2017</td>
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<td>Boston University</td>
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Dissertation: Prevention Efforts to Reduce Undergraduates' High-Risk Alcohol Use At a Small, Private, Urban Research University in the Northeast: A 20-Year Case Study.

LICENSURE AND CERTIFICATIONS

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<tr>
<td>2008</td>
<td>Management Development Certificate</td>
<td>Princeton University</td>
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<td>2001</td>
<td>Licensed Social Worker</td>
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<td>2001</td>
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<td>Planned Parenthood League</td>
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<tr>
<td>2000</td>
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<td>NCHEC, Inc.</td>
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PROFESSIONAL EXPERIENCE

Lehigh University, Bethlehem, PA

Special Assistant to the Vice Provost for Student Affairs (2013 – 2016), Assessment Specialist, Office of the Vice Provost for Student Affairs (2012 – 2013)

- Assist and advise the Vice Provost for Student Affairs (VPSA) with regard to strategic initiatives and departmental operations. Prepare and research information, provide analysis, and develop reports and presentation materials for the VPSA’s use. Represent the VPSA in meetings and on committees as requested. Write position descriptions and conduct searches for new hires as needed. Carry out special projects as requested to support the Student Affairs mission, vision, and strategic plan.
Designed a program model for overall review of Student Affairs departments based on appropriate external standards of the field (CAS). Managed departmental reviews for the Office of Multicultural Affairs, the Women’s Center, the Pride Center for Sexual Orientation and Gender Diversity, and the Health and Wellness Center. Trained staff members to conduct department self-study; coordinated and oversaw all aspects of self-study and peer review process while underway, making adjustments as needed; synthesized internal and external reports and wrote summary reports with recommendations for the VPSA’s consideration; developed action plans to realize the recommended changes; anticipated and assessed barriers to effectively implementing the recommended changes and suggested courses of action as appropriate. Supported the VPSA in developing resulting action plans.

Served as Team Leader for Lehigh’s participation in the National College Health Improvement Project (NCHIP). Used the Institute for Healthcare Improvement’s Collaborative Model for Achieving Breakthrough Improvement and Plan-Do-Study-Act process for quality improvement. Created logic models, determined desired outcomes, and evaluated Lehigh’s key initiatives: 1. Lehigh After Dark; and 2. changes to the University’s hard liquor policy. Met with University President to communicate final outcomes of NCHIP and recommended plans for sustainability of NCHIP gains.

Autism Services Group (member of the Beacon Health Strategies family of companies), Ewing, NJ

Doctoral Practicum in Utilization Management and Quality Improvement, Office of the Vice President for Operations (2013)

Contribute to the development of a Utilization Management and Quality Improvement (UM&QI) program for Autism Services Group, a private-sector specialized MBHO that manages and delivers Applied Behavioral Analysis benefits and services for health plan members. Prepared for a pre-agreement audit from a consolidated health plan by using a hybrid of National Committee for Quality Assurance and Utilization Review Accreditation Commission standards. Created databases, gathered existing artifacts (policies and procedures, clinical guidelines, and other key documents) that support the standards, and created new artifacts where needed. Contributed to the development of corrective action plans for adverse findings from the audit.
Princeton University, Princeton, NJ

- Directed the Health Promotion and Wellness Services department. Provided strategic development, administration, and management for the department which included two professional health educators (master-level), two program coordinators (one master-level), one operations coordinator, two graduate interns, six student workers, 20 Student Health Advisory Board members, over 60 student peer health advisors, and numerous volunteers. Served on the Executive Directors Committee, providing leadership and strategic direction for University Health Services. Conducted health behavior research, analyzed data using statistical methods, secured external grant funds, wrote manuscripts, prepared reports, and presented results to stakeholders. Served as Study Coordinator for various quality improvement, process improvement, quality assurance, and benchmarking studies for University Health Services. Directed the campus-wide Healthier Princeton initiative, an integrated program of health promotion, disease screening, and behavioral health strategies for students, faculty and staff. Managed the Advisory Board to Healthier Princeton, co-chaired by two University VPs. Collaborated closely with numerous campus and community partners to develop and support health promotion support strategies for over 13,000 students and employees. Designed trainings and delivered presentations across campus. Planned, organized, and executed annual community-wide flu immunization program and health fair for over 7000 attendees.

Massachusetts Institute of Technology (MIT), Cambridge, MA

- Coordinated all aspects of student health education program. Designed, implemented, and evaluated health education initiatives and provided direct service via teaching and one-on-one wellness consultations. Sought funding through grant-writing. Served on the MIT Medical Strategic Planning Committee. Served as Co-Chair of the MIT Mental Health Task Force Education Committee. Served as a founding member of the Campus Alcohol Advisory Board, pairing MIT students, staff, and faculty with City of Cambridge officials and members of the surrounding community to promote responsible behavior and reduce underage drinking on and off campus. Initiated and designed Residence-Based Advising program through which faculty and upper-class student teams provide academic, social, and wellness support to first-year residents. Developed training curriculum for Residential Associate Advisors. Planned and implemented Health and Wellness Fair for over 1000 students annually during freshman orientation.
Massachusetts Department of Public Health, Jamaica Plain, MA
Researcher, Division of STD Prevention (1998 – 1999)
• Designed and conducted needs assessment of Massachusetts women, some incarcerated at Massachusetts State Prison at Framingham, regarding high-risk behaviors and service needs. Designed databases, analyzed, and presented results. Evaluated existing protocols for violence identification, treatment, and referral, and proposed new policy recommendations.

Bentley College, Waltham, MA
Program Assistant, Center for Alcohol and Other Drug Education, Office of the Dean of Student Affairs (1998 – 1999)
• Managed the Alcohol and Other Drug Education Resource Library and developed educational and promotional materials. Organized health promotion campaigns to address issues including alcohol and other drugs, sexual assault, and healthy relationships. Served as a member of the Alcohol and Other Drug Task Force. Advised SPRITE peer health volunteer program.

The White House Athletic Center, Washington, DC

CONSULTATIONS
Florida Atlantic University, Boca Raton, FL
• Peer reviewer to evaluate the Health Promotion Department (invited 2017)

Colgate University, Hamilton, NY
• Lead reviewer for the CAS Program Review of the Shaw Wellness Institute (invited 2017)

Susquehanna University, Selinsgrove, PA
• Consultant for the Vice President for Student Engagement & Success (2016)

California State University, Fresno, Fresno, CA
• External reviewer for the CAS Program Review of the Wellness Services (2016)

Pennsylvania Liquor Control Board (PLCB), Harrisburg, PA
• Program Evaluator for the PLCB Town-Gown Pilot Project (2016)
Portland State University, Portland, OR
• Retreat facilitator to help Portland State University leaders advance the Healthy Campus Initiative (2013, 2015)

Villanova University, Villanova, PA
• External reviewer for the State of Alcohol at Villanova initiative (2013)

University of Houston, Houston, TX
• Chairperson, External Review Committee for the Department Review of the UH Wellness Program (2013)

University of Massachusetts Amherst, Amherst, MA
• External reviewer for the CAS Program Review of the Center for Health Promotion (2013)

University of Delaware, Newark, DE
• Retreat leader for Wellspring Student Wellness Program (2011)

Maryland Institute College of Art, Baltimore, MD
• Peer reviewer to evaluate the Wellness Center (2011)

Massachusetts Institute of Technology (MIT), Cambridge, MA
• Advisor for the Health Education Office at MIT Medical (2001 – 2002)

Outside The Classroom, Inc., Newton, MA
• Expert reviewer for the AlcoholEdu for College online alcohol education program (2001)

TEACHING EXPERIENCE
Online Course Instructor, School of Social Work, Boston University, Boston, MA (2013–present)
• SR 743: Social Work Research I (3 credits, graduate students)
• SR 744: Social Work Research II (3 credits, graduate students)
• HB 720: Human Behavior in the Social Environment (3 credits, graduate students)

• Essentials of Health Promotion for Social Workers (6 continuing education credits, professional social workers)
Teaching Assistant, School of Public Health, University of Medicine and Dentistry of New Jersey, Piscataway, NJ (2011)
  • HEBS 0651: Health Education Planning and Evaluation (3 credits, graduate students)

Teaching Assistant, School of Public Health, University of Medicine and Dentistry of New Jersey, Piscataway, NJ (2007)
  • PHCO 0505: Health Education and Behavioral Science (3 credits, graduate students)

Teaching Assistant, College of Health Sciences, University of Delaware, Newark, DE (1994)
  • HPER 263: Fitness in Dance (1 credit, undergraduate students)

RESEARCH EXPERIENCE
Principal Investigator: “Prevention Efforts to Reduce Undergraduates' High-Risk Alcohol Use at a Small, Private, Urban Research University in the Northeast: A 20-Year Case Study.” Dissertation Research (2016)

Principal Investigator: “American College Health Association - National College Health Assessment II.” Lehigh University (2013)


ACADEMIC/FIELD ADVISING EXPERIENCE
Faculty Advisor (Online MSW), School of Social Work, Boston University (2012–2013)
Field Advisor, School of Health, Physical Education, and Leisure Services, University of Northern Iowa (2010)
Field Advisor, School of Social Work, Rutgers University (2006–2011)
Internship Advisor, Project 55 Public Interest Program, Princeton University (2003)
Academic Advisor, Massachusetts Institute of Technology (2000 – 2001)
Field Advisor, School of Education, Lesley University (2001)
Field Advisor, School of Social Work, Boston University (2000 – 2001)

HONORS AND AWARDS
School of Public Health Scholarship, Boston University (2011)
Special Recognition Award, Princeton University (2007)
National Health Education Honorary, Eta Sigma Gamma (2005)
Mid-Level Professional Award, National Association of Student Personnel Administrators (2005)
Special Recognition Award, Princeton University (2004)
Faculty Fellow, Rockefeller College, Princeton University (2002)
Distinguished Member, National Society for Collegiate Scholars (2000)
School of Public Health Scholarship, Boston University (1999)
National Health, Physical Education, and Recreation Honor Fraternity Delta Psi Kappa (1994)

UNIVERSITY COMMITTEES
Lehigh University, Bethlehem, PA
- University Center Project Program Committee (2013 – 2016)
- National College Health Improvement Project, Campus Improvement Team, Team Leader (2012 – 2013)
- Lehigh After Dark Steering Committee (2012 – 2013)

Princeton University, Princeton, NJ
- National College Health Improvement Project, Campus Improvement Team, Team Leader (2011 – 2012)
University Health Services Strategic Planning Committee (2010 – 2011)
University Health Services Risk Management Committee (2008 – 2012)
Alcohol Coalition Committee (2007 – 2012)
University Health Services Cultural Competence Committee (2006 – 2012)
Healthier Princeton Advisory Board, Coordinator (2005 – 2012)
University Health Services Performance Appraisal Committee (2003 – 2004)
University Health Services Quality Improvement Committee (2002 – 2012)

Massachusetts Institute of Technology, Cambridge, Massachusetts
• Search Committee for Associate Dean of Community Development and Substance Abuse (2001)
• Medical Consumers Advisory Committee (2000 – 2001)
• MIT Medical Strategic Planning Committee (2000 – 2001)
• Mental Health Task Force, Education Committee Co-chair (2000 – 2001)
• Campus Alcohol Advisory Board (2000 – 2001)

Bentley College, Waltham, MA
• Alcohol and Other Drugs Task Force (1998 – 1999)

PROFESSIONAL SERVICE
Council for the Advancement of Standards
• Co-author for Cross-Functional Standards and Guidelines for High-Risk Behaviors (2016)
• Co-editor for Standards and Guidelines for Health Promotion Services (2016 revision)
• Co-editor for Standards and Guidelines for Health Promotion Services (2011 revision)

Quality Improvement in College Health Symposium, NYU & Agency for Healthcare Research and Quality
• Leadership Committee (2015)

National Association of Student Personnel Administrators

National Institute on Alcohol Abuse and Alcoholism, Bethesda, MD
• Invited participant in a “think tank” with regard to “Barriers to Implementing Evidence-Based Campus Prevention Strategies” (2013)
American College Health Association
  • Lead editor for the Standards of Practice for Health Promotion in Higher Education (3rd ed.)
  • Lead editor for Vision Into Action (2nd ed.)
  • Lead editor for Guidelines for Hiring Health Promotion Professionals in Higher Education (2nd ed.)
  • Health Promotion Section Executive Committee, Nominations Committee Chair (2012 – 2013)
  • Health Promotion Section Executive Committee, Section Chair (2010 – 2012)
  • Publications Review Committee, Co-chair (2010 – 2016)
  • Research Committee (2010 – 2013)
  • Hiring Guidelines for Health Promotion in Higher Education Committee (2007 – 2008)
  • Health Promotion Section Executive Committee, Program Planning Chair (2007 – 2009)
  • Health Promotion Section Executive Committee, Member-at-Large (2006 – 2007)
  • Standards of Practice for Health Promotion in Higher Education Committee (2002 – 2005)

Bucks County (PA) Drug and Alcohol Commission, Inc. Board of Directors (2005 – 2011)
  • Personnel Committee, Chair (2010 – 2011)
  • Board Secretary (2007 – 2010)
  • Program Service Committee, Chair (2007 – 2008)

PEER-REVIEWED PUBLICATIONS


**CONFERENCE PRESENTATIONS**


and learning pre-conference session. Annual conference of the National Association of Student Personnel Administrators, Chicago, IL.


JOURNAL REVIEWING
Journal of Students Affairs Research and Practice (2011 – 2014)
American Journal of Health Promotion (2010 – present)

EXTERNAL FUNDING
Princeton Depression Awareness Program Revision ($17,400), Auxiliary to the Isabella McCosh Infirmary, Princeton University, 2011
Residential College Community Organizing Pilot Project ($10,000), AAC&U Bringing Theory to Practice Project, 2008
Residential College Community Organizing Pilot Project ($2,550), Auxiliary to the Isabella McCosh Infirmary, Princeton University, 2008
Experience UHS ($7,500), Auxiliary to the Isabella McCosh Infirmary, Princeton University, 2008
Z-Card ($6,339), Auxiliary to the Isabella McCosh Infirmary, Princeton University, 2008
National College Health Assessment ($21,000), Princeton University, Trustee Initiative on Alcohol Abuse, Princeton University, 2006–2011
Princeton Depression Awareness Program ($2,500), AAC&U Bringing Theory to Practice Project, 2005
RealLife Social Marketing Campaign ($26,092), Trustee Initiative on Alcohol Abuse, Princeton University, 2002 – 2003
Janet C. Morgan Health and Wellness Library ($20,000), Auxiliary to the Isabella McCosh Infirmary, Princeton University, 2002
Residence-Based Advising ($122,500), d’Arbeloff Fund, MIT, 2001

PROFESSIONAL ASSOCIATIONS
American College Health Association
National Association of Student Personnel Administrators