

Brief Alcohol Screening and Intervention for College Students (BASICS):  
A Qualitative Study of the Experiences of Mental Health Practitioners on the College Campus

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**Abstract**

High-risk drinking among college students is believed to be the most serious health issue facing college and universities throughout the United States. In 1999, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) established a task force to address the issue and released a report with recommendations for intervention and prevention. Brief Alcohol Screening and Intervention for College Students (BASICS) emerged as an evidence-based practice to address high-risk drinking. Quantitative researchers produced results that indicate BASICS and interventions similar to BASICS are an effective means to reduce high-risk drinking and the negative outcomes associated with high-risk drinking. Despite strong evidence for the effectiveness of BASICS, little is known about its fidelity when BASICS is implemented in a practical setting. The purpose of this study was to explore the perspectives and experiences of practitioners in the mental health profession who use the BASICS intervention via semi-structured interviews. Themes emerged related to the application of the intervention, the strongest and weakest aspects of intervention, and barriers to implementation. The themes linked to the application of BASICS on campuses included: (1) a comprehensive/progressive approach to address high-risk drinking; (2) modifications; and (3) the mandated student. The themes relating to the strongest aspects of the intervention were: (1) harm reduction; (2) education; (3) personal awareness; and (4) self-empowerment while the weakest aspects were: (1) the dilemma of one size fits all and (2) the personalized feedback report (PFR). The themes connected to barriers were: (1) the referral process; (2) training; and (3) onus on the facilitator. These twelve

themes provide insight into the benefits and challenges of implementing BASICS in a practical setting on college campuses. Implications for both mental health practitioners and student affairs professionals are discussed, study limitations are provided, and suggestions for future research are offered. This study concludes with specific recommendations for student affairs professionals that includes the use of BASICS combined with other best practices to effectively address the issue of high-risk drinking and the negative consequences associated with this behavior on college campuses.

## **Dedication**

It is with overwhelming feelings of gratitude that I dedicate this dissertation to Mark Wagstaff. The support you have given me throughout the entire process was unwavering. For this and so many other things that make up our relationship, I will forever be grateful. Also to my dogs Lulu, Jasper, Tucker and Pearl. Sweet Lulu...you always calmed me down when you would rest your head on my leg and looked at me with those tender eyes. Jasper...may you rest in peace. You left this earth reminding me to live life to the fullest. Tucker...my other guy. You are the best writing partner that I could ever imagine. Pearl...your inability to control your urges to jump on me when I was in a deep thought simply makes me smile.

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## Chapter 1: Introduction

High-risk drinking and the consequences associated with this behavior continue to be the most serious public health concern for colleges and universities throughout the United States (Slutske, 2005). There never seems to be a shortage of headlines that attest to college students and their drinking antics and the negative consequences that follow such as death, serious injuries, driving while impaired, and vandalism (NIAAA, 2007). While these headlines offer a quick snapshot of the most severe consequences of college student drinking, they do not adequately represent the scope of this problem. In reality, many students between the ages of 18 and 24 experience a degree of alcohol-related consequences on an annual basis including: (a) 3,360,000 drive under the influence of alcohol; (b) 599,000 are unintentionally injured; (c) 150,000 develop an alcohol-related health problem; (d) approximately 110,000 are arrested for an alcohol-related violation such as underage possession or public intoxication; (e) 97,000 are victims of sexual abuse or date rape; (f) 1,825 die from alcohol-related consequences (Hingson, Zha, & Weitzman, 2009).

In 1999, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) established a task force to address the culture of drinking at colleges and universities nationwide (NIAAA, 2002). The taskforce issued a report in 2002 that highlighted the consequences of high-risk drinking on campuses and put forth recommendations for effective prevention and intervention programs. These recommendations became known as the 3-1-Framework to reach students on an individual level, a campus-wide level and within the greater college community. As a result, Brief Alcohol Screening and Intervention for College Students (BASICS) emerged as an evidenced-based brief motivational intervention to reach students on the individual level and has

been widely used on campuses across the nation (Dimeff, Baer, Kivlahan, & Marlatt, 1999; Nelson, Toomey, Lenk, Erickson, & Winters, 2010; NIAAA 2002, 2007).

The focus of this chapter is to provide an overview of statistics on college student drinking as a means to underscore this public health issue. BASICS, the evidence-based brief motivational intervention program approved by the Substance Abuse and Mental Health Services Administration (SAMHSA) and recommended by the NIAAA taskforce (2002) as a strategy to address high-risk drinking on the individual level will be introduced (Dimeff et al., 1999). A brief discussion on evidence-based practices is presented followed by a statement of the problem. Questions are posed to consider the strengths and weaknesses of BASICS, from the perspective of practitioners in the mental health profession. The purpose of the study and the research questions are presented. To conclude this chapter, key terms will be defined and a synopsis of the remaining chapters is provided.

### **Collegiate Drinking: The Cause for Concern**

In 1976, the NIAAA released the first report to raise awareness about the misuse of alcohol among the college student population (NIAAA, n.d.). Since then, there has been ongoing data collection and continued research to gain insight into the nature of college student drinking, the consequences associated with this behavior, and the best prevention and intervention strategies to address the issue (White & Hingson, 2013). The National Survey on Drug Use and Health (NSDUH) sponsored by SAMHSA and the Monitoring the Future (MTF) national survey are the two active data collection instruments that provide annual statistics on college student drinking (Johnston, O'Malley, Bachman, & Schulenberg, 2012; White & Hingson, 2013). Over the years, these surveys have revealed the trends and patterns of college student drinking (White & Hingson, 2013).

In any given month, approximately 65% of college students drink alcohol (Johnston et al., 2012). From this group of students, 44% meet the criteria for binge drinking defined as five standard drinks for men/four standard drinks for women within a two hour period (Johnston et al., 2012; White & Hingson, 2013). A greater concern is the number of students who far surpass this threshold of binge drinking. In a study of 10,424 college freshmen in their first semester, it was discovered that over 50% of males and approximately 33% of females drank at levels two to three times the binge drinking rate (White, Kraus, & Swartzwelder, 2006). Additional findings from the MTF survey revealed on average, 40% of students reported getting drunk in the past 30 days (Johnston et al., 2012). Finally, students considered frequent binge drinkers (3 or more binge drinking episodes in a two week period) drank 68% of the total amount alcohol consumed by all college students (Wechsler & Nelson, 2008). These numbers demonstrate the complexity of college student drinking and convey the need for continued research on effective intervention strategies.

### **Brief Alcohol Screening and Intervention for College Students (BASICS)**

Brief Alcohol Screening and Intervention for College Students (BASICS) is a two-session, brief, motivational intervention that aims to increase personal awareness around the use and abuse of alcohol, and reduce harmful consequences associated with high-risk drinking (Dimeff et al., 1999). Based on the principles of motivational interviewing and harm reduction, BASICS is facilitated in a nonjudgmental manner and conveys empathy for the student. The overarching goal of the intervention is to reveal discrepancies between the students' high-risk drinking behaviors and their values and goals (Baer, Kivlahan, Blume, McKnight, & Marlatt, 2001; Borsari & Carey, 2000, 2005; Dimeff et al., 1999; Roberts, Neal, Kivlahan, Baer, & Marlatt, 2000). The success of the intervention is contingent upon the facilitator's proficiency

with motivational interviewing and adherence to the core components of the program (Dimeff et al., 1999).

The primary focus of the first session is to establish rapport with the student and gather information about his or her history of alcohol use, problems associated with alcohol use, mental health problems, and typical drinking patterns over the last 30 days. In the week between the two sessions, the student completes a self-report questionnaire about patterns of alcohol consumption, problems associated with alcohol use, family history of substance abuse, alcohol outcome expectancies, perception of health and behavioral risks due to alcohol, perceptions of college drinking norms, readiness to change, and indices of alcohol dependence (Dimeff et al., 1999). The counselor summarizes the questionnaire and develops a feedback report for the second session. The objective of session two is to provide feedback to the student based on the self-report questionnaire in these areas: (a) personal goals related to alcohol use; (b) drinking patterns; (c) drinking patterns relative to college norms; (d) risks and consequences associated with alcohol use; (e) clarification of myths and facts about the effects of alcohol; (f) strategies to reduce risks associated with alcohol use; (g) options to assist in making changes; and (h) a referral list, if warranted (Dimeff et al., 1999) .

A number of researchers consistently demonstrate that participants made changes in the quantity and frequency of drinking behaviors and occasionally decreased the number of problems associated with high-risk drinking via BASICS or adaptations of the intervention with volunteer and mandated students (Baer et al., 2001; Borsari & Carey, 2000, 2005; Fromme & Corbin (2004); Larimer et al., 2001; Marlatt et al., 1998). As a result BASICS is considered a highly effective intervention program for college students who engage in high-risk drinking and is considered a model program with SAMHSA (NIAAA, 2002, 2007). Today the intervention is

used in varying forms on campuses nationwide and has reached over 20,000 individuals (Miller, 2013; SAMSHA, n.d.).

### **Evidence-Based Practices**

The intent of evidence-based practices in health settings is to lead to quality care. However, not uncommonly, practitioners experience barriers with implementation due to a lack of knowledge, standardization issues, costs, training, supervision and adequate staffing (Beidas & Kendall, 2010; Carise et al., 2009; Proctor et al., 2007). These difficulties with implementation often force practitioners to change or adapt the program on the local level which, unfortunately, may undermine the effectiveness demonstrated in the research studies (Backer, 2002; Cohen et al., 2008). SAMSHA (2012) defines fidelity in evidence-based practices as the maintenance of all core components of the program and adaptation as the process of changing program components to meet specific needs. This is the on-going battle surrounding evidence-based practices. Can practitioners maintain the fidelity of the program if they adapt it to their setting? Furthermore, from a multicultural perspective is realistic to think that one size fits all?

Effective training, adequate time to practice, and on-going supervision are the precursors to ensure the fidelity of evidenced-based practices (Beidas & Kendall, 2010; Carise et al., 2009; Proctor et al., 2007). As mentioned above, these are often overlooked due to inadequate staffing and limited resources. When these precursors are non-existent, practitioners are set up to fail because they change or adapt the program unknowingly (SAMSHA, 2012). Research has indicated that it is not uncommon for practitioners to tweak evidence-based programs for various reasons (Backer, 2002; Cohen et al., 2008). However, when tweaks occur, questions naturally emerge and fuel the debate over fidelity versus adaptability. There is no doubt that questions are warranted on both sides. Unfortunately, this debate widens the gap between science and practice.

Rather than continue the debate, it would be more helpful to determine if change is appropriate and if so what is deemed acceptable. These are the conversations that will lead to best practices.

To date, no studies about BASICS address mental health practitioners' (MHP) experiences implementing the intervention on their campuses. In particular, experiences associated with the day to day practice of using BASICS have not been explored in-depth. What do they perceive as the strengths and limitations of intervention? Do barriers exist with regard to implementation? Researchers Dimeff et al., (1999) provide a resource guide that outlines the BASICS intervention, but they do not provide a practical toolkit for implementation nor an evaluation instrument to ensure fidelity. There are many questions to explore with the MHP in relation to the implementation of BASICS: What challenges accompany the use of BASICS in your setting? What type of training is necessary to be a BASICS provider? How easy or difficult is it for you to adhere to the BASICS protocol? What components of BASICS are the most effective? What helps or hinders the process of facilitating an effective intervention with students? Are the students participating in the BASICS intervention mandated to attend or do they present on a voluntary basis? These first-hand accounts have the potential to refine components of BASICS and strengthen the overall intervention. Further, it may serve to empower those practitioners in the mental health profession and in turn benefit students who fall in the high-risk drinking category.

### **Statement of the Problem**

The issue of high-risk drinking on the college campus continues to be the most serious public health concern for colleges and universities throughout the United States (Slutske, 2005). In fact, in a recent article, Miller (2013) points out that college students drink more than any other age demographic and new dangers such as the impact on brain development has emerged

as a focal point for current research. The NIAAA (2002, 2007) provided the 3-1-Framework to address the problem of college drinking through individual and communal strategies. On the individual level, the BASICS intervention was identified as an evidence-based program with a strong theoretical foundation. A number of researchers conducted studies to determine the effect BASICS or variations of the intervention had on high-risk drinking behaviors and alcohol-related consequences with volunteer and mandated students. These studies will be critiqued in the review of literature. Of these studies, Simao et al. (2008) and Roberts et al. (2000) followed the exact BASICS protocol with volunteer participants and DiFulvio, Linowski, Mazziotti and Puleo (2012) followed the exact BASICS protocol with the mandated student population. As indicated earlier, BASICS is listed on the SAMSHA national registry of evidenced-based programs and practices for college students. The limited amount of research demonstrating the use of the BASICS intervention in its entirety raises questions about fidelity and warrants research to examine potential implementation barriers. As campuses continue to implement the recommended strategies provided by the NIAAA (2002, 2007) there is an increased need to determine the best way to utilize the BASICS intervention to effectively reach students who experience issues due to high-risk drinking behaviors.

### **Purpose of the Study**

The purpose of this study is to develop a deeper understanding of BASICS through the perspectives of those practitioners in the mental health profession who use the intervention on their campus. A primary goal is to determine how MHPs implement and facilitate BASICS in their setting. Do they adhere to the protocol outlined in the manual thereby maintaining the fidelity of the intervention? Given the possibility that the intervention was adapted to the MHP's work setting, it is important to explore factors that potentially contribute to the lack of adherence.

As noted earlier, common barriers that often impede implementation of evidence-based practices are lack of knowledge, standardization issues, costs, effective training, adequate time to practice, and on-going supervision and warrant exploration. From a practical standpoint there is a benefit to determine what helps or hinders the process of facilitating BASICS effectively. An increased understanding in these areas will help to reach mandated students who are the subpopulation who typically receive the intervention. Finally, to enhance the “user friendliness” of the intervention, it is important to gain a deeper understanding of the strongest and weakest aspects of BASICS.

### **Research Questions**

This exploratory research will take a qualitative approach to understand the perspectives of counselors who use the BASICS intervention in their work setting. The study is guided by the following research questions:

1. How do practitioners in the mental health profession use the BASICS intervention on their campuses?
2. What do practitioners in the mental health profession perceive as the strongest and weakest aspects of the BASICS intervention?
3. What barriers (if any) are experienced with regard to the implementation of BASICS?

### **Need for the Study**

Based on the current statistics on college student drinking, it is imperative that researchers continue to identify effective prevention and intervention strategies to address the issue of high-risk drinking. While research from the past fifteen years supports the use of the BASICS intervention as a means to reduce high-risk drinking, questions remain about implementation. As indicated earlier, the majority of researchers who supported the efficacy of BASICS used variations of the intervention as opposed to following the exact two-session

protocol. Considering the fact their methodologies involved variations, the question remains, “How are MHP’s at colleges and universities implementing the BASICS intervention in their work setting?” The need for this study exists because, presently, there is no research on MHP’s perspectives regarding the implementation of the BASICS intervention in their work setting. These “stories from the trenches” could establish what is really going on with the intervention and consequently strengthen the overall intervention. Through this study, there is the potential to provide MHP’s with a refined set of tools to better reach students experiencing personal, social, and academic issues due to high-risk drinking behaviors.

### **Definition of Terms**

A common challenge when reviewing the literature related to college students and high-risk drinking is the varying operational definitions (Ham & Hope, 2003). For the purpose of this research study, the following key terms are used:

*3-1-Framework:* A comprehensive approach based on research that targets individual students, the student body as a whole, and the greater college community to address high-risk drinking (NIAAA, 2002, 2007).

*Alcohol-Related Consequence:* An undesirable effect associated with high-risk drinking including but not limited to academic problems, arrests, assaults, injuries, overdose, unintentional sexual situations, social embarrassment, and death.

*Binge Drinking:* A pattern of drinking that increases a person’s blood alcohol level (BAL) to 0.08 grams percent or above. Typically five or more drinks for men and four or more drinks for women consumed in two hours (NIAAA, n.d.).

*Brief Motivational Intervention (BMI)*: A short one-on-one counseling approach that includes Motivational Interviewing (MI) to address high-risk drinking behaviors (NIAAA, n.d.).

*DSM-IV-TR vs. DSM 5*: It is acknowledged that the American Psychiatric Association (APA) updated the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) in May, 2013. The BASICS intervention references the diagnostic criteria used in DSM-IV-TR, which has been modified in DSM-5.

*High-risk drinking*: (a) Drinking at least monthly and consuming at least five to six drinks on one occasion in the last month. (b) A report of three alcohol related problems on three to five occasions in the past three years (Marlatt et al., 1998).

*Mental Health Practitioner*: A professional staff member who holds at least a master's degree in the mental health profession (clinical/counseling psychology, counseling, or social work) and facilitates BASICS on their campus

*Motivational Interviewing*: A goal-oriented, client-centered counseling style for eliciting behavior change by helping clients to explore and resolve ambivalence.

*National Institute on Alcohol Abuse and Alcoholism (NIAAA)*: A division of the National Institutes of Health that is recognized as a source for nationally regarded research in the area of college student drinking.

*Substance Abuse and Mental Health Services Administration (SAMHSA)*: A division of the U.S. Department of Health and Human Services that assumes leadership for public health efforts. The primary mission is to reduce the impact of substance abuse and mental illness on America's communities.

*Standard Drink:* A standard drink is any drink that contains about 0.6 fluid ounces of pure alcohol and is typically defined as a 12-ounce beer, a 5-ounce glass of wine, or 1.5 ounces of liquor.

*Substance Abuse:* The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision [DSM IV-TR] (APA, 2000) defines substance abuse as a “maladaptive pattern of substance use manifested by recurrent and significant adverse consequences related to the repeated use of substances” (p. 198) .

*Substance Dependence:* The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision [DSM IV-TR] (APA, 2000) defines substance dependence as a “cluster of cognitive, behavioral, and physiological symptoms indicating that the individual continues use of the substance despite significant substance related problems” (p. 192) .

### **Organization of the Study**

This study will be presented in five chapters. Chapter One is the introductory chapter and provides a statement of the problem, purpose for the study, research questions, and operational definitions used throughout this document. In Chapter Two, a description of the current trends and consequences of alcohol use among college students along with a summary of the NIAAA task force (2002, 2007) report is provided. Development theories and social norms theory are discussed. Attention is given to identity development, college student development, and emerging adulthood theories to increase understanding of the developmental tasks encountered during this stage of life. The theoretical foundation of the BASICS intervention is thoroughly described. Research related to the intervention is presented and analyzed with a focus on strengths, limitation, and implications for mental health professionals who use BASICS in their

work setting. In Chapter Three, the research questions are presented along with the methodology, data quality procedures, data collection and analyses used to guide the study. Chapter Four presents the results of the study in relation to the three research questions that guide the study. Chapter Five concludes with a discussion of the results, limitations, implications, and recommendations for future research and application.

## **Chapter 2: Review of the Literature**

In the first chapter, a rationale for qualitative research that seeks to understand the experiences of MHP's who use the BASIC intervention as a means to address high-risk drinking on college campuses is presented. In this chapter, current trends and consequences of alcohol use among college students are described. In addition, a summary of the NIAAA task force report (2002, 2007) is provided with a detailed description of the 3-1-Framework to develop and implement best practices for colleges and universities. Development theories are discussed along with social norms theory to establish a concrete understanding of the college student population and the developmental tasks that are encountered during this stage of life as well as the impact peer influences have on the decision making process. The BASICS intervention is thoroughly described and includes a brief review of addiction models in the United States, theoretical foundations of the intervention, and an overview of the harm reduction philosophy. The research related to the intervention will be presented and analyzed with a focus on strengths, limitations, and implications for MHP's who use BASICS in their work setting. This chapter concludes with a summary to reinforce the need for a qualitative research study to gain a deeper understanding of experiences among MHP's who use the BASICS intervention in their work setting.

### **Trends in Collegiate Alcohol Use**

Among college students, high-risk drinking is a prevalent issue and often plays a significant role in problems that students experience (e.g. injuries, blackouts, assault, unsafe sex, academic performance and legal issues). Data from the National Survey on Drug Use and Health (NSDUH) and the Monitoring the Future survey (MTF) reveals roughly 65% of college students consume alcohol in any given month (White & Hingson, 2013). Other researchers report that 40% of students have engaged in binge drinking (defined as 5 standard drinks for men/4 standard

drinks for women in two hours) in the previous two weeks (Johnston, O'Malley, Bachman, & Schulenberg, 2011). However, the most compelling research from a health and wellness perspective indicates that approximately 20% of students experienced clinically significant problems with alcohol in the past year, a percentage much higher than their peers who do not attend college (Hingson et al., 2009; Slutske, 2005).

Many faculty, staff, and administrators are fatigued by the persistent and costly nature of the problem, and the fact that drinking alcohol is often viewed as an integral part of the college experience (NIAAA, 2013). This mindset that alcohol and college go hand in hand contributes to an environment where dangerous drinking behaviors can occur. In 1999, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) established a task force to address the culture of drinking at colleges and universities nationwide (NIAAA, 2002). The task force issued a report in 2002 (updated in 2007) that highlights the consequences of dangerous drinking on college campuses and provides recommendations for effective prevention and intervention strategies.

### **Consequences of High-Risk College Drinking**

The NIAAA task force made a conscious decision to focus on the consequences of high-risk drinking behaviors rather than debate the amount of alcoholic beverages necessary to result in negative outcomes (NIAAA, 2002). A list of consequences was compiled by the taskforce and serves as a strategic outline that needs to remain in the forefront for faculty, staff, and administrators as they strategize to reduce student high-risk drinking on their campuses. This list of consequences has been updated on an annual basis since 2002 (College Drinking Prevention, n.d.).

The authors provide several compelling statistical outcomes related to college student drinking: (1) 1,825 college students between the ages of 18 and 24 die from alcohol-related

unintentional injuries, including motor vehicle crashes; (2) 599,000 college students between the ages of 18 and 24 are unintentionally injured under the influence of alcohol; (3) 97,000 students between the ages of 18 and 24 are victims of alcohol-related sexual assault or date rape; (4) Approximately 25 percent of college students report academic problems due to their drinking including missing class, falling behind, performing poorly on exams and assignments, and receiving lower grades; (5) 3,360,000 students between the ages of 18 and 24 drive under the influence of alcohol; (6) More than 25 percent of administrators from schools with relatively low drinking levels and over 50 percent from schools with high drinking levels say their campuses have a "moderate" or "major" problem with alcohol-related property damage; (7) 400,000 students between the ages of 18 and 24 had unprotected sex and more than 100,000 students between the ages of 18 and 24 report having been too intoxicated to know if they consented to having sex; (8) Approximately 11 percent of college student drinkers report that they have damaged property while under the influence of alcohol; (9) Approximately 110,000 students between the ages of 18 and 24 are arrested for an alcohol-related violation such as public drunkenness or driving under the influence (Hingson et al., 2009; NIAAA, n.d.).

The nature of these consequences are a cause for concern and suggest the need for a comprehensive intervention approach that includes strategies to target individual students, the campus community, and the greater community including law enforcement, alcohol distribution sites, town council, and community resources (NIAAA, 2002). Through extensive research, the NIAAA taskforce identified an array of strategies to assist administrators, faculty, staff, and students to address this public health issue (Nelson et al., 2010; NIAAA, 2002, 2007). The initial report issued in 2002 (updated in 2007) by NIAAA put forth interventions placed into four tiers and referred to as the 3-in-1 approach. This approach has multiple components that are integrated

in a manner that is broad and comprehensive and targets individuals, the student population as a whole, and the surrounding community. All components are intended to operate simultaneously and complement one another. Tier 1 describes the most effective strategies to prevent and reduce the quantity and frequency of college drinking. Tier 2 focuses on techniques proven to be successful with the general population and have the potential to work in the college setting. Tier 3 emphasizes outreach and prevention strategies that demonstrate logical and theoretical promise but require additional research to evaluate effectiveness. Tier 4 details approaches deemed ineffective due to universities' limited resources, and therefore should not be used (NIAAA, 2002, 2007).

### **NIAAA Recommendations**

High-risk drinking on the college campus has social, educational, and psychological implications and requires attention from administrators, faculty, staff, and students (Nelson et al., 2010; NIAAA, 2002, 2007). Those on the frontline such as counselors, campus security staff, student conduct hearing officers, residence life staff, health educators and the dean of students are typically tasked with solving the campus alcohol issue. While this is the logical choice, there is often a lack of resources and at times preparation is inadequate (Beidas & Kendall, 2010; Carise et al., 2009; Proctor et al., 2007). The 3-in-1 Framework put forth by the NIAAA task force is considered a “best practice” approach to reduce harm caused by high-risk drinking and provides a logical framework along with suggestions to implement prevention and intervention programs (Nelson et al., 2010; NIAAA, 2002, 2007).

#### **Tier 1 Interventions: The Most Promising**

Tier 1 interventions focus on individuals and small groups of students, and involve the use of brief interventions, motivational enhancement techniques, and cognitive behavioral skills

combined with norms clarification (NIAAA, 2002, 2007). A brief intervention typically entails one to four sessions that last approximately 30 minutes to an hour, and is facilitated by a trained professional such as a physician, psychologist, counselor, or social worker (Monti, Tevyaw, & Borsari, 2004/2005; Tevyaw & Monti, 2004). A brief intervention is structured so that the facilitator screens, assesses, delivers information, refers to appropriate resources, and arranges for follow-up sessions for the purpose of decreasing risky behaviors associated with alcohol and substance use (Bien, Miller, & Tonigan, 1993). A distinct difference exists between facilitating a brief intervention for problems associated with alcohol/substance use and abuse and those for dependence disorder. A brief intervention targets people who drink or use substances in a high-risk manner with the goal of *preventing* dependence disorders (Babor & Higgins-Biddle, 2000). Slutske (2005) noted that dependence does occur within the college student population, but in general, students who present with alcohol-related problems typically meet the criteria in the DSM-IV-TR for alcohol abuse.

Brief interventions that include motivational enhancement techniques are referred to as *Brief Motivational Interventions* (BMI) (Larimer, Crouce, Lee, & Kilmer, 2004/2005; Monti et al., 2004/2005). Motivational interviewing (MI) is a non-judgmental, client-centered, directive counseling approach with the primary goal of increasing clients' internal motivation to change (Miller & Rollnick, 2013). Miller and Rollnick (2013) described four basic principles that guide the practice of MI: expressing empathy, developing discrepancy, rolling with resistance, and supporting efficacy. Empathy involves accepting the client where they are in relation to their current situation. The development of discrepancy occurs when the client recognizes that their present situation does not match their values and goals for the future. To roll with resistance means the practitioner works with a client in a manner that avoids arguing for change and keeps

communication open. Supporting efficacy is the process of instilling the belief that change is possible. Practitioners who use these principles help clients think differently about their current situation and consider potential gains as a result of change (Miller & Rollnick, 2013). For college students, often there is a belief that everyone drinks excessive amounts of alcohol, and therefore problem recognition is minimal (Caldwell, 2002). Practitioners who use MI to address this issue should draw attention to the inconsistencies between personal goals such as academic success and current drinking behaviors (Dimeff et al., 1999). When discrepancies are brought to their attention and techniques are provided to handle upcoming risky situations, students can envision future success (Dimeff et al., 1999; LaBrie, Lamb, Pedersen, & Quinlan, 2006; Larimer, Palmer, & Marlatt, 1999). The two studies that paved the way for the use of BMIs with college students were conducted by Baer et al. (1992) and Marlatt et al. (1998) at the University of Washington. A four year follow-up study was conducted on the original work of Marlatt et al. (1998) by Baer et al., (2001) to reinforce the original findings.

**Baer et al.** The study by Baer et al. (1992) tested three different approaches to reduce the risks of alcohol use among young adults. One hundred thirty two college students were randomly assigned to one of three groups: (1) a six-week class and discussion group focused on alcohol skills; (2) a six-unit self-help manual focused on alcohol skills; or (3) a one hour in-person session with a professional staff member focused on feedback and advice. The analysis of data involved a two-phase multivariate analysis of variance (MANOVA) method to determine drinking changes over time and differential patterns between treatment groups. The different scores for each of the three drinking measures (standard drinks per week, peak BAC, and drinks per month) were calculated between pre-treatment and termination of treatment, between termination treatment and short-term follow-up, and between short-term follow-up and long-term

follow-up, respectively. The MANOVA revealed significant reduction with respect to standard drinks per week and drinks per month across all treatments and both short-term and long term follow-up points, Wilks's  $\lambda = .37$ , approximated  $F(9, 60) = 11.46, p < .0001$ . The greatest change stemmed from the 6-week program where weekly standard drinks decreased from 13.2 ( $SD = 8.0$ ) at pretreatment to 8.7 ( $SD = 6.3$ ) at the termination of treatment, univariate  $F(1, 68) = 25.2, p < .0001$ . Peak BAC declined from .15% ( $SD = 0.08$ ) at pretreatment to .10% ( $SD = 0.08$ ) at termination of treatment  $F(1, 68) = 15.58, p < .0001$ . Finally, drinks per month declined from 49.9 ( $SD = 23.3$ ) at pretreatment to 41.1 ( $SD = 30.1$ ) at end of treatment, univariate  $F(1, 68) = 7.71, p < .007$ . Participants in the individual intervention yielded comparable reductions. Reductions were also noted for those participants who used the self-help manual, but attrition became an issue with this treatment modality.

In summary, this study to determine the effectiveness of BMI's in various forms produced a desirable effect on drinking behaviors. All three treatment modalities yielded a significant reduction in alcohol use as well as maintenance of drinking changes in a two-year follow up period. However, attrition became an issue with the self-help manual modality. The findings suggested a cost-benefit advantage for the one-hour in-person intervention versus the six-week alcohol skills class. Limitations of this study were the setting (conducted in a research lab rather than a clinical setting) and the lack of a no-intervention control group. Aside from these limitations, the researchers demonstrated the efficacy of BMIs with college students and determined that it was acceptable to deliver the intervention in different formats.

**Marlatt et al.** The other study testing the efficacy of brief interventions with college students that is highly cited in the literature is the research by Marlatt and colleagues (1998). Similar to Baer et al. (1992) this trial study focused on methods to reduce alcohol use and

alcohol related harms among college students. First year students who were extensively screened prior to the start of the school year and met the criteria for high-risk drinking were invited to participate in the study. This yielded a sample of 348 students who were randomly assigned to an intervention group or a no-intervention group. Those in the intervention group received written feedback and personal feedback from a doctoral-level clinical psychologist, a postdoctoral-level clinical psychologist, and advanced graduate students in clinical psychology. All facilitators received training on a precise set of protocols that included BMI. Baseline and follow-up assessments were administered and the effects of treatment over time were assessed through the use of multivariate repeated measures (MANOVA).

Results of the study revealed a decrease in the quantity and frequency of alcohol use, lower BAC's, and a reduction in alcohol-related consequences among students assigned to the intervention group at the six-month and the two-year follow-up periods. At the six-month period multivariate repeated measures analysis revealed significance among treatment and time effects in relation to drinking patterns. Specifically, the interaction among treatment and time,  $F(2,280) = 3.42, p < .03$  was differentially associated with the average quantity of drinking,  $F(2,280) = 4.59, p < .011$ . At the two-year follow-up period students in the intervention group reported drinking 3.6 ( $SD = 2.5$ ) standard drinks per occasion while those in the control group drank 4.0 ( $SD = 2.8$ ) standard drinks per occasion. In terms of alcohol-related consequences, at the six-month period multivariate repeated measures analysis revealed significance among treatment and time effects in relation to alcohol related problems. The interaction among treatment and time,  $F(2, 297) = 3.89, p < .021$  was differentially associated with alcohol related consequences,  $F(2, 297) = 49.82, p < .000$ . At the two-year follow-up students in the intervention group reported experiencing an average of 3.3 ( $SD = 3.5$ ) problems while those in the control group reported 4.7

( $SD = 4.4$ ) problems. Although the magnitude of effect is modest when compared to the control group, the intervention had an impact on drinking behaviors and related consequences. The researchers acknowledged that the lab setting was a limitation of the study, but suggested that the methods could transfer easily to health and counseling settings (NIAAA, 2002).

To examine the long-term response to the BMI, Baer et al., (2001) conducted a four-year follow-up to Marlatt's 1998 work. Participants from the original sample were randomly selected to complete a self-report annually for four years ( $N = 328$ ). Longitudinal analysis revealed that students steadily decreased the negative consequences associated with drinking over four years. In addition, students reported a small decrease in the quantity of drinks per occasion, but no significant difference in the frequency of drinking (Baer et al., 2001). In their conclusion, the researchers express optimism about BMIs, but also call for further research on the impact developmental processes have on college student drinking behaviors.

These foundational studies taught the researchers that students were receptive to the BMI approach (Marlett et al., 1998). Upon drawing this conclusion, researchers combined these studies with other research to develop BASICS for college students at the University of Washington (Dimeff et al., 1999). The intervention was introduced in 1999. Since then BASICS and forms of BASICS have been used by mental health professionals nationwide as a means to address high-risk drinking (Borsari & Carey, 2000, 2005; Dimeff et al., 1999; Larimer et al., 2001; Nelson et al., 2010; Roberts et al., 2000).

## **Tier 2 Interventions**

Tier 2 interventions are considered environmental strategies and pertain to consistent enforcement of laws and policies, oversight of retail outlets and commercial settings, and the establishment of community coalitions (Nelson et al. 2010; NIAAA, 2002, 2007). These

interventions have been promising with other populations and could be applied to college environments. While Tier 1 approaches focus on individual and groups of students, the emphasis of Tier 2 strategies is on campus and community partnerships (NIAAA, 2002, 2007). Important research on Tier 2 strategies focused on the minimum legal drinking age, pricing and taxation, and service policies at commercial establishments provide evidence of effectiveness (NIAAA, 2002, 2007).

It is well documented that the minimum legal drinking age and the enforcement of this law have a direct impact on the consumption of alcohol among minors (Wagenaar & Toomey, 2002). For example, in a study focused on compliance checks at retail outlets, sales to underage patrons were reduced by fifty percent (Wagenaar et al., 2000). This information reinforces the importance of consistently enforcing the minimum drinking age law as well as other laws such as impaired driving, public intoxication, and false age identification as a means to limit access and deter undesirable behaviors (NIAAA, 2002). Research was also conducted in the area of retail outlet density and increased taxation on alcoholic beverages. The researchers found a positive correlation between high-risk drinking and the density of retail outlets as well as tax rates (Chaloupka, Grossman, & Saffer, 1998; Cook & Moore, 2002; Kenkel & Manning, 1996; Leung & Phelps, 1993; Toomey & Wagenaar, 2002). Simply put, when there is a high concentration of alcohol outlets in an area, consumption increases as well as the negative consequences associated with high levels of consumption (Toomey & Wagenaar, 2002). With regards to taxation, the researchers found that higher alcohol prices equated to lower levels of consumption and fewer alcohol-related problems (Chaloupka et al., 1998; Cook & Moore, 2002; Kenkel & Manning, 1996; Leung & Phelps, 1993). Finally, studies on service policies at commercial establishments indicate that bartenders, wait staff, and others in the hospitality industry welcome skills-based

training programs that are designed to prevent intoxication, underage drinking, and drunk driving. The ability to accurately measure standard drinks, recognize false age identification, and refuse service to intoxicated patrons is a skillset that leads to responsible service and is instrumental in the management of high-risk drinking situations at establishments that serve alcohol (Saltz & Stangetta, 1997; Holder et al., 1997) .

Tier 2 strategies aim to reframe the problem of high-risk drinking among college students as a community issue rather than simply a campus problem and strive to bring together key constituents to change the environment. Through collaboration, the campus and community can establish policies and procedures for the purpose of creating a safe environment free from high-risk drinking. It is these recommendations that truly help shift the campus and community culture around this public health issue (NIAAA, 2002). Indeed, according to Nelson et al. (2010) the best available scientific evidence revolves around Tier 2 strategies (e.g. work with authorities in the community) and yet these recommendations have been applied at very few colleges and universities. From these findings, it is clear that additional research is necessary to determine why these partnerships are difficult to establish and what constitutes a model program.

### **Tier 3 Interventions**

Tier 3 interventions are considered promising but require comprehensive evaluation. These interventions consist of campus-wide strategies that have strong theoretical support and intuitively make sense, but require more research (NIAAA, 2002, 2007). The following suggestions have appeal because the evaluation can be brief and simplistic: (1) Schedule Friday and Saturday morning classes and exams to decrease Thursday evening partying; (2) Offer late-night activities in the student center on weekends; (3) Ban on-campus keg parties; (4) Designate substance-free residence halls; (5) Hire mature resident assistants to assist with policy

enforcement; (6) Forbid the sale of alcohol at sporting events and eliminate tailgate events that encourage high-risk drinking; (7) Decline funding from the alcohol industry to avoid sending mixed messages to the student population; (8) Prohibit alcohol on campus, including student residence halls as well as faculty, board of visitors, and alumni events (NIAAA, 2002). In addition to these suggestions, other strategies that have theoretical support are marketing campaigns to correct misperceptions, safe ride programs, and disciplinary sanctions that include alcohol education. Finally, conveying expectations at new student orientation programs about alcohol policies and sanctions associated with the violation of policies could be beneficial based on research that indicates that the first six weeks of college is when students establish their drinking patterns (NIAAA, 2002).

Too often administrators, faculty, staff, and students have viewed the issue of high-risk drinking as an unsolvable problem. The NIAAA 3-in-1 approach is a framework that can help shift the culture of high-risk drinking on campuses and create healthier environments (NIAAA, 2002, 2007). The recommendations put forth can be adjusted to meet the needs of individual schools. To get started, a realistic assessment of alcohol-related problems will enable those on the frontline to implement appropriate strategies for their campuses. To achieve a sustainable change, it is best to intervene at the individual, campus and community level (NIAAA, 2002, 2007). With that being said, the taskforce recognizes the issue of inadequate resources and recommends beginning with the Tier 1 strategies and incorporating the other strategies as feasible.

### **Development and Social Norm Theories**

As indicated in the NIAAA taskforce report, the relationship between college students and alcohol use has a long history that society often views as synonymous (NIAAA 2002, 2007).

Popular culture has played into this stereotype with the release of the film *Animal House* in 1978 where a group of fraternity men face expulsion and decide to throw outrageous parties. Since *Animal House*, movies continue to follow this theme with students chugging from kegs, playing drinking games, dancing on tables, having sex and passing out (Vander Ven, 2011). The stereotype is difficult to avoid when Princeton Review ranks the nation's top party schools on an annual basis (Inside Higher Ed., 2013). Although the "college is drinking" theme has become part of the landscape, it is also necessary to consider human development theory and focus on college student development and the developmental tasks encountered during this stage of life. College is the time for students to explore new interests and develop their identities. As a part of identity development, it is fairly common for individuals to experiment and engage in risky behaviors that often include the use of alcohol (Bishop, Weisgram, Holleque, Lund, & Wheller-Anderson, 2005). The following descriptions of identity development theory, college student development theory, emerging adult theory, and social norm theory allow for an increased understanding of what is encountered during this stage of life.

### **Identity Development Theory**

Erickson's eight-stage model of human development serves as the foundation for college student development theory (Evans, Forney, Guido, Renn, & Patton, 2010). According to Erikson, the central developmental tasks for traditional college students (18-22 years of age) are identity development versus role confusion and intimacy versus isolation (Erikson, 1968). The identity development stage is the bridge between childhood and adulthood and serves as the time when individuals explore independence and develop a sense of self. Successful navigation of this stage results in increased self-understanding and establishes the groundwork to move into young adulthood where intimacy versus isolation is the focus. During this stage individuals navigate the

process of developing strong committed relationships with others (Erikson, 1968). Although Erikson's theory did not focus on college students specifically, his work on these two age groups became the basis for future study.

### **College Student Development Theory**

Chickering (and later Chickering and Reisser) expanded on Erickson's theory and identified seven tasks also known as vectors that college students encounter as they transition from adolescence into early adulthood and develop their identities (Chickering, 1969; Chickering & Reisser, 1993). The seven vectors are: (a) developing competence; (b) managing emotions; (c) moving through autonomy toward interdependence; (d) developing mature interpersonal relationships; (e) establishing identity; (f) developing purpose; and (g) developing integrity. Chickering was often criticized for his initial findings due to the homogenous demographics of his sample. In the revision of the theory, Chickering and Reisser (1993) looked at identity development in relation to gender, ethnicity, and sexual orientation as well as the education environment and suggested that these factors combined with the educational environment have a major impact on a student's ability to navigate each vector. A few of the environmental factors are institutional size, institutional goals and objectives, relationships among students and faculty, core curriculum, teaching styles, student development programs, and student community (Evans et al., 2010). This is important in the context of college student drinking as these factors parallel the factors identified by Pressley, Meilman, and Leichter (2002) who determined that institution size and location, the presence of Greek life and athletic teams, the availability of substance free residence halls, and diversity among the student body have a direct impact on high-risk drinking. This means that to accurately address the issue of high-risk drinking faculty, staff, and administrators must understand the development vectors

that the student encounters and recognize the environmental factors inherent to their campus. Without this awareness, the culture of drinking will be difficult to change.

### **Emerging Adulthood Theory**

The work by Jeffrey Arnett (2000) on emerging adulthood as a theory of life span development also warrants a closer look as we strive to find solutions to address high-risk drinking on college campuses. The focus of his theory is on young people between the ages of 18-25 in industrialized countries. Arnett (2000) argues that people in this age group do not fit the definition of adolescence nor adulthood, but fall somewhere in between. He goes on to say that individuals in this stage do not view themselves as adolescents nor adults because they are gradually establishing their independence from their parents and considered legally responsible for their behaviors, but have not fully assumed responsibilities associated with adulthood (e.g. commitment to a life-long partner, consistent employment, financial independence, and an established residence). Emerging adulthood is the time to explore life's endless possibilities as a means to develop identity.

The foundation of Arnett's theory stems from the change in demographics over the past half century. For example, there has been a postponement of marriage where the median age in 1970 for women was 21 and men was 23 while in 2010 the median ages were 27 and 28 respectively (Fry, 2013; U.S. Census Bureau, 2010). Also reflected in the data is the attainment of higher education. In 2012, approximately 60% of young adults attained education beyond high school compared to 29% in 1968 (U.S. Census Bureau, 2012; Arnett & Taber, 1994; Bianchi & Spain, 1996). As a result, the developmental tasks during this stage of life have been altered and exploration, which was typically considered an adolescent task, is a mainstay in emerging adulthood (Arnett, 2000). With exploration comes risk-taking behaviors and research indicates

that during emerging adulthood there is an increase in risky behaviors such as unprotected sex, drug and alcohol abuse, and driving while intoxicated (Johnston et al., 2011, 2012; Park, Mulye, Adams, Brindis, & Irwin, 2006). In fact, according to the Johnston et al. (2012) Monitoring the Future study, binge drinking and daily drunkenness is the highest during this stage of life. These sensation seeking behaviors are easily pursued as an emerging adult because parents are not present to monitor behavior and the responsibilities of adulthood are not established (Arnett, 2000). The failure to recognize the characteristics of emerging adulthood and to provide support services to navigate the tasks during this stage can have long-term implications such as continued misuse/abuse and dependence on alcohol (Stone, Becker, Huber, & Catalano, 2012). This is key information for MHP's and administrators as they search for best practices to address high-risk drinking on their campuses.

### **Social Norms Theory**

The theory of social norms emerged from research by Perkins and Berkowitz (1986, 2002) to address alcohol use patterns among college students. They found that peers had the greatest influence on individual drinking behaviors rather than family, faculty, resident advisors, religion, or other cultural influences. Consequently, the focus of the theory is on interpersonal influences (peers) and the environment and states that misperceptions of norms influences human behavior. The goal is to correct these misperceptions in an attempt to change behavior and is done through the deliverance of credible data and information (Perkins & Berkowitz, 1986). Social norm interventions typically come in the form of print media campaigns, innovative curriculum, brief interventions, and counseling.

Social norms theory has provided a context to better understand patterns of alcohol use among college student and has implications for prevention and intervention programs. However,

researchers have produced mixed results when it comes to behavioral changes with some finding success while others see no change or unfortunately an increase in the undesirable behaviors (Schultz, Nolan, Cialdini, Goldstein & Griskevicious, 2007; Scribner et al., 2011) .

Through meta-analysis research that included the responses of 53,825 participants, Borsari and Carey (2003) sought to establish if certain variables influenced the perception of drinking among college students. The variables explored (norm type, gender, reference group, question specificity, and campus size) were all determined to have a significant influence on perceptions and impact the misperceptions of drinking norms among students. Based on their findings, Borsari and Carey (2003) concluded that the success of social norms interventions is contingent upon the relevancy of the norms to a particular student population. For example, the student population at a large public university is vastly different from the student population at a small private liberal arts campus. To address the discrepancy between the perceived and actual norm, the descriptive norms used must fit the environment. This is a challenge with social norms interventions: a one size fits all model does not exist. For maximum effectiveness, social norms interventions must include accurate data that is carefully crafted into a message that provokes thought and conversation among students and avoids a defensive or dismissive attitude (Borsari & Carey, 2003).

Indicators of success in college are typically related to academic achievement and personal development (e.g. sense of purpose, self-awareness and social competence). As indicated in the Snapshot of Annual High-Risk College Drinking Consequences, it is not uncommon for students to experience difficulties in these areas as a result of high-risk drinking (Hingson et al., 2009; NIAAA, n.d.). These development theories and social norms interventions provide administrators, faculty, staff, and students with an increased understanding of what is

encountered during this stage of life (establishing an identity and navigating peer influences) and should be taken into consideration when developing the NIAAA recommended prevention and intervention strategies. For example, Tier 1 strategies focus on individuals and small groups of students, and involve the use of brief interventions, motivational enhancement techniques, and cognitive behavioral skills combined with norms clarification (NIAAA, 2002, 2007). When delivering these interventions, factors such as brain development, family of origin, on-set of alcohol use, membership in social groups, academic achievement etc. are necessary to consider as a means to better reach students. The same rationale also applies to environmental strategies where a change in culture is contingent upon strategies that are realistic, applicable, and resonate with students. In summary, through developmental and social norms theories, a better understanding of the college student population emerges and in turn enhances the prevention and intervention strategies put forth by the NIAAA (2002, 2007). The remainder of this literature review will focus on the BASICS intervention, a Tier 1 evidence-based strategy.

### **BASICS: A Tier 1 Intervention**

As outlined in chapter one, BASICS is a harm reduction approach aimed at college students who have experienced alcohol-related problems. This two-session, brief, motivational intervention is facilitated in a manner to increase personal awareness around the use and abuse of alcohol, and reduce harmful consequences associated with high-risk drinking (Dimeff et al., 1999). Research points to the effectiveness of the intervention particularly in the reduction of the quantity and frequency of drinking rates (Baer et al., 2001; Borsari & Carey, 2000, 2005; Larimer et al., 2001; Murphy et al., 2001).

## **Theoretical Foundation of BASICS**

Fifteen years of research in the areas of brief intervention for addiction issues and cognitive-behavioral group treatment were necessary to test the efficacy of BASICS with college students (Dimeff et al., 1999). In doing so, researchers used motivational interviewing, cognitive-behavioral therapy and the stages of change model as the theoretical foundation for the intervention (Dimeff et al., 1999). Motivational interviewing is based on client-centered therapy, social learning theory and cognitive-behavioral therapy (Miller & Rollnick, 2013). Through the combination of these theories, the nature of BASICS is characterized as a nonjudgmental, interactive, collaborative, skill building approach with the goal of harm reduction (Dimeff et al., 1999). Prior to any mental health professional facilitating the BASICS intervention, they must be clear about their values and beliefs surrounding the cause of addiction as a means to guide their work with clients. Several addiction models (e.g. moral, disease, spiritual, and biopsychosocial) in the United States aid facilitators with how they approach treatment, and provide a deeper understanding of clients' behaviors in relation to addiction issues (Dimeff et al., 1999). In this section, the helping and coping models as they apply to addiction issues and the theoretical underpinnings of BASICS will be described.

### **Helping and Coping Models**

Brickman et al. (1982) studied four helping and coping models and applied them to addiction issues in an attempt to answer whether a person addicted is responsible for the development of the problem and for changing the problem. These questions led to the development of a framework that provides mental health professionals with a better understanding of addiction issues, and a starting point when considering various approaches to prevention, treatment, and relapse (Dimeff & Marlatt, 1995; Marlatt & Gordon, 2005). The

framework includes the moral model, disease model, spiritual model, and biopsychosocial habit model as depicted in Figure 1 (Brickman et al., 1982; Dimeff et al., 1999).

		Responsible for Changing Problem? (Is person capable of changing without self-help or treatment group?)	
		Yes	No
Personally Responsible for Developing an Addictive Behavior	Yes	Moral Model Relapse = Sin	Spiritual or 12 Step Model Relapse = Loss of Contact with Higher Power
	No	Biopsychosocial Habit Model Relapse = Mistake/Error	Disease Model Relapse = Reactivation of Progressive Disease

*Figure 1: Framework to Approach Prevention, Treatment, and Relapse*

Within the moral model, individuals are responsible for their addiction issues and they are also responsible for changing or failing to change the issue. Regrettably, the moral model has a “blame the victim” mentality, and suggests the person has a lack of willpower should relapse occur. The disease model assumes that individuals are pre-disposed to addiction based on genetic and physiological makeup, and that total abstinence must be achieved to avoid the reoccurrence of the “disease state.” The challenge with this model is that individuals can never achieve full recovery. The spiritual model assumes addiction issues occur because the individual is alienated from a higher power and participates in sinful behaviors. To address addiction issues with this model, individuals must recognize that a spiritual source (e.g. God, higher power) will provide a solution. Steps toward recovery are based on a transition from self-centered behaviors to selfless behaviors and the ability to accept that through a higher power, addiction issues are manageable. The biopsychosocial habit model assumes that individuals experience addiction issues due to biological, psychological, and social factors. Therefore, individuals are not personally

responsible for their addiction issues, but with assistance they are responsible for making changes in behavior (Marlatt & Gordon, 2005; Brickman et al., 1983). BASICS draws upon this biopsychosocial model because the model recognizes the etiology of addiction issues and places emphasis on the individual's ability to develop skills to address these issues (Dimeff et al., 1999)

### **BASICS Theoretical Underpinnings**

**Motivational interviewing (MI) and stages of change.** MI is the cornerstone of the BASICS intervention, and Miller and Rollnick (2013) defined it as:

Collaborative, goal oriented style of communication with particular attention to the language of change. It is designed to strengthen personal motivation for and commitment to a specific goal by eliciting and exploring the person's own reasons for change within an atmosphere of acceptance and compassion. (p. 29)

The therapeutic relationship in MI is similar to the approach of Carl Rogers in client-centered therapy (Miller & Rollnick, 2013). Client-centered therapy is based on the belief that a client's condition could improve if the counselor demonstrated the core conditions of counseling: empathy, genuineness, congruency, and unconditional positive regard (Rogers, 2007). These core conditions promote change in a client while other behaviors such as negative confrontation, dismissal of ideas, and judgmental actions can be associated with no change, and at times, worse outcomes (Miller, Benefield, & Tonigan, 1993; Patterson & Forgatch, 1985). The key components of MI parallel Rogers' core conditions: express empathy, develop discrepancy, avoid argumentation, roll with resistance, and support self-efficacy (Miller & Rollnick, 2013). MI places emphasis on mastering communication methods to elicit change talk, focus on the discrepancy between clients' values and behaviors, and motivate people to change. Often, this method is viewed as an interpersonal style with a technical component that involves the

evocation and reinforcement of change talk (Miller & Rollnick, 2013; Miller & Rose, 2009). To facilitate the BASICS intervention successfully, the mental health professional must receive training in MI and develop a clear understanding of the Stages of Change model developed by Prochaska, Norcross, & DiClemente (1994).

**Stages of change model.** When clients present for alcohol and/or substance abuse and dependence issues, typically they are not ready to change their pattern of use (Rollnick, Heather, & Bell, 1992). In the case of college students, most present with minimal problem recognition based on the assumption that everyone drinks in college, which is congruent with social norms theory (Caldwell, 2002; Perkins (2002); Perkins & Berkowitz, 1986. The Stages of Change model includes five phases that build on one another with the early phases focused on thinking about and considering change, and the later stages focused on implementing and maintaining change (Prochaska et al., 1994). Pre-contemplation, phase one of the model, is when individuals are unaware that problems may exist as a result of behaviors and do not consider change. In phase two, contemplation, individuals recognize problems exist as a result of certain behaviors, and are ambivalent about change. During this time, counselors help clients to weigh the pros and cons of change, and the costs and benefits if change is avoided. Preparation is phase three of the model. During this time, individuals declare an intention to change, and often take some action in the direction they wish to change. Action is the fourth phase, and involves modification of behavior, experiences, and environment to overcome problems. Individuals in this phase spend a considerable amount of time and energy on the behavioral changes they are beginning to make. The final phase, maintenance, involves the stabilization of behavioral changes and prevention of relapse. Individuals in this phase work to integrate fully and maintain their new lifestyle changes (Prochaska et al., 1994).

From an MI perspective, the counselor must assess the client's readiness to change as a means to guide the session (Dimeff et al., 1999; Miller & Rollnick, 2013; Prochaska et al., 1994). For example, if a college student is mandated to participate in the BASICS intervention and is in the pre-contemplative phase, the student likely has little problem recognition and is resistant to change (Caldwell, 2002). In this case, the counselor would work with the student in a manner that increases awareness about risky and problematic drinking behaviors (Dimeff et al., 1999; LaBrie et al. 2006; Larimer et al., 1999). This occurs through the exploration of negative outcomes associated with binge drinking such as academic performance issues, the amount of time spent recovering from an evening of heavy drinking, and the amount of money spent on alcohol. When the student begins to consider his or her own reasons for concern and provides reasons for change, the next task is to resolve ambivalence (Dimeff et al., 1999; Prochaska et al., 1994). The contemplation phase addresses ambivalence and is when the counselor facilitates a decision-to-change exercise that identifies reasons to change and ponders the risks of remaining the same (Dimeff et al., 1999). Also, this is a time to promote self-efficacy and instill hope that change is possible and within reach (Dimeff et al., 1999; Miller & Sanchez, 1994). As the student moves toward the preparation, action, and maintenance phases, the counselor gives focus to the student's selection of a realistic action plan, provides encouragement and positive feedback, and teaches relapse prevention skills (Dimeff et al., 1999; Prochaska et al., 1994). These final stages mark a readiness to change and draw upon Cognitive Behavioral Therapy (CBT) as a means to start the change process and move toward lifestyle balance (Dimeff et al., 1999).

**Cognitive-behavioral therapy.** The BASICS intervention places emphasis on problem solving and skill building as means to address issues associated with high-risk drinking. This

intervention model stems directly from cognitive-behavioral therapy (CBT) (Dimeff et al., 1999). Many prominent therapies are grouped together under the umbrella of CBT including Albert Ellis's rational emotive behavioral therapy, Aaron T. Beck's cognitive therapy and Donald Meichenbaum's cognitive behavioral therapy (Corey, 2013). Counselors who use CBT work with clients in a manner that heightens awareness about the effect thoughts and feelings have on behavior (Corey, 2013). Beck is credited for recognizing this effect as result of his therapy sessions with clients who suffered from depression (Penberthy, Wartella, & Vaughan, 2011). He became cognizant of a powerful link between thoughts and feelings, and determined that clients could overcome their difficulties if they examined their core beliefs and changed their patterns of thinking, which would lead to behavioral changes (Penberthy et al., 2011).

Components of CBT include a functional analysis of how thoughts, feelings, and situations contribute to problematic beliefs and dysfunctional behaviors, and strategies to learn and practice a repertoire of coping methods that can be applied to all types of "real life" situations (Penberthy et al., 2011). CBT is a short-term, goal-oriented approach to therapy used to tackle a range of issues including sleep deprivation, anxiety, depression, alcohol and substance abuse, and relationship issues (Beck, Wright, Newman, & Liese, 2001). With regard to the BASICS intervention, the essence of CBT comes into play when the student practices new coping mechanisms and rehearses ways to avoid or confront social situations that could lead to a relapse (Dimeff et al., 1999). If the student manages the high-risk situation successfully, the potential to increase self-efficacy is high and the likelihood to maintain change is greater. With BASICS grounded in the biopsychosocial model, the assumption is that students encounter alcohol issues due to biological, psychological, and social factors. The model assumes that with assistance, students are able to recognize how their thoughts and feelings contribute to

problematic behaviors and develop skills to manage high-risk drinking (Brickman et al., 1983; Dimeff et al., 1999; Marlatt & Gordon, 2005). Through the integration of MI and CBT, students who participate in the BASICS intervention increase their motivation to change and develop the skills necessary to avoid relapse (Borsari & Carey, 2000, 2005; Dimeff et al., 1999; Larimer et al., 2001; Murphy et al., 2001).

**Harm reduction philosophy.** The theoretical underpinnings of BASICS is couched in the harm reduction philosophy (Dimeff et al., 1999). In the context of college student drinking, harm reduction places emphasis on practical strategies to reduce the negative outcomes associated with high-risk drinking and to develop goals in the areas of moderation and personal safety (Heather, 2006). The harm reduction philosophy is often considered controversial because abstinence is not required. However, it seems appropriate in the college setting where students frequently encounter the pressure to drink. They must learn to navigate these influences and ultimately assume personal responsibility for their decisions (Logan & Marlatt, 2010). Also, it is well documented that the majority of college students decrease their alcohol consumption as they mature. Therefore an approach that emphasizes good decision making is more relevant than abstinence (Marlatt & Witkiewitz, 2002). Harm reduction is humanistic in nature and aims to maintain the dignity of people who engage in high-risk behaviors while focusing on strategies to achieve a healthier and balanced lifestyle (Heather, 2006).

**Development Theories.** Dimeff et al., (1999) touch briefly on development and mention that a connection exists between developmental issues students encounter and the consumption of alcohol. Similar to Arnett (2000), they point out that students often view college as a time to experiment and consider drinking alcohol as a rite of passage. To reinforce this mindset, Dimeff et al., (1999) highlight a comment made by a student, “Once I graduate, my drinking habits will

change. I'll have a real job and responsibilities, and I won't be able to party all the time" (pp. 12). This notion of being in between is exactly what Arnett (2000) describes as emerging adulthood. As discussed earlier, the failure to understand the developmental tasks that students encounter and recognize the characteristic of emerging adulthood impede the process to effectively address high-risk drinking and must be taken into consideration when facilitating BASICS.

**Frames.** Although not a theoretical foundation of BASICS, FRAMES is an acronym that summarizes the elements of BMIs. FRAMES as defined by Miller and Sanchez (1994) stands for feedback, responsibility, advice, menu, empathy, and self-efficacy. Feedback is offered based on whether assessment scores indicate risks for alcohol problems. Responsibility is on the part of the client, and the mental health professional must facilitate the intervention in a manner that conveys this message. Advice means suggestions are offered to aid with the change process. Menu involves a variety of strategies to make changes such as limiting alcohol consumption or avoiding high-risk situations. A few examples of potential strategies are (1) setting a limit; (2) pacing consumption; (3) establishing a cut of time; (4) avoiding certain events that promote high-risk drinking etc. Empathy is what the mental health professional should convey when working with a client. Self-efficacy is the belief that change is possible. FRAMES provides a guideline that helps counselors maintain the spirit of MI and stay on track when facilitating any form of a BMI. In addition, the FRAMES model can help those who serve in a supervisory role evaluate their staff to ensure that the efficacy of the intervention is maintained and relevant feedback is provided (Miller & Rollnick, 2013; Miller & Rose, 2009; Miller & Sanchez, 1994). The integration of MI and CBT within the BASICS intervention provides a framework to address the biological, psychological and social factors that are attributed to high-risk drinking. The

sequence of establishing rapport, working through ambivalence, and developing behavioral tools offers students the opportunity to make changes in behavior (Brickman et al., 1983; Dimeff et al., 1999; Marlatt & Gordon, 2005). This next section is a review of studies related to the BASICS intervention as well as studies that focus on attitudes and practices toward BMIs.

### **Review of Related Studies**

As discussed earlier, Baer et al. (1992, 2001) and Marlatt et al. (1998) were the first to publish studies that evaluated the effect of BMIs on college drinking and demonstrated strong research outcomes that support the efficacy of BASICS. For the purpose of this literature review, emphasis is placed on studies beyond Baer et al. (1992, 2001) and Marlatt et al. (1998) that were also cited in the initial taskforce report as evidence to support the Tier 1 recommendation (NIAAA, 2002). In particular, studies by Borsari and Carey (2000) and Larimer et al. (2001) are thoroughly evaluated. Both produced quantitative evidence that BMIs are effective to decrease the quantity and frequency of alcohol use and negative outcomes among volunteer participants, but a deeper critique of the design, methodology, and discussion sections is warranted. Next, a meta-analysis on the efficacy of BASICS is critiqued (Fachini, Aliane, Martinez, & Furtado, 2012). The intent of this meta-analysis was to explore the efficacy of BASICS as a protocol to reduce high-risk alcohol use and decrease problems associated with heavy drinking among volunteer participants. The eighteen studies included in the meta-analysis extended the previous research and demonstrated mixed success with regard to varying BMI approaches. A number of these studies will be discussed. Following these studies, focus is placed on studies cited in the NIAAA follow-up report (2007) where the research shifted from students who volunteered to participate in a BMI to students who were mandated to receive a BMI. These studies produced quantitative evidence that BMIs were effective, but questions arise about the process of change

among participants. For example, was the impetus to change due to the intervention, the policy violation, or possibly both? Moving beyond the NIAAA taskforce reports, additional research evaluated includes two recent studies on mandated students. The first compared BASICS to two other alcohol intervention modalities (Alfonso, Hall, & Dunn, 2013) while the second was a quasi-experimental design that evaluated the effectiveness of BASICS through a comparison of an intervention group to a comparison group (DiFulvio, Linowski, Mazziotti, & Puleo, 2012). Following these studies is a review that examines existing research on alcohol-related consequences in relation to individual based interventions (Mallett et al., 2013). Finally, two qualitative studies that focus on attitudes and practices toward BMIs are assessed.

### **NIAAA Tier 1 Research**

**Borsari and Carey.** The work of Borsari and Carey (2000) is a highly cited study by the NIAAA and served to replicate the BMI portion of the Marlett et al. (1998) study. In their study, Borsari and Carey (2000) explored the effects of BMI on the reduction of drinking among college students who volunteered to participate in a randomized controlled trial. Students were recruited from a psychology class and screened for binge drinking events that occurred two or more times in the past month. Sixty-three of the students screened met the criteria, and 60 were invited to participate in the study. Students received credit toward a class project as compensation for participation in the research.

Students were randomly assigned to a one-session BMI using an adaptation of the BASICS intervention ( $N = 29$ ) or to a no-treatment control group ( $N = 31$ ). Eighty seven percent of participants lived on campus. The mean age of students in the BMI group was 18.45 ( $SD = 0.11$ ) and 59% were female. The mean age of students in the control group was 18.71 ( $SD = 0.17$ ) and 55% were female. The baseline assessment included demographic questions, an

evaluation of typical drinking over the past 30 days, the Rutgers Alcohol Problem Index (RAPI), Cognitive Appraisal of Risky Events (CARE), and the Drinking Norms Rating Form (DNRF). The baseline assessment included demographic questions, an evaluation of typical drinking over the past 30 days, the Rutgers Alcohol Problem Index (RAPI), Cognitive Appraisal of Risky Events (CARE), and the Drinking Norms Rating Form (DNRF) that gathered information about participants' average and highest weekly drinking totals as well as that of friends and typical students. The RAPI was developed in 1989 by Helene Raskin White and Erich Lavouvie at Rutgers University and has become one of the most widely used instruments to determine alcohol-related problems among the college student population (Bosari & Carey, 2005; Collins & Carey, 2005; White & Labovouvie, 1989). CARE, developed by Fromme, Katz, & Rivet, (1997) is a questionnaire that measures expectancies in relation to heavy alcohol use and other risky behaviors and provides insight into what motivates risk-taking behavior. The DNRF is a 10-item self-report instrument used to assess students' perception of alcohol use among their peers (Baer, Stacy, & Larimer, 1991).

The BMI was an adaptation of the BASICS intervention and reduced from two individual sessions to one with a focus on five components: (1) review of personal alcohol use in the past thirty days and how it compares to campus and national norms; (2) review of personal negative outcomes due to drinking; (3) discussion that addresses the effect of positive and negative expectancies in relation to personal alcohol use; (4) education about the effects of alcohol for the purpose of dispelling myths and providing accurate information; and (5) a review of available options that would aid in the decrease of alcohol use and facilitate the use of protective strategies.

The four variables used as outcomes measures were: the quantity of drinks consumed per week, number of days alcohol was consumed in last month, the number of binge drinking occasions in the last month, and RAPI scores. Significant correlations were found between the three drinking variables, but were analyzed separately because they measured different styles of high-risk drinking behaviors. Use of a *t-test* was the appropriate statistical analysis to measure baseline between the two groups and revealed no significant difference. At follow-up, to control for a Type 1 error, the Bonferroni correction was used and revealed that the brief intervention group drank significantly fewer drinks per week ( $M = 11.4, SD = 7.03$ ) than the control group ( $M = 15.78, SD = 8.17$ ) and they also drank fewer times per month ( $M = 3.83, SD = .89$ ) than the control group ( $M = 4.57, SD = 1.07$ ).

Multiple regression analyses were conducted to examine the relationship between demographic variables that influence alcohol use and to model reductions in drinking. This analysis showed significant reductions in the number of times alcohol was consumed and the frequency of binge drinking episodes for those who received the BMI as compared to the no-treatment group at the six-week post intervention mark. However, there were no significant differences between groups with regard to the RAPI scale (alcohol-related consequences). The final step of their data analysis was the use of a mediation analysis to compare participants' estimates of drinking norms to the actual drinking norms data, and it revealed that the perception of typical student drinking patterns mediated a relationship between drinking and intervention. As a result, the researchers proposed the use of drinking norms data in the BMI intervention as a catalyst for decreased alcohol use (Borsari & Carey, 2000).

Borsari and Carey (2000) made a significant contribution to the field through this research and reinforced that BMI's work as a means to address high-risk drinking among college

students. Strengths of this study include the use of a randomized control group, equivalency between the two groups at the baseline assessment, exploration of BMIs, thorough data analysis to produce findings that support the use of BMIs with high-risk drinkers and the replication of promising research. The limitations of the study were potential bias in recruitment of participants, setting, potential bias on the part of the principal investigator, and the adaptation of the BASICS intervention. With regards to recruitment, there may have been some bias with persuasion to participate for class credit, and high-risk drinkers may have avoided participating based on recruitment strategies that potentially labeled them as high-risk drinkers. In terms of the setting, the study was conducted in a research laboratory rather than a clinical setting, which influences future application. Furthermore, one of the principal investigators facilitated the BMI, which may not reflect the typical practitioner who is responsible for the delivery of BMI on campus, and could potentially result in researcher bias. Questions arise about the type of training the research team received in the area of BMI and whether the key principles of MI were applied. Finally, the adaptation of the BASICS intervention may cause confusion for practitioners who want to use BASICS on their campuses. For example, practitioners might question if using certain components of the intervention is sufficient rather than adhering to the two-session structured outline, and further, if one session is sufficient and which components are necessary. The researchers did not find a significant difference between the intervention and control group in relation to alcohol-related consequences. This raises questions about the impact BMIs have on alcohol-related consequences and requires additional research.

**Larimer et al.** Larimer and colleagues (2001) replicated and extended the research of Marlatt et al. (1998). In this study, the researchers focused on pledge classes from 21 fraternities at a large university in the Northwest, and hypothesized that members who received a BMI

during their pledge year would decrease their overall alcohol consumption as compared to members who received services-as-usual in the community. A unique component of this research was that peer educators as well as professional staff (clinical psychology advanced graduate students, a master's level clinician, and a licensed psychologist) delivered the feedback portion of the BMI.

One hundred fifty nine students from twelve different fraternities volunteered to participate in the study and were randomly assigned to a BMI group or the service-as-usual (alcohol education class). Randomization occurred by fraternity rather than on an individual level, with six fraternities assigned to a BMI that included individual feedback and group feedback, and six fraternities assigned to a one-hour didactic alcohol education presentation. As an incentive to participate, all fraternities received \$100.00. Similar to the research by Bosari and Carey (2000), baseline and follow-up measures were used including the Daily Drinking Questionnaire (DDQ), RAPI, and the DNRF. Other assessment instruments used were Alcohol Dependence Scale (ADS) to assess symptoms of physical dependence, Short Michigan Alcohol Screening Test (SMAST) to assess lifetime incidence of problem drinking behavior, University of Rhode Island Change Assessment (URICA) to assess readiness to change behaviors and the Alcohol Perceived Risk Assessment (APRA) to assess perceptions of the risk of experiencing negative consequences as a result of drinking. The BMI included an individualized tailored feedback session based on information provided in the baseline assessment. Facilitators received eight to twelve hours of training in the area of brief intervention and structured the sessions around the principles of MI.

The researchers ran three one-way ANOVA's to establish baseline data and ensure no significant difference between the fraternity members in relation to drinking patterns. The

variables used as measures were the quantity of standard drinks per occasion ( $M = 4.93$ ,  $SD = 2.73$ ), number of days alcohol was consumed per week ( $M = 3.03$ ,  $SD = 1.51$ ) and estimated peak BAC (.17%). There was no significant difference between participants in the two conditions. Analysis of Covariance (ANCOVA) was used to measure the treatment effect on alcohol use, peak BAC, consequences between the two groups, and revealed a significant difference in the total number of standard drinks consumed per week for the intervention group ( $M = 12.27$ ,  $SD = 10.85$ ) compared to the control group ( $M = 17.51$ ,  $SD = 16.96$ ), ( $F = 5.10$ ,  $1/115$   $df$ ,  $p < .05$ ). A significant reduction in the typical peak BAC was also noted between the two groups with the intervention group decreasing from .10% at baseline to .07% as compared to the control group which decreased from .09% to .08%. With regard to the frequency of alcohol consumption and alcohol-related consequences, no significant treatment interactions emerged.

Through this study, the researchers replicated previous findings that indicated BMI's are effective for the reduction of high-risk drinking among college students (Baer et al., 1992; Borsari & Carey, 2000; Marlatt et al., 1998). The researchers used sound methodology and appropriate statistical analysis to report their findings. The one-year follow-up suggested the "staying power" of a BMI as evidenced by reductions in the quantity of standard drinks consumed per week. However, questions remain about the impact of BMIs on the frequency of alcohol consumption and alcohol-related consequences. Although members of the research team received eight to twelve hours of training and supervision delivering one or two feedback sessions prior to the study, it is difficult to determine if key principles of MI were applied. Components of the BASICS intervention were used, but the exact protocol was not followed. Feedback was delivered on seven topic areas as opposed to ten areas in the full BASICS intervention. Again, this raises questions about translating BASICS into practice if researchers

only use certain components of the intervention. This appears to be a theme within the research as evidenced in the meta-analysis study by Fachini et al. (2012) where only two of the eighteen studies critiqued used the full BASICS intervention.

### **Meta-Analysis of BASICS Research**

The meta-analysis research conducted by Fachini et al. (2012) explored the efficacy of BASICS as a protocol to reduce high-risk alcohol use and decrease problems associated with heavy drinking among college students. The researchers performed a systematic review with a focus on randomized controlled trials and produced 18 studies for this meta-analysis. Three methodological conditions necessary to be included in the meta-analysis were: (1) use of BMI; (2) face-to-face intervention; and (3) comparison with a control group or different intervention. All studies selected were deemed to be “strong” via solid evaluation of methodological quality. Four were considered superior quality. To maintain homogeneity of the sample, the researchers excluded studies that focused on the mandated student population. Although they did not provide an explanation for excluding this population other researchers including Barnett et al. (2004), Barnett and Reed (2005), and Borsari and Carey (2005) determined that mandated students differ from volunteer students and called for a deeper investigation of the factors contributing to the change process among this student population.

Five of the included studies were NIAAA foundational studies discussed earlier in this literature review (Baer et al., 1992; Marlatt et al., 1998; Baer et al., 2001; Borsari & Carey, 2001; Larimer et al., 2001). The two studies by Roberts et al. (2000) and Simao et al. (2008) followed the BASICS protocol and produced findings that have implication for counselors. These studies will be discussed in the following paragraph. Eight studies including: (1) Turrisi et al. (2009); (2) Fernandez, Wood, Laforge, and Black, 2011; (3) Murphy et al. (2001); (4) Murphy et al. (2004);

(5) Wood, Capone, Laforge, Erickson, and Brand, (2007); (6) Carey, Carey, Maisto, and Henson, (2006); (7) Mastroleo, Turrisi, Carney, Ray, and Larimer, (2010) and (8) Schaus, Sole, McCoy, Mullett, and Obrien, (2009) collectively demonstrated the great variance in research conducted on BMI's and the impact these interventions have on high-risk alcohol use among college students. With the exception of Mastroleo et al. (2010), who focused on the efficacy of peer facilitators delivering BMI's, and Schaus et al. (2009) who focused on primary care providers delivering a 20 minute intervention in a student health center, the purpose of each study will be described and the outcomes will be discussed. The three remaining studies by Wagener et al. (2012), Murphy, Dennhardt, Skidmore, Martens, and McDevitt-Murphy (2010), and Butler and Correia (2009) compared a face to face BMI to a computerized intervention. Outcomes of these interventions will be addressed.

**Roberts et al. and Simae et al.** As mentioned earlier, these two studies complied with the BASICS protocol and provided evidence to support the intervention, but also raised concerns about generalizability and adaptability. The first study by Roberts et al. (2000) extended the initial research of Marlatt et al. (1998) and demonstrated the use of BASICS. From the original sample ( $N = 348$ ) the researchers identified 153 high-risk drinkers to participate in the intervention. The researchers explained that the intervention consisted of a one-hour assessment session and a one-hour feedback session grounded in MI and based on the work of Dimeff et al. (1999) leaving the reader to conclude that BASICS was utilized. Their findings were consistent with the previously reported results by Marlatt et al. (1998). Participants in the high-risk treatment group demonstrated better outcomes than the participants in the control group. However, they noted methodological challenges with this longevity study and indicated that it

was difficult to determine the clinical significance of change. As a result, they called for additional research to determine the impact interventions have with individual participants.

Although Simae et al. (2008) did not extend the previous research of Marlatt et al. (1998), they did work to extend the research on BASICS with college students. As a visiting professor at Sao Paulo State University in Brazil, Marlatt facilitated a one week training course on BASICS at the medical school and assisted with the implementation and evaluation of this research study. In this case, the researchers found that the BASICS intervention did have an impact on high-risk drinking, but noted that environmental factors such as inexpensive alcohol and minimal regulation of laws were difficult to combat. In addition, the researchers determined that there were cultural adjustments with the intervention and noted that participants found it difficult to keep a journal of daily alcohol consumption, and they reported that the intervention session was too long. Although the researchers attribute these difficulties to cultural adjustment, it is possible that there were implementation barriers or a combination of both. These findings are worth exploring given the number of international students enrolled in colleges and universities in the U.S. In summary, these two studies support the recommendation to use BASICS as a means to reduce alcohol consumption and negative consequence among college students who fall into the high-risk category. Additional research to determine the mechanism of change is warranted and could lead to development of a specific and concise intervention. This recommendation is in line with this proposed research study.

**Turrisi et al. and Fernandez et al.** The two studies by these researchers focused on comparing a BMI to a parent intervention. Turrisi et al. (2009) explored the efficacy of a parent handbook and a BMI alone and in combination to reduce alcohol use and consequences among a high-risk population of matriculating students. Participants were randomly selected and assigned

to a control group and intervention group. The parent intervention involved the use of a 35 page handbook that included information on college student drinking and techniques for communicating. The BMI consisted of a 40-50 minute session facilitated by a trained peer facilitator. Participants who did not attend an in-person session received their feedback in the mail. Findings revealed that those in the combined intervention group were significantly different in regards to total alcohol consumption, high-risk drinking occasions and alcohol related consequences as compared to those in the other groups. The BMI did have an impact on high-risk drinking occasions and BAC levels. The parent handbook as a stand-alone intervention did not differ significantly from the control group. According to the researchers, these findings demonstrate that the efficacy of a BMI is enhanced when students receive multiple messages about college student drinking.

Fernandez et al. (2011) used a 2x2 factorial design to examine the impact that a two-session BMI and a parent handbook had on the reduction of heavy episodic drinking among incoming college students. The two-session BMI was modeled after BASICS with the primary focus on delivering feedback. The sessions were facilitated by bachelor's and master's level psychology students who received training in MI. The parent intervention involved the use of a 32 page handbook that included information about college student alcohol use and strategies to reduce high-risk drinking. The findings revealed that the BMI significantly reduced the onset of heavy episodic drinking and alcohol related consequences at 10 months and 22 months while the observed effect of the parent intervention was small. In both cases, the researchers stressed the need for additional research to examine the content and quality of interventions. Fernandez et al. (2011) suggested that the BMI session be recorded and coded to ensure fidelity. This call for a deeper investigation is in line with this proposed research to explore the perspectives of

counselors who use BASICS in practice as a means to determine the strengths and limitations of the intervention.

**Murphy et al. (2001) and Murphy et al. (2004).** The two studies by Murphy and colleagues (2001, 2004) focused on comparing a single session BMI to another type of alcohol intervention. The 2001 study compared a single session BMI facilitated by graduate students in clinical psychology to a 30 minute alcohol education video and 20 minute individual follow-up discussion. Findings revealed that there were no overall significant differences between groups, but those who were heavier drinkers in the BMI group did decrease their weekly alcohol consumption. In addition, participants in the BMI group viewed the intervention more favorable than the education video. The 2004 study compared a single session BMI to a single session brief intervention without the use of MI. Both interventions were facilitated by doctoral candidates in a clinical psychology program. The researchers hypothesized that MI would enhance the efficacy of the interventions. Findings revealed that both groups show a significant reduction in alcohol consumption at the six month post intervention mark.

Murphy and colleagues advised that the results of both studies should be interpreted with caution based on small sample sizes and the fact that prior studies have demonstrated the efficacy of BMI's. In this case, the question should be raised as to why these studies were included in a meta-analysis to determine the efficacy of BASICS when neither study adhered to the majority of the BASICS protocol. For example, in both cases the BMI bypassed the first step of BASICS which is to establish rapport with the student and to gain an initial commitment. Instead, the focus of the BMI was on delivering personalized feedback. In both cases, the feedback addressed four areas rather than the ten areas outlined in the BASICS, which raises additional questions. While Murphy and colleagues (2001, 2004) contributed to the literature on

college student drinking, these studies do not provide enough insight to accurately conclude if a BMI is more effective than other forms of alcohol intervention.

**Wood et al.** The study by Wood et al. (2007) is notable because they compared a single session BMI based on the BASICS protocol to an Alcohol Expectancy Challenge. The Alcohol Expectancy Challenge consisted of two sessions conducted in the evening in an environment that simulated a bar atmosphere. Participants completed self-generated and standardized expectancy measures that focused on the positive and negative consequences of drinking alcohol.

Participants were then asked to indicate the number of drinks they would need to consume to experience both types of consequences. Participants who met the legal drinking age criteria were randomly assigned to receive two standard drinks or two placebo drinks while participants under the legal age were given placebo drinks with their knowledge. Following these sessions, participants engaged in a discussion on expectancy theory in the context of social and sexual situations and the distinction between behavioral and pharmacological effects of alcohol. The BMI was facilitated by clinical psychology graduate students who received training in MI and primarily focused on delivering feedback. However, establishing rapport was emphasized as a component of the BMI.

Initial results indicated that both interventions decrease the quantity and frequency of drinking and heavy drinking episodes, but that only the BMI had an impact on alcohol related consequences. At the 6-month follow-up, the effects of the Alcohol Expectancy Challenge completely deteriorated while the BMI deteriorated at a smaller degree. An interesting comment by these researchers was that BMIs work, but very little is known about how they work. Through qualitative research, there is the potential to discover how BMIs work.

**Carey et al.** The research by Carey et al. (2006) investigated the impact six intervention conditions had on 509 college students screened and identified as heavy drinkers. These students were randomly assigned to one of the six intervention groups that included: (1) an interview about their drinking patterns in the last thirty days known as a Timeline Follow Back interview (TLFB); (2) a basic BMI; (3) an enhanced BMI; (4) a combined TLFB with a basic BMI; (5) a combined TLFB with the enhanced BMI; (6) a control group. The BMI entailed alcohol education and personalized feedback to increase personal awareness around current drinking behaviors and the consequences associated with the behavior. The enhanced BMI combined the basic BMI protocol with the use of a decisional balance exercise to explore the advantages and disadvantages of changing current drinking behaviors. All interventions were facilitated by clinical or counseling psychology graduate students who received training in BMI's and were supervised on a weekly basis. In addition, sessions were recorded to ensure competence.

The results of the study revealed at one month, six month, and twelve month follow-up periods that the basic BMI improved all drinking outcome variables as compared to the enhanced BMI and the TLFB intervention. The decisional balance exercise used in the enhanced BMI is a tool that is intended to move people along the stages of change and is highlighted by the NIAAA (n.d.) as a useful resource. These findings indicate that the decisional balance exercise is not necessary and that a basic BMI is effective and will save on the amount of time required to deliver an intervention. This research parallels the foundational studies described in this literature review and demonstrates the efficacy of BMI's with college students identified as heavy drinkers. A strength of this study is that the researchers made a concerted effort to include the majority of the BASIC components as described in the manual (Dimeff et al., 1999). The

researchers called for additional research to determine which components of the BMI promote change.

**Computerized interventions.** The three remaining studies by Butler and Correia (2009), Murphy et al. (2010), and Wagener et al. (2012), compared a face to face BMI to a computerized intervention. All three studies used the same design where participants filled out an assessment that generated a personalized feedback report. The feedback was delivered via the computer or in-person by clinicians or trained graduate students in a clinical psychology program. Each study produced varied results with regards to the quantity and frequency of alcohol consumption and alcohol related consequences. For example, Butler and Correia (2009) found that both interventions produced comparable results while Wagener et al. (2012) found that the in-person BMI significantly reduced typical and peak BAC's as well as the quantity and frequency of alcohol use whereas no significant results were found with the computerized feedback intervention. Murphy et al. (2010) found that the in-person BMI increased the motivation to change and decreased alcohol consumption as compared to the computerized feedback intervention. All three studies also revealed that participants preferred an in-person intervention as compared to the computerized intervention.

There is no doubt the desire to reach a large number of students in a time efficient manner exists, but it is important to pay attention to these findings. Students indicated that they favor in-person interventions. Considering 40% of students have engaged in binge drinking in the previous two weeks, it is important to have campus resources to address the issue (Johnston et al., 2011). As the field strives to identify best practices to reach students, the use of technology needs to be a talking point. Therefore, additional research is critical in this area.

Fachini et al. (2012) concluded through their meta-analysis that BASICS was effective at lowering alcohol consumption and negative consequence among college students. This study included a large sample size ( $N= 6233$ ) with participation among females slightly higher. The variables used as outcome measures were alcohol consumption and alcohol-related problems. The researchers took into account the length of intervention (one session = 72% and two sessions = 28%) when interpreting the results. They deduced that a counselor-administered BMI combined with feedback could be the best option to reduce alcohol consumption and negative consequences. However, rather than labeling it as a counselor-administered intervention, it may be more accurate to state that an in-person intervention is more impactful as there was an array of facilitators with varying credentials delivering the interventions. For example, in the Murphy et al. (2010) study students indicated that they appreciated the interaction with the facilitators. These facilitators were identified as clinicians, but no other descriptors were provided. In addition, they found that participants reported high levels of satisfaction with in-person BMI's as compared to other interventions such as videos, computerized feedback and alcohol expectancy challenges. As stated above, this finding is important to consider as the search for best practices continues. Finally, similar to other studies the researchers call for additional research to determine which components of BMI's influence change. Table 1 on the following page describes the key characteristics of the 18 studies included in this meta-analysis research.

**Summary of NIAAA research and the meta-analysis.** Since 1992, the effort put forth by researchers to determine the efficacy of BMIs is remarkable. The initial studies by Baer et al. (1992) and Marlatt et al. (1998) laid the foundation by demonstrating that various forms of BMIs are an effective means to reduce the quantity and frequency of high-risk drinking and the negative consequences associated with this behavior. These studies combined with the studies by

**Table 1****Key Characteristics of Fachini et al. (2012) Meta-analysis**

<b>Author</b>	<b>Research Objective</b>	<b>Type of Intervention</b>	<b>Credentials of Facilitator</b>	<b>Outcome</b>
Baer et al., 1992	To study 3 forms of alcohol risk reduction programs for young adults.	6 Week Group intervention; Six Unit Self-Help Manual; 1 Hour In-Person BMI	Advanced graduate students in clinical psychology or doctoral psychologist	Comparable drinking reductions were rated across treatments.
Marlatt et al., 1998	To evaluate the efficacy of a brief intervention designed to reduce harmful consequences of heavy drinking among high-risk students.	One session in-person BMI or No Intervention	2 doctoral-level, 2 postdoctoral-level and 4 advanced graduate students in clinical psychology	Significant reductions in drinking rates and consequences for those receiving the BMI.
Baer et al., 2001	To evaluate the efficacy of a brief intervention designed to reduce harmful consequences of heavy drinking among high-risk students. A four-year follow-up to Marlatt et al. (1998)	One session in-person BMI or No Intervention	2 doctoral-level, 2 postdoctoral-level and 4 advanced graduate students in clinical psychology	Reductions in drinking rates and consequences for those receiving the BMI were maintained.
Borsari & Carey, 2001	To replicate the findings of Baer et al. (1992) and Marlatt et al. (1998) and to determine the role of perceived drinking norms and alcohol expectancies in a BMI	One session in-person BMI or No Intervention	Doctoral level clinical psychology graduate student.	Significant reductions in the quantity and frequency of drinking for those receiving the BMI
Larimer et al., 2001	To test the efficacy of BMI's among first-year fraternity members.	Individual and group in-person BMI or One Hour Alcohol Education	5 undergraduate students; 2 graduate students in clinical psychology; 1 master's level clinician; 1 licensed psychologist	BMI's reduce drinking with this high risk population

<b>Author</b>	<b>Research Objective</b>	<b>Type of Intervention</b>	<b>Credentials of Facilitator</b>	<b>Outcome</b>
Roberts, Neal, Kivlahan, Baer, & Marlatt, 2000	To investigate the clinical significance of BMI's that demonstrated a significant change among high-risk drinkers.	BASICS or No Intervention	Did not report.	More individuals in the high risk intervention group improved as compared to the high-risk control group.
Simao et al., 2008	To compare the quantity and frequency of alcohol use and its associated negative consequences between students who were identified as risky drinkers at a Brazilian university.	BASICS or No Intervention	5 Social Assistants specializing in mental health; 3 Clinical Psychologist; 1 Psychiatrist	Students receiving the BASICS intervention decreased the quantity of alcohol used per occasion.
Turrisi et al., 2009	To evaluate the efficacy of a parent handbook and a BMI alone and in combination in reducing alcohol use and consequences among a high-risk group of matriculating students.	One session in-person BMI, Parent Handbook, No Intervention (Alone and in combination)	Undergraduate student peer facilitators and parents.	The combined group (BMI and Parent Handbook) had significantly lower alcohol consumption and negative consequences at the 10-month follow-up.
Fernandez, Wood, Laforge, & Black, 2011	To explore 2 interventions (BMI and Parent Handbook) as a means to reduce the onset of heavy drinking among incoming students.	Two session in-person BMI or Parent Handbook	16 facilitators with a bachelors or master's degree in psychology and parents.	The BMI significantly reduced the onset of heavy drinking and negative consequences while the parent intervention did not.
Murphy et al., 2001	To replicate and extend findings by randomly assigning heavy drinking students to a BMI, education intervention, or assessment only control group.	One session in-person BMI, Alcohol Education Video with a follow-up discussion or No Intervention	Clinicians (Did not indicate discipline.)	Participants receiving the BMI showed greater reductions in weekly alcohol consumption and binge drinking than the other two groups.

<b>Author</b>	<b>Research Objective</b>	<b>Type of Intervention</b>	<b>Credentials of Facilitator</b>	<b>Outcome</b>
Murphy et al., 2004	To evaluate the efficacy of personalized drinking feedback delivered with and without MI for college student drinkers.	Personalized Feedback Intervention using MI or Personalized Feedback Intervention without MI	7 doctoral students in clinical psychology	Both groups showed small to moderate reductions in alcohol consumption.
Wood, Capone, Laforge, Erickson, & Brand, 2007	To resolve issues pertaining to the use of BMI's and Alcohol Expectancy Challenge (AEC) for reducing alcohol use and problems among college students.	One session in-person BMI, Alcohol Expectancy Challenge (AEC) or No Intervention (alone and in combination)	Clinical psychology graduate students.	The BMI group significantly reduced the quantity and frequency of heavy drinking and problem. The AEC group significantly reduced the quantity and frequency of heavy drinking. No differences were reported for the combined group.
Carey, Carey, Maisto, & Henson, 2006	To test the efficacy of two forms of BMI's among at-risk college student drinkers.	One session in-person basic BMI, one session in-person enhanced BMI or No Intervention	7 clinical or counseling psychology graduate students	The basic BMI improved all drinking outcomes.
Butler & Correia, 2009	To investigate the efficacy of face-to-face and counselor-delivered BMI's relative to an assessment only condition.	One session in-person BMI Computer-delivered PFI No Intervention	Graduate clinicians trained in MI. (Did not indicate discipline.)	Face-to-face and computerized interventions were equally successful. Participants rated the face-to-face more favorable.
Murphy, Dennhardt, Skidmore, Martens, McDevitt-Murphy, 2010	To study the relative efficacy of counselor-delivered BMI's versus two popular computerized interventions.	Two session in-person BMI Alcohol 101 Online Program E-Chug Online Program	Clinicians (Did not indicate discipline.)	Participants rated the in-person BMI more favorable. The overall treatment effect favored the in-person BMI.
Wagener et al., 2012	To examine the comparative efficacy of computer-delivered to face-to-face Personal Feedback Interventions (PFI).	Computer-delivered PFI Face-to-face PFI Comprehensive Assessment Minimal Assessment Only	Advanced graduate students. (Did not indicate discipline.)	The computer delivered PFI is helpful, but not a complete substitute for a live facilitator to reduce alcohol consumption.

<b>Author</b>	<b>Research Objective</b>	<b>Type of Intervention</b>	<b>Credentials of Facilitator</b>	<b>Outcome</b>
Mastroleo, Turrisi, Carney, Ray, & Larimer, 2010	To compare two documented supervision approaches on peer counselors' ability to acquire skills to facilitate a BMI with fidelity.	One Session BMI with a peer counselor receiving two different types of supervision or No Intervention	Undergraduate student peer facilitators.	Both treatment groups with different types of supervision reduced their drinking.
Schaus, Sole, McCoy, Mullett, & Obrien, 2009	To test the effectiveness of BMI's delivered by primary care providers to high risk students in a college health center.	Two twenty minute in-person BMI sessions or No Intervention	2 physicians 1 physician assistant 1 nurse practitioner	Participants receiving the BMI had significant reductions in typical BAC, peak number of drinks per occasion and per week and a decrease in consequences.

Borsari and Carey (2000) and Larimer et al. (2001) helped inform the NIAAA task force committee and led to the conclusion that BMIs are the most promising intervention to address high-risk drinking (NIAAA, 2002, 2007). The meta-analysis dug deeper to explore the efficacy of BASICS as a protocol to reduce high-risk drinking. Fachini et al. (2012) performed a systematic review with a focus on randomized controlled trials and produced 18 studies to include in the meta-analysis. The three methodological conditions necessary to be included in the meta-analysis were: (1) use of BMI; (2) face-to-face intervention; and (3) comparison with a control group or different intervention. All studies selected were deemed to be “strong” via solid evaluation of methodological quality. Through this meta-analysis, they determined that BASICS was effective at lowering alcohol consumption and negative consequence among college students, but called for additional research in multiple areas including the mandated student population.

### **Mandated College Students**

As stated earlier, the research conducted by Borsari and Carey (2000) and Larimer et al. (2001) was cited in the original NIAAA taskforce report (2002) as evidence to support the use of

BMI's as a means to identify and address high-risk drinking among college students.

Consequently, a number of institutions complied with the Tier 1 recommendation as signified by the results of a national survey administered in 2010 by Nelson and colleagues. This survey generated data from a nationally representative group of college administrators at four-year institutions to determine how familiar and to what degree the recommendations from the NIAAA task force report were implemented. They found that 66% of administrators were familiar with the report, and from this group 67% reported that intervention programs were available to students either on-campus or off-campus with an agreed upon provider. Survey questions further explored the type of interventions offered and found that 50% of colleges had empirically supported programs that included norms clarification, motivational interviewing, cognitive-behavioral skills training, and expectancy challenges. These findings suggest that the several administrators at colleges and universities have adopted the Tier 1 recommendations and established policies and procedures such as mandating students who violate the alcohol policy to participate in an intervention (Barnett & Read, 2005). As a result, new research surfaced on the mandated student population.

**Borsari and Carey (2005).** The mandated student population has become a critical area of research to determine the efficacy of BMIs because when compared to non-adjudicated students, this group reports higher levels of alcohol abuse, and often experiences other problems associated with alcohol use such as lack of sleep, relationship issues, poor academic performance, and health concerns (Caldwell, 2002). Borsari and Carey (2005) produced a strong study in this area when they implemented a two-group randomized control design ( $N = 64$ ) to measure the effectiveness of a BMI as compared to an alcohol education (AE) class. Students found responsible for violating the alcohol policy were assigned to either the alcohol education

class or the BASICS intervention. Baseline measures included demographic questions, an evaluation of typical drinking over the past 30 days, DNRFB, the Alcohol and Drug use Measure, RAPI and BAC was calculated.

A baseline comparison between the two conditions revealed no significant differences on demographic variables or reason for referral. The variables used as outcomes measures were the quantity of standard drinks consumed per week, frequency of binge drinking episodes, typical peak BAC, peak BAC, and RAPI scores. Results of the study revealed a decrease in binge drinking episodes for both interventions. Baseline for BMI group was ( $M = 7.47, SD = 3.54$ ) and AE was ( $M = 7.9, SD = 4.52$ ) compared to the six-month follow up ( $M = 6.10, SD = 4.07$ ) and ( $M = 6.07, SD = 4.71$ ) respectively. Other findings of significance were in the area of alcohol-related negative outcomes where the student in the BMI reported fewer consequences than those in the AE at the six-month follow up ( $M = 5.0, SD = 5.09$ ) and ( $M = 6.71, SD = 5.21$ ) respectively. No significant difference was found with the quantity of standard drinks per week or the typical and peak BAC.

Borsari and Carey (2005) mentioned the need to explore all possible reasons why change might have occurred among participants. While they evaluated levels of satisfaction with the interventions and found that students responded favorably to the nonjudgmental and empathetic principles of MI, they did not fully explore if change among participants may have reflected regression toward the mean. It is also possible that students changed based on their desire to avoid future sanctions with the university rather than from the intervention. These limitations suggest the need for a deeper investigation of the factors contributing to the change process. Other limitations discussed were small sample size, no control group, unsuccessful randomization, and the intervention was facilitated by the same person. Despite the limitations,

Borsari and Carey (2005) did reinforce existing research findings that BMIs are an effective means to reduce high-risk drinking among college students and made an essential contribution to the literature on mandated students.

**Fromme and Corbin.** Fromme and Corbin (2004) demonstrated the unique collaboration among administrators, scientists, and practitioners when they tested the efficacy of BASICS on their campus. The study design was a three-arm randomized clinical trial that used BASICS as part of a four-hour lifestyle management class (LMC) for mandated students ( $N = 124$ ) and volunteer students ( $n = 452$ ). All participants completed a pretest questionnaire prior to the LMC and a posttest questionnaire approximately one month following the LMC. The LMC combined MI techniques with cognitive behaviors skills training and provided students with feedback in several areas: (a) personal goals in relation to alcohol use; (b) drinking patterns; (c) drinking patterns in relation to college norms; (d) risks and consequences associated with alcohol use; (e) strategies to reduce risks associated with alcohol use; and (f) options to address stress management and lifestyle balance.

Through the use of hierarchical linear modeling (HLM) to analyze data, the researchers were able to ascertain change across multiple time points. The variables used as outcome measures were typical weekly alcohol consumption, monitored weekly drinking, heavy drinking composite, and driving under the influence (DUI) composite. No significant main or interaction effects with the treatment condition were found for typical weekly alcohol consumption. However, both groups decreased their use from pre-test to post-test,  $t(869) = 3.73, p < .01$ . A significant difference was found among men in the mandated group and participants who scored higher on the readiness to change scale in relation to heavy drinking episodes. Both groups

decreased their heavy drinking episodes. Finally, those in the LMC group decreased the negative consequences associated with heavy drinking as compared to the control group.

This was a well-designed study that explored the use of BASICS in a group setting with both mandated and volunteer student participants. Cost effectiveness was highlighted as one of the reasons for the adaptation of BASICS to the group setting. The findings suggest that as a group intervention, BASICS is efficacious in the reduction of risky behaviors and related-consequences associated with high-risk drinking among mandated and volunteer participants. However, caution should be exercised when trying to adapt BASICS to a group intervention because BASICS was designed as an individual intervention. Similar to the studies by Larimer et al. (2001) and Fromme and Corbin (2004) questions were raised about translating BASICS into a group intervention. While Fromme and Corbin (2004) offered an alternative intervention method that has the potential to reach a large number of students in a time efficient manner, additional research is critical to ensure the efficacy of BASICS.

**Barnett et al. (2004).** On an annual basis, approximately 600,000 students are injured unintentionally while under the influence of alcohol (Hingson et al., 2009). This statistic combined with Anderson and Gadaelto's (2001) data that 54% of campus policy violations involved alcohol propelled Barnett and colleagues (2004) to execute a randomized control study. They compared BMIs with standard alcohol education among students mandated to attend some form of an alcohol intervention based on a disciplinary or medical event related to alcohol. This study was conducted at a private university in the Northeast with 117 participants. The researchers used a 2 X 2 design to compare a BMI to a standard alcohol education class and to compare a one-month booster session with no booster. Participants completed a baseline assessment that included demographics, readiness to change measures, alcohol consumption

measures, alcohol-related behavior and risks measures, and information about the incident. Baseline analysis revealed at the time of the incident, on average participants consumed 8.4 standard drinks and their mean estimated BAC was 0.21%. In the area of alcohol-related consequences 74% of the participants reported vomiting and 54% reported having had a blackout. 71% of participants accepted responsibility for the incident and 65% indicated their alcohol use contributed to the incident.

Similar to the other studies focused on the mandated student population, Barnett et al. (2004) also found the BMI as well as the standard alcohol education class led to some decreases in consumption patterns. In particular, both intervention groups significantly reduced the quantity and frequency of drinking per week and the number of heavy drinking episodes in the past month. Among the students in the standard alcohol education class, the typical BAC was significantly reduced, but not in the BMI group. No differences were found in the number of alcohol consequences experienced in either group. Although additional research is necessary, the findings revealed that students benefit from various forms of BMIs.

Barnett et al. (2004) noted that the delay between the medical treatment/policy violation and the intervention are unavoidable and must be considered as a possible factor contributing to the change process. Also, one outcome they did not anticipate finding was that approximately one in five participants who received the BMI and the booster session were more likely to pursue additional counseling. This evidence is encouraging because as mentioned earlier, mandated students typically report higher levels of alcohol abuse, and often experience other problems associated with alcohol use such as lack of sleep, relationship issues, poor academic performance, and health concerns (Caldwell, 2002). This desire to receive additional counseling

suggests a readiness to change and warrants additional research. The use of qualitative research could lead to a deeper understanding of these outcomes and aid in the improvement of BASICS.

**Alfonso, Hall, and Dunn (2013).** A more recent study by Alfonso et al. (2013) on the mandated student population explored the use of an individual BMI, group intervention and an electronic intervention as a means to reduce high-risk alcohol use and the negative consequences associated with this behavior. They hypothesized that participants in all three treatment modalities would exhibit comparable reductions in alcohol use and alcohol related problems. A sample of 173 students (57% men,  $n = 98$ ; 43% women,  $n = 75$ ) who were referred to an alcohol intervention and met the high-risk drinking screening criteria participated in the study. Measures included a demographic questionnaire, alcohol timeline follow-back, BAC, and RAPI. Alcohol intervention conditions included BASICS, a group alcohol intervention modeled after BASICS, and an electronically delivered intervention that uses normative feedback. Sessions were recorded to ensure MI adherence and address possible intervention drift. Participants were randomly assigned to one of the three treatment modalities.

The use of a randomized control trial to compare three distinct treatment modalities provided the researchers with valuable information about best practices to reach mandated students. Through chi-square analysis, the researchers ensured that no significant differences were found at baseline between the groups. The variables used as outcomes measures were negative alcohol-related consequences, average BAC over a four-week period, peak BAC over a four-week period, and peak number standard drinks consumed in one sitting over a four week period. Results revealed a significant decrease in negative alcohol-related consequences for participants in the BMI and electronic intervention, but no difference for the group intervention. Baseline for the BMI was ( $M = 21.26$ ,  $SD = 23.19$ ) compared to follow-up ( $M = 12.33$ ,  $SD$ ,

20.17) and the electronic intervention was ( $M = 19.00$ ,  $SD = 23.85$ ) and ( $M = 9.18$ ,  $SD = 17.44$ ) respectively. The results also revealed a significant difference for participants in the BMI in relation to average BAC over a four-week period (0.061% to 0.047%), peak BAC over a four-week period (0.112% to 0.082%) and peak number standard drinks consumed in one sitting over a four week period (7.02 to 5.49), but no differences were found on these outcome measures for participants in the group intervention or electronic intervention.

These findings reinforce the previous findings that individual BMI's are an empirically supported intervention. With regards to the electronically delivered intervention, participants reported a significant reduction in alcohol related harms, but no significant results were revealed with the other outcome measures. This suggest the need for additional research on electronic interventions. Unfortunately, no significant results were reported among participants in the group intervention with any of the outcome measures. These findings contradict the previous study by Fromme and Corbin (2004), and suggest the need for additional research to determine the efficacy of BMIs facilitated in a group setting. While this study contributes to the existing literature concerning the use of BMIs with the mandated student population and reinforces previous findings, questions remain about the BASICS intervention when it is not used in a controlled environment. In this case, facilitators were videotaped, scored on MI protocol, and closely supervised to control for intervention drift. This is a wonderful protocol to have in place, but may not be realistic in settings where there is a large caseload, limited resources, and time constraints. The idea of intervention drift would be an excellent topic to explore in a qualitative research context with counselors who use BASICS in their work setting.

**DiFulvio et al.** This quasi-experimental research occurred at a large public university in the Northeast with the intent to determine the effectiveness of BASICS with the mandated

student population (DiFulvio et al., 2012). The importance of this research must be underscored as this is one of the few studies where the BASICS intervention was facilitated with fidelity in a natural setting and includes a large number of participants in the intervention group ( $n = 1360$ ) and the comparison group ( $n = 508$ ). All participants completed a baseline and a six-month follow-up survey. Data was collected on a rolling basis for two and a half years.

In this study, BASICS was facilitated in the exact manner that Dimeff et al. (1999) outlined in their resource book. All participants completed measures to screen for problem drinking and to determine typical, peak, and heavy episodic drinking, blood alcohol concentration (BAC), and consequences of alcohol consumption. Initial analysis involved the use of  $t$  tests for continuous variables and chi-square tests for categorical variables to determine if demographic characteristics and outcome variables between the intervention and comparison groups were statistically significant different and found no difference at the  $\alpha = .05$ . Further analysis was conducted through the use of bivariate analysis and generalized linear modeling techniques to determine the effectiveness of BASICS based on changes in typical and peak BAC, number of drinks in a typical week and peak week, high-risk and frequent high-risk drinking, and consequences associated with alcohol consumption. These generalized linear model techniques divided the groups by gender and involved time, group, and time by group interactions. Findings revealed a statistical difference between the male intervention group and the comparison group with the intervention group decreasing their typical and peak BAC (0.109% to 0.092%; 0.157% to 0.135% respectively). In addition their typical number of drinks per occasion decreased (8.7 to 7.4) as well as the typical and peak number of drinks per week (19.2 to 17.3; 28.2 to 26.2 respectively). All outcome variables in the comparison group remained consistent or increased with the exception of the peak drinking occasion where they reported fewer drinks. With regard

to the female group, typical and peak BAC decreased for both groups. However, the female intervention group decreased drinking across the drink per occasion and the typical and peak number of drinks per week variables while the comparison group remained constant.

One interesting finding from this study stemmed out of the results of RAPI instrument, which measures alcohol-related consequences. The researchers acknowledged that the RAPI has been used as a valid measure of alcohol-related consequences, but in their study scores from the instrument could not be normally distributed and proved to be insufficient to plausibly connect drinking behaviors and related consequences. This finding matters because an essential component of the BASICS feedback session is the alcohol-related consequences section which is designed to stimulate cognitive dissonance. As stated earlier, Dimeff et al. (1999) assert that a discussion focused on alcohol-related consequences can cause conflict between beliefs, attitudes, and behaviors and often leads to change talk. Remarkably, the mini-review by Mallett et al. (2013) also raised questions about alcohol related-consequences with relevance to individual based interventions and will be summarized in a future section. Both studies raise questions about the effect interventions have on negative consequences associated with drinking behaviors and suggest the need for additional research.

The benefit of this study is that it adds to the existing body of literature on Tier 1 strategies and demonstrates that BASICS is an effective intervention with the mandated student population. The fact that BASICS was implemented in a natural environment, facilitated with fidelity and gender differences were taken into consideration led to a robust study that resulted in the desired effect on drinking behaviors. This outcome is encouraging for colleges and universities who use BASICS with fidelity. A credit to the researchers is the fact that they acknowledged that evidence-based research is often difficult to translate into effective and

sustainable practices. They also acknowledged that campuses with limited resources or a large number of mandated students will experience additional challenges with the implementation of BASICS based on staffing and time requirements. Finally, unlike any other study on the BASICS intervention these researchers recognized the need for technical assistance to accomplish the systematic implementation of the intervention. These findings directly support the need for qualitative research. Specifically, this research suggests the need for qualitative exploration of several areas with counselors who use BASICS in their setting. These areas include BASICS implementation, limited resources within the institution, the need for technical assistance, and alcohol-related consequences.

These findings along with the findings from the previous studies on mandated students emphasize the need to identify best practices for this population. As indicated earlier, mandated students are a subpopulation that often fall into the high risk category with serious health and safety concerns (Barnett et al., 2004; Barnett & Reed, 2005). As institutions continue to adjust to the recommendations of the NIAAA task force report by way of enforcing policies and implementing BMI's (Barnett & Read, 2005; Nelson et al., 2010; NIAAA, 2007) it is critical that research continues in this trajectory. The unique set of challenges that mandated students present with is something to explore with MHPs who work with this population on a daily basis. Their perspectives could shed insight on the parts of the intervention that work with this population and aid in addressing that question about how and what works from the brief intervention.

**Summary of the research related to BASICS.** As faculty, staff, and administrators strategize to reduce high-risk drinking on their campuses, the significance of this literature review of BASICS cannot be understated. Although there was great variance in the use of BMIs, the research consistently demonstrated that students decreased the quantity and frequency of

alcohol use and at times decreased the negative consequences associated with drinking through these interventions. Fachini et al. (2012) suggested the need for additional research to explore the individual components of the BASIC intervention. This is a recurrent theme in the literature. From the onset, Marlatt et al. (1998) and Baer et al. (2001) determined that BMI's were effective at reducing alcohol use, but they were unclear as to precisely how they work. The variances of BMI's observed throughout this literature review such as the length of the sessions, the number of sessions, the credential of facilitators, and the items covered in the feedback session suggest the need to establish a consistent approach that has the potential to be adapted to an array of settings including counseling centers, health centers, student conduct offices, residence halls, etc. on the college campus. At this time it is critical to determine which components of the BASICS influence change. This suggestion for additional research fits perfectly with the nature of qualitative research in which the researcher explores all components of the intervention via semi-structured interviews with counselors who use BASICS.

### **A Mini-Review of the Literature to Examine Alcohol Related Consequences**

As mentioned earlier, the mini-review by Mallett et al. (2013) is worth noting due to the focus on alcohol-related negative outcomes among college students in relation to individual-based BMIs. In this mini-review, the researchers critiqued several existing studies and were able to extract that interventions that decrease alcohol use may not necessarily decrease alcohol-related consequences. In fact, a previous study by Mallett, Varvil-Weld, and Read (2011) examined the willingness of students to experience alcohol-related consequences and found that those who are more willing to experience negative consequences reported doing so despite controlling for use. The mini-review involved the identification of risk-factors that contribute to the experience of alcohol-related consequences including: (1) belonging to certain student

organizations or subgroups; (2) drinking at high-risk events or occasions; (3) students' evaluation of both positive and negative alcohol-related consequences in relation to future drinking behaviors. Recommendations were provided to enhance future interventions.

**High-risk students.** Findings from the studies in this mini-review indicate that there are sub-sets of students on campus who have an increased tendency to engage in high-risk drinking and experience related consequences. For example, students who are members of Greek organizations are more likely to engage in dangerous drinking behaviors and are at the highest risk for severe alcohol-related consequences. In a study by Borsari, Hudstad, & Caponel, (2009) they found that Greek students experience more problems associated with dependence-related issues than the non-Greek student population. Other subsets are students who experience psychological distress and mandated students. In particular, students who report drinking to cope with issues of depression or anxiety tend to experience higher rates of consequences including academic issues, poor self-care, and risky behavioral patterns. With regards to the mandated student population, it is not uncommon for this group to engage in high-risk drinking activities such as pre-gaming (drinking quickly prior to an event) or playing fast paced drinking games. Further research on this subset has resulted in the establishment of three profiles: (1) The "Bad Incident" group who typically exhibited low levels of high-risk drinking, but at the time of the incident exhibited a high level of drinking. (2) The "Why Me" group who reported low levels of drinking at the time of the incident and typically believed they were in the wrong place at the wrong time. (3) The "So What" group who typically exhibited high-levels of high-risk drinking before, during, and after the incident.

**High-risk events and activities associated with alcohol consequences.** This mini-review of research reaffirms that the transition from high school to college often results in

increased drinking behaviors and related consequences among traditional age students. The first six weeks is often the time when students develop new friendships and based on these influences, drinking patterns are often established. Other specific events such as holidays (St. Patrick's Day, New Year's Eve, and Cinco de May), 21<sup>st</sup> birthday celebrations, spring break, and athletic events lead to an increase in drinking patterns and alcohol-related problems. In particular, 21<sup>st</sup> birthday celebrations are a cause for concern because students tend to reach high BAC's and the potential for severe and life threatening consequences rises. Researchers also studied alcohol-oriented activities such as drinking games and pre-gaming and concluded that those who participate in these activities increased their level of intoxication quickly and as a result experienced more severe alcohol-related consequences.

**Students' subjective evaluation of consequences.** In addition to sub-sets of students on campus and events and activities associated with alcohol-related consequences, the researchers also explored students' subjective evaluation of alcohol-related consequences. Students experience an array of positive consequences from alcohol use such as socialization, stress reduction, and lowered inhibitions. In simplest terms, drinking is fun (Dodd, Glassman, Arthur, Webb, & Miller, 2010). It is worth noting that what is viewed as negative by faculty and staff may be viewed as irrelevant by students. For example, a hangover is simply a part of the experience and not necessarily negative. Consequences that are typically viewed as negative by students are physical injuries, DUI's, and assault. However, the most significant negative consequence that has an impact on high-risk alcohol consumption are social consequences (Lee, Geisner, Patrick, & Neighbors, 2010). Students do not want to be embarrassed in front of their peers, which reinforces developmental and social norms theories described above.

**Recommendations.** Mallett et al. (2013) acknowledge that high-risk drinking is the precursor to alcohol-related consequences. With that being said, their research points to these other risk-factors: (1) belonging to certain student organizations or subgroups; (2) drinking at high-risk events or occasions; (3) students' evaluation of both positive and negative alcohol-related consequences as contributing factors to high-risk drinking. To accurately address high-risk drinking behaviors among students, these contributing factors must also be taken into consideration. For example, in the case of Greek organizations, peer influences have the potential to moderate high-risk drinking. Therefore, normative feedback within the organization could resonate with more members. With regard to mandated students, those in the "So What" group rarely viewed their consequences as aversive. Therefore the BMI should focus on global strategies rather than the individual incident. In terms of events or occasions, students will continue to identify reasons to drink throughout the entire academic year. For instance, a perfect score on an exam or breaking up with a significant other is as fitting as a tailgate party prior to the football game. The Tier 2 environmental strategies help to address this area. Finally, the students' evaluation of both positive and negative alcohol-related consequences is critical to consider. As indicated by Mallett et al. (2013), the student's perception of the consequence was far more important to explore than the consequence alone because the perception was what explained the drinking behavior. In the context of a BMI, this information can have a direct impact on the effectiveness of the intervention.

Based on this research presented by Mallett et al. (2013), these risk-factors have a direct impact on high-risk drinking and must be considered when delivering individual interventions. From a qualitative research perspective, these factors are worth exploring with BASICS providers because they can dictate the effectiveness of the intervention. Thus, it is necessary to

establish if there is an awareness of these risk-factors. As previously stated, those students in the mandated group who fall in the “So What” category rarely viewed their consequences as aversive. Therefore, to spend time on consequences may be an irrelevant component of the intervention. If awareness of these risk factors does exist, it is beneficial to explore how they incorporate these factors into the intervention. Again, this type of information has the potential to enhance the BASICS intervention and decrease high-risking drinking behaviors and the negative consequences associated with this behavior.

### **Qualitative Research Findings on BMIs**

To date, qualitative research on the BASICS intervention is non-existent, but a small amount has occurred on screening and brief intervention in primary health care. Beich, Gannik and Malterud (2002) researched the experiences of general practitioners (GPs) who used screening and brief interventions in their everyday practice. Focus groups and individual interviews were facilitated with 24 participants. The main goal was to gather information about their experiences using screening and brief intervention through exploration of: (1) doctor/patient relationships; (2) patients’ reactions to the intervention; (3) attitudes toward putting the intervention in place; (4) factors that affect the ability to carry out the intervention; (5) recommendations on the use of brief intervention to their colleagues. Focus groups were semi-structured and lasted two hours while individual interviews lasted one hour. A modified phenomenological approach was used to gain knowledge for descriptive rather than explanatory purposes. Analysis involved the establishment of themes for coding, categorization of units to extract meaning, and synthesis into concise statements.

Results indicated that brief interventions are not suitable for GPs in their everyday setting due to a variety of reasons. In particular, GPs reported difficulty with establishing rapport with

patients and found it challenging to provide counseling on the topic of alcohol. They reported also that screening and intervention increased their workload and interrupted the natural flow of an appointment. Finally, the lack of resources and appropriate training were identified as barriers to adequately facilitate the intervention. Despite the difficulties experienced by these practitioners, there was agreement that screening and brief intervention served a purpose in the appropriate setting.

Lock, Kaner, Lamont, and Bond (2002) conducted a similar study with a focus on nurse practitioners. They hypothesized that brief interventions were underutilized by nurses in a primary health care setting. Through the use of semi-structure interviews, the researchers explored the attitudes and perceptions of 24 nurses to determine what affects involvement in this area of work. Through the use of the FRAMEWORK method, thorough evaluation of the data occurred and led to the establishment of categories and themes. Further analysis of these categories and themes resulted in a final narrative (Lock et al., 2002).

Findings paralleled the findings of Beich et al. (2002). In particular, the nurses identified the lack of training as a barrier to implementation. Also, they raised concerns about the lack of support when patients had a negative reaction to the intervention. On the positive side, there was agreement that screening and brief interventions had the potential to promote health and wellness (Locke et al., 2002).

The findings of these two studies reinforce the fact that practitioners experience barriers with the implementation of brief interventions due to a lack of knowledge, standardization issues, costs, training, supervision and adequate staffing (Beidas & Kendall, 2010; Carise et al., 2009; Proctor et al., 2007). Yet participants in both studies acknowledged the benefits of

screening and brief intervention. These studies underscore the need for additional research to develop best practices for implementation of BMIs.

### **Summary**

High risk drinking among college students is a persistent and costly issue that plays a significant role in an array of problems on campuses throughout the United States. The recommendations provided by the NIAAA (2002, 2007) offer a framework for faculty, staff, and administrators to address this issue in a comprehensive manner. BMIs are considered the most effective strategy to prevent and reduce the quantity and frequency of drinking. Vast quantitative research exists to demonstrate the efficacy of BASICS and variations of BASICS as a means to reduce high-risk drinking and the negative consequences associated with this behavior. As a result, BASICS has been identified as an evidence-based model recognized by the NIAAA and approved by SAMHSA (Dimeff et. al., 1999; NIAAA, 2002, 2007).

Health care qualitative studies point out practitioner struggles related to screening and brief intervention implementation. To date, no studies about BASICS address practitioners' competency, struggles, or experiences implementing the intervention. This gap in the literature leads to the purpose of this study which is to develop a deeper understanding BASICS through the perspectives of those practitioners in the mental health profession who use the intervention on their campus. Through qualitative research that involves the use of semi-structured interviews the experiences of these MHP's will be unveiled and will provide a better understanding of the strengths and limitations to carrying out BASICS in a practical setting. Specific questions to address in the semi-structured interview are: How is BASICS used in your setting? What (if any) challenges accompany the use of BASICS on your campus? What type of training is necessary to be an effective BASICS provider? How easy or difficult is it to adhere to the BASICS protocol?

What components of BASICS are the most effective on your campus? What helps or hinders the process of facilitating an effective intervention with students? Are the students participating in the BASICS intervention mandated to attend or do they present on a voluntary basis? This deeper understanding has the potential to refine components of BASICS and strengthen the overall intervention with the hope for a decrease in high-risk drinking behaviors and the consequences related to this behavior among college students.

### **Chapter 3: Methodology**

The purpose of this study was to develop a deeper understanding of BASICS through the perspectives of MHPs who use the intervention on their campus. Emphasis was placed on gathering information from MHPs with regard to their experiences implementing and facilitating BASICS in their setting. In addition, the researcher was interested to learn about the strongest and weakest aspects of BASICS based on the perceptions of MHPs. With regard to this study, a gap existed in the research on BASICS in that there were no studies that included perspectives of practitioners who use the intervention. Exploratory research provided the researcher the opportunity to gather information about a hypothetical or theoretical idea and lay the groundwork for future research (Creswell, 2013; Hays & Singh; 2012; Rosman & Rallis, 2012). In this case, the researcher explored the MHPs' accounts to establish what was really going on with the BASICS intervention in a practical setting and established a foundation for future research and application. This chapter includes a description of the methods and procedures used to accomplish this study with the following research questions serving as a guide:

1. How do practitioners in the mental health profession use the BASICS intervention on their campuses?
2. What do practitioners in the mental health profession perceive as the strongest and weakest aspects of the BASICS intervention?
3. What barriers (if any) are experienced with regard to the implementation of BASICS?

#### **Research Design**

The overarching goal of this study was to develop a deeper understanding of BASICS through the perspectives of MHPs who use the intervention on their campus. Qualitative methodology is appropriate when the researcher is interested in exploring the lived experiences

of participants to increase their knowledge of a particular phenomenon (Creswell, 2013; Hays & Singh; 2012; Rosman & Rallis, 2012). Furthermore, Merriam (1998) states that qualitative research offers the promise to make great contributions to the social sciences field due to the desire to discover and comprehend the perspectives of those being studied. This qualitative research study was based on the phenomenological tradition which is best described as research focused on several individuals and their lived experience in relation to an event or phenomenon (Creswell, 2013; Rosman & Rallis, 2012).

### **Phenomenology**

The German philosopher Edmund Husserl is considered the father of phenomenology, a complex philosophy that stressed the lived experience as a means to understand the world rather than empirical science (Osborne, 1990). Phenomenology was considered controversial then and remains controversial today according to Finlay (2009). The reason for this controversy stems from the fact that an array of methods and techniques are couched under the umbrella of phenomenological research thus suggesting the methodology lacks clear boundaries. Finlay further elaborates on her definition of sound phenomenological research and describes the methodology as grounded in a philosophy or theory, involving a thick description of the lived experience of those research participants, and setting aside preconceived notions or biases about phenomena under investigation. Hays and Wood (2011) expand on Finlay's opinion and describe phenomenological methodology as effective when the researcher establishes a phenomenon of interest and has the ability to refrain from adding any sort of judgment. This is known as epoché or bracketing, and is accomplished when the researcher can truly place his or her opinions and prior experiences on hold and enter the research process with an open mind (Hays & Singh; 2012; Hays & Wood, 2011; Merriman, 2002; Moustakas, 1994). Epoché or bracketing is difficult

but critical throughout data collection and analysis processes to ensure accurate representation of participants' experiences.

### **Role of the Researcher**

Phenomenological methodology closely parallels the counseling profession where the goal is to learn about the experiences of others (Hays & Wood, 2011). In the context of this research, the researcher studied the lived experience of those MHPs who use BASICS in their work setting. The researcher is a member of the mental health profession and has extensive experience using BASICS in a prior work setting. In fact, she was trained to use BASICS by one of the original researchers from the pilot study. This prior experience was beneficial because it provided her with a strong understanding of the intervention. However, she also acknowledged that this experience has led to opinions about the strengths and weaknesses of the intervention. She recognized the need to bracket these opinions and remain in the here and now throughout the data collection and analysis processes to ensure objectivity. The researcher had an etic role where she remained on the outside of the research process. To ensure this, she kept an ongoing reflexive journal to describe each interview experience to safeguard against potential biases (Creswell, 2013; Rosman & Rallis, 2012). The process of journaling occurred soon after the pilot interview and involved thorough record keeping of research activities and ideas throughout the research process. Finally, the researcher understood the objective of the research was to understand rather than solve. It was anticipated that research participants would view BASICS through different lenses. The goal was to gain a deeper understanding of these different lenses. Therefore, the researcher employed empathic neutrality, which is described by Patton (2002) as a balance between becoming too involved versus being too far removed. Too much involvement can cloud judgment while distance decreases understanding. To ensure a balance, the researcher

paid close attention to verbal and non-verbal cues on the part of the research participants. Through the use of semi-structured interviews, MHPs had the opportunity to describe their experiences with the BASICS intervention extensively. The end result was an increased understanding of their lived experience and the meaning they assigned to the lived experience (Seidman, 2013). Through this phenomenological approach the researcher was able to interpret rather than measure what was occurring in the natural setting.

### **Participants**

According to Hays & Woods (2011), participants who simply have an opinion are not enough. Instead, the success of phenomenological research is contingent upon the careful selection of participants who have concrete experiences with the phenomenon under investigation. Patton (2002) refers to this as purposeful sampling. A primary goal of this research was to explore the experiences of MHPs who use the BASICS intervention in their work setting. Therefore, the researcher was purposeful to identify participants who had at least one year of experience using BASICS on their campus. In addition, the researcher was interested to learn about the perspectives of those in the mental health profession on campuses. This resulted in minimum inclusion criteria of one year of full-time work experience using BASICS at a four-year college or university and a master's degree in the mental health profession (clinical/counseling psychology, counseling, or social work).

The researcher conducted an extensive web search to identify colleges and universities in the mid-Atlantic, Midwest, and southeast who used the BASICS intervention on their campus. She recognized the potential for bias and did not interview any colleagues from her prior work setting for data collection purposes. The researcher identified twenty institutions and made contact through phone calls (see script - Appendix B) to explain the purpose of the research and

the time commitment. Research participants who expressed an interest were screened to determine if they fit the criteria. Following screening, a date, time, and location were established to conduct the interview. After this initial contact, each research participant was emailed the informed consent (Appendix A) and a confirmation note with the interview date, time, and location. Within this email, the request was made to review the informed consent and call or email if there were questions or concerns prior to the interview date. Approximately five days prior to interview date, the researcher sent another confirmation email to ensure that the interview would proceed as planned. To unveil the core elements of the phenomenon under investigation, Starks and Trinidad (2007) suggests a sample size ranging from one to ten people. In this case, the researcher met and exceeded the recommended sample size and interviewed thirteen participants to ensure a thorough representation of MHPs perceptions and experiences with the BASICS intervention.

### **Ethical Considerations**

In qualitative research it is of utmost importance to protect the rights of the participants due to the personal nature of the research (Creswell, 2013). This protection is also a requirement of the Institutional Review Board (IRB) at Virginia Polytechnic Institute and State University. All researchers must adhere to institutional policies and research protocol throughout the study. According to the American Counseling Association (ACA), it is the responsibility of the researcher to protect the emotional, physical, and social welfare of participants, and this can be accomplished through reasonable precautions (ACA, 2014). From the design to the conclusion, ethical considerations were made and safeguards were used to protect the rights of participants in this research study.

## **Confidentiality**

Qualitative research requires participants to share in-depth experiences and disclose personal thoughts and feelings. As a result, the need for confidentiality cannot be overstated. The following protocol was used to protect research participants' privacy: (1) All interviews were conducted in-person in a private setting. (When a follow-up interview was warranted, it happened via the telephone.); (2) Data collection procedures followed the Virginia Polytechnic Institute and State University IRB guidelines; (3) Participants volunteered to be a part of the study and their identity was kept confidential to protect them and their place of employment; (4) Participants were assigned a pseudonym for data collection purposes; (5) Audio recordings and interview transcripts were stored in a secure location that could only be accessed by the researcher; (6) The researcher transcribed ten of the interviews while a transcriptionist transcribed three. The transcriptionist signed a confidentiality agreement and turned over the audio and electronic documents to the researcher upon completion of the transcription process; (7) All data sources will be destroyed after data analysis and dissemination of results is complete. This protocol was discussed with each participant prior to the start of the interview.

## **Informed Consent**

The Virginia Polytechnic Institute and State University IRB requires the researcher to provide informed consent to research participants (Appendix A). The informed consent was written in a manner that accurately portrayed the purpose of the study and was outlined in a manner that was easily interpreted. Each participant was presented with a copy of the informed consent via email following the initial phone conversation. The major components of the informed consent were an invitation to participate in the study, risks, rights, possible benefits, confidentiality of records, dissemination of research findings, and contact information/copies of

the form (Seidman, 2013). The researcher used a collaborative approach when presenting the informed consent and made certain that research participants were fully aware of the purpose of the study and understood that they could withdraw from the study at any time without retribution (Hays & Singh, 2012; Rosman & Rallis, 2012). The potential risks and benefits of the study were outlined. Risks included the burden of participation and limitations of confidentiality. Benefits of participation included the ability to reflect on experiences with the BASICS intervention and to contribute to the existing body of literature. The researcher reviewed the informed consent form in its entirety with research participants and provided the opportunity to ask questions at any time throughout the study.

### **Data Collection**

The data collection for this study was garnered from common sources used in qualitative research including interviews, observations, field notes, artifacts and reflexive journaling (Creswell, 2013; Hays & Singh, 2012; Patton, 2002; Rosman & Rallis, 2012; Seidman, 2013). The use of “how” and “what” interview questions guided the data collection process as means to formulate a *thick description* of participants’ lived experiences (Creswell, 2013; Rosman & Rallis, 2012; Seidman, 2013). The researcher traveled to the campuses to gain a deeper insight into the campus culture, student population, and the research participants’ work setting. For convenience purposes one interviewee met with the researcher at a conference they both attended. The researcher previously visited her campus and was familiar with the campus culture and student population. In addition to the interviews, the researcher collected artifacts from site visits and kept field notes and a reflexive journal to enrich the interview data and recognize researcher biases (Creswell, 2013; Rosman & Rallis, 2012). In addition she maintained a detailed audit trail to recall all research activities.

## **Interview Method**

In a semi-structured interview, the researcher establishes the phenomenon to be explored and develops a loose outline of open ended questions for discussion purposes (Stuckey, 2012). In addition, facilitation of the interview is done in a manner that is flexible and follows the interviewee's responses (Seidman, 2013). In this case, the researcher structured interview questions in a manner that was non-directive and open (Appendix C). Prior to the onset of interviews, the researcher conducted an initial pilot interview to ensure that the interview questions yielded relevant data that pertains to the phenomenon under investigation.

There is debate over the need for multiple interviews versus a single interview (Schuman, 1982 & Seidman, 2013). However, Seidman (2013) goes on to say that there is a lack of evidence to suggest that multiple interviews are more effective. The goal is to create an interview process that is open, follows a rational process, and can be replicated (Seidman, 2013). This research adhered to the one interview protocol with the option for follow-up questions via the telephone and email. The length of the interviews ranged from 50 – 65 minutes. The researcher conducted the interview following the protocol (Appendix C). To generate useful data, the researcher recognized the need to listen for prompts and was willing to probe deeper if warranted (Stuckey, 2012). Following the interview protocol, the researcher gather demographic information including age, gender, ethnicity, education level, and years of experience using BASICS, and years of experience in the profession. All interviews were audio recorded for transcription purposes and researcher review. Through this interview process, the researcher gathered in-depth information about the perceptions and experiences of MHPs who use the BASICS intervention on their campuses.

## **Observations**

According to Rosman and Rallis (2012) interviewing and observation go hand in hand and strong qualitative researchers are skilled at both. Through observations, the researcher has the potential to discover additional information about the phenomenon under investigation. The opportunity for observations occurred throughout the interview process. While interviewing, the researcher made note of the different feelings and expressions that emerged when questions were posed. In addition to interview observations, the researcher also had the opportunity to observe the work settings of the research participants. Tours of the facility were provided at every site which helped to highlight the services and resources available to students. This insight into the work setting provided additional information into how BASICS was used on the different campuses. The researcher used these observations for reflective purposes to aid with data analysis.

## **Field Notes and Artifacts**

Field notes consist of descriptive and reflective information and are used to help the researcher capture more data (Rosman & Rallis, 2012). Effective field notes are typically recorded promptly after the interview, focused on the research question, and include a detailed description about people, places and things. It is often recommended that the researcher avoids talking to anybody before the field notes are recorded (Neuman, 2000). The researcher was intentional about recording field notes immediately following each interview. She used an audio recorder to talk freely about the content and the process of each interview session and transcribed these notes on an as needed basis. These field notes aided with the recollection and assignment of meaning to the phenomena under investigation. To ensure accuracy, the researcher conducted a weekly review of the field notes and filled in gaps and highlighted emerging themes.

Artifacts in qualitative research are materials that provide additional insight into phenomena under investigation (Creswell, 2013; Rossman & Rallis, 2012). In this case, the researcher collected examples of the personalized feedback reports and educational materials from the sites. The researcher noted that research participants were very willing to share their resources. These artifacts provided an additional layer to the data analysis process.

### **Reflexive Journaling**

The act of reflexive journaling allows the researcher to interact with the data throughout the research process (Rossman & Rallis, 2012). As indicated earlier, the phenomenological methodology is effective when the researcher establishes a phenomenon of interest and has the ability to refrain from adding any sort of judgment, which is known as epoché or bracketing (Hays & Wood, 2011; Merriman, 2002; Moustakas, 1994). The researcher considered the process of reflexive journaling as a form of epoché or bracketing to ensure accurate representation of research participants' experiences. The researcher took the time to journal throughout the entire research process. As a result, she was able to separate thoughts, feelings, impressions, and opinions from the concrete data.

### **Data Quality Procedures**

Whereas quality in qualitative research can be assessed with the same general concepts as reliability and validity used in quantitative research, qualitative researchers place focus on procedures that ensure credibility, transferability, dependability, and confirmability to ensure trustworthiness (Cresswell, 2013; Golafshani, 2003; Hays & Singh; 2012; Merriam, 2002; Rossman & Rallis; 2012; Shenton, 2004). Qualitative research is considered credible when the findings and conclusions make sense and are supported by the data. Transferability means that findings can be applied to other contexts. Dependability is the ability of an independent

researcher to track the steps and decisions made throughout the study. Finally, confirmability involves the convergence of data that accurately represents the perspectives of research participants and a willingness to trust the final outcome. In this case, the researcher used the following data quality procedures: (1) prolonged engagement/observations; (2) triangulation; (3) researcher reflexivity; (4) member checks; (5) peer debriefing; (6) thick rich description; (7) audit trail; and (8) independent analyst to ensure credibility, transferability, dependability, and confirmability.

### **Credibility**

To ensure credibility in qualitative research, the findings and conclusions are supported by the data thus resulting in believability (Hays & Singh; 2012). The researcher accomplished this through prolonged engagements/observations, triangulation, researcher reflexivity, member checks, and peer debriefing. Prolonged engagement/observation is the investment of adequate time to learn about the research participants' perceptions and experiences. Creswell and Miller (2000) state that there is not an exact amount of time that defines prolonged engagement/observation, but instead say it is a duration of time that leads to increased understanding. In this study, the researcher traveled to each campus to interview the research participants in person and to view the site where BASICS is facilitated. In addition, the researcher toured the campuses and surrounding communities to increase her understanding of the campus culture.

Triangulation leads to credibility by using multiple data sources to build a justification for themes (Cresswell, 2013; Golafshani, 2003; Hays & Singh; 2012; Merriam, 2002; Rossman & Rallis; 2012; Shenton, 2004). In this case, the researcher used the data from each interview combined with artifacts and the field notes to determine areas of convergence and divergence.

Through triangulation, there was increased confidence that particular themes existed. Through the location of evidence in different data sources validity of findings occurred.

The purpose of researcher reflexivity is to control for potential bias in the research. To ensure for this, the researcher kept an ongoing reflexive journal to describe each interview experience to safeguard against potential biases (Creswell, 2013; Rosman & Rallis, 2012). As stated earlier, the researcher considered the process of reflexive journaling as a form of epoché or bracketing to ensure accurate representation of research participants' experiences. The process of journaling occurred soon after the pilot interview and involved thorough record keeping of research activities, ideas throughout the research process.

Member checks involve the solicitation of feedback from research participants to ensure that findings are accurate with their lived experience (Creswell, 2013; Hayes & Singh; 2012; Merriam, 2002; Patton, 2002; Rosman & Rallis; Shenton, 2004). Guba and Lincoln (1985) consider member checks the most critical step to ensure the credibility of qualitative research and were used in this study. In this case, each research participant was given the opportunity to review the interview transcript for the purpose of validation. They were encouraged to make changes and additions and to provide feedback to control for errors. All research participants were willing to answer follow-up questions and several made changes and additions to their transcript.

Lastly, the researcher consulted with a peer-debriefer as a means to ensure that the findings and conclusions were supported by the data. Peer debriefing allows for an external check in the research process by someone who is familiar with the phenomenon under investigation (Creswell, 2013; Creswell & Miller, 2000; Hays & Singh, 2012; Rosman & Rallis, 2012; Shenton, 2004). In this case, the researcher consulted with a former colleague who has

over twenty-five years of experience working in the field. He reviewed transcripts, field notes and artifacts. In addition, he assisted with reflexivity throughout the process.

### **Transferability**

Transferability means that the research findings can be applied to other situations. To ensure for transferability, the researcher must provide a thick rich description of the research process that includes a detailed account of everything the reader may need to know to understand the findings (Creswell, 2013; Hays & Singh, 2012; Guba & Lincoln; 1985; Rossman & Rallis, 2012; Shenton, 2004). For the purpose of this study, the researcher followed the recommended research protocol to investigate the phenomena. In particular, she established specific research questions, used purposeful sampling, kept field notes and a reflexive journal, and conducted systematic data collection and analysis processes to ensure rigor. Based on this thick rich description, the reader can apply this research to other settings.

### **Dependability and Confirmability**

Dependability is the ability of an independent researcher to track the steps and decisions made throughout the study (Creswell, 2013; Hays & Singh, 2012; Rossman & Rallis, 2012; Shenton, 2004). Similar to transferability, Shenton (2004) states that the researcher should provide a detailed report of the research processes to ensure for dependability. In this case, the researcher kept an audit trail that included detailed records of all correspondence, recordings, transcripts, field notes, artifacts, and the reflexive journal. All records were retained in a secure location that could only be accessed by the researcher. This thorough record keeping helped the researcher to be consistent throughout the research process.

Confirmability involves the convergence of data and a willingness to trust the final outcome (Creswell, 2013; Hays & Singh, 2012; Rossman & Rallis, 2012; Shenton, 2004). To

confirm these research findings, the researcher used two independent analysts who had no previous ties to the study. Each independent analyst reviewed three transcripts to check for consistency of findings. This review helped the researcher identify blind spots and gain an increased understanding of the data (Creswell, 2013; Hays & Singh, 2012; Rossman & Rallis, 2012; Patton, 2002). In addition, the researcher consulted with a peer group and her dissertation committee members to debrief the research process and to receive honest feedback.

### **Data Analysis**

Data analysis involved a process where the researcher uncovers emerging themes, patterns, concepts, insights, and understandings (Creswell, 2013; Hays & Singh, 2012; Rossman & Rallis, 2012; Patton, 2002). In this iterative process, where data collection and analysis happen concurrently to ensure that understandings are truly coming from the data was used (Anfara, Brown, Mangione, 2002; DiCicco-Bloom & Crabtree, 2006). This process ultimately led the researcher to saturation or a point where the data collection no longer produced new categories and themes (Creswell, 2013; DiCicco-Bloom & Crabtree, 2006). To conduct the data analysis, the researcher was immersed in the data, performed the coding by hand, and maintained detailed notes.

### **The Iterative and Coding Process**

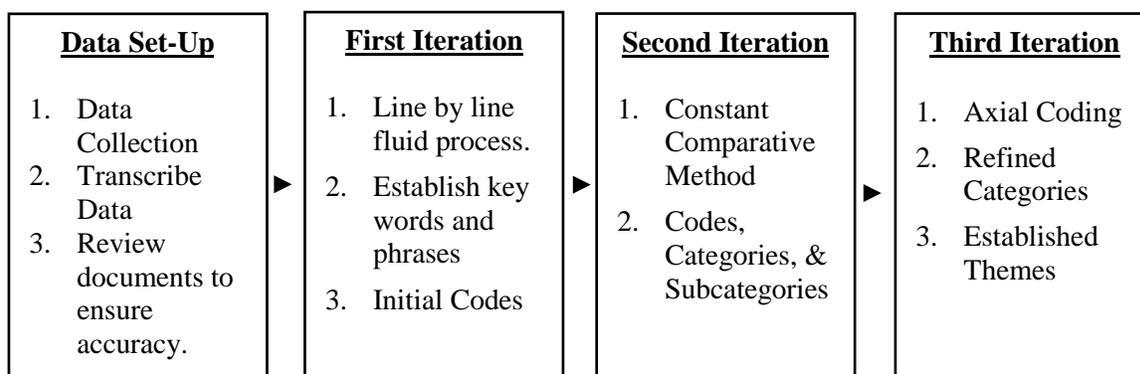
Upon completion of in-person interviews, the researcher transcribed the interviews into a Word documents and reviewed those documents twice to ensure accuracy of the data. When necessary, the researcher followed up with the research participants via email or telephone calls to clarify sections of the recording that were inaudible or responses to interview questions required further explanation. Next, the researcher read each transcript in its entirety for the purpose of surface analysis (Anfara, Brown, & Mangione, 2002). This line by line fluid process

produced key words and phrases that were common among the research participants (Hahn, 2008; Rossman & Rallis, 2012; Thomas & Harden, 2008). This first iteration reduced the data and allowed for a manageable focus.

Next, further analysis of the data occurred through a second iteration. During this iteration, the researcher used the constant comparative method to recognize similarly coded data to consolidate and produced categories and subcategories. (Anfara, Brown, & Mangione, 2002; Creswell, 2012; Hays & Singh, 2012; Merriam, 1998). Merriam (1998) defined the constant comparative method as the researcher beginning “with a particular incident from an interview, field notes, or document” and comparing with “another incident in the same set of data or in another set” (p. 159). The process of coding within phenomenological methodology as described by Creswell (2013) involves the identification of specific statements that are categorized into meaningful clusters. In the context of this study, the researcher reviewed codes from the first stage and focused the codes to develop categories. In addition, she consulted with the independent analysts to identify blind spots and to develop new understandings. To complete the second iteration, she organized data into categories and subcategories.

The final iteration involved further analysis of the first two iterations and allowed for the discovery of how the categories and sub-categories related to one another to generate themes. During this third iteration, the researcher used axial or thematic coding as a means to critique previous codes and to develop refined categories (Creswell, 2012; Hahn, 2008; Hays & Singh, 2012; Thomas & Harden, 2008). Figure 2 on the following page depicts the steps to the iterative and coding process that was used in this study. The end result was the establishment of themes in relation to the three research questions that guided this study. These themes are discussed in the next chapter.

Figure 2

*The Iterative and Coding Process***Summary**

This chapter included a description and rationale for qualitative research and outlined phenomenology as both a tradition and methodology. Data collection involved the use of in-depth semi-structured interviews combined with observations and field notes. The intent of this data collection procedure was to obtain a thick description of the lived experience. Data analysis employed processes where the researcher uncovered emerging themes, patterns, concepts, insights, and understanding through stages of coding. The constant comparative method was used to extract meaning from the data. To ensure rigor throughout the qualitative research process, the researcher placed focus on procedures that ensured credibility, transferability, dependability, and confirmability.

## Chapter 4: Results of the Study

This phenomenological research utilized a qualitative approach to understand the perspectives of mental health practitioners who use the BASICS intervention in their work setting on the college campus. Eleven females and two males participated in face-to-face, individual interviews to share their experiences and discuss their perceptions of the BASICS intervention. The inclusion criteria for participation in this study specified that the interviewee hold a minimum of a master's degree in the mental health profession (counseling, social work, or psychology) and have at least one year of full-time work experience using brief motivational interventions at a four-year college or university. Through professional networks, list-serves, internet searches, and cold calls, thirteen participants were identified from thirteen different institutions of higher education located in the Mid-Atlantic, Midwest, and Southeast. The study was guided by the following research questions:

1. How do practitioners in the mental health profession use the BASICS intervention on their campuses?
2. What do practitioners in the mental health profession perceive as the strongest and weakest aspects of the BASICS intervention?
3. What barriers (if any) are experienced with regard to the implementation of BASICS?

Chapter Four presents the findings. The participants' responses to semi-structured interview questions, demographic questions, follow-up questions through emails and phone calls, artifacts such as examples of feedback reports, harm reduction tools etc., and field notes were used as a means to identify emerging themes to respond to the research questions. Great care was taken by the researcher to remain objective throughout the data collection phase to improve the

understanding and interpretation of the data findings. Included in this chapter are the participant demographics, results, and a summary.

### Participants

Participant demographics were collected through a structured interview format following the semi-structure interview. Participants were asked to share their gender, age range, race, degree, years of experience facilitating BASICS, years of experience in the profession and their work setting on the campus. Of the thirteen participants, eleven were female and two were male. Ten identified as white, two as bi-racial, and one as African American. The participants' total years of experience facilitating the BASICS intervention averaged 4.5 years and total years of experience in the mental health profession averaged 15.7 years. Six participants provided BASICS within a counseling center on their campus while three were in an interdisciplinary health center. The other four participants worked in a student wellness center, university life center, dean of students office, and an academic department. The academic department will be discussed further in the following chapter. Each participant was assigned a pseudonym and the names of the colleges and universities were not disclosed herein to protect participant confidentiality. The participant demographics are presented in Table 2:

Table 2

#### *Demographic Summary of Participants (N=13)*

Name	Gender	Age	Race*	Degree	Years BASICS	Years in Profession	Setting
Pam	F	30-39	W	M. Ed. - Counseling Psych. & Student Affairs	3	14	Health Center
Joy	F	20-29	AA	Ph.D. - Counseling Psychology	1.5	2	Counseling Center
Lou	F	50-59	W	MA - Counseling	9	25	Health Center
Meg	F	50-59	W	MSW - Social Work	3	3	Counseling

Name	Gender	Age	Race*	Degree	Years BASICS	Years in Profession	Setting Center
Ned	M	30-39	W	MA - Counseling Clinical Mental Health	1.5	4.5	Health Center
Ann	F	50-59	W	MSW - Social work	10	34	Counseling Center
Viv	F	50-59	W	MSW - Social Work	3	24	University Life
Sky	F	40-49	W	MA - Substance Abuse Counseling	2.5	17	Wellness Center
Gia	F	60-69	BR	MS - Clinical Psychology	10	25	Counseling Center
Tab	F	30-39	W	MS - Counseling and Student Affairs	3.5	7	Dean of Students
Ava	F	30-39	W	M. Ed - Counselor Education	3	8	Counseling Center
Jeb	M	60-69	BR	MSW - Social Work	6	38	Counseling Center
Aly	F	30-39	W	M. Ed. - Community & Addictions Counseling	3	3	Academic Dept. Clinic

\* W = White, BR = Bi-Racial, AA = African American

### Campus Descriptions

The researcher visited the campuses of twelve of the research participants. The thirteenth participant agreed to be interviewed at another campus site while both she and the researcher were attending a conference. Fortunately, the researcher previously visited this participant's campus and is familiar with the campus culture. Five of the campuses are considered large state research universities with enrollments ranging from 27,000 to 34,000. Two of these campuses are located in an urban setting and three are located in a rural setting. Three campuses are considered mid-size state research universities with enrollments ranging from 15,000 to 20,000 and are located in rural settings. Three campuses are private liberal arts institutions with enrollments ranging from 1,100 to 2,600 and are all located in rural settings. One campus is

considered a small regional state university with an enrollment of 7,500 and is located in a rural setting. Finally, one campus is considered a small public research university with an enrollment of 8,200 and is located in a rural setting. Regions represented in the study are the Mid-Atlantic, Mid-West, and Southeast. All research participants stated that they use the BASICS intervention on their campus as a means to address high-risk drinking.

## **Results**

Prior to each interview, the researcher reminded each participant that the purpose of this study was to gain insight about the BASICS intervention through their perspectives and experiences. Specifically, the researcher wanted to learn how the intervention was being used on their respective campuses, what they perceived as the strengths and limitations of the intervention, and what barriers were experienced with regard to the implementation of the intervention. Through a series of thirteen semi-structured interview questions and two open ended statements, the researcher gathered data to answer the research questions (Appendix C). The researcher combined this data with campus artifacts such as personal feedback reports (PFR) and harm reductions materials, field notes and memos of understanding to answer the research questions.

### **Research Question One**

The initial research question explored how practitioners in the mental health profession use the BASICS intervention on their campus. Each participant provided a detailed narrative of his or her approach to the intervention on their campus. Through three iterations of analysis, the researcher was able to determine that there was great variance in how the BASICS intervention is facilitated on campuses. Visible differences existed with regards to the number of sessions that students attend, the type of session (individual or group), the length of time between sessions,

and the PFR. Along with these variances, three distinct themes emerged that provided insight into the application of the intervention on these campuses. First, participants described BASICS as a part of a comprehensive and progressive approach to address high-risk drinking. Second, they discussed the need to tweak or modify the intervention to fit their setting. Third, they indicated that the mandated student population posed complications.

### **Participant Narratives**

All research participants took great care to articulate how the BASICS intervention is used on their respective campus. As mentioned above, great variance in how the intervention was implemented with regard to number of sessions, individual or group format, the length of time between sessions, and the feedback protocol became apparent as the interview process unfolded. A description of each participant's approach to BASICS is described below and is summarized in Table 3 on page 106.

**Participant #1.** Pam works at a mid-sized state research university. Eighty percent of the students she sees are mandated to attend BASICS via the student conduct office or other referring agencies such as the county court system. Twenty percent of the students are self-referred. Pam describes sticking rather closely to the BASICS protocol as outlined in the BASICS manual by Dimeff et al. (1999) and states that is important for her university to adhere to the best practices available. The intervention consists of two individual sessions that last approximately 45-50 minutes with a typical two-week time frame between sessions. The focus of the first session is orientation to the intervention, rapport building, and gathering information. Following this session, the student completes an on-line assessment instrument that will generate the PFR for session two. The PFR was developed in-house and is computer-generated as a result of an outstanding partnership that she forged with the Information Technology (IT) department

on campus. All data is stored in a secure password protected database. The decision was made not to facilitate the BASICS intervention until they were able to produce a thorough PFR. The PFR report is twelve pages in length and includes twelve categories for review. Session two consists of reestablishing rapport, providing education, and reviewing the PFR. Pam is a part of the Health Center staff on her campus and facilitating the BASICS intervention is her primary job responsibility. The office staff also includes two graduate student who facilitate BASICS and a full-time time employee who administers the program and occasionally facilitates the intervention.

**Participant #2.** Joy works at a large state university located in an urban area. Ninety five percent of the students are mandated to attend while five percent are self-referred. When asked if she follows the two session intervention as outlined in the BASICS manual by Dimeff et al. (1999), she said, “Well, we don’t use that protocol” and attributed this to job demands. Instead she described her institution’s approach as a hybrid model. Session one is an on-line module that entails education and the completion of the assessment instrument to generate the PFR. Session two is facilitated in-person and consists of establishing rapport and discussing the PFR. However, session two is only for those students identified as high-risk. Students identified as low-risk are given the option to meet with Joy in person but are not required. The institution has a contract with Blue Sky, a custom web application company to design, develop, and generate the PFR report. The PFR is twenty pages in length and includes twelve categories. Joy is a part of the Counseling Center staff on her campus and facilitating the BASICS intervention is a small part of her job responsibilities. Another staff member within the Wellness Center also works on the BASICS intervention as a small part of her job responsibilities. She states that the campus needs a full-time staff member whose focus is primarily on facilitating the intervention.

**Participant #3.** Lou works at a large land grant research university in a rural setting. The majority of students who participate in the BASICS intervention are mandated to attend. Occasionally there is a student who will self-refer. Referring agencies consist of the student conduct office, county courts, and out-of-state agencies. Lou describes that she and her staff follow the BASICS protocol as described in the BASICS manual by Dimeff et al. (1999), but admits to a few tweaks. Also, there is an option for a third session should students have the need to “check-in.” A typical intervention consists of two individual sessions that last approximately 45-50 minutes with a usual two-week time frame between sessions. Depending on the time of the school year, they may decrease to one week between sessions. Session one focuses on orienting the student to the intervention, establishing rapport, and gathering information. Following this session, the student is sent a link to complete an on-line assessment instrument to generate the PFR for session two. Lou’s institution also has a contract with Blue Sky to design, develop, and generate the PFR. Lou states that she tweaked the PFR to meet the needs of her institution. The PRF report is twenty-six pages in length and includes thirteen categories. Session two consists of reestablishing rapport and discussing the PFR. Lou is a part of the Health Center staff on her campus and she administrates the BASICS intervention along with other job responsibilities. She reports that there are other staff members in the center who also facilitate the intervention.

**Participant #4.** Meg works at a mid-sized state regional university located in a rural setting. The majority of the students are mandated to attend via the Student Conduct office, but a few will self-refer. Meg describes BASICS on her campus as typically a two-session individual intervention with the option to attend additional sessions if the student desires. (Several students have attended additional sessions.) Meg states that conceptually she follows the protocol outline in the BASICS manual by Dimeff et al. (1999), but she fears becoming too rote if she is simply

working from a checklist. Instead she draws upon her clinical skills and background working in the addictions field. Session one is all about rapport building and gathering information and session two is about harm reduction. Prior to the 2014-15 academic year, the university contracted with San Diego State University to use the eCheck-Up program to generate the PFR. Due to budget constraints, they can no longer afford this service. As a result, the student no longer completes an on-line assessment instrument to generate a PFR between sessions. Instead, Meg has the student develop a personal harm-reduction plan and identify protective strategies during session two. She believes this approach also works. Meg is a part of the Counseling Center staff on her campus and facilitating the BASICS intervention constitutes five hours per week of her primary work responsibilities. The office staff also includes one graduate assistant to facilitate BASICS.

**Participant #5.** Ned works at a mid-sized state research university. The majority of students are mandated to attend, but there is the occasional self-referral. Ned describes BASICS on his campus as a three-session individual intervention. Session one entails an intake that lasts approximately thirty minutes. Between the intake and session two, the student completes an on-line assessment instrument to generate the PFR. Ned's campus also made the decision to use Blue Sky to design, develop, and generate the PFR. Session two is scheduled one to two weeks following the initial intake session. During session two, rapport will be reestablished and the PFR will be discussed. The feedback report is sixteen pages in length and includes thirteen categories. Approximately thirty days following session two, students will attend a third session for the purpose of follow-up. Ned is a part of the Health Center staff on his campus. He serves as the primary administrator of the BASICS program and facilitates the intervention. In addition, he supervises four counseling interns who also facilitate the intervention.

**Participant #6.** Ann works at a small private liberal arts university located in a suburban setting. The majority of students she sees on her campus are mandated to attend, but she indicates that students will also self-refer. Conceptually, Ann believes in the BASICS intervention and describes it as a useful tool that provides a scan of students in relation to their alcohol use. BASICS on Ann's campus is typically a three to five individual session intervention because there is a culture of resistance and rapport building requires a significant amount of time. Typically after session two, the student will fill out a hard copy of the assessment instrument, which is hand-scored to generate an informal PFR. Due to budget constraints, her office is not equipped with an on-line assessment instrument. Ann is a part of the Counseling Center staff on her campus. She facilitates the intervention, but also has other significant supervisory and clinical responsibilities within the center.

**Participant #7.** Viv works at a large state university located in a suburban setting. Ninety percent of the students are mandated to attend via the Student Conduct office or other referring agencies while ten percent of the students are self-referred. Viv describes a desire to adhere to the BASICS protocol as outlined in the BASICS manual by Dimeff et al. (1999). The intervention consists of two individual sessions that last approximately 45-50 minutes with a typical two-week time frame between sessions. She states that there is an option for a third session if the student has a desire. During the first session, she orients the student to the intervention, establishes rapport, and gathers information. Following this session, the student completes an on-line assessment instrument to generate the PFR. Viv's university uses San Diego State University eCheck-Up personalized feedback program to create their report. Session two consists of reestablishing rapport and providing feedback. The PFR is twelve pages in length and includes ten categories for review. Viv is a part of University Life office on her campus and

facilitating the BASICS intervention is one of her primary work responsibilities. She also supervises an intern who facilitates BASICS.

**Participant #8.** Sky works at a small private liberal arts college located in a rural setting. The majority of the students are mandated to attend via the Student Conduct office, but a few will self-refer. Sky describes BASICS on her campus as two-session individual intervention that parallels what is described in the manual. Each session lasts approximately 45-50 minutes with a typical two-week time frame between sessions. Her campus is experiencing budget cuts and recently the Blue Sky program was discontinued, which eliminated the formal PFR to discuss with students. As a result, the students fill out a hard copy of the assessment, which is hand-scored. At the time of this interview, she had not determined exactly how she plans to facilitate the feedback component of the intervention. For now, she focuses on education and harm reduction strategies. Sky is a part of the Wellness Center staff on campus and facilitating the BASICS intervention constitutes a small portion of primary job responsibilities. She also oversees all aspects of primary prevention on her campus. She has one counseling intern who assists with the facilitation of BASICS.

**Participant #9.** Gia works at a small private liberal arts college in a rural setting. Students who participate in the BASICS intervention on her campus are typically mandated, and she states that it would be very rare for a student to self-refer. In the past, her college was more “faithful” to the BASICS protocol described in the manual, but as demands increased in her work setting, changes were made to the protocol. Currently, the intervention consists of two sessions. Session one is facilitated in a group format and session two is facilitated in an individual format. Usually there is a two-week time frame between sessions. In the past she used a PFR that she compiled by hand. Today she verbally discusses the typical items on the PFR with each student.

Gia is a part of the Counseling Center staff on her campus and facilitating the BASICS intervention is a small part of her job responsibilities. She generally facilitates session one while other staff members in the center will assist with session two when the caseload is heavy.

**Participant #10.** Tab works at a mid-sized state university located in a rural setting. The typical student who participates in the BASICS intervention is mandated from the Student Conduct office. The intervention consists of two individual sessions that last approximately 60 minutes, and usually there are one to two weeks between sessions depending on the time of the academic year. During the first session, she orients the student to the intervention, establishes rapport, and gathers information. Following this session, the student completes an on-line assessment instrument to generate the PFR. Tab's university also uses San Diego State University eCheck-Up personalized feedback program to create this report. Session two consists of reestablishing rapport and providing feedback. The PFR report is twelve pages in length and includes ten categories for review. Tab is a part of the Dean of Students office on her campus and facilitating the BASICS intervention constitutes 80% of her work responsibilities while 20% is dedicated to other prevention efforts. Each semester she is assigned a graduate student to help facilitate BASICS.

**Participant #11.** Ava works at a large public research university. The majority of the students are mandated to attend the BASICS intervention via the Student Conduct office. She states that it would be "strange" to have more than one or two students self-refer in any given year. Ava describes BASICS on her campus as a two-session individual intervention with an option for a third session. The first session involves a lengthy intake and completion of a hard copy assessment packet and takes approximately ninety minutes to two hours to complete. She hand-scores the assessment packet, which she describes as the "bane of her existence," to

generate a homegrown PFR that is plugged into a template within a Word document. There is a two-week time frame between sessions. Session two entails rapport building, education, and review of the PFR. The PFR is six pages in length and includes ten categories. Ava is a part of the Counseling Center staff on her campus and serves as the primary supervisor and administrator of the BASICS program. She facilitates the intervention but also has other clinical responsibilities. She supervises three graduate assistants who also facilitate the intervention.

**Participant #12.** Jeb works at a large public land grant university in a rural setting. The typical student who participates in the BASICS intervention on his campus is mandated from the Student Conduct office. Jeb describes the intervention as lasting for two or more sessions and facilitated in a group format. In his words, it's hard to stick to the protocol outlined in the manual due to other job responsibilities. He goes on to say that there is no way that his university could offer individual sessions and keep up with their caseload. Typically there is one week between each group session. Students do not receive a PFR but instead receive education and feedback on an on-going basis throughout the group process. Jeb is a part of the Counseling Center staff on his campus and serves as one of the supervisors for the BASICS program. He facilitates the intervention, but also has other clinical responsibilities within the center. Typically there a few practicum students from various graduate programs on campus who also facilitate the intervention under his supervision.

**Participant #13.** Aly works at a small public research university located in rural area. All students who participate in the BASICS intervention on her campus are mandated to attend by the Office of Student Conduct or other referring agencies such as the county court system. Aly describes sticking to the BASICS protocol as outlined in the BASICS manual by Dimeff et al. (1999). The intervention consists of two individual sessions that last approximately 45-50

minutes with a typical two-week time frame between sessions. During the first session, students are oriented to the intervention, and a focus is placed on establishing rapport and gathering information. Following this session, the student completes an on-line assessment instrument that generates the PFR for session two. The PFR is homegrown and computer generated from a secured database. Session two consists of reestablishing rapport and providing feedback. The PFR is two pages in length and includes ten categories for review. Aly works in a clinic housed in an academic program on campus. She describes the partnership between the academic program and the Division of Student Affairs as fantastic. Together they collaborate to address high-risk drinking on campus. She has facilitated the intervention and currently provides supervision to students in the master's program who facilitate the intervention as part of their internship experience.

**Summary of Participants.** Through campus visits, the researcher was not only able to obtain a thick description of the BASICS intervention on each campus (Table 4.2), but she also gained insight into the drinking culture at these institutions. The Greek life culture was often part of the conversation as well as other campus organizations and traditions such as athletic events, music festivals, spring flings, and street fairs. Most campuses have bars, restaurants, and other entertainment venues in close proximity. It was not uncommon for the research participants to become animated when describing the drinking culture on their campus. At times their stories were humorous but also troubling. Their reports of injuries, alcohol overdoses, blackouts, sexual assaults, and students struggling with addiction were consistent among all thirteen interviews. In fact during one interview, the participant announced that one of their students was currently hospitalized and on a ventilator due to an alcohol overdose. It was obvious this student was on the participant's mind throughout the interview. Following the interview, the researcher

participated in a conversation with the interviewee and another colleague to discuss the tragic nature of this incident and to process feelings. Later that day, the death of this student was announced and an investigation was to follow. Yet again, another death signifying that the search for long-term effective solutions must continue. A reminder, approximately 1,825 college students between the ages of 18 and 24 die from alcohol-related incidents each year (Hingson et al., 2009; NIAAA, n.d.).

Table 3

*Participant's Approach to the BASICS Intervention*

<b>Name</b>	<b>Setting</b>	<b>Mandated</b>	<b># of Sessions</b>	<b>Type of Sessions</b>	<b>Weeks Between Sessions</b>	<b>PFR</b>	<b>Feedback Provider</b>
Pam	Health Center	Yes	2	Individual	2	Yes	In-House
Joy	Counseling Center	Yes	1 or 2	Online & Individual	1	Yes	Blue Sky
Lou	Health Center	Yes	2+	Individual	2	Yes	Blue Sky
Meg	Counseling Center	Yes	2+	Individual	1 - 2	No	None
Ned	Health Center	Yes	3	Individual	4	Yes	Blue Sky
Ann	Counseling Center	Yes	3-5	Individual	1	No	None
Viv	University Life	Yes	2+	Individual	2	Yes	eCheck-Up
Sky	Wellness Center	Yes	2	Individual	2	No	None
Gia	Counseling Center	Yes	2	Group & Individual	2	No	None
Tab	Dean of Students	Yes	2	Individual	1-2	Yes	eCheck-Up
Ava	Counseling Center	Yes	2+	Individual	2	Yes	In-House
Jeb	Counseling Center	Yes	2+	Group	1	No	N/A
Aly	Academic Dept.	Yes	2	Individual	2	Yes	In-House

**Theme One: Comprehensive/Progressive**

The comprehensive/progressive theme emerged as a result of the initial interview question that asked participants to describe their approach to high-risk drinking on their campus.

All thirteen research participants were familiar with the NIAAA taskforce report (2002, 2007) and stated that a comprehensive approach is critical to address the issue. All research participants reported that there was a combination of prevention and intervention efforts on their campuses, but it was also common to hear a follow-up statement that they needed to do more. For example, concerning Jeb's university he states, "We are doing lots of things and we're going to have to do more." The "lots of things" reported by all research participants include: on-line alcohol education classes for all entering first year and transfer students, substance free living arrangements, social marketing campaigns, peer education, policy enforcement, campus coalitions, partnerships with local businesses, individual and group interventions and recovery programs to name a few.

**Comprehensive.** It was not uncommon to hear the words "comprehensive approach" used by the participants. Pam took pride in her university and describes the approach on her campus as:

I guess the word comprehensive is what I would use to try to define how we approach high risk drinking on our campus. It is not something we feel is the responsibility of the health center, or is the responsibility of residence life, or the responsibility of the counseling center. It's a very community partnership based approach. We are intentional at identifying target populations and having a core foundation of universal programming. So really thinking of it tiered and universal and comprehensive.

Other participants also described their approach in a similar manner and spoke of collaboration and partnerships. Joy remarked about a healthy tension that exists among stakeholders due to the different roles they have on campus:

I think there is a tension between punishment and behavioral interventions....and so in some ways all the stakeholders who are involved in this decision making have different goals and values, and I think that creates some of the tension. For example, in Housing they need to determine really quickly if a person is a risk to the community right? I think it's a healthy tension in that it keeps the conversation going and we are figuring things out. There are certain students that we wonder what we need to do and that can feel really challenging.

Two participants described their approach as two-pronged, meaning there is prevention and intervention. Interestingly, Sky described the approach on her campus as collective and went on to say, "We use the Institute of Medicine Modes where you have the universal, selected, and indicated."

Emphasis was certainly placed on intervention efforts and frank discussion occurred about an imbalance that exists between primary prevention and intervention on some campuses.

Tab stated:

I would say the program at my university is mainly intervention based in nature. I would say eighty percent of what I do is intervention....which itself is a level of prevention, so trying to prevent the second, third and fourth violations. About twenty percent of what we do is overall prevention on the campus.

Ned and Ann also shared in this experience with Tab. Both campuses have a few primary prevention efforts in place, but the majority of the focus is placed on intervention. The following was Ned's experience:

So right now our main focus here is from an intervention perspective with an idea of prevention. Because a great deal of students we see are mandated to come....and so I

view our program as very much an intervention process, but we do a lot of preventative work, because we do want to support these students in achieving the success while in school as well as when they leave school. So in the wellness center, that is my approach as the alcohol and drug services coordinator. Our other position is the Student Wellness Outreach Program Coordinator and they do a lot with prevention. So a lot of the social norming campaigns. A lot of reaching out to students. Facilitation. The wellness peer educators go out and facilitate presentations and educational outreach programs to really build a prevention focus.

Ann discussed how her campus approaches intervention and prevention:

The approach is that the students are seen by our Assistant Student Conduct Officer.

They are asked to participate in an on-line program or the BASICS intervention.

Environmental strategies that we have had off and on are in alcohol and other drug task force, public safety officer presence on campus, and harm reduction training for student leaders.

The description of these experiences reinforces the findings by Nelson et al. (2010) that colleges and universities find it difficult to implement the recommendations put forth by the NIAAA task force committee (2002, 2007). Every participant stated resources (staff and money) as the primary reason that they couldn't accomplish more. This will be discussed later in this chapter in relation to the third research question about barriers.

**Progressive.** It was not uncommon to hear that BASICS was part of a progression of interventions that were being offered on participants' campuses. For example, nine of the participants report that their campus has different levels of intervention for different levels of violation. Specifically, Meg, Lou, Gia, and Ava gave the example of a student who was a first

time offender with a low level violation such as underage consumption. In this case, the student would be assigned to an alcohol education class rather than BASICS. Jeb explained on his campus that students have the option to attend the BASICS intervention in the counseling center or they can participate in an experiential program with a focus on psycho-education on the weekend. Aly outlined three distinct interventions in her clinic with BASICS considered the middle level. The hearing officer assigns the student to one of the three interventions based on the nature of the incident and the student's drinking pattern. This progression of interventions allows campuses to better manage their caseloads.

### **Theme Two: Tweaks/Modifications**

The second theme that emerged from the first question dealt with adaptations of the intervention. As described in the manual, BASICS is a two-session, brief, motivational intervention that aims to increase personal awareness around the use and abuse of alcohol, and reduce harmful consequences associated with high-risk drinking (Dimeff et al., 1999). The primary focus of the first session is to establish rapport with the student and gather information about his or her history of alcohol use, problems associated with alcohol use, mental health problems, and typical drinking patterns over the last 30 days. In the week between the two sessions, the student completes a self-report questionnaire about patterns of alcohol consumption, problems associated with alcohol use, family history of substance abuse, alcohol outcome expectancies, perception of health and behavioral risks due to alcohol, perceptions of college drinking norms, readiness to change, and indices of alcohol dependence (Dimeff et al., 1999). The counselor summarizes the questionnaire and develops a feedback report for the second session. The objective of session two is to provide feedback to the student based on the self-report questionnaire in these areas: (a) personal goals related to alcohol use; (b) drinking

patterns; (c) drinking patterns relative to college norms; (d) risks and consequences associated with alcohol use; (e) clarification of myths and facts about the effects of alcohol; (f) strategies to reduce risks associated with alcohol use; (g) options to assist in making changes; and (h) a referral list, if warranted (Dimeff et al., 1999).

The researcher reminded the participants of this protocol described in the manual and asked participants how they used the intervention in their setting, how easy or difficult is it to adhere to the protocol, and to describe the challenges (if any) that accompany the use of BASICS. As indicated in Table 4.2, it is evident that many of the participants modified the intervention in their setting. This is how Joy described their modification of the intervention when asked how easy or difficult it is to adhere to the protocol:

Well we don't use that protocol. (Laughter) So it's difficult. I think there is absolutely no way that we would be able to meet with each student twice. For us, that is not at all feasible. My co-worker has other responsibilities in terms of teaching a class, managing other outreach programs within the wellness center. She is the faculty advisor for our student recovery group. I still have a clinical caseload here and I am running two groups. So there is no way. There is just no way that I would be able to do that. We use a hybrid model that seems to work for us... You never just have one job if you are a student affairs professional. So that means you have to roll with the punches. So for us that has meant pulling out the best of what this assessment can offer us and not be bound by rules that don't make sense in our environment. It has worked for us. You know. Students get the feedback, take in the feedback, and are able to have meaningful conversations about it. They decide to make decisions to change and talk about risk reduction strategies. I mean to me that is what matters, not that we are performing this perfect protocol.

Gia also talks about the modifications that were made to the intervention on her campus and explained that this occurred because of the increased demands on her time:

Well we used to do it more faithfully to the model. We did two individual sessions.

Certainly after it became more known, you know from the NIAAA it seemed to be the most evidenced based interventions so we got more and more referrals. It came to the point where it was difficult to do it that way. So we have modified it. I spoke to a lot of different people who were modifying it and doing more group kind of things. So now we do one group meeting which I usually run almost always. It's a lot of information and while they are there they write down some stuff about their drinking and they track their drinking for two weeks. We meet with them individually and bring their drinking log. So I give them their feedback in that session with normative stuff and all of that.

The length of the intervention was another reason stated for tweaking and modifying the intervention. Many participants do not feel that the intervention is long enough and state the need for more time to establish rapport, review the education materials, and provide feedback. Lou said that she, "Tweaked the PFR so that students could receive feedback about the pre-incident and their post-incident." Meanwhile Ned said, "We are continually refining how we deliver the BASICS based on the feedback I hear from the students and the interns." Jeb simply stated that it is hard to stick to protocol. Once again, resources are a contributing factor as to how BASICS will be implemented on campus. Two research participants from private schools described budget cuts which resulted in the loss of the web-based services (Blue Sky and eCheck-Up) to design, develop, and generate the PFR. To date, both are trying to determine how they will generate PFR's in the future. This was Meg's description of this situation:

We were using eCheck-Up for a while, but quite frankly it's too expensive for my budget. This is the first semester we haven't had that service. There is a good chance that I will have to come up with something else, but I am not sure what that is going to be. So for now when they come in for the second session we review what we talked about the last time, how things are going, and I have a harm reduction plan that I will show you...we create a harm reduction plan and it is within that plan that we will go over the triggers and strategies.

With regard to these tweaks and modifications Jeb spoke with passion:

...If I thought following that book, if I was going to get "X" result by just following that cookbook, then yeah. I mean my mom is an awesome cook. She still is and she's 91! If you ask her where is that recipe? I want to write it down. She is going to say it's in my head. It's about working, understanding it, taking those tools, taking those principles, and using it as a guideline. That's one of the things we know. As a guideline. Keeping true to the basic principles of that theory. It's going to look different on different campuses. It has to because the environment is different and your resources are different.

### **Theme Three: The Mandated Student**

The mandated student was a consistent discussion topic throughout the thirteen interviews and emerged as a clear theme in relation to this research question. The research participants were asked to describe the typical student who seeks services. With the exception of one participant, who indicated that every student who participates in BASICS on her campus is mandated, all others stated that students are either mandated or they self-refer. However, as the interviews progressed, all acknowledged that the self-referred student is a minimal part of their caseload. Pam indicates that approximately 20% of students on her campus self-refer while all

others say that self-referrals constitute less than 10% of their caseload. Most participants discussed the desire to see more self-referred students simply because that type of student wants to attend the sessions and is interested in change. Gia says:

I would much rather have students signing up for it (BASICS) because they are curious about it, or they are interested in it, or they are wondering, or they are self-referring. That would be pretty nice... Sometimes when I see them sitting in there (mandated students), I will say to our administrative assistant, "I will pay you to go in and face that crowd." They look so hostile sitting in there. They are pissed off that they were busted for some reason and it is unfair.

Ann describes her experience with mandated versus self-referral:

I am fairly certain that 90% of the students did not want to be there because they thought their consumption was similar to their peers and it is a part of college life. The 10% of students who self-refer and want to work on their issue could be attributed to family history...they were worried.

This act of mandating students to the intervention emerged as a result of the NIAAA follow-up report (2007), where much of the research focused on this student population. Certainly more students are reached through this process, but based on the experiences described by the participants in this study, it is not uncommon to encounter roadblocks with these students. Undoubtedly, there is a need for additional research in this area.

### **Research Question Two**

The second research question focused on what practitioners in the mental health profession perceive as the strongest and weakest aspects of the BASICS intervention. The researcher's intent with this question was to simply provide an opportunity for the participants to

discuss their experiences with the BASICS intervention in their work setting. Questions guiding this conversation were: (1) What are the strengths of the BASICS intervention? (2) Describe any limitations of the BASICS intervention? (3) What challenges accompany the use of BASICS in your setting? (4) If you could change one thing about BASICS what would you change? As discussed in chapter two, a number of researchers established that the BASICS intervention led to a decrease in the quantity and frequency of drinking behaviors and problems associated with high-risk drinking in a research setting (Baer et al., 2001; Borsari & Carey, 2000, 2005; Larimer et al., 2001; Marlatt et al., 1998). However, it is the input from practitioners who use the intervention on a daily basis in a practical setting that provides us a more complete understanding of how the intervention truly unfolds. Their hands-on experience offers insight into the strengths and weaknesses of the intervention that are not apparent in the BASICS manual. As Jeb stated:

...Look, we are out here working. We are in the trenches. We are the ones using the intervention.

Jeb is a seasoned professional with more than thirty years in the profession. He was able to provide insight into the reality of BASICS on his campus. He had a realistic and practical approach when working with students that included facilitating BASICS in a group rather than an individual setting due to the caseload. This sentiment was common among other participants: the need to be realistic and practical with the BASICS intervention.

Overall, participants were able to identify far more strengths than weaknesses and many spoke of a deep appreciation for the intervention. The themes that emerged in relation to strengths were: (1) harm reduction; (2) education; (3) personal awareness; and (4) self-empowerment. The themes that emerged in relation to weaknesses were: (1) the dilemma of one

size fits all; and (2) the personalized feedback report (PFR). A detailed description of each theme follows.

### **Strengths Theme One: Harm Reduction**

The harm reduction philosophy was a talking point among all research participants. Harm reduction places emphasis on practical strategies to reduce the negative outcomes associated with high-risk drinking and to develop goals in the areas of moderation and personal safety (Heather, 2006). It was recognized that without the harm reduction philosophy, BASICS would be non-existent. In fact Meg elaborated on this and said, “You know, I just don’t think you can do this job if you don’t have a harm reduction approach because that is what BASICS is, harm reduction.” This philosophy neither condones nor condemns any behavior, but instead places emphasis on taking a nonjudgmental stance to build an effective therapeutic relationship. As stated in the review of the literature, it is well documented that the majority of college students decrease their alcohol consumption as they mature. Therefore, an approach that emphasizes good decision making to achieve a healthier and balanced lifestyle is more relevant than abstinence (Heather, 2006; Marlatt & Witkiewitz, 2002).

### **Strengths Theme Two: Education**

All participants agreed that the education component of the intervention is valuable, and there was agreement that some topics resonated with students more than others. Commonly cited topics were standard drinks, BAC, tolerance, sobering up, and protective strategies. As Lou stated, “The beauty of BASICS is that students get some education.” Sky described the value of standard drinks, BAC, and protective strategies in this manner:

...the education and awareness of standard drinks and BAC. So often they do not realize that they were drinking more (than a standard drink). I can point out that they did not

realize they had three drinks because they filled their cup with half liquor and half soda.

Also, the protective strategies is a big one. They will actually learn a thing or two about that and make a commitment...and making a commitment is important.

Others stress the importance of delivering education in a manner that is not a lecture. According to one participant, students breathe a sigh of relief when they realize that it is not a lecture and then they let down their guard a bit. Joy described how she delivers this information:

I kind of informally talk to students about their experiences in the program and so many times I have had people say, "You know that wasn't as bad as I thought it was going to be. Because I thought you were just going to lecture me about all the stuff I was doing wrong." So for me it's really important to encourage dialogue and not just talk at students. You know to be able to have a conversation with them and to invite disagreement.

Gia also explained how she approached the education component of the intervention:

You can equate it (BASICS) with kinds of health information. Like how often do you wear a seatbelt? Do you notice that? How many times do you go to the gym? How often do you have that second piece of chocolate cake? It's just good to know about yourself and what drinking choices they are making. So it normalizes and it's just one more health decision that we make.

There is no doubt that education is a key ingredient to reduce high risk drinking behaviors. This idea was reinforced by the majority of the research participants. However, the manner in which the education is delivered might be of greater importance as highlighted in the above examples. The key to any BMI is to provide information and allow the people to contemplate the information and determine on their own accord what they want to do with the

information. It is through this act of contemplation that change may occur. This leads to the next strength-based theme, which was identified as personal awareness.

### **Strengths Theme Three: Personal Awareness**

Codes and categories that emerged to form the personal awareness theme were self-reflection, self-understanding, self-directed, self-exploration, being honest with yourself, and truly looking at yourself. Several of the research participants saw the intervention as a tool to help students become more self-aware. Viv saw the benefit of reflective conversations and stated:

I think those reflective conversations about choices and motivation, how confident are they (the student) that they can make that change. You know we just don't have those conversations very often as a rule in our society. So for them to have it about a fairly loaded taboo subject... I think it is a really cool opportunity.

Two research participants used the metaphor of a mirror. Pam stated:

It sounds cheesy, but I really do feel like it's holding up a mirror. Them (students) holding it up to themselves instead of me or somebody else. I can help them in that process of looking at themselves... I love that it paints a picture for them of the way in which they are benefitting from alcohol in their life, real or perceived, and the ways in which they could be doing something differently. I love that all those things are self-identified. It's not me telling them. It's me hearing something from them and then I follow-up and ask them to tell me more. So yeah, I love that it is really driven by them and I feel more like an invisible hand.

Joy described it in this manner:

I think it's a real quick and dirty way to hold a mirror up to students about their use. Because for me, it's like everything you got is because you put something in. Right? You know sometimes students get defensive and they want to argue. It's okay that they are not happy with it. It's what they put in. I want to talk about what it is that you are not happy about and I want us to consider the possibility that this could be true. That's really different than having a mom say, "Oh you drink too much and you need to stop." Right? It's really different because it's what they reported and so really it is on the student to own it and figure out what that means... But if you could hold up the mirror and say, "Talk to me about what you see." Tell them it is okay. Whatever they see is okay, but talk to me about it. I think that is really powerful for students and it really empowers them to make some decisions about lower risk drinking.

Others gravitate to the goal-setting portion of the intervention and believe it is the act of setting goals that fosters personal awareness. For example, a few research participants mentioned that when students establish goals and truly reflect on where they want to be in the future they change their drinking behaviors. They make a connection between current behaviors and future outcomes. A final example of personal awareness was explained as students increased their understanding of alcohol and acknowledged that their choices with regard to how they use the substance can benefit or compromise their college experience.

Too often students encounter difficulties such as academic problems, health issues and relationship struggles due to their alcohol use. Based on the examples above, the research participants viewed BASICS as an instrument that leads students to heightened awareness. It is designed in a manner to promote new understandings, which is both appealing and appreciated.

### **Strengths Theme Four: Self-Empowerment**

Self-empowerment emerged as a result of codes and categories that included: (1) choice; (2) freedom; (3) self-authorship; (4) personal decision making; (5) self-directed; (6) personal conclusions; and (6) personal investment. The BASICS intervention is rooted in MI (Dimeff et al., 1999) and MI is defined as a:

Collaborative, goal oriented style of communication with particular attention to the language of change. It is designed to strengthen personal motivation for and commitment to a specific goal by eliciting and exploring the person's own reasons for change within an atmosphere of acceptance and compassion. (p. 29)

Every research participant recognized that the intervention should be facilitated in a manner that draws on the principles of MI and allows the students to make their own decisions. Viv sees BASICS as empowering from this perspective:

...You are not being assessed, lectured, judged right or wrong. It's feedback for you to do with it what you will. You know let's talk about what you might want to do with it and what part of it that you don't want to do anything with it.

Meg echoed Viv and discussed BASICS as empowering in this manner:

First of all they are treated as human beings who have choices and their choices are honored. They are given information and they are treated like an adult to go use this information or not. It is on them to use the information.

The metaphor of allowing the student to be in the driver's seat emerged and was supported by Lou who stated, "The beauty of BASICS is that you are not forcing students to do anything that they don't want to do. When they are ready, they either do it or they don't. It's their choice."

The focus of the BASICS intervention is to provide students with information and allow them to come to their own conclusions. In the words of Tab, “That is a huge strength of the intervention.”

### **Weaknesses Theme One: One Size Does Not Fit All**

As previously mentioned, the research participants were able to identify far more strengths than limitations of the BASICS intervention. The two themes that participants consistently talked about in relation to perceived limitations were: one size does not fit all and the PFR. The one size does not fit all theme can be a dilemma for practitioners because students are typically mandated to participate in the intervention and their needs may be more conducive to other types of services on campus. For example, Pam stated:

I say this as if it’s pretty black and white, but BASICS is not easy when the student... what they really need is to use this as a bridge to a more appropriate resource. So it’s when they need to be with a counselor or they need to be in treatment. It is most challenging when I am not doing BASICS, I am supporting the student in another way or helping them get to a more appropriate resource.

To combat this issue, Pam stated the need to educate the staff in the Student Conduct office about BASICS and to foster relationships with the counseling center so that there is a seamless referral process should the student require services beyond the intervention. Other research participants referenced the stages of change model and indicated that BASICS was not a good match for students in pre-contemplation. While they recognized that it is the facilitator’s role to move students along the stages of change, sometimes two sessions are not enough time to get there. Aly shared her perspective with regard to students in pre-contemplation:

BASICS is built on MI, and MI is built on being flexible and meeting your client where he or she is. And if he or she is pre-pre-pre-pre contemplation that feedback sheet isn’t

going to mean a thing to them. Especially if they answered all the questions to keep you from noticing if anything is going on. You know, in some cases following the protocol is not doing BASICS. If your client is in pre-contemplation and you are meeting him or her like they are in action you are not adhering to MI which is sort of the bread of the burger of BASICS. I really firmly believe that if you are using MI the way it was constructed, everything else falls into place. Some people take that position (complete adherence to the protocol) and I am morally opposed to thinking that to just check things off the list means that you are adhering to MI.

Ava also spoke of students in pre-contemplation:

...Sometimes it difficult to work with pre-pre-pre-pre-pre-contemplative students.

Despite it being MI, I think it can be difficult because often times they are

like...whatever.

Meanwhile, some research participants spoke about those students who present in the action stage. Changes already occurred because they want to avoid future problems with the conduct system on campus or the court system on the local and state level. According to these students, the intervention is not necessary because they have already figured out what they need to do. With this type of student, it can feel pointless to facilitate the intervention.

A third category that emerged as a limitation within the one size does not fit all theme is the heavy duty drinker. Several of the research participants mentioned students who exhibit extreme drinking behaviors and questioned the effectiveness of BASICS with this population.

For example, Viv stated:

I don't know if it's a limitation or it's just inherently the wrong intervention for heavy duty drinkers. I think they have come out with some research that shows that for this type of drinker, BASICS is really kind of missing mark.

Lou described the same situation on her campus:

I don't know if BASICS would work at each school with each population. I am convinced that it's not perfect, I do see some benefit, but I think it's really for the lower to mid-risk students.

It was also stated that sometimes there are unrealistic expectations around the BASICS intervention on the part of the administration. They want BASICS to be the magic bullet. Their thought process is: once students participate in the intervention, it is the end of the road. They will not experience future problems. Sometimes this is the case, but unfortunately not all of the time.

### **Weaknesses Theme Two: Personalized Feedback Report (PFR)**

According to the research, delivering feedback is a key component of the BASICS intervention. With that being said, it is acknowledged in the BASICS manual that the generation of the PFR is expensive and requires computer expertise and costly equipment (Dimeff et al., 1999). Several of the research participants discussed the difficulties they have encountered trying to develop the PFR for their campuses. The other limitations that emerged with regard to the PFR is that it is too long, rote, and cumbersome.

**The development of PFR.** Five research participants were not using a PFR on their campus. This situation is attributed to a lack of resources including time, money, and personnel. For example, two research participants cited finances as the issue. In the past, they contracted with an outside company to generate the PFR but due to budget cuts they could no longer afford

this service. Now they are both piecing things together and wondering how they will produce one in the future.

Instrument fatigue for both the participant and the facilitator is how another research participant spoke of the PFR. Her institution also lacks the funds to contract with a company, and their IT department does not have the time to invest. Instead, they have a hard copy of the instrument that is hand-scored. She noted that students would gloss over when filling it out because there were so many questions and jokingly stated that she encountered the same issue when scoring and turning it into a PFR. As mentioned earlier, Ava uses a homegrown PFR at her institution, but indicated that the process of hand-scoring the instrument is annoying and at times the bane of her existence. The participants who contract with a company to generate the PFR count their good fortune and are quick to acknowledge that it would be difficult to facilitate the intervention without that resource. These accounts confirm that the PFR can cause complications leading one research participant to beg for the development of a simple *app* that everyone can access.

**Too long, rote, and cumbersome.** These limitations were discussed by a number of the research participants. In terms of the length, it was not uncommon to hear comments about the number of feedback topics to cover with students. Relating to this, Pam shared her experiences:

There is just too much to cover in 45 minutes. I mean we have 45 minutes. Sometimes students will be really engaged and interested in BAC so we will spend 15 minutes talking about that. Sometime they will want to process what protective strategies are realistic. Sometimes they are more interested in temptations so that opens the door to talking about change. And so I am not wedded to the feedback report.

The number of pages in the PFR also contributed to the length as a limitation. Some reports are more than twenty pages long. As indicated above, students gloss over when the report goes on and on.

Rote and cumbersome were words selected by one research participant. She expressed concern about becoming too mechanical in facilitating the PFR and simply checking things off the list rather than connecting with the students. Others agreed and alluded that the PFR can be a security blanket when facilitating. Yes, it serves as a guide to the harm reduction conversation, but if you are simply going through the motions and the bullet points, that leads to problems. As one research participant explained:

...Personally, I don't like to use forms because I find that it disrupts the flow of the intervention. It (PFR) is too long and at times repetitive.

She expanded further on this:

When I say I am not wedded to the structure of the intervention that doesn't mean that I don't cover it all, it just means I may not cover it with their handout. I make my own handout, and I may cover it in a different order depending on the student.

Others mentioned that the PFR brings consistency to the intervention, but there were times when students brought up concerns that did not relate to the report. These types of situations raise questions in relation to the intervention protocol, "Should you stick with the PFR or gravitate away and validate the student? As Aly states:

I find with any kind of "manualized" treatment, as soon as you know the manual, the client comes in and nothing in the manual applies to the client. So what I have learned to do as a supervisor and a facilitator was to trust MI and the spirit of MI. So in the session,

being MI adherent, being MI congruent sometimes means that the feedback sheet needs to wait.

Aly's experience reflects some of the difficulties encountered with the BASICS intervention. While it is her desire to adhere to the protocol outlined in the intervention, there are times when she needs to proceed in another direction. Similar to all other treatment approaches, there are benefits and drawbacks. As we search for best practices, it is important to remember that each student is different and what resonates with one student may be completely different for another student.

### **Research Question Three**

The focus of the third research question was on barriers (if any) that MHPs experience with regard to the implementation of BASICS. In the context of this research study, barriers were identified as circumstances that impede the implementation of BASICS. To gather information in this area, the research participants were asked to think about the challenges they encountered using BASICS in their setting, what if anything helps or hinders the process of facilitating an effective intervention, and if they could change anything about BASICS, what would they change? They were also given the opportunity to discuss their training background. Three distinct themes emerged in relation to this research question including: (1) the referral process; (2) training; and (3) onus on the facilitator.

#### **Theme One: The Referral Process**

The mandated student was consistently discussed throughout the interview process. Pertaining to this research question, the majority of the research participants spoke about the administrative procedures in place to manage the referral process. An emphasis was placed on the need to foster a strong working relationship with staff in the Student Conduct office and other

offices responsible for making referrals. According to one participant, the staff in the Student Conduct office can make or break the intervention depending on how it is presented to the student. If they present BASICS as a punishment rather than opportunity for growth, the student typically shows up far more resistant. Others mentioned the passage of time between the incident, judicial process, and meeting with the MHP for the intervention as an issue. If too much time elapsed between these three, the intervention lost its impact. Lou stated:

The bigger issue is working with the Student Conduct officer to cut back on the window of how long student have from the date of the incident to come in and meet with us. We could have students coming in during the fall semester when their incident was in February or March of the previous semester. As you know, you lose that window of the “ah ha” moment or they don’t even remember that night because there are so many things that happened since then.

Ava also discussed a similar experience:

I guess on the challenges that comes up a lot is that there is a lag in sanctioning and then sometimes depending on what part of the semester it is there is a lag in scheduling because we get so busy. For example, what happened last Halloween may not be addressed until the spring (semester).

Ned spoke of the timeline that he established with the Student Conduct office on his campus:

When students get a citation, we have a structure in place and a timeline of when they have to complete the requirements. This timeline is based on what has been determined to be effective for BASICS. Within a two week minimum of the citation, you have to come in for the initial session. This really helps us reach the students in a timely fashion and is most effective.

Every research participant in this study works with mandated students. Furthermore, most view it as an effective way to address high-risk drinking on their campus. Given the reality that most students will not attend the intervention of their own accord, colleges and universities will need to collaborate and establish strong partnerships with the staff in the Student Conduct office and other referral agencies to reach these students in an effective manner.

### **Theme Two: Training**

All research participants were asked to discuss the training they received to be a BASICS provider. All thirteen participants have been through training in MI. Six participants were trained by an individual who was a research assistant on the original BASICS research. Others have attended BASICS trainings at conferences and workshops. In light of this, many research participants mentioned the need for annual refresher trainings to maintain the fidelity of the intervention. Others would like to see a train the trainer model in place as a means to increase the consistency of the intervention. Tab discussed her training experiences:

My state has two BASICS trainers. I was trained by both of them on separate occasions. One has a background in counseling and social work so her training is much more on par with what we do and kind of my philosophy. The other one is coming from a nurse practitioner background, so it's very different. For example, one doesn't take any notes with clients while the other one takes copious notes. I've had conversations with other professionals in my state about becoming a BASICS trainer, but I don't know how that works and I don't know who is trained to do that. I don't know if something like that exists.

Ava describes the same experience pertaining to a train the trainer model:

That is one of my projects this year...to try to find someone who is doing the training and can effectively train me to train other people. I am still working on that...

The majority of research participants stated that on-going training is necessary to remain current in the profession. This is a challenge for those with limited resources. The suggestion of a train the trainer model could help these access issues.

### **Theme Three: Onus on the Facilitator**

The final barrier with regard to implementation lies with the facilitator. As mentioned by several of the research participants, it is the facilitator's personal responsibility to determine how the student receives the intervention. Four poignant examples of this emerged:

Ava said:

I think that roadblocks occur when I have my own agenda like, "this is what you need to do" and the student isn't there yet (in terms of the stages to change). Also, when I am confrontational or when other people are confrontational. I think that that can be ineffective.

Jeb stated:

...You have to use those basic counseling tools and you know resist that "righting" reflex, right? You know because we want to fix them. We are therapists because we want to help people. So I think that that is one of the cores that I think about when I think about MI and BASICS. That you want to resist that "righting" reflex. And that you are not lecturing students. And I think not trying to flood them with information.

Tab shared her perspective in this manner:

It's like with any helping service, if you are in a crappy mood and you've had a bad day, sometimes I find myself getting into the yes or no questions, and I'm like ok back out of

that. Let's get back into MI. Or sometimes I hear things that, especially if they are (students) dogging the university or dogging the conduct process or rolling their eyes, getting really disrespectful, really out of line...then sometimes I want to flip into that administrative role and be like "watch your tone." But I have to remember, ok we will address that later, or have that teachable moment in session two, which is sometimes what I'll do. Sometimes they give you a lot of attitude. So we have to be able as counselors, or counselors in training, or facilitators, to be able to take that and kind of work through it.

Sky said:

You know in our field, a lot of us are wearing more than one hat. So I do find that if I don't have the time to reflect and meditate on this one particular BASICS recipient that I don't do as good of job.

These examples depict what MHP's are experiencing in their roles on campus with the BASICS intervention. MI is a key component of the intervention and is often described as an art rather than a science. Several research participants said that there is a spirit to MI spirit...a way of being. This way of being creates a space that is non-threatening and non-judgmental which results in the freedom to be open and honest and discuss anything.

Some would argue that not everyone is cut out to use MI. It is not conducive to their facilitation style when helping others. Considering this, there is no doubt that it can be a challenge to stick with MI when there are distractions. The need to be mindful is never-ending and takes effort. Knowing that MI is a key component of the BASICS intervention, this mindfulness must be taken into consideration. Institutions must make a concerted effort to

identify facilitators who can adhere to the principles of MI, and consistent training must be provided on an on-going basis to ensure the fidelity of the intervention.

### **Summary**

Thirteen mental health practitioners graciously offered their time to discuss their perceptions and experiences in relation to the BASICS intervention on their campus. The three research questions guiding the study were:

1. How do practitioners in the mental health profession use the BASICS intervention on their campuses?
2. What do practitioners in the mental health profession perceive as the strongest and weakest aspects of the BASICS intervention?
3. What barriers (if any) are experienced with regard to the implementation of BASICS?

Countless perspectives and experiences were discussed in relation to these research questions and themes emerged.

With respect to the first research question, the themes that surfaced revolved around the logistics of the intervention. Specifically, participants described BASICS as part of a comprehensive/progressive approach to address high-risk drinking on their campuses. They revealed that modifications are normal when facilitating with the intervention and explained how the mandated student is complicated. Words including practical and realistic were often a part of the interviews. The second research question focused on the strongest and weakest aspects of the intervention. The themes that materialized in relation to strengths were: (1) harm reduction; (2) education; (3) personal awareness; and (4) self-empowerment while weaknesses were: (1) the dilemma of one size fits all and (2) the personalized feedback report (PFR). Research participants identified far more strengths than weaknesses and described a deep appreciation for

the intervention. The final research question focused on barriers to implementation. Three distinct barriers arose: (1) the referral process; (2) training; and (3) onus on the facilitator. These barriers can be described as systematic in nature and personal. Indeed, as participants often showed strong emotions as they described these challenges.

These twelve themes emerged from a vast amount of information including the participants' responses to semi-structured interview questions, follow-up questions through phone calls and emails, artifacts such as examples of feedback reports, harm reduction tools etc., and field notes. The constant comparative method was used to extract meaning from the data. To ensure rigor throughout the qualitative research process, the researcher placed focus on procedures that ensured credibility, transferability, dependability, and confirmability. The next chapter presents a clear summary of the results, limitations of the study, implications, and recommendations for the future research and application.

## **Chapter 5: Discussion and Recommendations**

The purpose of this study was to develop a deeper understanding of BASICS through the perspectives of mental health practitioners who use the intervention on their campuses. Emphasis was placed on gathering information from MHPs with regard to their experiences implementing and facilitating BASICS in their setting. In addition, the researcher was interested to learn about what MHPs perceive as the strongest and weakest aspects of the intervention. A phenomenological research approach was used in this study, which is best described as research focused on several individuals and their lived experience in relation to an event or phenomenon (Creswell, 2013; Rosman & Rallis, 2012). To ensure that perspectives would come from MPHs, the researcher was purposeful to identify participants who had at least one year of experience using BASICS on their campus and a master's degree in a mental health profession such as clinical/counseling psychology, counseling, or social work. As a result, in-depth, semi-structured interviews were conducted with eleven females and two males. These thirteen interviews were audio-recorded and transcribed for data analysis. A brief summary of the major findings in relation to the three research questions is provided. In addition, the limitations of the study are described. Implications of the research are discussed. This chapter concludes with a recommendations for future research and application and a final summary.

### **Summary of Major Findings**

Thirteen mental health practitioners agreed to participate in this research study and committed time to discuss their perceptions and experiences in relation to the BASICS intervention on their campuses. Data from the thirteen interviews combined with follow-up conversations, observations, field notes and artifacts was analyzed. An iterative process was used to ensure that understandings were truly coming from the data (Anfara, Brown, & Mangione,

2002; DiCicco-Bloom & Crabtree, 2006). The final iteration allowed for the discovery of themes in relation to the research questions:

1. How do practitioners in the mental health profession use the BASICS intervention on their campuses?
2. What do practitioners in the mental health profession perceive as the strongest and weakest aspects of the BASICS intervention?
3. What barriers (if any) are experienced with regard to the implementation of BASICS?

### **Research Question One**

The focus of research question one was on how MHPs use the BASICS intervention on their campus. Participants provided a detailed narrative of their approach to the intervention on their campus. Visible differences existed with regards to the number of sessions that students attend, the type of session (individual or group), the length of time between sessions, and the personalized feedback report (PFR). Along with these variances, other themes emerged to provide insight into the application of the intervention on these campuses. Specifically, research participants described BASICS as part of a comprehensive/progressive approach to address high-risk drinking on their campuses, tweaks/modifications are normal when facilitating the intervention, and the mandated student is complicated. Subcategories within these themes were inclusive, thorough, variation, adaptation, practical and realistic. These themes suggest that with adaptations, BASICS is one of several strategies to address high-risk drinking on college campuses.

### **Research Question Two**

The focus of the second research question was on perceptions of the strongest and weakest aspects the intervention. Four themes emerged in relation to the strongest aspects of the

intervention including: (1) harm reduction; (2) education; (3) personal awareness; and (4) self-empowerment while two themes emerged in relation to the weakest aspects: (1) the dilemma of one size fits all and (2) PFR. In general, research participants identified far more strengths than weaknesses and described a deep appreciation for the intervention.

The strongest aspects of the intervention were harm reduction, education, personal awareness, and self-empowerment. All participants agreed that the harm reduction philosophy was a key component of the intervention. In addition, there was a consensus among all research participants that the education component is a critical ingredient of the intervention and was often described as extremely valuable. Participants were also in agreement that some education topics resonated with students more than others. This situation warrants additional research. Pertaining to personal awareness, quite a few of the research participants saw the intervention as a tool to help students become more self-aware. They acknowledged that the MI component of the intervention helped students to identify things that they want to be different in their lives, which led to new understandings. In relation to self-empowerment, the focus of BASICS is to provide students with information and allow them to draw their own conclusions. The impetus to change is on the student not the facilitator.

Relating to the weakest aspects of the intervention, the two themes that emerged were one size does not fit all and the PFR. As mentioned in the previous chapter, the one size does not fit all theme can be a dilemma for practitioners because students are typically mandated to participate in the intervention and their needs may be more conducive to other types of services on or off campus such as the counseling center or a treatment facility. Other research participants referenced the stages of change model and stated that BASICS was not a good match for students in pre-contemplation or the action stage. While they recognized that the facilitator's role is to

move students along the stages of change, sometimes two sessions is not enough time to get there. The one size fits all dilemma will be expanded on in the implications section. The PFR also emerged as a limitation. Several of the research participants discussed the difficulties they have encountered trying to develop the PFR for their campuses. They cite a lack of resources including time, money, and personnel as the biggest roadblocks. Others discussed the PFR as being too long, rote, and cumbersome.

### **Research Question Three**

The third research question was aimed to explore the barriers (if any) that MHPs experience with regard to the implementation of BASICS. In the context of this research study, barriers were identified as circumstances that impede the implementation of BASICS. To gather data in this area, research participants were asked to think about the challenges they encounter using BASICS and identify anything that helps or hinders the process of facilitating the intervention. In addition they were also given the opportunity to discuss the changes they would make to the intervention. As a result, the referral process, training, and onus on the facilitator were the three distinct themes that emerged.

Several of the research participants discussed the referral process at length in relation to this research question. In particular, these research participants spoke about the administrative procedures in place to manage the referrals. Emphasis was placed on the need to foster a strong working relationship with the staff responsible for making referrals such as those in the Student Conduct office. This theme will be expanded on in the implication section.

The themes of training and onus on the facilitator reflect the obstacles that the research participants encounter in relation to implementation and facilitation of the intervention. All thirteen participants have been through training in motivational interviewing (MI), and most

received training specifically on the BASICS intervention. In spite of this, the majority of research participants mentioned the need for annual refresher trainings to maintain the fidelity of the intervention. This need will also be discussed in the implications section. Onus on the facilitator relates to the research participants' willingness to accept personal responsibility for their facilitation style and techniques. In particular, many described some days as better than others. If outside distractions are present or they (the facilitators) are experiencing a desire to push an agenda, the intervention typically does not go as planned. The need to be mindful is never ending and takes effort on the part of all MHPs. Knowing that MI is a key component of the BASICS intervention, this must be taken into consideration. As stated in chapter four, institutions must make a concerted effort to identify facilitators who can adhere to the principles of MI and provide training on an ongoing basis to ensure the fidelity of the intervention.

### **Limitations**

There are limitations with this current study that should be considered when interpreting the results and planning for future research. First, pertaining to the sample, this study included MHPs who have at least one year facilitating the BASICS intervention on their campus and a master's degree in a mental health profession such as clinical/counseling psychology, counseling, or social work. It is not uncommon for colleges and universities to employ Public Health Educators (PHE) to facilitate the intervention. PHEs have a different educational background and different work experiences than MHPs. Therefore, they may have different perspectives in relation to the three research questions explored in the context of this study. While there was diversity in the type of institutions represented in the study (small, medium, and large state universities and private liberal arts colleges and universities) and the research participants were from three regions in the United States (i.e., the Southeast, Mid-Atlantic, and

Midwest). The option of audio or video conversations could be considered to allow for the inclusion of research participants beyond these three regions to gain alternative perspectives.

The use of semi-structured interviews was the main data collection method for this research study. There are several limitations associated with this method including the reliance on self-reports, dependence on the interviewer's ability to skillfully conduct an interview and develop rapport with the interviewee, and a large time commitment (Hays & Singh, 2012). With self-reports, the interviewee decides how much he or she will share and at times may wish to impress the interviewer. Thus, they may filter or share information that they think the interviewer wants to hear. In addition, the interviewee may have difficulty describing his or her experiences accurately. In relation to the interviewer, the process of interviewing requires skills. It is critical that the interviewer have the ability to think of follow-up questions during the interview to generate detailed responses. Also, they must develop a relationship where the interviewee feels safe to share information. The development of these skills requires training that is not always attainable.

Finally, it may be difficult to extend these findings to wider populations. Although BASICS is categorized as an evidence-based practice, it is a very specific intervention that entails a specific protocol. The knowledge produced may or may not apply to other populations or settings. As the result, the research may not be viewed as credible in the eyes of administrators or other practitioners who are interested in precise statistical data to reflect the bottom line. The combination of qualitative and quantitative research could help address this issue.

### **Implications**

The need to identify best practices to address the issue of high-risk drinking remains constant on campuses nationwide. The results from this research may help guide MHPs and

student affairs professionals (SAPs) to develop a refined set of intervention tools to better reach students experiencing personal, social, and academic issues due to high-risk drinking behaviors. The implications from this research relate to the referral process, the impression that BASICS is a one size fits all intervention, and access to training resources. These implications are discussed for both MHPs and SAPs.

### **The Referral Process**

Following the recommendations from the National Institute on Alcohol Abuse and Alcoholism (NIAAA) to use brief motivational interventions (BMI) as a means to address high risk drinking, the process of mandating students emerged as a logical solution to reach students considering most would not present to the intervention of their own accord (Caldwell, 2002; Nelson et al., 2010; NIAAA, 2007). This situation was confirmed from the results of this study where all thirteen research participants stated that the typical student who presents for BASICS was referred by the judicial system on campus or the local court system. The thirteen research participants also agreed that it was necessary to have this system of care in place. However, it was not uncommon for the participants to also discuss roadblocks encountered due to the process of mandating students.

The first roadblock frequently mentioned by participants was the amount of time that lapsed between the incident that resulted in a referral to the student conduct office and the intervention. There was agreement among all research participants that the intervention is more effective if delivered in a timely manner. For example, if a student was arrested for public intoxication at a football game during the fall semester and they participated in BASICS the following semester, it was difficult to recall the reason for referral. This time gap lessened the impact of the intervention. Barnett et al. (2004) acknowledged that delays between the incident

and intervention are unavoidable, but also stressed that in the context of the Stages of Change process, these delays must be taken into consideration. Also, Borsari and Carey (2005) mentioned the need to explore all possible reasons why change might occur among students. The nature of the incident, negative consequences, time of the intervention, peer feedback, and education are all possible reasons for change and deserve further investigation.

The recommendation by two research participants was that no more than thirty days should lapse between the time of the incident and the intervention. As stated earlier, mandated students are a subpopulation that often fall into the high risk category with serious health and safety concerns (Barnett et al., 2004; Barnett & Reed, 2005). To better serve these students and to increase the effectiveness of the intervention, MHPs and SAPS should make a concerted effort to establish an agreed-upon timeline on their campuses. Furthermore, this protocol should be revisited on an annual basis.

A second roadblock discussed was the manner in which the intervention was presented to the student by staff who make the referral. Rather than explaining the intervention as an opportunity for personal growth, it was presented as a punishment. As a result, several research participants described students as extremely angry and resistant when they presented for the intervention. This tension leads to difficulties facilitating the intervention.

As described earlier, the BASICS intervention is designed to be brief with rapport building as a major component (Dimeff et al., 1999). In addition, the intervention incorporates the Stages of Change model. The research on MI by Miller and Rollnick (2013) involved the exploration of resistance between counselors and clients. On numerous occasions they found that resistance was due to the confrontational style on the part of the counselor. Considering students are mandated to attend the intervention through the student conduct process, feelings of

resistance are natural. Also, as mentioned earlier, it is not uncommon for students to be in the pre-contemplation stage with little problem recognition and resistant to change (Caldwell, 2002). Therefore, if the facilitator needs to spend a significant amount of time establishing rapport, other parts of the intervention may be compromised. To combat this issue, it is critical for SAPs to have a clear understanding of the purpose of BASICS. It may be necessary for the MHPs to provide education and training on BASICS to SAPs to ensure an accurate representation of the intervention. On the part of the MHP, it is critical to remain in the here and now while facilitating and focus on eliciting arguments for change from the client rather than imposing change.

The third roadblock discussed in relation to the referral was that BASICS may not be the most fitting sanction for the student. For example, one research participant reported that a student was referred to BASICS because she happened to be in a residence hall where alcohol was present. This student was a non-drinker, but because she was a bystander she was referred to the intervention. Given the demands on time, it is important to use human resources efficiently and effectively.

The use of alcohol screening instruments could help combat this issue. There is a variety of brief alcohol screening instruments available to use with college students. Those with a focus on the quantity and frequency of alcohol consumption, high-risk drinking rates, alcohol related symptoms (e.g., tolerance, withdrawal), and problems experienced as a result of alcohol use provide the greatest snapshot of students who are at risk for alcohol-related problems (College Drinking Prevention, n.d.). Researchers suggest the use of the CAGE Questionnaire, Alcohol Use Disorders Identification Test (AUDIT), College Alcohol Problems Scale (CAPS), and Rutgers Alcohol Problem Index (RAPI) to identify students who are at risk for alcohol related

problems (Cherpitel, 1997; Devos-Comby & Lange, 2008; Larimer et al., 2005; Lenk, Erickson, Winters, Nelson, & Toomey, 2012; Monti, Tevyaw, & Borsari, 2005; Seigers & Carey, 2010).

These instruments are available free of charge at the NIAAA and do not require training (NIAAA, n.d.). MHPs and SAPs should work together to establish a screening process. This process would ensure that students receive sanctions and the intervention that best fit their needs.

### **One Size Fits All**

Based on these research findings, no two campuses are alike when it comes to implementing and facilitating BASICS. Certainly similarities exist, but the idea that BASICS can meet the needs of every student has implications for the MHPs. Dimeff et al., (1999) state that BASICS is not designed for individuals who meet the criteria for dependence on alcohol. This idea was acknowledged by all research participants. Along with criteria for dependence, the majority of the research also indicated that it was critical to take into account where the student is in relation to the stages of change model and to be certain that the intervention does not become prescriptive.

To effectively facilitate BASICS, the MHP must assess the student's readiness to change as a means to guide the session (Dimeff et al., 1999; Miller & Rollnick, 2013; Prochaska et al., 1994). As stated above, it is not uncommon for students who are mandated to participate in BASICS to be in the pre-contemplation stage and have little problem recognition (Caldwell, 2002). The aim of BASICS is to move students in a direction where they acknowledge their personal concerns about alcohol and identify their reasons for change (Dimeff et al., 1999; Prochaska et al., 1994). Similar to screening students for alcohol-related problems, it is also important to screen for stages of change. A simple tool titled, Readiness to Change Questionnaire, is available free of charge at the NIAAA website (NIAAA, n.d.). This tool can

easily become a part of session one. Students who remain in pre-contemplation about their alcohol use should not be assigned additional sanctions but rather be encouraged to work on their self-exploration. Also, both MHPs and SAPs must make a concerted effort to avoid a confrontational style when working with students as imposing change rarely works.

As discussed in the previous chapter, several of the research participants pointed out that BASICS was ineffective for those student who remained in the pre-contemplation stage. On the opposite end, others mentioned that students who presented in the action stage did not see the need for the intervention because they already made changes. Again, this idea is reinforced in the literature (Dimeff et al., 1999; Miller & Rollnick, 2013; Prochaska et al., 1994). To simply go through the motions and facilitate the intervention with students in these two stages can lead to BASICS becoming prescriptive. Given caseloads of MHPs and the number of other duties they are asked to accomplish, it is critical to use BASICS wisely. MHPs and SAPs need to be realistic and establish a plan to work with students in these stages.

### **Training Resources**

Access to training was an issue identified by many of the research participants. In the introduction to this study, effective training, adequate time to practice, and on-going supervision were identified as precursors to ensure the fidelity of evidence-based practices (Beidas & Kendall, 2010; Carise et al., 2009; Proctor et al., 2007). All MHPs in this study reported that there were trained in MI. In addition, eleven reported participating in one or more BASICS trainings. In spite of that, the majority expressed the desire to have refresher trainings available. Unlike MI, which has a network of trainers, those who established BASICS have not developed a similar network of trainers. As a result there are no checks and balances in place. How does one become qualified to train others on the intervention? Is simply having experience

implementing and facilitating BASICS enough to train others? The experiences of one research participant who attended two separate BASICS trainings (one facilitated by an individual with a counseling background and the other facilitated by an individual with a health background) demonstrates that there is no consistency in the types of trainings available.

The NIAAA (2002, 2007) identified BASICS as the best practice to address high-risk drinking on campuses. Yet, access to training is limited and extremely expensive. According to SAMSHA's national registry of evidence-based programs and practices, there are two people available to provide training (SAMSHA, 2014). The lack of this resource prohibits colleges and universities from establishing best practices. It is critical that researchers, practitioners, and college administrators come together to establish a training model that can benefit everyone.

### **Future Research**

This study served as a first step to establish qualitative research on the BASICS intervention. Specifically, the researcher conducted a literature review and facilitated in-depth, semi-structured interviews to understand the perspectives of MHPs who implement and facilitate the BASICS intervention on their campuses. Future researchers should continue to determine how BASICS is utilized by practitioners and which components of the intervention have an impact on high-risk drinking behaviors.

This study included a sample of MHPs from three regions in the United States. Future research may include practitioners in Health Education as it is not uncommon for individuals in this profession to facilitate the intervention. Also, it is worth considering quantitative research that involves the use of the survey so that a random sample could be obtained from a wider geographic area. More specifically, the survey could stem from these current findings to yield a

richer understanding of MHPs who use BASICS as means to address high-risk drinking on their campuses.

Another useful qualitative study would be to explore the perspectives of SAPs who work in student conduct. They have access to different information in relation to high-risk drinking and may have suggestions for items to include in an intervention. Finally, it would be beneficial to do qualitative or quantitative research with students who have been through the BASICS intervention. They most likely have certain beliefs about the strengths and limitations of the intervention. As indicated by the current research participants, certain parts of the PFR are viewed as more effective than others. Students could provide valuable information to refine and improve the feedback process.

### **Conclusion**

The purpose of this study was to gain a deeper understanding of BASICS through the use of qualitative research. The researcher explored the perspectives and experiences of MHPs who use the intervention on their campuses through the use of in-depth, semi-structured interviews. Analysis of the data revealed twelve themes. Through data analysis, it was determined that the research participants found BASICS to be a good intervention that benefits them in their work setting. In relation to the three research questions, the most significant themes were associated with the mandated student and the referral process, the impression that BASICS is a one size fits all intervention, and access to training resources. While additional research is always a necessity to substantiate results, there is merit in applying these findings now to improve the outcome of the intervention.

Based on the information that research participants provided in relation to the mandated student and the referral process, it is clear that MHPs and SAPs must collaborate to establish a

well-defined process to effectively serve students who experience personal, social, and academic issues due to high-risk drinking. Specifically, it is important that SAPs have a thorough understanding of the purpose of BASICS and the essential components of the intervention to maximize effectiveness. Two simple solutions include the establishment of a protocol to ensure students referred to the intervention are seen in a timely manner and the provision of training to all SAPs on campus. As mentioned in the results section of this document, two research participants (each have over eight years of experience facilitating BASICS) recommended that no more than thirty days elapse between the time of the incident and the intervention to ensure impact. It is acknowledged that within the academic calendar there are times when lapses naturally occur such as holiday breaks, spring break and finals week. Best efforts should be put forth because the intervention works best when treatment occurs as soon as the problem is noticed. When these lapses are unavoidable, it is recommended that students attend an abbreviated alcohol education class prior to BASICS.

With regard to training, it is important to include the NIAAA recommendations to address high-risk drinking on campuses and a detailed description of the BASICS intervention. This description should consist of the theoretical foundation of the intervention, the harm reduction philosophy, and an explanation of exactly how the intervention is implemented and facilitated. The benefit of this type of training is that it equips SAPs with the skills to provide education about alcohol, debunk the myths about drinking on college campuses, and make referrals to the appropriate campus resources. It is recommended that this training is offered on an annual basis to ensure a consistent approach to address high-risk drinking.

In addition to this campus protocol and training, there is value to establishing a screening process for those students who are found responsible for the violation of the alcohol policy. Staff

in the office responsible for student conduct matters should assume responsibility for the screening process to ensure that students are referred to the appropriate campus or community resource. As indicated in the implication section, screening instruments with a focus on the quantity and frequency of alcohol consumption, high-risk drinking rates, alcohol related symptoms (e.g., tolerance, withdrawal), and problems experienced as a result of alcohol use provide the greatest snapshot of students who are at risk for alcohol-related problems. In addition to screening, a seamless referral process must be in place. For example, if a student would benefit from ongoing counseling rather than a brief intervention it is important for this resource to be readily available.

Pertaining to the training theme it is time to establish a network of trainers throughout the country to ensure that all college and universities have access to training that delivers the same content. The research behind BASICS was generously funded by the NIAAA (Dimeff et al., 1999). This led to an evidence-based intervention that has been embraced on numerous campuses throughout the country (Nelson et al., 2010). However, the findings from this research indicate that MHPs on most campuses have veered away from the exact protocol and made adaptations to the intervention to meet their specific needs. For some research participants, the desire to stick to the protocol was impossible because they lack the resources to develop a PFR. The other example that stands out was the research participant who attended a BASICS training facilitated by a nurse practitioner and another BASICS training facilitated by a mental health counselor. She reported receiving opposing information about the intervention which led to some confusion when it came to the implementation of the intervention on her campus. Every research participant reported that they have received training in MI from their coursework and additional workshops. MI is a critical component to effectively facilitate the intervention and should always

be a part of a BASICS training. However, the need for training that clearly defines the intervention protocol and equips participants with the skills to facilitate the intervention is critical. In addition, this training should provide participants with the resources to develop a PFR on their campus. As noted in these research findings, five research participants reported that they did not have a formalized PFR due to a lack of resources. According to the research, the PFR is a key component of the intervention and serves as the main focal point of the second session. If it is important to maintain the fidelity of the intervention, easy and affordable access to a PFR is critical.

Finally with regard to the mandated student, this system of care makes sense. As mentioned throughout this document, mandated students constitute a subset of students on campus that often fall into the high risk category with serious health and safety concerns (Barnett et al., 2004; Barnett & Reeed, 2005). The research highlighted in this document demonstrates that the BASICS intervention has been effective with mandated students. With that being said, there are other subsets of students on campus who also engage in dangerous drinking behaviors and experience negative consequences. For example, students who are members of Greek organizations are more likely to engage in dangerous drinking behaviors and are at the highest risk for severe alcohol-related consequences as specified in the study by Borsari, Hudstad, & Caponel, (2009). In this case, the researchers found that Greek students experience more problems associated with dependence-related issues than the non-Greek student population. This information suggest the need to "mandate" students to the BASICS intervention for other reasons beyond policy violations. Pertaining to this situation, the researcher recommends using BASICS as a proactive measure to address high-risk drinking. For instance, students who pledge a sorority or fraternity should be required to participate in the BASICS intervention as a part of the pledge

process. It is acknowledged that this would require additional resources, but this early intervention has the potential to reduce future negative outcomes. This recommendation should also apply to other student groups and organizations that engage in high-risk drinking behaviors. Through this proactive measure, there is a tremendous potential to shift the culture of drinking on campuses.

To conclude, it is important to restate that BASICS is one of several best practices put forth by the NIAAA to reduce the harms caused by high-risk drinking. It is impossible for this intervention to meet the needs everyone. In addition, if used as a standalone solution to fix the problem of high-risk drinking on campuses, failure is likely inevitable. Given the annual consequences of high risk drinking, there is a duty on the part of MHPs and SAPs to work with students to combat this issue. BASICS is one piece of the puzzle. To put the best effort forth, it is recommended that all campuses revisit the NIAAA taskforce report and develop a strategic plan that includes practices from the three tiers.

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## **APPENDIX A: Participant Informed Consent**

### **Informed Consent Form for (Insert Name of Participant) \_\_\_\_\_**

The purpose of this form is to provide information to those participating in the dissertation research study entitled, Brief Alcohol Screening and Intervention for College Students (BASICS): A Qualitative Study of Practitioners' Experiences on the College Campus conducted by counselor education candidate Jennifer F. Wagstaff, M.S., M.Ed., LPC. This research study is approved by Virginia Tech Institutional Review Board (IRB), IRB # 14-909 upon approval.

#### **This Informed Consent Form has three parts:**

1. Information Sheet (to share information about the study with you)
2. Certificate of Consent (for signatures if you choose to participate)
3. Pseudonym Selection Sheet

**\*You will be given a copy of all documents\***

### **Part I: Information Sheet**

#### **Purpose of the Research and Participant Requirements**

I seek to understand the perspectives of practitioners who have used the BASICS intervention to address high-risk drinking. You are invited to participate if you have a master's degree in the mental health profession and one year of experience using BASICS on a college campus. You may **not** participate in this research study if you do not meet all of the above criteria.

#### **Voluntary Participation**

Your participation in this research is entirely voluntary. The choice that you make will have no bearing on your professional standing, and your choice to participate or not will be kept confidential. You may change your mind later and end participation, without consequence, even if earlier you agreed to participate.

#### **Type of Research Intervention**

This is an interview-based research study. You will be interviewed for approximately 60 minutes, and the interview will be take place in a confidential location convenient for you.

#### **Procedures**

If you accept you will be interviewed by the principal researcher, Jennifer F. Wagstaff.

If you do not wish to answer any of the questions during the interview, you may say so and I will move on to the next question. No one else but the interviewer will be present unless you would like someone else to be there. The information recorded is confidential, and only the researchers will have access to the information from your interview. The interview will be audio and video recorded. The tape/digital file will be kept in a secure location. Interviews will be transcribed by a professional, secure transcription service. You will be invited to review the transcript, and make revisions or additions to the transcript if you wish to do so. The tape/digital file will be destroyed within five years of completion of the study.

**Duration**

Interviews will last approximately 60 minutes and will be scheduled at your convenience. Once your interview is transcribed, you will be invited to read over the transcript and make any revisions or additions you wish. This review will take place via email. I request that comments, if any, be returned within two weeks of receipt.

**Risks**

This research project poses minimal or no risk to participants. Foreseeable risks may include discomfort discussing challenging work tasks. Please note you have the right to stop the interview at any time, to choose what you disclose, or to opt out of the study at any time during or after the interview.

**Benefits**

Benefits may include gaining clarity about the BASICS intervention and the potential to improve the intervention.

**Participant Compensation and Reimbursements**

You will not be provided any incentive to take part in the research.

**Confidentiality**

None of your identifying information will be shared with anyone outside the interview. The information collected will be kept private and every possible effort will be made to mask any identities. A pseudonym will be assigned for use. Only the researcher will know what your pseudonym is, and the key linking your identity to your pseudonym will be stored separately.

**Sharing the Results**

None of the information you share will be attributed to you by name. The knowledge attained from this research will be shared by the way of a summary of the results. Any direct quotes used will include your participant pseudonym, not your name. The results and knowledge gained from your participation may be used to contribute to the broader knowledge base of BASICS via scholarly articles and conference proceedings.

**Right to Refuse or Withdraw**

You do not have to take part in this research if you do not wish to do so. Choosing to participate or stopping participation in the interview at any time will not be shared with anyone by the interviewer. You will have the opportunity to read the transcript of your interview and review your remarks, and/or modify/remove any portions of the interview.

**Who to Contact**

If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact any of the following:

**Jennifer F. Wagstaff**  
Researcher

540-808-8080  
jennyw@vt.edu

**Dr. Laura Welfare**  
Dissertation Chairperson

540-819-7551  
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This research project has been reviewed and approved by the Virginia Tech Institutional Review Board for Research Involving Human Subjects (IRB). The IRB is charged with the task to make sure research participants are protected from harm. If you wish to find about more about the IRB, please go to: <http://www.irb.vt.edu/>.

**If you have questions about your rights in the study, contact:**

Dr. David M. Moore  
Asst. Vice President for Research  
200 Kraft Drive (0497)  
Suite 2000, CRC Bldg. VIII  
Blacksburg, VA 24061  
Telephone: (540) 231-4991  
Email: [moored@vt.edu](mailto:moored@vt.edu)

**Part II: Certificate of Consent**

I have been invited to participate in research about practitioners' perspectives on the BASICS intervention to address high-risk drinking among college students. I have read the above information, and have had the opportunity to ask any questions about it, and any questions I have been asked have been answered to my satisfaction. I voluntarily consent to be a participant in this study. By signing below, I give my consent to participate in this study, and I attest to the fact that I am 18 years of age or older.

Print Name of Participant: \_\_\_\_\_

Signature of Participant: \_\_\_\_\_ Date: \_\_\_\_\_

Email Address: \_\_\_\_\_ Phone: \_\_\_\_\_

Researcher Printed Name: \_\_\_\_\_

Researcher Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Part III: Pseudonym Selection**

Any research findings reported in conference proceedings, journal articles, etc. will use a pseudonym to protect your identity. You may choose your own pseudonym, or one will be assigned to you.

**Do you wish to choose your own pseudonym?**

**Please initial in front of either the word “yes” or the word “no.”**

\_\_\_\_\_ **yes**      \_\_\_\_\_ **no**

**If yes, please write the pseudonym you wish to use here:**

\_\_\_\_\_

Print Name of Participant: \_\_\_\_\_

Signature of Participant: \_\_\_\_\_ Date: \_\_\_\_\_

## APPENDIX B: Recruitment Materials

### Recruitment: Telephone Script

Hello, my name is Jenny Wagstaff, and I am a doctoral candidate at Virginia Tech. I am calling you because I am seeking interview participants for my dissertation study exploring practitioners' perspectives using the BASICS intervention to address high-risking drinking among college students. Do you have a few minutes to speak with me?

**If yes, continue with script. If no, determine a day/time to connect in the future if the participant is interested.**

I am asking BASICS practitioners to participate in a 60-minute interview at a place and time convenient for them. This research study is approved by Virginia Tech Institutional Review Board (IRB), IRB # <INSERT #>. To date, no research has been conducted on the perspectives of those practitioners who use the BASICS intervention. Because of this, there is little information available to those practitioners like us, at college and universities who are considering using BASICS as a means to address high-risk drinking. Sharing your experiences could help identify the strengths and limitations of BASICS and inform other practitioners who are not familiar with this intervention. In addition, this study could address the gap between researchers and practitioners. Your identity will not be revealed or the name of your institution. Is this something you think you would be interested in participating in?

**If yes, continue to screening questions. If no, thank the person for her/his time.**

Would it be okay if I ask you a few questions to ensure you fit the study criteria?

Do you have experience using the BASICS intervention for at least one year?

**If yes, continue. If no, thank the person for her/his time. Unfortunately she/he does not fit the study criteria.**

Do you have a master's degree in the mental health profession?

**If yes, continue. If no, thank the person for her/his time. Unfortunately she/he does not fit the study criteria.**

You meet the criteria for this study. Do you have any questions so far? Would you like to participate?

**If yes, continue. If no, thank the person for her/his time.**

As I mentioned, interviews will take approximately 60 minutes, and we can meet in a confidential location at a time and place convenient for you. Can we schedule that time now?

**If yes, schedule interview. If not, set up how (email or phone) and when to make the appointment.**

Do you have an email address? I would like to send you the consent form for your review prior to our meeting. We will go over it when we meet, and I am happy to answer any questions about it prior to our meeting as well.

**If yes, record email address and send consent form. If no, ask for U.S. Postal Service Address and send consent form there.**

Thank you for your time. I'm excited to talk with you in person, and to hear about your experiences. I look forward to seeing you on <INSERT DATE/TIME> at <INSERT PLACE>. My phone number is 540-808-8080, and my email is jennyw@vt.edu if you need additional information or there are scheduling changes.

**Recruitment: Email****1. Initial Email Contact**

Dear <INSERT POTENTIAL PARTICIPANT'S NAME>:

My name is Jenny Wagstaff, and I am a doctoral candidate at Virginia Tech. I am writing to you because I am seeking interview participants for my dissertation study exploring practitioners' perspectives on the use Brief Alcohol Screening and Intervention for College Student (BASICS) to address high-risk drinking among college students. The research will explore the perceptions of practitioners who use the BASICS intervention. I am hopeful you will consider participating. This research study is approved by Virginia Tech Institutional Review Board (IRB), IRB # 14-909.

To date, no research has been conducted on the perspectives of those practitioners who use the BASICS intervention. Because of this, there is little information available to those practitioners, like us, at college and universities who are considering using BASICS as a means to address high-risk drinking. Sharing your experiences could help identify the strengths and limitations of BASICS and inform other practitioners who are not familiar with this intervention. In addition, this study could address the gap between researchers and practitioners.

To participate, you must have at least one year of experience using BASICS and a master's degree in the mental health profession. Interviews will take approximately 60 minutes, and we can meet in a confidential location at a time and place convenient for you. If you are willing to participate, or would like more information, please email me (jennyw@vt.edu) or call 540-808-8080. I am happy to share more details with you!

I look forward to hearing from you.

Sincerely,

Jennifer F. Wagstaff, M.S., M.Ed., LPC  
Doctoral Candidate, Counselor Education  
Virginia Tech

**2. Follow-Up Email (No response from participant. To be sent seven (7) days after initial contact.)**

Dear <INSERT POTENTIAL PARTICIPANT'S NAME>:

You recently received an email invitation to participate in a research study about Brief Alcohol Screening and Intervention for College Students (BASICS). Your participation is important to me, and I would like your perspective to be included in this research. Please see original email below:

My name is Jenny Wagstaff, and I am a doctoral candidate at Virginia Tech. I am writing to you because I am seeking interview participants for my dissertation study exploring counselors' perspectives social class awareness and knowledge. I am hopeful you will consider participating. This research study is approved by Virginia Tech Institutional Review Board (IRB), IRB # <INSERT #>.

To date, no research has been conducted on the perspectives of those practitioners who use the BASICS intervention. Because of this, there is little information available to those practitioners, like us, at college and universities who are considering using BASICS as a means to address high-risk drinking. Sharing your experiences could help identify the strengths and limitations of BASICS and inform other practitioners who are not familiar with this intervention. In addition, this study could address the gap between researchers and practitioners.

To participate, you must have at least one year of experience using BASICS and a master's degree in the mental health profession. Interviews will take approximately 60 minutes, and we can meet in a confidential location at a time and place convenient for you. If you are willing to participate, or would like more information, please email me (jennyw@vt.edu) or call 540-808-8080. I am happy to share more details with you!

I look forward to hearing from you.

Sincerely,

Jennifer F. Wagstaff, M.S., M.Ed., LPC  
Doctoral Candidate, Counselor Education  
Virginia Tech

**3. Follow-up Email (Response from participant is, “Yes.”)**

Dear <INSERT PARTICIPANT NAME>:

Thank you for your response! I am excited you have agreed to participate in my research study. I want to respect your time and other commitments so I would like to schedule our 60-minute interview as soon as possible. Please offer me 3-5 times that you are available to interview.

I am attaching the consent form for this study to this email so you can review it before we meet. We will go over it in person, and if you have any questions about it prior to our meeting, please do not hesitate to ask. Thank you again for your response, and your willingness to contribute to the profession!

Sincerely,

Jennifer F. Wagstaff, M.S., M.Ed., LPC  
Doctoral Candidate, Counselor Education  
Virginia Tech

**4. Follow-up Email (Response from participant is, “No.”)**

Dear <INSERT PARTICIPANT NAME>:

Thank you for your response. I am disappointed you will not be a participant in my research study, but understand you are very busy. If you decide you are able to participate, please do not hesitate to contact me by <INSERT DATE>. Again, thank you for your time.

Sincerely,

Jennifer F. Wagstaff, M.S., M.Ed., LPC  
Doctoral Candidate, Counselor Education  
Virginia Tech

## APPENDIX C: Interview Protocol

### Introduction

As mentioned earlier, this interview is about the perspectives of practitioners who use the BASICS intervention. There are no right or wrong answers because your experience is your truth. Remember, you have the option not to answer the questions and you are free to disclose or not disclose anything you choose. Do you have any questions before we begin?

### Questions and Probes

1. First, tell me about your about your work at this college or university. What is your approach to addressing high-risk drinking among college students?  
*Probe: Discuss the NIAAA 3-1-approach, BMI approaches.*  
*Probe: What is the campus-wide approach to addressing high-risk drinking?*
2. Describe the typical student seeking services in your office. Are they mandated to attend? If so why would they be mandated? Please describe the institution policies?  
*Probe: Student Conduct Policies?*  
*Probe: Do students seek your services voluntarily?*
3. How did your institution decide to use BASICS in your setting?  
*Probe: History*  
*Probe: What systems were needed to get BASICS in place/up and running?*
4. How do you use BASICS in your setting?  
*Probe: Number of sessions?*  
*Probe: Group or Individual*
5. What type of training did you have to be a BASICS provider?  
*Probe: MI, BASICS, Graduate School, Course Work*
6. How easy or difficult is it for you to adhere to the BASICS protocol?  
*Probe: BASICS was designed to be a 2 – Session Intervention*  
*Probe: Time between sessions.*  
*Probe: The number of areas that your deliver feedback in?*  
*Probe: Possible roadblocks?*  
*Probe: What are the critical ingredients?*
7. How do you generate the feedback report for the intervention?  
*Probe: Feedback Protocol (Computer generated or hand scored?) Blue Sky?*
8. Are their certain parts of the feedback component that you find more effective than others?

9. What challenges accompany the use of BASICS in your setting?  
*Probe: Have you experienced any barriers with regards to implementation.*
10. What helps or hinders the process of facilitating an effective intervention with students?
11. What are the strengths of the BASICS intervention?
12. Describes any limitations of the BASICS intervention?
13. If you could change one thing about BASICS what would you change?

**Respond to these statements:**

Marlatt and Baer said that we know that BMI's work, but we don't know exactly what about it works. Do you agree with this statement....

If you don't follow the exact BASICS protocol then you are not doing BASICS nor can you claim that you are doing BASICS. How do you respond to that?

**Demographic Questions**

What is your gender? \_\_\_\_\_

What is your race? \_\_\_\_\_

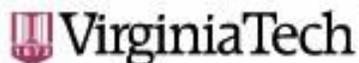
How old are you? Or if more appropriate, which range best describes your age?  
 \_\_\_ 21-29    \_\_\_ 30-39    \_\_\_ 40-49    \_\_\_ 50-59    \_\_\_ 60-69    \_\_\_ 70 and over

What master's degree do you hold?  
 \_\_\_\_\_

Describe the setting that you facilitate BASICS? \_\_\_\_\_

How many years of experience do you have using BASICS? \_\_\_\_\_

How many years of experience do you have in this profession? \_\_\_\_\_

**APPENDIX D: IRB Approval Letter**

**Office of Research Compliance**  
 Institutional Review Board  
 North End Center, Suite 4120, Virginia Tech  
 300 Turner Street NW  
 Blacksburg, Virginia 24061  
 540/231-4606 Fax 540/231-0959  
 email irb@vt.edu website <http://www.irb.vt.edu>

**MEMORANDUM**

**DATE:** September 23, 2014

**TO:** Laura Everhart Welfare, Jennifer Fay Wagstaff

**FROM:** Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)

**PROTOCOL TITLE:** Brief Alcohol Screening and Intervention for College Students (BASICS): A Qualitative Study of Practitioners' Experiences on the College Campus

**IRB NUMBER:** 14-909

Effective September 23, 2014, the Virginia Tech Institutional Review Board (IRB) Chair, David M Moore, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at: <http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

**PROTOCOL INFORMATION:**

Approved As: **Expedited, under 45 CFR 46.110 category(ies) 5,6,7**  
 Protocol Approval Date: **September 23, 2014**

*Invent the Future*

Protocol Expiration Date: **September 22, 2015**  
Continuing Review Due Date\*: **September 8, 2015**

\*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

## APPENDIX E: Audit Trail

Jenny Wagstaff – Audit Trail  
Qualitative Research Study

### Perspectives of Mental Health Professionals on BASICS

Date	Activity
9/19/2014	Defended prospectus. Integrated changes as recommended by the committee.
9/20/2014	Submitted materials to IRB. Familiarized myself with audio equipment.
9/23/2014	Received IRB Approval. Conducted pilot interview.
9/24/2014	Recruitment phone call placed to Research Participant #1. Interview scheduled for 9/25/2014. Reflected on pilot interview to determine sequence of questions.
9/25/2014	Interviewed Research Participant #1. Toured the campus facilities and surrounding community. Filled out field notes and reflections. Played back the interview on the drive home.
9/26/2014	Conducted an internet search to determine schools in the southeast who facilitated BASICS. Placed recruitment phone calls to 5 schools.
9/29/2014	Received an email from Research Participant #2 confirming that she would participate in the interview. Interview scheduled for 10/7/2014. Forwarded informed consent materials via email.
9/30/2014	Received two phone calls from research participants #3 & #4 indicating that they would participate. Scheduled interviews for 10/16 & 10/17, 2014. Forwarded informed consent materials via email to these two participants. Sent confirmation email to Research Participant #2.
10/2/2014	Conducted an internet search to determine schools in the mid-Atlantic who facilitated BASICS. Placed recruitment phone calls to 5 schools. Identified two more participants and scheduled interviews for November. Forwarded informed consent materials via email to these participants.
10/3/2014	Began the transcription process for the first interview. Reflected on the flow of the interview and sequenced the interview questions in a different order.
10/7/2014	Interviewed Research Participant #2. Toured the campus facilities and surrounding community. Filled out field notes and reflections. Played back the interview on the drive home.
10/8/2014	Finalized the transcription from the first interview. Placed additional recruitment phone calls and scheduled interviews with three research participant for 10/21 & 10/24, 2014. Forwarded informed consent materials via email to these participants. Received an email from an individual who declined to participate.
10/9/2014	Transcribed the second interview. Reflected on the transcripts from the first two interviews. Sent transcripts for review to Research Participants #1 & #2.
10/10/2014	Finalized interview date and time with research participant #7 for 10/30/2014. Forwarded informed consent materials via email.
10/16/2014	Interviewed Research Participant #3. Toured the campus facilities and surrounding community. Filled out field notes and reflections. Played back the interview on the drive to the next interview.
10/17/2014	Interviewed Research Participant #4. Toured the campus facilities and

	surrounding community. Filled out field notes and reflections. Played back the interview on the drive home.
10/18/2014	Began the transcription process for interview #3 and #4. Sent an email confirmation to participant #5.
10/19/2014	Called Research Participant #1 to clarify to responses from the transcript. Finalized the transcripts for interviews #3 and #4. Reflected on the data.
10/20/2014	Sent recruitment emails to universities in the Midwest. Sent transcripts to Research Participants #3 & #4. Received clarifying comments from Research Participant #2 via email in relation to the transcript. Sent an email confirmation to participants #6 & 7.
10/21/2014	Interviewed Research Participant #5. Toured the campus facilities and surrounding community. Filled out field notes and reflections. Played back the interview on the drive home. Received a phone call from a participant indicating a willingness to participate in the research. Scheduled an interview for November 14 <sup>th</sup> , 2014. Forwarded informed consent materials via email to this participant..
10/22/2014	Transcribed interview #5.
10/23/2014	Finalized the transcript from interview #5 and emailed. Began the surface analysis of the data.
10/24/2014	Interviewed Research Participant #6. Toured the campus facilities and surrounding community. Filled out field notes and reflections. Interview Research Participant # 7 at an agreed upon location. Played back the interviews on the drive home.
10/27/2014	Identified a transcriptionist to transcribe interviews #6. & #7. Sent an email confirmation to participant #8.
10/28/2014	Scheduled two more interviews for November 13 <sup>th</sup> & 21 <sup>st</sup> , 2014. Forwarded informed consent materials via email to these participants. Sent an email confirmation to participant #9 & 10.
10/30/2014	Interviewed Research Participant #8. Toured the campus facilities and surrounding community. Filled out field notes and reflections. Played back the interview on the drive home.
11/1/2014	Transcribed interview #8 and emailed to participant.
11/3/2014	Interviewed Research Participant #9. Toured the campus facilities and surrounding community. Filled out field notes and reflections. Interview Research Participant # 10. Toured the campus facilities and surrounding community. Played back the interviews on the drive home
11/4/2014	Received transcripts #6 & #7 and forwarded to the research participants.
11/6/2014	Transcribed interview #9. The transcriptionist transcribed interview #10.
11/7/2014	Continued surface analysis of the transcripts. Sent an email confirmation to participant #11 & 12. Sent transcripts to participants # 9 & 10 for review.
11/13/2014	Interviewed Research Participant #11. Toured the campus facilities and surrounding community. Filled out field notes and reflections. Played back the interview on the drive to the next interview.
11/14/2014	Interviewed Research Participant #12. Toured the campus facilities and surrounding community. Filled out field notes and reflections. Played back the interview on the drive home.

11/17/2014	Transcribed interview #11
11/18/2014	Transcribed interview #11
11/19/2014	Transcribed interview #12
11/20/2014	Transcribed interview #12. Sent transcripts to participants #11 & 12 for review.
11/21/2014	Interviewed Research Participant #13. Toured the campus facilities and surrounding community. Filled out field notes and reflections.
11/24/2014	Transcribed interview #13.
11/25/2014	Transcribed interview #13.
12/1/2014	Emailed transcript to participant #13 for review.
12/2/2014	Continued surface analysis.
12/3/2014	Reviewed the coding process in the literature.
12/3/2014	Consulted with the Chair of my dissertation committee about the process of coding and writing up research implications.
12/4/2014	Met with peer reviewer to discuss four transcripts.
12/10/2014	Consulted with dissertation committee member to discuss best strategies for the coding process.
12/11/2014	Met with independent analyst to discuss findings from two transcripts.
12/15/2014	Met with the second independent analyst to discuss findings from three transcripts.
12/16/2014	Finished the first iteration and initial coding from 246 pages of data. Hundreds of codes emerged.
12/17/2014	Consulted with the independent analyst and peer reviewer about the second iteration. Established categories and sub-categories.
12/18/2014 – 12/20/2014	Conducted the third iteration of the data. Established themes.
12/20/2014 – 12/26/2014	Wrote up the findings for the dissertation. Submitted to dissertation chair on 12/26/2014.
1/5/2015	Received feedback from the chair of my dissertation committee about findings.
1/6/2015 – 1/9/2015	Revised findings chapter and resubmitted.
1/10/2015 -	Submitted final chapter of the dissertation.
1/11/2015 – 1/14/2015	Completed edits and revisions
1/15/2015	Submitted entire dissertation to my chair for feedback.