


7-2015

Students' Perspectives after Participation in a Mandated College Level Alcohol Intervention Program: A Phenomenological Study

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Students' Perspectives after Participation in a Mandated College Level Alcohol Intervention
Program: A Phenomenological Study

Students' Perspectives after Participation in a Mandated College Level Alcohol Intervention
Program: A Phenomenological Study

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in Community Health Promotion

By

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ABSTRACT

Alcohol abuse among college students continues to be a significant problem by which the consequences impact the student, their peers, and the university. Although quantitative research with volunteer participants supports the use of enhanced brief motivational interventions and cognitive behavioral skills training in reducing risky drinking behavior (binge drinking), research with mandated students has shown inconsistent findings. The current study is a phenomenological qualitative study exploring the students' perspectives after attending a mandated college-level alcohol intervention program. Mandated students are students who have been referred to an alcohol intervention as a result of violating an alcohol related policy on campus. Protective behavioral strategies were used by the mandated students and perceived as helpful in reducing alcohol consumption and minimizing alcohol related consequences. Mandated students expressed more satisfaction with meeting face-to-face in the SPARK motivational intervention as compared to computer-based intervention programs. Factors that facilitate motivation to change are a relatively untapped field of exploration. There is a relationship between the satisfaction with the facilitator and satisfaction with the alcohol intervention. As a result, the SPARK participants reported reducing their risky drinking behavior. Mandated students should attend a face-to-face motivational intervention consisting of motivational interviewing and cognitive behavioral skills in an effort to influence a motivation to change. Nine themes emerged from the data. The findings build on previous research by providing a more nuanced understanding of mandated students' experience through a college-level alcohol intervention program called SPARK.

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ACKNOWLEDGMENTS

I would like to thank Dr. Jean Henry, my committee chair, who guided me to finish my dissertation. Dr. Henry, thank you for your tireless support throughout this process and your willingness to go the extra mile. Dr. Henry, I chose you as my dissertation chair because I highly respect you as a professor and as a person. I knew that you would be tough on me, however, I also knew that you would push me to my highest potential and that you would not let me fail.

I would also like to thank each member of my committee. Dr. Gorman, thank you for being a great teacher. I will be forever grateful to you for your knowledge that you shared with me in the Grant Writing class and for serving on my dissertation committees. Dr. Mink, thank you for allowing me the opportunity to serve as the facilitator in the alcohol intervention program. It has been my pleasure to teach classes and facilitate the SPARK alcohol intervention program under your guidance and supervision. You are very charismatic and I admire your passion for teaching students about health. Dr. Warren, thank you so much for serving on my committee as the qualitative specialist. You were so kind and generous with your qualitative knowledge. I really appreciate the information that you taught me and all the times that you were available for me to discuss my phenomenological study. I especially want to thank you for sharing your never-ending list of amazing words and your gift of communication skills.

Most importantly, I give all the glory to God, who has given me the strength to pursue and prevail, even when I believed that I could not accomplish this huge task of obtaining a PhD.

DEDICATION

I dedicate my dissertation to my wonderful husband. Joe, you have always shown me such loving support for every endeavor that I desired. However, obtaining a PhD was the most difficult and the craziest endeavor that I have ever done. Thank you so much for always allowing me to chase my long-term dream of going back to school. There were so many times during this journey that I became very discouraged because I didn't think I had the ability to finish. It was only because of your loving encouragement that I continued. You are my best friend. I am so blessed to have you in my life. I also want to thank my wonderful children Josh and Nathan, who have seen me struggle through this process, and continued to offer kind words of encouragement. Thank you for always believing in me.

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CHAPTER I: INTRODUCTION

Evidence suggests that alcohol abuse is the leading public health problem in colleges and universities in the United States (Neighbors et al., 2010). Increased enforcement of minimum drinking age laws, and laws to reduce alcohol-impaired driving, and restriction on alcohol retail density have not been shown to be effective for at-risk and dependent drinkers (U.S. Department of Health and Human Services [USDHHS], 2007). Alcohol abuse among college students continues to be a significant problem, by which the consequences impact not only the student directly, but their peers and the university. Yet, alcohol use is often viewed as a normative part of college life experience (Park, 2004). Research studies suggest that incoming college freshmen are at highest risk for abusing drugs and alcohol in the first 6 to 8 weeks of school (Kazemi, Levene, Dmochowski, Nies, & Sun, 2013). In addition, college students are more likely to experience alcohol related harms (i.e., injuries, traffic accident) after binge drinking (Gonzalez & Hewell, 2012; Wechsler & Nelson, 2008). Substance Abuse and Mental Health Services Administration (SAMHSA, 2012) reported that 43% of college students were described as binge drinkers and 16% were described as heavy drinkers. Alcohol abuse has also been associated with risky sexual behavior (e.g., unprotected sex), and antisocial behavior (e.g., vandalism). Several studies report that there are more than 696,000 alcohol-related assaults, 599,000 unintentional injuries, and over 97,000 sexual assaults reported annually as a result of alcohol abuse (Buscemi & Murphy, 2010; Ehrlich, Haque, Swisher-McClure, & Helmkamp, 2006; Hingson & Weitzman, 2009; Wechsler & Nelson, 2008). The Centers for Disease Control and Prevention (2012) estimate that excessive alcohol consumption costs the United States economy over 223.5 billion dollars every year.

In response to these significant patterns of alcohol abuse and harmful alcohol related consequences, the National Institute on Alcohol Abuse and Alcoholism (2002; 2007) issued *Call to Action* publications which target college students and underage drinking (USDHHS, 2007). A Task Force was formed to evaluate and support evidence-based alcohol intervention programs. As a result, the Task Force identified four levels of interventions: Tier 1, Tier 2, Tier 3, and Tier 4 interventions. Tier 1 interventions include strategies designed for the individual student and have demonstrated effectiveness in reducing alcohol-related harms and risky drinking behavior. Tier 2 and Tier 3 interventions are designed for the college campus (Tier 2 intervention) and surrounding campus community (Tier 3 intervention). The strategies included in a Tier 2 and Tier 3 intervention typically relate to policies and parental and community education. The Task Force has labeled Tier 4 interventions as ineffective for the individual college student. The strategies that are included in a Tier 4 intervention are typically education only. Although these strategies have been deemed ineffective by the Task Force, they are the most commonly used strategies by colleges and universities (Larimer & Cronce, 2007). These strategies will be discussed in detail in the current literature.

Statement of the Problem

Although there is sufficient quantitative research regarding the effectiveness of alcohol intervention programs (Cronce & Larimer, 2011) there are no known phenomenological studies exploring the protective behavioral strategies used by students after participation in a mandated alcohol intervention programs. There are even fewer studies exploring the factors that influenced a motivation to change in attitude and or behavior of a mandated student. Quantitative research methods may not as effectively reveal the full experience of participating

in the mandated alcohol intervention program. Prior research with volunteer participants generally supports the use of motivational interventions in reducing risky drinking behavior and alcohol related harms. Research with students who were mandated to attend an intervention (as a result of an alcohol violation on campus) continues to produce mixed results. As a result, a gap in literature exists regarding research studies producing consistent outcomes for alcohol intervention programs among mandated college students. Research studies have somewhat addressed this issue in voluntary students, but not addressed in mandated students.

Purpose of the Study

The purpose of the study was to explore the influence of an alcohol intervention program, implemented in one large Southern university, on attitudes, behaviors, and knowledge of college students who had been mandated to attend the program.

Research Questions

The general research questions are:

- 1) What protective behavioral/harm reduction strategies are college students currently using when going out drinking?
 - a. Do college students use the protective behavioral/harm reduction strategies that were presented in the alcohol intervention program?
- 2) How does the student describe his or her own drinking behavior at the time of receiving the alcohol violation?
- 3) How does the student describe his or her experience in the mandated alcohol intervention program?

- a. What are the key components from the alcohol intervention program that students learned?
 - b. Which components, if any, within the intervention, are perceived as helpful or unhelpful?
- 4) What do students perceive to be the factors, if any, that motivated them to change their attitude and or behavior about drinking?

Significance

The study adds to existing research findings regarding how mandated, post-intervention students engage in protective behavioral strategies while consuming alcohol. The study helped the researcher explore, understand, and describe college students' self-reported experiences after participation in a mandated alcohol intervention program. Research indicated that students are drinking more responsibly and making better decisions while practicing protective behavioral strategies as a result of the alcohol intervention program called SPARK. The study explored the factors that influenced mandated students to change their drinking behavior. Furthermore, the study revealed which delivery method (e.g., face-to-face or computer-based) should be implemented for mandated students.

Delimitations

Since the researcher was the primary instrument, it was easier to adapt and expand the student's perspectives, clarify and summarize gathered information, check for accuracy of interpretation thus, exploring possible emergent phenomenon and unanticipated responses. Themes and principles are described by the researcher. Qualitative data, in the words and categories of participants, lend themselves to exploring how and why phenomena occur. Thick,

rich descriptions of the emergent phenomenon are detailed in the participants' own essence of the meaning. The study provided understanding of participants' self-reported experiences. Although evidence revealed that many college students participate in risky drinking behavior, the study was limited to only those college students, male and female, who were sanctioned to attend the SPARK alcohol intervention program from 2011-2014 at a large public Southern university.

Limitations

Some limitations existed for the study and include the following:

1. The investigator was also the alcohol intervention facilitator.
2. Knowledge produced might not generalize to other student population or settings.
3. Accuracy of student recall of experience in program.
4. Researcher bias.
5. Data is in the form of self-reported quotes, interviews, and audio tapes in support of the findings of the study

Assumptions

1. The responses obtained from the participants are truthful reflections.
2. The researcher/facilitator conducted the interview in a consistent manner.

Definition of Terms

The following terms were defined for use in the study:

At-Risk Group

At-risk or high-risk group on college campuses are identified in the literature as white males, freshmen, athletes, and Greek organization members (Larimer & Cronce, 2002).

Alcohol Related Harms

Alcohol related harms are the consequences of excessive alcohol use which include blackouts, deaths, unintentional injuries, assaults, sexual abuse, unsafe sex, academic problems, suicide attempts, drunk driving, vandalism, property damage, and police involvement (Hingson, Zha, & Weitzman, 2009; Howard, Griffin, Boekeloo, Lake, & Bellows, 2007).

Binge Drinking

The National Institute of Alcohol Abuse and Alcoholism (NIAAA, 2007) reports that “a ‘binge’ is a pattern of drinking alcohol that brings blood alcohol concentration (BAC) to 0.08% gram-percent or above ” which consists of consuming 5 or more drinks for a male, or 4 or more drinks for a female within 2 hours. Wechsler and Nelson (2008) define binge drinking as five drinks for a male and four drinks for a female in a short amount of time. Heavy drinking and risky drinking behavior are used interchangeably with the term binge drinking in existing literature. This paper used the term risky drinking, heavy drinking, and binge drinking interchangeably.

Brief Alcohol Screening and Intervention for College Students (BASICS) Model

The BASICS model is an evidence-based alcohol intervention program that is used in most colleges and universities. Components within the intervention programs include alcohol screenings, cognitive-behavioral skills (e.g., documenting daily alcohol consumption, changing perceptions, and managing stress), and enhanced motivational interviewing techniques. These strategies are also referred to as the 3-1 approach, because they must operate simultaneously within an intervention to be most effective.

Computer-based Intervention

Computer-based intervention offers educational materials, alcohol screening, and personalized feedback via an educational computer program (e.g., AlcoholEdu and eChug), and then the computer displays feedback.

Face-to-Face Feedback

Face-to-face feedback is an interview technique in which an intervention facilitator gives feedback about the participant's own drinking behavior in a personalized, individualized manner.

Greek Member

A Greek member is a member of a fraternity or sorority at a college.

Harm Reduction Strategies

Harm reduction strategies are behaviors that students learn to reduce any harm that is related to alcohol. Harm reduction strategies are designed for “anyone who works to reduce the amount they are drinking by any amount” and “anyone who works to drink more safely is said to be practicing harm reduction even if they do not choose to reduce the amount which they are drinking” (The HAMS Harm Reduction Network, Inc., 2008). Harm reduction strategies and protective behavioral strategies are often used interchangeably in the literature.

Incident

An incident in this study refers to the actions that brought them to the SPARK alcohol intervention. For example, some students were arrested and received an alcohol violation, whereas other students may have had beer in their dorm.

Mandated College-Level Alcohol Intervention Program

A mandated college-level alcohol intervention program is a program that targets college students who received an alcohol violation on university property or who were arrested on campus or nearby campus, by which they are required by university policy to attend.

Mandated Student

A mandated student is a college student who has been found in violation of an alcohol-related policy and sanctioned to a form of penalty. In this study, a mandated student is either arrested for alcohol consumption or received two alcohol violations on or near campus.

Motivational Interviewing (MI)

Motivational Interviewing is defined as “a client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence” (Miller & Rollnick, 2002, p. 25).

Protective Behavioral Strategies

Martens et al. (2005) defines protective behavioral strategies as cognitive behavioral strategies that a student can use (while out drinking) to reduce their alcohol consumption and alcohol-related problems. Protective behavioral strategies are consistent with the harm reduction model in which the goal is to reduce alcohol consumption; any reduction of alcohol is considered successful.

Student Program for Alcohol Resources and Knowledge (SPARK)

The Student Program for Alcohol Resources and Knowledge (SPARK) is a mandated alcohol intervention program developed and implemented in an effort to reduce heavy drinking behavior in college students who received alcohol violations or who were arrested as a result of alcohol (see SPARK Flow Chart, Appendix A). The SPARK alcohol intervention program is a

component of the wellness and health promotion department of the university's health center. The alcohol intervention program consists of two 1-hour, 1-on-1 private interviewing sessions that are held in the university health center.

The SPARK alcohol intervention program is modeled after the evidence-based program called BASICS (Tier 1 intervention), which is composed of multi-component cognitive behavioral skills, protective behavioral strategies, motivational interviewing, and personalized feedback within the intervention. The goal of the alcohol intervention program is to provide an early intervention for mandated students who have experienced negative consequences as a result of alcohol abuse. The objectives of the SPARK program are to: 1) conduct alcohol screening to assess whether a student is in need of additional services; 2) educate students about the effects of alcohol abuse on overall health and introduce protective behavioral/harm reduction strategies; 3) teach cognitive behavioral skills; and 4) encourage students to take a personal evaluation of his or her attitudes and behaviors as they relate to alcohol abuse by eliciting change talk (self-reflection).

The components within the SPARK program consist of: a) the Daily Drinking Questionnaire (DDQ); b) an alcohol screening called the AUDIT; c) pretests and posttests; d) cognitive behavioral skills; e) behavior change contract; and f) and a personalized motivational interview (MI).

Students who attended the SPARK program were sanctioned by the university after receiving an alcohol violation on or near the college campus. Although the majority of the students were sanctioned, not every student was drinking alcohol. At this university, a student must complete the SPARK intervention if they are arrested or upon receiving two alcohol

violations. For instance, some students may have had an empty alcohol container in their dorm room, or were at a campus party where alcohol was being served and every attendee received alcohol violations. However, some of the mandated students received alcohol violations after being arrested for Minor in Possession or Public Intoxication, blacking out, or being transported to the hospital as a result of alcohol poisoning. Hence, the term alcohol violation is used broadly in the current study. After a student receives the alcohol violation, the student meets with a university hearing officer (the time/frame is usually 1-2 weeks). The hearing officer discusses the *incident* with the student and then sanctions are issued to the student (e.g., computer based intervention, fines, community service, SPARK, etc.). Sanctions that the students receive will vary and is based on the hearing officer's recommendations. Because every student's circumstance is different, the majority of the students received various sanctions. In an effort to protect the identity of the participants in the current study, I will only use the term *incident* when referring to how and why they received an alcohol violation.

CHAPTER II: LITERATURE REVIEW

Presented in this chapter, relevant literature pertaining to the seriousness of alcohol abuse in colleges and universities, initiatives to develop alcohol intervention programs, alcohol related laws and policies, defining college drinking, determinants of drinking behavior, characteristics of mandated students, and the theoretical perspective will be discussed. Additionally, alcohol interventions and effective components utilized within alcohol intervention programs for reducing risky drinking behavior in college students will be presented.

Alcohol Abuse in Colleges and Universities

College students are facing serious consequences as a result of their own risky drinking behavior and that of their peers' alcohol use. Alcohol abuse in colleges and universities is considered an underlying root of mortality and morbidity among college students (Larimer & Cronce, 2007). Many college students who binge drink often experience a blackout as a result of alcohol intoxication. Blackouts are characterized by a loss of memory (i.e., amnesia) or by a loss of some memory events (i.e. anterograde amnesia). Parada et al. (2012) suggest that alcohol has an effect on the hippocampus and prefrontal cortex of the brain, which in turn disrupts how the brain processes memory and learning. When an individual is in an anterograde amnesia state, a person can socialize at parties or even drive a car and not remember doing it, yet remember being at certain locations with certain people.

College students usually engage in riskier drinking behavior compared to their non-college bound friends (Johnston, O'Malley, Bachman, & Schulenberg, 2011). Findings from the NIAAA chartered study estimated that over 1,825 college students die every year as a result of alcohol abuse (Hingson et al., 2009). Several studies report that there are more than 696,000

alcohol-related assaults, 599,000 unintentional injuries, and over 97,000 sexual assaults reported annually (Buscemi & Murphy, 2010; Ehrlich et al., 2006; Hingson et al., 2009; Wechsler & Nelson, 2008). The findings from the National College Health Assessment (American College Health Association, ACHA, 2009) indicated that millions of college students are affected by alcohol-related consequences (e.g. assaults, car accidents, deaths, and sexual assaults). As a result, more evidence-based alcohol interventions are needed to target college students, especially those students who are considered high risk drinkers (Logan, 2013). Some believe the most cost effective intervention in changing drinking behaviors is motivational interventions with personalized feedback (Cowell, Brown, Mills, Bender, & Wedehase, 2012; Kuleza, Apperson, Larimer, & Copeland, 2010; Logan, 2013). Although 20% of college students were identified as risky drinkers, only 3.9% reported receiving counseling for alcohol abuse (Wu, Pilowsky, Schlenger, & Hasin, 2007). As such, interventions to improve efficacy are needed for college students who identify as heavier drinkers (Carey, DeMartini, Prince, Luteran, & Carey, 2013).

There have been a number of surveys that explored alcohol abuse and alcohol-related harms in college students. The Harvard Study of Public Health College Alcohol Study (CAS), which began in 1992, was originally adapted from the University of Michigan's Monitoring the Future study, conducted by Johnston and Bachman (1980). The CAS surveyed 50,000 college students at 120 universities. Wechsler and Nelson (2008) reviewed the findings from a 14-year study (1993-2001) of the CAS. The CAS aimed to provide a representative description of alcohol use and harms produced as a result of college drinking. Findings from the CAS have shown that risky drinking behavior has had an impact on the college student's health, social

relationships, and academic performance. The National College Health Risk Behavior Study was conducted by the Center for Disease Control (1997) and conducted at 136 two-and four-year colleges. The National Household Survey on Drug Abuse is the primary source of data used to estimate use of alcohol, illegal drugs, and tobacco in the U.S., and includes all age groups living in shelters, rooming houses, and student dorms (SAMHSA, 2012). This survey allows for comparison of non-college and college peers. College students (27.4%) reported driving a vehicle after drinking alcohol. Females (22.8%) reported drinking and driving significantly less than males (33.2%); males (6.6%) were significantly more likely than females (2.2%) to report current frequent alcohol use. Marijuana use was significantly higher in males (17.1%) than females (11.6%).

The Monitoring the Future (MTF) survey of high school students is a longitudinal study which follows high school students through college and beyond (Johnston, O'Malley, & Bachman, 2002). The MTF survey indicates that 79% of college students reported past year alcohol use, 44% of college students reported having been drunk in the past month, and over one-third of college students reported at least one episode of five or more drinks (i.e. binge drinking) in the past two weeks, and 13% of college students reported extreme binge drinking in the past two weeks (i.e., 10 or more drinks in a row) (Johnston et al., 2011). In addition, 38% of students reported consuming 5 or more drinks the last time they went out to party (Johnston et al., 2011). These findings from MTF data are consistent with CAS indicating an increase in binge drinking among college students age 18 to 25 in comparison to those individuals who are not attending college and in the same age group (Johnston et al., 2011). The highest prevalence of diagnosable alcohol use disorders is the college age cohort (USDHHS, 2007).

Alcohol-Related Laws and Policies

Most colleges and universities have implemented alcohol-related laws and policies. As previously noted, many of the larger colleges and universities have implemented many of the Tier 2 and 3 intervention strategies. Lenk, Erickson, Nelson, Winters, and Toomey (2012) indicated that there is a lack of consistencies in alcohol-related policies across college campuses. They indicated that less than half of the colleges in the U.S. prohibit alcohol at fraternity and sorority events, whereas the majority of colleges prohibit alcohol sales at sporting events. Higher education institutions are continuing to enforce alcohol related policies related to underage drinking, because of the health and safety concerns (Barnett & Read, 2005). A survey of college administrators reported that “more than one half of violations of campus policies involve alcohol” (Barnett et al., 2004, p. 966). Collaborations of judicial and disciplinary officers, health care staff, health educators, law enforcement personnel, policy makers, and alcohol outlets support intervention efforts of reducing binge drinking in college students (Cronce & Larimer, 2011). The NIAAA (2007) reports that increased enforcement of laws have not been shown to be effective in reducing alcohol-related harms in college students. However, studies (Colby, Raymond, & Colby, 2000; Kilmer, Larimer, Parks, Dimeff, & Marlett, 1999) vary in their findings regarding drinking behavior related to alcohol related campus policies. For example, stricter policies were either met with greater opposition or had no impact among mandated students. Further studies (Logan, 2013; Walker & Cosden, 2007) found that some universities with fewer alcohol-related policies reported greater alcohol consumption. Nelson, Naimi, Brewer, and Wechsler (2005a) suggest that students attending colleges and universities that have strict alcohol control policies are less likely to engage in binge drinking. Although

research indicates that students are still engaging in risky drinking behavior, some evidence suggests that states with strict alcohol-related laws and policies are experiencing less alcohol-related consequences, such as drinking while intoxicated and fighting on campus (Nelson et al. 2005a; Wechsler & Nelson, 2008).

Morgan, White, and Mun (2008) revealed that sanctions had an impact on reducing drinking behavior. Qi, Pearson, and Hustad (2014) indicated that there is little evidence about the constructs of reduced alcohol use after a student has been sanctioned. Barnett et al. (2004) found that harsh sanctions are less effective compared to education-only interventions in mandated college students. However, Morgan et al. (2008) suggests that when college students perceive the sanction as more serious (e.g. school probation), students reduced their alcohol use even before attending the intervention. The literature is inconsistent and more research is needed to understand the role of sanctions.

Barnett, Goldstein, Murphy, Colby, and Monti (2006) found that when the incident (i.e., hospital transport, arrest) is perceived to be more aversive, mandated students are more likely to reduce alcohol use. Other factors (e.g., incident reactions) may also be the moderator in reducing alcohol consumption. Mastroleo, Murphy, Colby, Monti, and Barnett (2011) indicated that alcohol related consequences (as a result of the incident) may influence motivation to change. Another study (Reis, Harned, & Riley, 2004) found that college students who had a negative alcohol-related experience (e.g., transported to hospital for alcohol poisoning) reported making plans to reduce alcohol use. Morgan et al. (2008) showed the more serious the incident, the more a student reduced his alcohol consumption prior to the intervention. Barnett et al. (2006) found that when the incident is perceived as more aversive, students were more likely to

change their drinking behavior. Qi et al. (2014) found that when students perceive the incident as more aversive, the incident was positively related to motivation to change.

Initiatives to Develop Interventions

In 1976, the NIAAA issued the first report regarding dangerous drinking behavior and alcohol related consequences by college students (USDHHS, 2002). As a result, the research advances have changed the way college campuses and university officials understand alcohol abuse on college campuses. Most college campuses engage in some sort of alcohol prevention and intervention programs in an effort to reduce alcohol related harms and risky drinking behavior (Carey, Scott-Sheldon, Carey, & DeMartini, 2007).

The NIAAA relies on scientific evidence and urges colleges to join forces in order to change the culture of college drinking. The National Advisory Council on Alcohol Abuse and Alcoholism's initial report called *A Call to Action: Changing the Culture of Drinking at U.S. Colleges* established the Task Force on College Drinking (USDHHS, 2002). The Task Force made recommendations for addressing risky drinking behavior in college students, which included integrating intervention programs with multiple components that target the entire student population, the surrounding campus community, individual student, alcohol-dependent students, at-risk students, and those students who are sanctioned to attend an alcohol intervention program. These recommendations only focused on changing the culture of drinking on campuses, not prohibition of alcohol. Additionally, the Task Force suggested that some prevention/intervention efforts are not successful because the strategies used are not tested for effectiveness by research.

The NIAAA reported, in the updated version *What Colleges Need to Know Now* that the most effective interventions are referred to as Tier 1 interventions and include three strategies. The first strategy has three components: cognitive behavioral skills, norms clarification, and enhanced motivational interventions including motivational interviewing (MI). These strategies are also referred as 3-in-1 approach because they must operate simultaneously within an intervention to be most effective for individuals including at-risk and dependent drinkers. The second strategy is a motivational enhancement intervention with motivational interviewing (used as a stand-alone intervention) and is typically used in university health centers and surrounding emergency rooms. The third strategy is alcohol expectancy challenges (AECs) (USDHHS, 2007).

As previously stated, the first strategy of a Tier 1 intervention consists of a combination of three components: 1) cognitive behavioral skills; 2) norms clarification; and 3) enhanced motivational interventions with MI. The first component is cognitive behavioral skills. Cognitive Behavioral skills include teaching a student how to monitor their drinking behavior, discussing campus norms, and realistic effects of alcohol. Students can be taught skills that help them to make better decisions regarding alcohol use, thus, supporting autonomy. Saltz and DeJong (2002) state, “Cognitive behavior skills training strives to change an individuals’ dysfunctional beliefs and thinking about the use of alcohol through activities such as altering expectancies about alcohol’s effects, documenting daily alcohol consumption, and learning to manage stress” (p. 10).

The second component is norms clarification. Norms clarification examines how students perceive the acceptance of abusive drinking behavior on college campus. Further,

norms clarification utilizes campus data to refute student's beliefs about the tolerance of other student's drinking behavior and the amount of alcohol they actually consume. College students often overestimate the quantity of alcohol that their peers are engaged in (Harper, Harris, & Mmeje, 2005) and will modify their own drinking behavior based on this overestimation. Harper et al. (2005) states, "The heavy drinker is personally motivated to binge drink because he believes his peers are engaging in the same behavior, which enables him to justify his own drinking behavior" (p. 578).

The third component in this 3-in-1 strategy is enhanced motivational intervention with MI. Enhanced motivational intervention with MI is a communication method that elicits change talk. Motivational interviewing strives to "stimulate students' intrinsic desire or motivation to change their behavior" (Saltz & DeJong, 2002, p. 10).

The second strategy is an enhanced motivational intervention with MI used as a stand-alone intervention. Enhanced motivational interventions with MI are personalized session (typically 45-60 minutes) delivered in small groups or individually. The enhanced motivational intervention with MI has been proven effective in reducing negative alcohol-related consequences, such as drinking and driving or riding in a car with a drunk driver (D'Amico & Fromme, 2000; Larimer & Crouse, 2007). An example of an enhanced motivational intervention with MI is the Brief Alcohol Screening for College Students (BASICS), developed at the University of Washington (Dimeff, Baer, Kivlahan, & Marlatt, 1999). The BASICS intervention program has demonstrated effectiveness in at-risk individuals and those students who are mandated to attend. BASICS will be discussed in detail later in the literature.

The third strategy is alcohol expectancy challenges (AECs). The AEC is a treatment that use bar labs to treat participants. The bar labs have participants drink an alcoholic beverage or a placebo, interact with each other, and then guess who consumed the alcoholic beverage. Theoretically, participants will have fewer positive outcome expectancies and drink less alcohol. Additionally, participants will learn that they cannot guess who actually drank alcohol based on their behavior (Wood, Capone, LaForge, Erickson, & Brand, 2007). Alcohol expectancy challenges combine experiential learning and information to change student's expectations about the effects of alcohol (Darkes & Goldman, 1993;1998). Park (2004) indicated that both positive and negative alcohol expectancies are stronger predictors of drinking behavior. Although the alcohol expectancy challenge is considered a Tier 1 intervention (NIAAA, 2007), and has shown to reduce drinking frequencies per week for up to the 6 week follow-up, they are not maintained after the 6 week follow-up. Scott-Sheldon, Terry, Carey, Garey, and Carey (2012) reviewed 14 studies and examined the efficacy of the alcohol expectancy challenge (AEC) as a stand-alone intervention. The total population included 1,415 college students. Scott-Sheldon et al. indicates that AEC participants reported lower positive alcohol expectancies and reduced drinking frequencies when compared to controls. However, at the four-week follow-up, the effects of AEC interventions were not maintained. Therefore, the efficacy of AECs are considered short-term.

The Task Force encourages colleges and universities to adopt the most effective strategies for the student population. In addition, the Task Force recommends that college presidents, alcohol program planners, and student and community leaders explore these strategies in an effort to reduce alcohol-related consequences and risky drinking behavior.

Defining the College Drinker

A typical U.S. college student either abstains from alcoholic drinks or drinks in moderation (NIAAA, 2007). The CAS reported the typical college student drinks an average of 1.5 drinks per week and drinks one drink per hour while at a party. Additionally, the CAS reported that 72% of students had no alcohol in their bloodstream after attending a party.

Determinants of Drinking Behavior

Some environmental and social factors have been found to be determinants of drinking behavior in college students, such as involvement in athletics, fraternity, sorority, a students' residence (on or off campus), and alcohol availability (Wheeler, 2010). Incoming freshmen are very enticed by the college drinking environment and often succumb to peer pressure (Misch, 2007). College students have alcohol expectancies about behavioral, cognitive, and emotional effects of alcohol, which are important behavioral determinants (Baer, Kivlahan, Blume, Mcknight, & Marlatt, 2001). Findings (Borsari, & Carey, 2001; 2003; Neighbors et al., 2010) suggest that positive expectations of drinking behavior are related to higher levels of alcohol consumption, whereas negative expectation is related to lower consumption levels. Osberg, Insana, Eggert, and Billingsley (2011) revealed how alcohol-related harms and risky drinking behavior is related to alcohol beliefs, suggesting that alcohol interventions aimed at reducing alcohol beliefs (about college drinking) may be effective in reducing alcohol abuse in the college environment.

Howard et al. (2007) suggest that future research “needs to be focused on the motivations and contextual factors that prompt this behavior and the success of various initiatives” (p. 250). Many factors are hypothesized to facilitate reduction of alcohol use in college students. Factors

may include: weighing the pros and cons, fear of sanctions, full-time work, natural maturity, responsibilities, and occurrences of negative alcohol-related harms (Misch, 2007).

Characteristics of Mandated Students

Mandated students are students referred for an intervention following violation of a campus alcohol policy. The mandated population is mostly represented by: 1) white male students, 2) those students who report lower grades, 3) students who report more heavy drinking days, 4) students who are members of Greek organizations, and 5) students who attend colleges with low minority populations (Barnett & Read, 2005; Harper et al., 2005). Research indicates that volunteer and mandated students do not always benefit from the same interventions or strategies because mandated students have experienced negative psychological reactions due to a loss of autonomy (Barnett & Read, 2005).

Mandated students are a liability and a safety concern for colleges and universities. As a result, alcohol-related policies related to underage drinking should be enforced (Barnett & Read, 2005). Carey, Henson, Carey, and Maisto (2009) found that volunteer students reported decreases in drinking behavior after intervention, whereas mandated students reported increases in drinking behavior. These and other findings indicate that differences exist between volunteer and mandated populations. Palmer (2004) found that a volunteer group of psychology students (screened as at-risk drinkers) reported more drinking days and more alcohol related consequences than mandated students after attending the same intervention. Morgan et al. (2008) suggest that a sanction has an impact on drinking behaviors and attitudes. They reported that mandated students with the most serious infractions reduced their binge drinking days and alcohol-related consequences more than those mandated students with lesser infractions prior to

the intervention. Another study (Hustad et al., 2011) found that mandated students drank more heavily on the day they received the alcohol violation than their typical drinking day and reported a decrease in alcohol consumption immediately following the alcohol violation.

Barnett et al. (2004) evaluated differences between mandated college students and their peers on alcohol use and readiness to change. Their study utilized 32 mandated students and 32 of their peers who would normally drink with them at parties. Both the mandated student and their peer received the same 45-minute personalized intervention. Results indicated that non-mandated students reported higher grades and lower percentage of drinking days, whereas mandated students reported higher scores on the Young Adult Alcohol Problems Screening Test.

Theoretical Perspective

The underlying theory of an enhanced motivational intervention is the transtheoretical model (TTM), commonly referred to as the stages of change. The Stages of Change Theory is used as a stage-matched intervention and considered one of the leading models for behavior change. The TTM was developed by Prochaska and Diclemente in 1983. The processes of change are the principles that promote behavior change and propel forward progression through the stages of change. The TTM can tailor change principles and processes to individuals at each stage of change (Prochaska et al., 2002).

The five stages of change consist of precontemplation, contemplation, preparation, action, and maintenance. Precontemplation is the first stage in the TTM. In this first stage the individual will deny that a problem exists and has no intention of changing their behavior. The processes used to facilitate movement to the next change will involve consciousness-raising, increasing emotional arousal, and environmental reevaluation. Consciousness-raising may

involve the use of educational material, and personalized feedback from alcohol screenings (i.e., AUDIT). Emotional arousal may involve showing pictures or videos of a student in a coma after binge drinking. Environmental reevaluation involves helping a student realize how his or her drinking behavior has impacted others. For example, friends of heavy drinkers are usually the caretakers of their drunk friends (e.g., cleaning up their vomit after binge drinking).

Contemplation is the second stage of TTM. In this stage, the individual weighs the pros and cons of whether or not to change the behavior and is intending to change in the next six months (Prochaska, 2002). Individuals in the contemplation stage will benefit by either intrinsic motivators or outside resources in order to achieve change (Ramos & Perkins, 2006). The process used to facilitate movement to the next stage is self-reevaluation (e.g., helping a student visualize a healthier life by reducing alcohol related problems).

Preparation is the third stage of change in which the individual intends to change his or her behavior in the next month and has already begun taking steps to change. The process used to facilitate movement is self-liberation (e.g., student completes a behavior change contract or makes a public commitment to his or her family about making their behavior change).

Action is the fourth stage of TTM. In this stage, the individual is overtly engaged in changing their behavior. The processes used to facilitate movement are helping relationships (i.e., students seeking out a social support system), counter-conditioning, and rewards (i.e., rewarding oneself with the money saved).

Maintenance is the fifth stage of TTM. In this stage, the individual has been able to sustain action for at least six months. The processes used to facilitate movement include stimulus control, such as removing cues that encourage risky drinking behavior, social liberation,

and contingency management (i.e., enforcing alcohol policies and punishing students for violating these policies).

Learning outcomes are a result of integrating motivational interviewing (MI) with the stages of change. Intervention strategies, at all stages, include feedback that is tailored to the students' stage of readiness to change. The stages of change are the basis for developing effective interventions that promote changes in behavior. Interviewers learn to recognize and reinforce phrases or key words that indicate readiness to change, such as "I have a good reason to change." Identifying the student's stage of change is the first step in promoting the behavior change intervention. Most college students, who are considered risky drinkers are not aware that they need to change, fall into the precontemplation stage (Vik, Culbertson, & Sellers, 2000). Shealy, Murphy, Borsari, and Correia (2007) found that mandated students who were in the contemplation stage experienced fewer alcohol-related consequences, fewer binge drinking occasions, and fewer drinking days. When met with resistance, the interviewer should meet the client where they are.

Alcohol Interventions

Alcohol intervention programs are designed to treat the individual in a personalized session or in a group setting. Some alcohol intervention programs are computer-based interventions and are designed to reach the entire student body or specifically designed for students who participate in Greek life, athletics, or mandated students. An ineffective intervention program will be discussed first in the literature.

Education-Only Intervention

Evidence indicates that college students' drinking patterns have not improved significantly since implementation of certain prevention programs, such as educational information only or "just say no campaigns" (Howard et al., 2007; O'Malley & Johnston, 2002). Research indicates that most colleges and universities participate in one or more types of intervention programs in an effort to reduce risky drinking behavior. Alcohol-education programs (used as a stand-alone intervention), which are the most widely used programs by colleges and universities, are reported as the least effective interventions in reducing alcohol related harms and risky drinking behavior in college students (Logan, 2013). Further studies indicate that students who participated in education-only intervention programs were more defensive (Logan, 2013). Thus, the more resistant the client is, the more learning outcomes decrease (Logan, 2013; Miller & Rollnick, 2012). Thadani, Huchting, and LaBrie et al. (2009) evaluated four studies that utilized alcohol education as the only intervention. These studies indicated an increase in knowledge among all the students receiving the intervention. However, they found no decrease in alcohol use and alcohol related harms. Additionally, the study indicated that students are more interested in learning skills about how to drink responsibly.

Brief Alcohol Screening in College Students (BASICS)

The BASICS program, a harm reduction approach, is a cognitive-behavioral technique used in the school setting and equally effective for both genders. The BASICS program was developed by Dimeff, Baer, Kivlahan, and Marlatt in 1999. The BASICS program is designed to target high-risk groups (i.e., mandated students, freshmen, athletes and Greek members). The BASICS program is an evidence-based program designed to teach harm reduction strategies to

college students, 18-24 years old, who have experienced negative consequences as a result of alcohol abuse. The BASICS program also contains the FRAMES core components of an enhanced motivational intervention with MI (Miller & Sanchez, 1994): 1) Feedback; 2) Responsibility for change is the client's; 3) Advice is given by the BASICS facilitator to moderate drinking or abstain from alcohol; 4) Menu of change strategies; 5) Empathic style of delivery; and 6) Self-efficacy of the client is supported by the BASICS practitioner. The BASICS program includes the combination of several components within an intervention program such as alcohol screenings (e.g., AUDIT, cognitive-behavioral skills (e.g. documenting daily alcohol consumption, changing perceptions, and managing stress), motivational enhancement intervention with MI, and protective behavioral strategies. Evidence suggests that the BASICS program is one of most effective interventions for reducing alcohol abuse and alcohol-related harms in college students (SAMHSA, 2012; USDHHS, 2007).

A “Call to Action” report classifies BASICS as a Tier 1 intervention with evidence of effectiveness in reducing risky drinking behavior and reducing alcohol related harms (NIAAA, 2002). The BASICS model is also reported to be generalizable and effective among Mexican Americans (Hernandez et al., 2006). Other studies’ findings illustrate that colleges and universities who implemented and participated in the BASICS program reduced alcohol consumption and alcohol related harms in a 2-year and 4-year follow-up (Baer et al., 2001; USDHHS, 2007). For example, 67% of students receiving the BASICS intervention made significant improvements, as compared to 55% of controls, from baseline to follow-up 4 years later (Baer et al., 2001). Another study found that college students who were heavy drinkers reduced weekly alcohol consumption and binge drinking behavior than education-only and

control groups at 3 and 9 month post interventions (Murphys et al., 2001). Kazemi et al., (2013) followed a longitudinal design while examining the effects of motivational interventions with MI among college students. Participants received motivational interventions with MI at baseline, 2 weeks, 3 months, and 6 months. Findings indicate that 40% of participants had experienced a blackout at baseline and that the rate of blackouts decreased to 16% at 6 months ($p < .0001$) after receiving the MI sessions. These findings also show that drinks per week dropped from 11.1 to 7.3 per week at 6 months. Kazemi et al. (2013) only reviewed the effects of their motivational intervention and so it is still unclear as to which component of the intervention was the predictor of behavior change. However, motivational interventions typically include MI communication methods, which encourage clients the opportunity to self-reflect about their behavior.

Alcohol Skills Training Program (ASTP)

The alcohol skills training program (ASTP) is considered a Tier 1 intervention (NIAAA, 2002) and is conducted in a group setting for mandated students. Miller, Kilmer, Kim, Weingardt, and Marlatt (2001) developed the ASTP and combine cognitive behavioral skills, norms clarification, and enhanced motivational enhancements with MI. The ASTP is similar to the BASICS program, except that the BASICS program is designed to treat the individual. The ASTP has demonstrated effectiveness at reducing alcohol consumption by approximately 50% (Miller E. et al., 2001).

Logan (2013) evaluated the efficacy of three intervention programs among 61 mandated students; this was called Project AIMS. Alcohol Intervention for Mandated Students (AIMS) evaluated the efficacy of an Alcohol Skills Training Program (ASTP) for groups, BASICS for individuals, and alcohol diversion program (ADP) that consists of education information only.

Results indicated a decrease in drinking before the intervention. Further results indicated lower BAC in the BASICS (individual) program and ASTP (group) program as a reaction to the sanction. However, students in the ADP intervention reported higher BAC. Fewer alcohol-related consequences were reported at 2 month follow-up in the group intervention (ASTP).

Personalized Feedback Intervention (PFI)

A Personalized Feedback Intervention (PFI) collects data about a student's alcohol use and generates a personalized feedback of the students' alcohol use and any alcohol related harms that are associated thus, increasing motivation to reduce their risky drinking behavior. A PFI can be delivered via computer or face-to-face. Butler, Silvestri, and Correia (2014) indicated that a "potential predictor of the effectiveness of a Personalized Feedback Intervention (PFI) component is the perceptions and preferences of the student" (p. 615).

Components of an Effective Intervention

As previously discussed in the literature, some components within an intervention are considered more effective than others (NIAAA, 2002). Motivational interviewing and cognitive behavioral skills will be discussed in detail.

Motivational Interviewing (MI)

Motivational interviewing is an interviewing style of interacting with an individual which focuses on therapeutic change in a non-confrontational manner and emphasizes rapport, autonomy, self-efficacy, and internal motivation (Miller & Rollnick, 2002). Carl Rogers (1959) developed the MI technique as a client-centered approach to be used in his clinical practice. Motivational interviewing typically last approximately 1-hour. A brief motivational interview is

usually conducted in a short amount of time (i.e., 10 minutes) and facilitated by an emergency room doctor.

The goals of MI are to strengthen a person's motivation and commitment to change and give the client the confidence to make a behavior change (Ehrlich et al., 2006). Motivational interviewing is a non-confrontational form of communication (Baer & Peterson, 2002). The tenets of MI include rolling with resistance, expressing empathy, empathic listening, and developing discrepancy. Communication methods commonly used in MI are statements that use a) open-ended questions, b) affirmation, c) reflection, and d) summary statements. These are sometimes referred to as the acronym O.A.R.S. This communication method is utilized in an effort to *row for change* while eliciting change talk. Open-ended questions are used instead of closed-ended questions because they elicit more answers from the participant. For instance, open-ended questions encourage a participant to self-reflect on their past drinking behavior, which allows the participant to do most of the talking. Affirmation recognizes the client's strengths, good efforts, and capabilities (Miller, M. et al., 2013). Affirmation is used in an effort to disarm the client, thus reducing resistance (i.e., the client needs to feel better about themselves). An example of an affirmation statement is "I really appreciate your honesty." Reflection is a technique in which the interviewer paraphrases the complex reflection and puts the spotlight on the change. Miller M. et al. 2013 state, "Reflective statements that make a guess about client's meaning have the important function of deepening understanding by clarifying whether one's guess is accurate" (p. 34). For example, an interviewer might reflect back their statement as "What I hear you saying is that you are worried that you are hurting your parents." Summarizing is a long reflection from the interview that "draws together the person's motivating

intentions, and specific plans for change” (Miller & Rollnick, 2013, p. 34). Examples of summarizing are “It sounds like you’re trying to reduce your drinking so that your parents don’t make you quit school,” and “Where do you think we should go from here.”

Cognitive Behavioral Skills

Cognitive behavioral skills combine correct information, campus norms, and protective behavioral strategies. In addition, specific cognitive behavioral skills (i.e. setting a limit, pacing their drinks, documenting daily alcohol consumption, changing perceptions, and managing stress) can be taught to reduce risky drinking and alcohol related harms. As a result, risky drinking situations can be discussed and alternatives identified. The Blood Alcohol Concentration (BAC) chart is an example of a cognitive behavioral skill because it is an excellent tool to teach students how to monitor their own drinking behavior. Blood Alcohol Concentration charts can also be used to create awareness. Although the majority of cognitive behavioral skills are considered effective in reducing risky drinking behavior (Cronce & Larimer, 2011), not every author agrees that the BAC chart (used as a stand-alone intervention) is effective in reducing alcohol consumption. For example, two studies (Glindeman, Wiegand, & Geller, 2007; Thombs et al., 2009) investigated the efficacy of a cognitive behavioral skills intervention utilizing the BAC chart with personalized feedback. Glindeman et al. reported a reduction in BAC after the intervention; whereas Thombs et al. found that individuals demonstrated an increase in BAC.

Protective Behavioral Strategies

Martens et al. (2011) describes protective behavioral strategies as those cognitive behavioral strategies that a person can use while out drinking to protect themselves from further

alcohol-related harms. Protective behavioral strategies have been used as stand-alone components. Protective behavioral and harm reduction strategies are used interchangeably in the literature. Individuals who are choosing to practice safer drinking behaviors, and reduce major harms are practicing protective behavioral/harm reduction strategies (The HAMS Harm Reduction Network Inc., 2008). Alcohol abstinence is pursuing harm elimination rather than harm reduction. The HAMS Harm Reduction Network refer to harm reduction strategies as the following: 1) planning ahead (e.g., if the student has a tendency to drink and drive, give the car keys to a trusted friend, so that it is not possible to drive); 2) drink at home; 3) party with a trusted friend; 4) carry condoms; 5) use supplements (e.g., vitamin C); 6) avoid impulse drinking; 7) avoid blackouts; 8) eat before drinking; 9) stay hydrated; 10) slow the drinking pace; 11) sleep; 12) reduce daily alcohol consumption; and 13) avoiding alcohol-related harms. An example of avoiding alcohol-related harms would be a student who may attend a party with several friends, and plan ahead by arranging a ride home. Studies (Larimer & Cronce, 2007; Martens et al., 2011) have found that interventions incorporating protective behavioral strategies (which include a skills training component) are a strong mediator of the effectiveness of the alcohol intervention program because students routinely use these harm minimization strategies. Haines, Barker, and Rice (2006) suggest that college students may be more likely to learn and apply protective behavioral strategies.

LaBrie, Lac, Kenney, and Mirza (2011) investigated the efficacy of stand-alone protective behavioral strategy interventions and how these strategies mediate the effects of drinking motives on alcohol use among 1,592 college students from a private and public university who identify as heavy drinkers. The Drinking Motives Questionnaire (DMQ-R;

Cooper, 1994), the Protective Behavioral Strategy Scale (PBSS; Martens et al., 2005), and the Daily Drinking Questionnaire (DDQ; Collins, Parks & Marlatt, 1985; Dimeff et al., 1999) were measures used. A mediational model evaluated “the effect of drinking motives on level of alcohol consumption and whether this pathway was statistically mediated through the usage of PBS” (LaBrie et al., p. 356). Results revealed that higher drinking motives predicted decreased use of protective behavioral strategies. Additionally, usage of protective behavioral strategies predicted reduced alcohol consumption. Consistent with previous studies, females use protective behavioral strategies more than males.

Delva et al. (2004) conducted a study on 1,043 college students at a large public university. Both male and female students reported binge drinking at least once in the last two weeks. Delva et al. attempted to: 1) identify protective behaviors that students’ age 18-21 years old use when going out drinking; 2) describe how many protective behaviors students engage in when going out drinking and; 3) whether these students’ experience less alcohol-related harms. Sixty-eight percent of the sample student population was female. After assessing college students’ use of protective strategies, Delva et al. (2004) found that three-fourths of all college females reported using a designated driver after drinking, or eating before or during drinking, and 65% reported keeping track of drinks. The protective behavior used least by female students was drinking a look alike (i.e., punch or non-alcoholic beer) while out partying. Forty-three percent of the female students reported that the most common reported alcohol-related harms were doing something that they later regretted. Delva et al. indicated that 71% of male students reported eating before or during drinking, and 64% reported using a designated driver after drinking, and 64% reported keeping track of the number of drinks. They also indicated that the

most common reported alcohol-related harms by males (47%) were doing something that the student later regretted. Other research (Martens et al., 2004) reported that the protective behaviors used least included choosing not to drink alcohol, alternating nonalcoholic with alcoholic beverages, drinking alcohol look-alikes, and pacing their drinks. These findings indicate that students who engaged in protective behaviors were less likely to experience alcohol related harms.

Alcohol Use Disorder Identification Test (AUDIT)

The Alcohol Use Disorder Identification Test (AUDIT) is often conducted in prevention of substance abuse events at colleges and universities to identify heavy drinkers or problem drinkers and create awareness. The AUDIT is considered to be a multicultural sensitive self-reported screening instrument to identify individuals at higher risk of experiencing a broad range of alcohol problems. The AUDIT is a 10 item questionnaire which includes three questions about alcohol consumption, four questions on dependence, and three on consequences. The 10 item questionnaire has a score ranging from 0-41. A score greater or equal to 6 is considered problematic (Ehrlich et al., 2006). O'Hare (2000) conducted a study of 376 college freshmen, who received alcohol violations, and tested the predictive power of the AUDIT. The study revealed that the AUDIT was the best predictor of personal and social problems and is recommended in alcohol intervention programs. Additionally, evidence suggests that the AUDIT was developed to provide a brief detection of alcohol abuse. The AUDIT is a reliable measure with high internal consistency (Bohn, Barbor, & Krazler, 1995).

Computer-Based Interventions

Computer-based interventions are online alcohol intervention programs. Most large universities require their first year college students to complete one of these computer-based interventions. *AlcoholEdu and EChug* are computer-based interventions targeting first year college students. AlcoholEdu and EChug motivate behavior change by teaching students to practice safer decision making, resetting unrealistic expectations about the effects of alcohol, and engages the student to create a healthier campus community. Both of these programs consist of pre-and post-exams, a behavioral survey, and goal setting plans. Additionally, they also offer specific computer-based programs that target mandated students, members of Greek life, and athletic groups. AlcoholEdu suggest it is the only intervention program that demonstrates effectiveness to reduce alcohol-related harms among college students. However, EChug makes a similar claim.

Delivery Method Preference

The delivery of an intervention program has produced significant inconsistencies in the research. One method is delivered via face-to-face to an individual, or to a group setting. Butler and Correia (2009) found that the effects of providing face-to-face personalized feedback and computerized feedback were both rated as acceptable methods for reducing alcohol use on college campuses. However, the face-to-face personalized feedback was somewhat more favorable than a computer-based feedback intervention. Elliott, Carey, and Bolles (2008) reviewed 17 randomized controlled trials in which they compared the effectiveness of computer-based interventions with other commonly used strategies (e.g., face-to-face interventions) and found that computerized interventions reach more individuals, cost less, and can lead to more

honest answers. However, other evidence shows that face-to-face interventions are more effective than computerized programs in changing drinking risky behavior. Elliott et al. describe a face-to-face intervention as having more therapeutic benefits than a computer based program.

Carey, Scott-Sheldon, Elliott, Garey, and Carey (2012) conducted a meta-analytic review (1998-2010) comparing two approaches (face-to-face and computer delivered interventions) and identified controlled trials for both. The goal of the analysis was to determine the efficacy of both of these programs and to test predictors of intervention efficacy. The face-to-face interventions include ($n = 5,237$); 56% females and 87% White college students. The computer delivered interventions include ($n = 32,243$); 51% female, and 81% White college students. Findings showed that students who participated in the face-to-face interventions had fewer drinking frequencies and less alcohol related harms (compared to controls) at short-term, intermediate, and long-term follow-ups. The computer delivered interventions resulted in less drink frequencies (compared to controls) only at short-term follow-up. Participant and intervention characteristics are identified as moderators that influence the efficacy of the intervention. Thus, when comparing face-to-face interventions to computer-delivered interventions, Carey et al. (2012) indicate that face-to-face interventions are more effective than computer-based interventions, and reduce risky drinking behavior and alcohol related harms.

Cadigan et al. (2014) analyzed 13 manuscripts which demonstrated that both face-to-face motivational interventions ($N=1,240$) and computerized feedback interventions ($N= 1,201$) are effective in reducing alcohol use and alcohol-related harms among college students when compared to the control group at short follow-up (≤ 4 months). However, at long follow-up (> 4 months), face-to-face motivational interventions impacted overall drinking frequency and

quantity in comparison to computer-based interventions and control group which included education only. This data indicates that study participants perceived personalized feedback delivered face-to-face as more beneficial than feedback delivered via a computer-based intervention. Cadigan et al. (2014) suggests that researchers continue to compare delivery modalities (e.g., face-to-face interventions or computerized feedback interventions) and examine the face-to-face intervention at longer follow-ups (≥ 4 months).

Summary

Since risky drinking behavior in college students has been noted in the literature as a major issue facing colleges, it is imperative that evidence-based alcohol intervention programs are developed and implemented in an effort to reduce alcohol-related harms (i.e., unintentional injuries, blackouts). The Task Force has identified Tier 1 interventions that are evidence-based and have demonstrated effectiveness in reducing drinking frequencies in college students. Findings indicate that alcohol intervention programs that utilize several components are more effective in reducing risky drinking behavior and alcohol-related harms than education/assessment only programs. Although most research studies in the literature have shown that alcohol interventions can reduce alcohol related harms and reduce alcohol consumption in college students, the sample population used in these studies is mostly voluntary, not mandated, or heavy drinkers. The heaviest drinkers are also considered high-risk or at-risk individuals, and are described in the literature as freshmen, white males, Greek members, athletes, and mandated students.

Research indicates that efficacious alcohol interventions will consist of 1) a combination of cognitive behavioral skills, enhanced motivational intervention with MI, and norms

clarification; 2) Enhanced motivational interventions with MI; and 3) alcohol expectancy challenges (NIAAA, 2007). Students who received interventions that included these strategies reported lower alcohol consumption and fewer alcohol-related problems post-intervention than the controls. However, the literature also suggests that research studies have demonstrated inconsistent outcomes among mandated college students. As a result, a gap in literature exists regarding research studies producing consistent outcomes for alcohol intervention programs among mandated college students. In addition, studies focusing on why and when a student decreased his or her alcohol consumption have been somewhat addressed in voluntary students, but not addressed in mandated students.

There are no known phenomenological studies exploring the protective behavioral strategies used by students after participation in a mandated alcohol intervention programs (Cronce & Larimer, 2011). Few studies explore the factors that influenced a motivation to change in attitude and or behavior of a mandated student. Quantitative research methods may not reveal the full experience of participating in the mandated alcohol intervention program because surveys offer select answers for the participant. Qualitative research methods allow the participants' words to reveal the thick, rich descriptions of the emergent phenomenon detailed in the participants' own essence of the meaning. Qualitative data, in the words and categories of participants, lend themselves to exploring how and why phenomena occur.

CHAPTER III: METHODOLOGY

The beginning of this chapter presents the research questions; qualifications of the researcher; selection of the participants, discussion of the research methodology and design; and the instrument to be used. An overview of the procedure for data collection, type of analyses and ethical assurances are presented.

Research Questions

The general research questions are:

- 1) What protective behavioral strategies are college students currently using when going out drinking?
 - a. Do college students use the protective behavioral strategies that were presented in the alcohol intervention program?
- 2) How does the student describe his or her own drinking behavior at the time of receiving the alcohol violation?
- 3) How does the student describe his or her experience in the mandated alcohol intervention program?
 - a. What are the key components from the alcohol intervention program that students learned?
 - b. Which components, if any, within the intervention, are perceived as helpful or unhelpful?
- 4) What do students perceive to be the factors, if any, that influenced a motivation to change their attitude and or behavior about drinking?

Qualifications of the Researcher

The researcher/facilitator is a doctoral graduate student in the discipline of Community Health Promotion and has three years experience facilitating the mandated alcohol intervention program called SPARK. The researcher is trained in using a semi-structured training curriculum, which consists of motivational interviewing, cognitive behavioral skills, and delivering personalized feedback from the AUDIT, and behavior change contracts. However, the researcher/facilitator is not a licensed clinician or licensed alcohol counselor.

Participants

Participants consist of only those college students who were mandated to attend the SPARK program from 2011-2014 (See Ch. 1, Operational Definitions, for a detailed explanation of the program). In-depth interviews were conducted with students ($n = 20$) who self-identify with being sanctioned by the same university, and shared the same experience of attending two 1-hour alcohol intervention sessions with the same facilitator at a large Southern university. Participation in the study was voluntary and the college students had the opportunity to end their participation in the study at any time without risk or harm. College students were compensated with a \$25.00 Visa card for a 1-hour interview session. Approximately 150 students completed the alcohol intervention program from 2011-2014. Every student who participated in the SPARK program was contacted by email (see Appendix B) and asked if they would be willing to participate in the research study. Seventy five students responded to the email and stated that they would be willing to participate in the research study. A random sampling technique using Excel was conducted and 20 students were selected to participate in the study. By generating a random sample, bias was minimized. The Institutional Review Board approved 20 students to be

interviewed for the research study (Appendix C). Creswell (2009) and Ryan and Bernard (2003) recommended 10-20 participants as an appropriate sample size for this type of phenomenological research study because saturation can often be accomplished.

Qualitative Approach

Creswell's (2009) phenomenological qualitative methodology and analysis methodology, in combination with Kvale's (2007) qualitative interview methodology was utilized to direct the interview protocol. The interview process was conducted in an environment of safety and trust as Kvale suggests. The methodological approach was grounded in Lincoln and Guba's (2000) philosophical social constructivist paradigm (also referred as one's worldview), which consisted of a basic set of beliefs that guided the researcher into taking action. The constructivists' paradigm consists of knowledge that is constructed by those involved in the research process. The goal of the social constructivists is to rely as much as possible on the participants' perspectives of the situation in which they are being studied. Lincoln and Guba (2000) describe social constructivism as humans constructing meanings based on historical and social perspectives that we are born into. Thus, the researchers sought to understand, describe, and interpret the setting the participants are experiencing, as well as recognizing personal background and experience in the setting and situation being studied. The intent in using social constructivism was to try and understand the participant's view of their experience and inductively gather patterns of meaning. Creswell's (2009) methods of inquiry include phenomenological reflection on data elicited by existential investigation of students' perspectives. The current study involved a person-centered holistic approach, and an emic perspective of inquiry. Emic refers to deriving meaning from a participant's view. Inductive

logic allowed the researcher to gather information through extensive interviews using semi-structured open-ended questions and analyze data in order to form themes. Inductive analysis is a straight forward approach for deriving findings because it allows findings to emerge from dominant themes inherent in raw data (Creswell, 2009).

Procedure for Data Collection

Prior to administering the interview, the participant read the informed consent document (Appendix D). The informed consent communicated the purpose, procedures including time, commitment of the subject, risks and benefits of the study, and the confidentiality of their information. Participants were given a specific time and place to attend a face-to-face individualized interview session in the university health center. The researcher conducted all interviews in a quiet, private room in the university health center (i.e., the same room in which the intervention was held to ensure confidentiality). The participant was greeted upon entering the room (see Interview Protocol, Appendix E). The researcher was the only person in the room with the participant during the interview process. The participant read and signed an informed consent form before the interview. The participant was assigned a code number (e.g., SPM1 which is defined as SPARK Participant Male #1). A \$25.00 Visa gift card was placed on the table (near the recipient) as an incentive to participate. The participant was then told that the tape recorder will be turned on. Each interview session was audio-taped and observation notes were made by the researcher regarding the student's body language, mannerism, and tone of voice. The interview questions were asked in a neutral tone voice. The researcher refrained from any comments or facial expressions in an effort to not convey a sense of judgment. The interviews utilized semi-structured, open-ended questions that were intended to be non-leading.

Following each central question, probe questions were utilized (if the participant did not seem to understand the initial question or provide enough information). Interviews were directed by the participants' responses so that the researcher was able to probe for greater detail when the participant stated something relevant to the research questions. After completing the interview questions, the demographic items were asked. After the 1-hour interview session, the student was thanked for his or her participation in the study and asked to complete all required forms and sign the forms in order to receive the \$25.00 Visa gift card. After each interview session, the audio-tapes were transcribed verbatim. Interview transcriptions were combined with observational notes taken after each interview to create a thick rich description. The researcher checked accuracy of transcriptions with any written notes taken during the interview process to ensure accuracy. Hardcopies of the transcripts (including the signed informed consent form, instrument paper, and audio tapes) were kept in a sealed envelope and stored in a locked cabinet.

Instrumentation

The interview protocol for this 21 demographic items (Appendix F), and 4 open-ended semi-structured interview questions and probes (Appendix G). Demographic items and interview questions were derived from existing research findings and knowledge gathered from facilitating the SPARK program. The interview questions were directed towards understanding and describing protective behavioral strategies that students may use when going out to drink, whether or not these strategies resulted from the alcohol intervention program, and what factors motivated the student to change his or her attitude and or behavior regarding their risky drinking behavior.

Qualitative Analyses

Open-ended data were coded using inductive and enumeration coding based on Creswell's (2009) methodology in combination with Colazzi's (1978) coding techniques. Each participant was assigned an ID name. The ID name and verbatim responses were copied into a word document. Responses from each participant were separated by the research questions, and examined individually.

Creswell (2009) and Colazzi (1978) suggest 5 steps when coding qualitative data. The first step involved reading the transcribed data line by line. The second step consists of extracting significant statements and phrases (dividing the data into meaningful units) from each transcript "that directly pertain to the phenomenon being studied" (Colazzi, 1978, p. 49). Meaningful units are segments of the text that appears to answer the semi-structured research questions or to reveal a possible emergent theme. Meaningful units were then underlined and color coated. The responses are divided into separate lines when the respondent gives more than one response. This step involved utilizing a coding process which requires identifying and labeling the text data with numerical codes (i.e. numerical codes number 1-162). A numerical code was assigned to each significant and salient word, phrase, sentence, and paragraph for every participant's responses for each research question (Creswell, 2009). *In vivo* coding (actual words used in text), segments of the text, and word frequencies determined the coding scheme. Numerical codes were created for every response that answered research questions. The numerical codes represent *in vivo* coding and segments of the text. There were 162 numerical codes that were identified from the text. An Excel spread sheet was created to label the numerical codes 1-162 for every participant. Data frequencies were analyzed by number of

responses for each participant. This coding process is called enumeration. Enumeration coding is defined as counting the numbers of times a word or phrase appears in the text (Strauss, 1987). The frequency of responses for every participant was tabulated. In addition, data frequencies were analyzed and compared by number of responses for females and for males.

The third step involved reading through all the data and gaining a sense of the information and its overall meaning. Potential meanings of the statements made by participants were assessed when conducting meaning field analysis. The students' self-reported experiences were the unit of analysis.

The fourth step consisted of organizing the formulated meanings into groups. Coding the data enabled the researcher to organize and group similarly coded data into themes, because they shared similar meanings. Overlapping of similar phrases or words and patterns were identified and were clustered together and labeled with topics/meaning units. Topics/meaning units that were similar to each other were combined, and then turned into sub-themes, and themes. Next, a coding framework was developed, which is a record that contains a list of codes that are used for coding the data (see Appendix L). The coding framework consists of a label for each significant word and phrase.

The last step involved interpreting the findings by reviewing and identifying relationships among the themes. Ryan and Bernard (2003) states, "Without thematic categories, investigators have nothing to describe, nothing to compare, and nothing to explain" (p. 86). Themes that were deemed of importance were the highest frequency responses overall, as well as outlier, which were generated from the open-ended interview questions. Although some themes were

anticipated due to the nature of the semi-structured questions, themes emerged that were not anticipated.

Frequencies were calculated for the demographic variables for gender and age. Further simple descriptive analyses were performed to determine the frequencies for sample characteristics (see Table 1). The outcomes produced nine themes and four overarching principles identified in the text. Afterwards, data collected from the female participants were grouped separately from those collected from the male participants throughout the coding process. When reporting the findings, the salient themes are used as the headings and the sub-themes are used in sub-headings. The themes are described in detail and include quotations from the text in an effort to illustrate the meanings. The last step included interpreting the results.

Ethical Assurance

Qualitative researchers, in the social and behavioral science field, utilize various validation strategies that are considered credible and rigorous (Creswell, 2000). In a constructivist paradigm utilizing a phenomenological methodology, it is important for qualitative researchers to think in terms of trustworthiness, which consist of credibility and dependability. Creswell (2009) depicts trustworthiness in qualitative research as comparable to validity in quantitative research and dependability in qualitative research as comparable to reliability in quantitative research. The credibility of the current findings was enhanced by conducting a research audit (i.e., comparing my data with other research findings) and describing experiences in narrating the themes. Creswell (2009) reports that counting words and phrases can be used for verifying and documenting the researchers' findings as well as helping the researcher represent the experiences and events. Creswell also reported that counting words and phrases from the text

helps the researcher identify patterns in data while avoiding overemphasizing certain experiences from the program that may represent bias from the researcher. Beck (2003) suggests that counting words and statements help generate meaning of themes and can help identify patterns and categories in the data text. Response frequencies are used to document and verify my data interpretations of the findings.

Bracketing (often referred as phenomenological reduction) was also used in an effort to put aside repertoires of knowledge, beliefs, and values in order to accurately describe the student's experience in the intervention program. Bracketing is a process of holding back one's assumptions or judgments about the phenomenon in an effort to see it clearly (Zenobia, Chan, & Wai-tong, 2013). Laverty (2003) states, "Bracketing, which is incorporated into intentional focusing on the experience, is one factor that is central to the rigor of the study" (p. 23). In the current study, personal notes were taken regarding comments that had been taken during the interview if the researcher believed them to reflect bias. In addition, the researcher also avoided facial expression, and controlled tone of voice, as well as created an environment in which the participant felt that he or she can express his or her feelings without fear of retribution (e.g., a quiet, private interview room), which are examples of bracketing. Thus, bracketing ensured the validity of the data collection and analysis process (Ryan & Bernard, 2003). Bracketing was developed by Husserl (1859-1938) who was often referred as the father of phenomenology (Laverty, 2003). Husserl described bracketing as a necessary process in developing a non-judgmental study. The results are presented in descriptive, narrative form rather than as a scientific report.

CHAPTER IV: RESULTS

The current phenomenological, qualitative study interviewed students previously mandated to attend the alcohol intervention program called SPARK. The purpose of the study was to explore the influence of an alcohol intervention program, implemented in one large Southern university, on college students' attitudes, behaviors, and knowledge of students who had been mandated to attend the program.

Demographics

Demographic information was complete for 20 participants of the entire sample and presented and summarized in Table 1. Participants were primarily male ($n = 13$, 65%), heterosexual ($n = 20$, 100%), and Caucasian ($n = 17$, 85%). Mean age was 18.8. They were primarily freshmen ($n = 10$, 50%) and sophomores ($n = 5$, 25%), and lived in residence halls ($n = 15$, 75%). Over half reported a Greek affiliation ($n = 12$, 60%). Sixty percent reported no family history of alcoholism ($n = 12$). A majority of participants reported being permitted to drink alcohol with their family ($n = 14$, 70%).

Emergent Themes

As a result of the analysis, nine overarching themes emerged (see Tables 3-10) with corresponding sub-themes related to the student's reported experiences of the SPARK alcohol intervention program. The first overarching theme identified program characteristics. Within the first overarching theme, several sub-themes emerged. The first sub-theme in Theme 1 revealed that self-reflection/self-realization is more frequently reported. The second sub-theme

in Theme 1 related to meeting face-to-face for the intervention. The third sub-theme in Theme 1 revealed other factors (i.e., educational materials).

The second overarching theme that emerged was facilitator characteristics. Within the second overarching theme, several sub-themes emerged. The first sub-theme revealed the importance of a facilitator's personality characteristics (e.g., caring, kind). The second sub-theme that emerged was facilitation skills (e.g., good listener). The third sub-theme revealed other aspects (e.g., "if it isn't you, then someone in a lab coat").

The third overarching theme revealed factors influencing motivation to change. Within the third overarching theme, sub-themes and sub-sub-themes emerged related to single factors and multiple factors influencing motivation to change. While the majority of participants mentioned only one factor (i.e., SPARK only); the minority of participants mentioned a combination of factors which influenced motivation to change. The factors influencing motivation to change were identified as SPARK, incident, personal reasons, sanctions, and no change.

The fourth emerging theme encompassed applying protective behavioral strategies. Within the fourth overarching theme, sub-themes emerged related to strategies (e.g., avoiding alcohol-related harms, limiting/ quitting drinking, and modes of drinking) which were applied while out drinking.

The fifth emerging theme was cognitive behavioral skills learned in the SPARK alcohol intervention program. Within the fifth theme emerged four sub-themes: BAC chart, harm reduction strategies, making a plan, and how alcohol affects men and women differently. Cognitive behavioral skills were components presented in the SPARK program.

The sixth emerging theme was the timing of the SPARK intervention program. Within the sixth theme emerged three sub-themes: as soon as possible to 3 weeks, 1-3 months, and the timing would depend on the person.

The seventh overarching theme is related to the participant's denial of a drinking problem. The eighth theme that emerged is the delivery method preference of the alcohol intervention. One delivery method was receiving the SPARK alcohol intervention program via face-to-face personalized feedback by the facilitator/researcher. The other delivery method was delivered via a computer-based alcohol intervention program, which was required to be completed prior to attending the SPARK alcohol intervention program. The computer-based alcohol intervention program was not associated with the SPARK alcohol intervention program. However, the computer-based intervention program is often required to take by those students as a result of receiving alcohol violations.

The ninth theme to emerge is drinking behavior at time of violation. Within this theme revealed four sub-themes: binge drinking, minimal drinking, not drinking at all, and perceptions of why students binge drink.

Theme 1: Program Characteristics

Theme 1 addressed program characteristics. Program characteristics are those characteristics that are presented in the SPARK alcohol intervention program and accounted for 36.04% (280 of the total 777 responses). The SPARK alcohol intervention program is delivered via face-to-face, in which the facilitator gives personalized feedback. The facilitator utilizes a MI communication method during the intervention sessions. Within this theme, three Sub-themes emerged: 1.1) self-reflection/self-realization; 1.2) face-to-face; and 1.3) other factors.

Table 3 presents a summary of the program characteristic theme and sub-themes by frequency of response.

Sub-theme 1.1: Self-Reflection/Self-Realization.

A sub-theme emerged related to self-reflection/self-realization. This sub-theme included responses that participants made to describe helpful components of the SPARK alcohol intervention program. Approximately 60% (167 out of 280 responses) of the participants reported self-reflection/ self-realization. Males (57%) and females (67%) reported self-reflection/self-realization. One participant (SPF2) expressed (almost in tears) how ashamed and embarrassed she felt as a result of the alcohol violation she received. She stated,

In the interview, I realized that this experience is real, and when you say it out loud, and relive the experience. I think that it was very helpful to come in and talk, and write it down. Once you write it down, or say it out loud, it makes it reality. You can't pretend it didn't happen.

SPM14 attended the SPARK program two years prior, reported counting out the quantity of alcohol drinks (i.e., self-reflecting in the initial SPARK session) he was consuming while out partying. He stated,

I remember going through the interview and counting out my drinks to you and saying to myself, oh my gosh, maybe I should take it down a notch. Just seeing how much my BAC was when I was drinking that night. I never really thought about it like that. I've never thought about my drinking in that light before. I used to think, I'm a tank, I can drink a lot and then when we went through what I was drinking and what my BAC would be, I thought, whoa!

Another participant described his experience in the SPARK program very passionately. His demeanor suggested he was appreciative and sincere. SPM12 stated, "I think being able to talk about everything and learning the facts and knowing how to let it never to happen again..." One participant described how she was able to learn cognitive behavioral skills from the program

(i.e., BAC) because she was able to write out how much she was drinking (e.g., self-reflecting) on the day she received her alcohol violation. She also did not realize the quantity of alcohol she was consuming, nor did she realize what kind of alcohol she was drinking while out partying.

SPF5 stated,

When we did the breakdown of how much I was drinking on the day of the [incident] and how you said that how a shot is the same as drinking a beer really fast and how much alcohol really is and how much I'm drinking and I didn't even know what I was drinking, because I didn't even know what was in it. Just realizing how much I'm actually drinking. I never thought that I would get alcohol poisoning-that really started to make me think, like maybe I should be more cautious, because I should know if it ever gets too much.

Sub-theme 1.2: Face-to-Face.

A sub-theme emerged identifying the importance of meeting face-to-face. A response was coded under this sub-theme if the respondent mentioned face-to-face, 1-on-1, or personable.

The word personable in this sub-theme related only to the program characteristics.

Approximately 32% (90 out of 280 responses) in Theme 1 related to face-to-face personalized feedback. Males (39%) and females (30%) reported personalized feedback via face-to-face.

The word *personable* in the following quote is referring to how the program was perceived to be geared towards their personal issues, and their problem on a personal level, and that the SPARK program was not a "one size fits all" type of intervention program. SPM6 stated,

The program was really personable, just one on one. I liked the fact that it was more personable. It was nice to have someone listening to me and give me feedback to be honest. The SPARK program you have to talk to someone 1-on-1, so you have to pay attention and make sure that you're in the moment and focusing on trying to get better...

Participant (SPM12) described how meeting with someone in person helped him to feel better about himself. He stated,

I think meeting with someone in person as compared to the online program did help a lot. And just going over and just talking to you about my incident did help me because I mean- since my parents live far away, I didn't want to talk to them about it, and then I got in trouble. SPARK did help me and I did learn a lot. And then just being able to talk about it, and just getting everything off my chest (I guess you could say) made everything better.

Although participants perceived the 1-on-1 feedback as helpful, participants also described how the SPARK program helped them to change their drinking behavior, as well as help with their personal problems. For example, SPF13 stated, "I made a big change-coming here really helped in the one-on-one, really helped me open up, it helped a lot. It really helped me with the alcohol problems and outside the alcohol problem." SPM6 stated, "I just think that the 1-on-1 is what I liked the best."

Sub-theme 1.3: Other Factors.

This sub-theme addressed other factors (e.g., educational material) that did not fit in a particular category regarding program characteristics. Other factors accounted for 5% (14 responses) in theme 1. Males (4%) and females (6%) reported other factors. SPM12 stated, "Everything was positive about it. The program touched base about things that I didn't know about." SPM15 reported how the SPARK program educated him and gave him the proper tools to make changes in the future. He stated, "The program helped me to label what is moderate drinking and educating me. I had the tools after the program. I just didn't decide to use them until a year later." SPM4 described the program as factual and non-opinionated. He stated, "This program was just mellow and understanding, which was really good. It was factual, not opinionated."

Theme 2: Facilitator Characteristics

Theme 2 addressed facilitator characteristics (90 out of 777 total responses). Three sub-themes were identified: 2.1) personality characteristics; 2.2) facilitation skills; and 2.3) other aspects. The majority (69%) of the participants reported personality characteristics, 18% reported facilitation skills, and 13% reported other aspects (e.g., if not you, then someone in a lab coat) in theme two. Table 4 presents a summary of the characteristics of a facilitator by frequency of response.

Sub-theme 2.1: Personality Characteristics.

The first sub-theme identified personality characteristics (e.g., caring, understanding). A response was coded under this sub-theme if it was clearly identified by the respondent as a personality characteristic. Approximately 69% (62 out of 90 responses) related to personality characteristics in Theme 2. Some participants expressed how important it is to meet with a person who cares about them. SPM13 who attended the SPARK program 1 ½ years prior stated, “You really cannot replicate a person-to-person contact who cares about the student.” SPM6 described that he liked the program because he believed that the facilitator cared about him as a person. He stated, “It was just-you don’t have any other distraction and the facilitator cared, and cares that you don’t go out and make the same mistakes. That is just nice.” Another participant (SPF16) mentioned that the facilitator personalized the SPARK program to meet their needs. She stated, “You made it very personable- for like this is how you should be drinking for you, and this is totally different than for other people.” SPM4 stated, “The person should be understanding and not pushy.”

The majority of participants reported that the facilitator did a good job while presenting information in the initial SPARK alcohol intervention program. SPM12 stated, “Everything that you did do in the program, you did a good job at.” One participant’s (SPM18) words seemed to indicate being disgruntled over the sanctions he received from the university. However, he was complimentary about the SPARK facilitator. He stated, “Well, you are very nice, very supportive.” SPM12 described how nervous and embarrassed he was to come in and talk to someone about his drinking behavior. However, once he met the facilitator, he perceived the environment to be welcoming. He stated, “But once I came in and talked to you- it was perfectly fine. I think I felt OK because you welcomed me-and just being nice to me made me loosen up.”

Sub-theme 2.2: Facilitation Skills.

The second sub-theme identified facilitation skills. Approximately 18% (16 out of the 90 responses) in Theme 2 related to facilitation skills. This sub-theme included responses that participants made to describe effective facilitation skills. Descriptive words such as non-accusatory, nonjudgmental, and open-minded were a few responses from the participants as facilitation skills needed. One participant (SPF8) reported that an effective facilitator should be more neutral, and not accusatory or authoritative. She stated, “Someone who is more neutral and not there to lecture you, like say what you did wrong.” One participant (SPM9) mentioned how an effective facilitator should understand how to relate to someone in their age group. He stated, “...someone who understands what your age is, and knows where you’re coming from- and not tell you what’s right, just lead you, like this is what you’re doing-and this is what

happened. SPARK is more helpful.” One participant (SPM11) mentioned that an effective facilitator should have good listening skills, be intelligent, and be committed to their job. He stated,

I think they have to be good listeners and intelligent about what they are talking about-know the material, have people skills-being able to listen to people or myself rambling is an important skill for your job-caring about what people are doing, cause you wouldn't be here if you weren't committed to what you are doing.

Sub-theme: 2.3: Other Aspects.

The third sub-theme identified other aspects (e.g. not a student) that pertained to facilitator characteristics. Approximately 13% (12 out of 90 responses) in this theme cited other aspects that did not fit into a certain category. SPM19 reported that a facilitator should be older than an undergraduate student. He stated,

I think that the person has to be older. I don't think they can be a student-cause if you have students-well, maybe a grad student would be OK, but not an undergraduate student-you can tell the difference between the two.

One participant (SPF13) described how she would not be as honest if the SPARK intervention program were held in a group session. She also mentioned feeling worried that students in the group session might gossip to other people. She stated,

If in a group... I would be thinking about what are these people [in the group] going to think of me, and who are they going to go tell. I would be wondering who the group people were going to tell my stuff to. Are these people going to hunt me up afterwards. I might not be as honest if I were in a group session.

Theme 3: Factors Influencing Motivation to Change

Theme 3 related to factors influencing a motivation to change. A response was coded under this theme if it was clearly identified by the respondent as a factor which influenced a motivation to change. These categories included responses that participants made to describe the

point in time or event that may have influenced a motivation to change. For example, several participants cited that the harsh university sanctions made them quit drinking; whereas other participants may have mentioned several factors (reasons) of why they slowed down their drinking behavior. Table 4 presents a summary of factors influencing a motivation to change.

Within Theme 3, two sub-themes emerged: 3.1) Single factor; and 3.2) Multiple factors. Within both of these sub-themes emerged five factors influencing a motivation to change: 1) the alcohol intervention called SPARK; 2) Incident; 3) Sanctions; 4) Personal Reasons; and 5) no change. The majority of participants ($n=13$, 65%) reported a single factor; whereas ($n=7$, 35%) reported multiple factors influencing their motivation to change. Of the 31 total responses from sub-theme 3.1 and 3.2, SPARK accounted for 35.48% of these responses; incident accounted for 25.81%; sanctions accounted for 22.58%; personal reasons accounted for 12.90%; and no change accounted for 3.23%.

Sub-theme 3.1: Single Factors Influenced Motivation to Change.

Out of 20 participants, 65% ($n = 13$) reported single factors that influenced motivation to change. This sub-theme included responses that participants made to describe what influenced them to change their drinking behavior, if they changed at all. The following Sub-sub-themes (3.1.1-3.1.5) were noted by participants as the only factor that influenced motivation to change. Out of the 13 responses indicating a single factor motivated change, SPARK accounted for five responses (38.46%) and the incident accounted for four responses (30.77%).

Sub-sub-theme 3.1.1: SPARK influenced motivation to change.

Of the single factor responses, 38.46% (5 out of 13) revealed that SPARK was the only factor that influenced motivation to change. For example, one participant (SPM14) mentioned

how he did not make any drinking changes after he received his alcohol violation; it was the SPARK program that helped him to change. He stated,

The SPARK program is when I decided to make a change, because I didn't really change after I got the violation. The one-on-one interview and reflecting back how much I drank helped me to change. I also realized I should use harm reduction strategies.

SPM6 described how he thought that going to the SPARK program was going to be dumb.

However, he realized after arriving to the program that he may have to change how he drinks alcohol in the future. He stated,

I changed after I went to the SPARK program. At first I thought this was dumb, but after I got here, that is when I decided that I needed to make that change. You don't really think that you need to change anything until you go through the program. The program gave me tools to change things and made me realize that I needed to change things, and now I feel like I have the tools to change my behavior for the better.

Sub-sub-theme 3.1.2: Incident influenced motivation to change.

Of the single factor responses, 30% (4 out of 13 responses) revealed that the incident was the only factor that influenced a motivation to change. One female (who never drank alcohol before receiving the alcohol violation) reported how the incident made her change her drinking behavior. She also described how horrible her experience was the night she received the alcohol violation, then afterwards she decided never to drink again. SPF2 stated,

The [incident] made me change. I quit drinking...I just drank that day because my friend invited me and I had never done it before, and that was stupid of me. You could get arrested on your first drink or your last drink.

One participant (SPM10) described how he learned that jungle juice was very dangerous. Although he reported that the only factor that made him change was the incident, he also described how he is now applying what he learned from the SPARK program. He stated, "The [incident] made me change. I felt very down. I drank jungle juice. I felt like I got something

out of the program, cause I'll never drink jungle juice because of what you told me." SPM9 described how the incident caused him to change. He stated, "When I got in trouble, I realized I needed to change."

Sub-sub-theme 3.1.3: Sanctions influenced motivation to change.

One out of 13 participants reported that sanctions were the only factor that influenced a motivation to change. SPM4 stated, "I was frustrated with receiving the violations. The biggest reason I slowed down was if I screw up again, I'm kicked out. The strict rules after receiving the violations made me livid with the university."

Sub-sub-theme 3.1.4: Personal reasons influenced motivation to change.

Two out of 13 participants reported that personal reasons were the only factors that motivated them to change their behavior. Although one participant (SPM1) reported making minimal changes in his drinking habits (i.e., only changing the location where he drinks his alcohol), he was deterred from drinking in the dorms due to the strict university policies. The participant mentioned that he was already thinking about changing his drinking behavior for personal reasons. He stated,

I thought about the components, but I was already thinking about making changes, like I was realizing my BAC and limiting my drinks. I learned from my brother's mistake, and so I know what it is like, I just know it is not worth it at all to risk any of that and get arrested and such.

Sub-sub-theme 3.1.5: No change.

One student (outlier) reported that he did not make any changes. SPM20 repeatedly mentioned that he did not have a drinking problem, so he did not change. He stated, "I didn't make a change, because I don't have a problem."

Sub-theme 3.2: Multiple Factors Influencing Motivation to Change.

Seven participants reported that a combination of factors influenced their motivation to change. One participant (SPF5) mentioned how she would still be drinking heavily if not for the SPARK program, incident, sanctions, and for personal reasons. She stated,

The [incident], SPARK, personal reasons, and the university sanctions made me change my attitude and behavior. I had never gotten in trouble before, so when I got in trouble here [the university], and it was so much stuff that I had to do. I had a lot of things that I had to do for my sanctions, so I didn't want to get in trouble. I was really scared because I didn't want to be suspended.

SPM15 expressed how his prior drinking behavior used to cause him problems (e.g. hangovers, fighting) and that he realized he was tired of waking up with a hangover. He stated,

Like I said, after the arrest, I had to tone it down. However, I was still drinking heavily because it was a habit. The real change happened a year ago with time, maturity, shifting friend groups, and observing how they drink and realizing, and that it is really out of the ordinary for someone to drink a fifth in a night. I got tired of not being able to move because I was so hung over the next day. I got tired of making really bad decisions and verbally fighting with people, just stupid stuff, I got tired of it. I just realized that stuff doesn't happen if you don't get so drunk.

Another female (SPF17) described how her parents helped her by discussing the incident with her and that SPARK helped her because she was able to self-reflect on her drinking behavior and realize that the consequences were not worth getting another alcohol violation. She stated,

It was a combination of things...SPARK helped too because of adding up the drinks from the night of my violation-and I knew that I didn't want to be sick like that again. Obviously, getting in trouble makes you be more careful, cause being in trouble and applying for internships and jobs, you don't want to have something bad on your record.

Theme 4: Applying Protective Behavioral Strategies

Theme 4 identified the protective behavioral strategies participants applied. Protective behavioral strategies accounted for approximately 13% (102 out of 777 total responses).

Protective behavioral strategies were presented in the SPARK intervention program. The three most frequently mentioned were Sub-themes: 4.1) avoiding alcohol-related harms; 4.2) limit/quit drinking and; 4.3) mode of drinking. Table 6 presents a summary of protective behavioral strategies applied by frequency of response.

Sub-theme 4.1: Avoiding Alcohol-Related Harms.

The first sub-theme in Theme 4 is avoiding alcohol-related harms. Approximately 65% (66 out of 102 responses) of participants reported avoiding alcohol-related harms. Males (62%) and females (71%) reported avoiding alcohol-related harms. Examples of avoiding alcohol-related harms consist of: 1) Choosing to have a designated driver; 2) Eating a bigger dinner before going out drinking; 3) Knowing where you will spend the night before going out drinking; 4) Going home with a friend; 5) Knowing where you are going and with whom you are going with; 6) Helping each other while drinking; 7) Making sure everyone stays together before leaving party; 8) Knowing personal issues (e.g. menstrual cycle, medicine history); 9) Holding each other accountable; 10) Don't go out drinking alone; 11) Pouring own drink; and 12) Knowing where your drink has been at all times. One participant referenced several scenarios that he applied in an effort to avoid alcohol-related harms when he was out drinking with buddies.

SPM6 stated,

You need to trust who you go out with and trust your environment. I usually go where I know a third of the people there. I don't go places where I don't know because you don't know what drinks are there or what drugs will be there. I never bring my keys if I'm drinking or anyone else's keys if I'm drinking. I don't carry my wallet cause I might spend money for no reasons.

SPM14 mentioned how he protects himself (before going out drinking) by only bringing his ID and a small amount of cash. He stated, “If I’m going to the bars, I’ll just take my ID and like \$40.00 and leave my credit card-and once I spend that, I’m like, oh, I’m done.” One female participant (SPF5) was adamant about protecting herself while out partying by writing her name on her cup, pouring her own drinks, and never putting her cup down. She stated, “I’ll pour my own drink. I write my name on my own cup. I’ll keep my cup with me at all times. I won’t even put it down. If I do put it down, I’ll get a new cup instead of using the cup I put down.” Female participants are not the only people who protect their drinks at a party. One male reported not accepting any alcoholic drinks that are given to him. SPM4 stated, “I don’t take drinks from anybody. If someone pours me a shot, I will say no thanks, and if I want a shot, I will just pour my own.” SPF16 mentioned how the SPARK facilitator discussed personal issues (i.e., starting menstrual cycle or taking medication) that may affect her while out drinking, and any precautions that she will now apply as a result of the SPARK program. She stated,

I make sure I eat. I’m a lot more careful now to look back at my day and make sure what medicine I took today; and then you had said in the program if I was going to start my period, to be more careful, so if it is going to affect me like it did last weekend, so I can kind of balance it out- I definitely would never go out by myself. I always make sure I go out with one of my good friends and hold each other accountable for sure. We always have a DD. If someone says that they have had a bad week, then someone else will say OK, I’ll watch them tonight. We really just go to fraternity parties where we know at least a couple of people at each fraternity house. So I would never be in a situation where I don’t know some guy or someone there.

SPF17 described her drinking behavior as not careful enough, and somewhat trusting of people when it comes to accepting alcoholic drinks at parties. However, she did mention that she would never go to a fraternity house by herself. For example, she stated,

I’m probably not careful enough when taking drinks from people I don’t know, cause we’re usually in a group environment and usually drinking the same thing. I don’t worry

so much. If you go in a room and they'll have a fifth of a handle- I usually don't worry about this drink cause everyone's drinking from it. I always go with a specific group of people that I go out with and I'll always stick with a friend and I never go to a house [fraternity house] by myself.

The majority of participants reported never drinking and driving. Participants often stated that they usually walk or will designate a driver. Every participant who mentioned that they were a Greek member (i.e., fraternity or sorority) stated that their fraternities have pledge drivers for members or attendees of their parties. SPF17 stated, "We always walk or have pledge drivers. None of us would ever drive to a party." Students who live off campus often reported riding an apartment shuttle that runs to and from the bars. SPM14 stated, "Sometimes I'll plan a ride, but we have a shuttle that runs from our apartment to the bars and they run every 30 minutes. We would never drive." SPM10 confirmed that he would never drink and drive, and described how he would avoid being tempted to drive. He stated, "We don't drive. We never bring our car keys. We just bring our dorm keys and just walk." However, SPM12 mentioned that he has drank and drove on several occasions, but that he is trying to improve. He stated,

I've gotten a lot better at not drinking and driving. So usually I do get a driver to come pick us up. Then, they would take us to the party, but usually I'm the person that makes sure everyone is OK at the party.

Sub-theme 4.2: Limit/Quit Drinking.

The second sub-theme in Theme 4 is limiting/quitting drinking, and is cited as one of three protective behavioral strategies. Approximately 25% (25 out of 102 responses) of participants reported limiting/quitting drinking. Males (24%) and females (26%) reported limiting or quitting drinking. SPF5 expressed how she forgets to eat (before going out drinking) because she is so busy studying before finals week. As a result, when she goes out partying in

the evening, she tends to not have any food in her body and would get extremely intoxicated.

She stated,

So, I usually try to drink water in between drinks. I hope that drinking water will help me more, because I forget to eat. I'll get to the party and my friends will remind me that I haven't eaten, and so I drink more water. I also try to limit the amount of drinks that I have, and if I feel a little dizzy, I'll stop drinking for an hour or so.

SPM15 discussed how he drinks a copious amount of water so that he remains hydrated

throughout his evening. He stated,

Yeah, I have this 32 ounces water bottle and I drink 2 or 3 of those a day, and if I'm planning on going on a bender that weekend, I'll make sure I drink 3 before the weekend, so 32 ounces times 3 is 96 ounces. I make sure that I'm hydrated before I go out. I might even take a vitamin C packet too.

SPF5 reported limiting her amount of alcohol while out partying, or simply waiting until she feels dizzy to slow down. She stated, "I try to limit the amount of drinks that I have, and if I feel a little dizzy, I'll stop drinking for an hour or so." Another participant (SPF6) reported limiting her drinks to 3 or 4 beers so that she can still be responsible. She stated,

I make sure that my stomach is full cause like I want to eat before so I will be able to have more than 3 or 4 beers without getting too drunk-and make sure that I will be able to be responsible that night, and that means setting a limit of how many drinks I have. I don't want to have more than 7 drinks.

A few male participants reported applying only a few protective behavioral strategies (i.e., planning, limiting, and drinking water) as a result of the SPARK program. SPM14 reported only drinking more water before going out partying. He stated, "I drink water before, during and after I get home if available. When I get home though, I will chug about 2 glasses of water." SPM1 reported limiting his alcohol use by only bringing a certain amount of beer to the party so that he is not tempted to drink more. He stated, "I limit my drinking. I don't take all my beer out that I do have, so I can't drink it, even if I wanted to." SPM9 described how he likes to plan

the evening so that he is in control. He stated, “I usually plan what we do. I plan where I’m going and how I’m going to get myself home. I also drink a lot of water.” He also mentioned planning ahead and gauging his own drinking behavior by how he feels. He stated,

I protect myself by planning ahead. I just don’t drink so much that I can’t function correctly. I get above a .08 but I don’t get to the point of blacking out. I’ve drank enough to know what it feels like to be drunk. I know where I am on the timeline of drunkenness. Self-realization keeps you from veering too far off of intoxication.

One participant (SPF2) described how she never got into trouble drinking alcohol before. She described the incident as horrible and embarrassing. She stated, “The [incident] made me change. I quit drinking.” Another participant reported quitting drinking due to the incident also. SPM12 stated, “I was so embarrassed, I quit drinking.”

Sub-theme 4.3: Mode of Drinking.

The least reported protective behavioral strategy related to the participants’ mode of drinking. Approximately 11% (11 out of 102 responses) of participants reported mode of drinking. Males (14%) and females (3%) reported practicing mode of drinking. SPM14 stated, “I space out my drinks. Now, I’ll pound 4 or 5 beers and then wait it out-probably give myself another 25 minutes before making myself another drink. I try to avoid shots all together.” One participant mentioned how she avoids drinking jungle juice since receiving the alcohol violation. SPF5 stated,

I drank jungle juice at the incident. I usually make my own drink since the incident. I used to drink jungle juice at the parties, now I don’t do that. I will do a couple of shots of vodka an hour. Or, I’ll just drink a beer an hour.

SPM6 reported using a tracking system in which he uses his phone to tally up his alcoholic drinks. He stated,

I have to keep track of how many drinks I've had. Putting a tally in your phone every time you've had a drink, and making sure that you have a plan of how to get home, so that once you get to that limit of 6 or 7 drinks, you won't walk home or drive home, and you have someone to pick you up.

Theme 5: Cognitive Behavioral Skills Learned

Theme 5 addressed the cognitive behavioral skills participants reported learning from the SPARK program. Approximately 28% (213 out of total 777 responses) of participants reported learning cognitive behavioral skills. The four Sub-themes (5.1-5.4) that emerged are Blood Alcohol Content (BAC) chart, harm reduction strategies, planning ahead, and how alcohol affects men and women differently. These cognitive behavioral skills are specific components that were presented in the SPARK interventions program. Table 7 presents the summary of cognitive behavioral skills participants learned from the alcohol intervention program. The term components and cognitive behavioral skills are often reported as *worksheets* in the participants' quotes. The cognitive behavioral skills learned in the program are listed in order of frequency.

Sub-theme 5.1: Blood Alcohol Concentration (BAC) Chart

Approximately 39% (83 out of 213 responses) related to learning from the BAC chart. Males (41%) reported learning slightly more than females (36%) from the BAC chart. SPM3 stated, "The most helpful worksheet is the BAC chart and learning the weight and hours and drinks consumed, and how long the alcohol would stay in my body."

SPM4 reported how the BAC chart (presented in the SPARK program) helped him to understand that he had been drinking more than what he thought. He stated,

The BAC chart that you gave me that showed for this weight and these many drinks. I realized that I have been way over the limit than I thought after seeing the chart and potentially could have hurt myself really badly. That really struck me more than anything. The amount of drinks could be fatal or make me black out.

One participant (SPF7) jokingly mentioned that she has basically memorized the BAC chart for her weight and alcohol drinks. She stated, “I think about the BAC stuff now, and so I think that when I’m drinking, if I’ve had so many drinks, then this would be my BAC. I can guess what my BAC would be now for my weight.” SPM4 indicated that he looks at the BAC chart before going out to party. He stated,

I actually put the chart on my door and looked at it every night. Every night that I was planning on going to a party, I would look at the BAC chart to remind me of what could happen to me and say this is where I need to stay, right here.

Sub-theme 5.2: Harm Reduction Strategies.

Approximately 31% (66 out of 213 responses) related to learning harm reduction strategies. Females (33%) reported learning slightly more of the harm reduction strategies than the males (29%). SPM9 stated,

I learned how to watch out for peer pressure and know your limits. I learned that I needed to find out what is important to me and take care yourself. Don’t be peered pressured. You need self-control. Before I got in the SPARK program, I was hanging out with people and I didn’t really know them. Just drink around people that want you safe and that will help you, rather than be around people that don’t know you and don’t care.

Another participant (SPM12) learned the importance of alternating water or juice with his alcoholic drink and spacing out his drinks. He stated,

The main thing I remember is that if you’re going to drink, you should have water or juice in between the drinks, and not try to get extremely messed up. If you were to drink, try not to have shots, back to back to back - space it out.

SPM3 stated, “I learned about the mixed drinks; jungle juice and 4 locos.”

Another participant (SPF16) described how she was able to make personal changes in her drinking behavior because she believed that the SPARK program taught her the skills needed to drink responsibly or to abstain from alcohol. She stated,

You can make like personal changes because I have all these tools now so that I can still go out and drink and I can still have fun like everyone else. I just need to think of all these things so I'm not getting out of control and wild every time. It's not like one piece of information that I learned, it's like thinking about all the things to do before you go out. It's like that person is heavier than me so they can drink more. Or, that person is on medicine and I need to watch them, like say don't drink today.

Sub-theme 5.3: Make a plan.

Approximately 21% (44 out of 213 responses) related to learning how to make a plan before going out drinking. Females (22%) reported slightly more than males (20%) about learning how to make a plan before going out drinking. SPF2 mentioned that a person should plan on having a designated driver if they are going out drinking. She stated,

Have a plan, and a backup plan, and have someone you know that doesn't drink or who is not drinking that night, so you can call them. If you plan on drinking-just be smart about it and know who you are going out drinking with so that they can help you not drink so much.

Another female (SPF13) also stated, "I think it would be that planning it out, like how to get home, maybe like how much you will plan on drinking there."

Sub-theme 5.4: Learned How Alcohol Affects Men and Women Differently.

The minority of the responses (9%), 20 out of 213 responses addressed learning how alcohol affects men and women differently. Males (10%) and females (8%) reported learning how alcohol affects men and women differently. SPM11 stated,

SPARK is one of those things that sticks with me. When a girl is at your house, and she's had 5 drinks back to back, and she weighs 100 pounds, you can say you're drinking too much and you need to be watching out. Size, gender and how you process alcohol, I learned about, so I can now look out for it. Knowing the differences between men and women was very helpful-I knew it obviously, but the program showed me that the facts are real. I thought that I knew it, and then hearing what people say, but actually knowing it with a factual person [facilitator] and putting numbers to everything was helpful.

Another participant mentioned how he remembered that women get drunk faster because they have less water in the body. SPM6 stated, “I remember the difference between men and women and how they have less of the enzyme, and that girls get drunker easier. They (women) have less water in their body which contributes to women getting drunker easier.”

Theme 6: Timing of Intervention

Theme 6 identified timing of intervention. This theme included responses that participants made to describe how soon mandated students should attend the SPARK intervention program after receiving their alcohol violation. Within this theme, three sub-themes emerged: 6.1) As soon as possible – 3 weeks; 6.2) 1-3 months; and 6.3) depends on the person. Table 8 presents a summary of the timing of intervention by frequency of response.

Sub-theme 6.1: As Soon as Possible-3 Weeks.

The majority of participants (75%, $n = 15$) reported that the SPARK intervention should be implemented as soon as possible after receiving the alcohol violation. SPM4 stated that someone should attend the SPARK intervention program as soon as possible so that he or she would have a better recollection of the incident. He stated,

Someone should come in as soon as possible after a violation. However, at the same time, it was kind of a punishment wondering what was going to happen-what do I have to do because of the sanction. It was like a punishment just wondering what the SPARK program was going to be like. I think coming in sooner would be better because you would have a better memory of the [incident].

SPF5 mentioned how a mandated student should attend the SPARK program as soon as possible after receiving the violation. She stated,

I think the SPARK program should be implemented as soon as possible. I had a month before judicial and then another 2 weeks before I came to the SPARK program. So, I did try to limit my drinking after the [incident] because my family wanted me to. But if the average person didn't have someone telling them to slow

down, they might not.

Sub-theme 6.2: 1-3 Months.

Three participants (15%) reported that the SPARK intervention should be implemented within 1-3 months. These same three male participants reported that they needed a couple of months to cool down, because they were so angry about the entire situation (e.g., sanctions, fines). For example, one participant believed that it is important to seek treatment within a month after receiving the violation, so that students can relieve the feelings of guilt. SPF13 stated,

I think they should see someone within a month of the violation. That way it is still clear in their head, and that way they can move on, and don't keep holding it back. Because once this program is over, you have a big relief off your shoulders. I feel like the longer they wait, the crankier they get about-why they need to go see this person about my alcohol problems- where if they come to the program right after the violation, they will feel better.

Sub-theme 6.3: Depends On The Person.

Two participants (10%) reported that the timeframe of implementation would depend on the person. The responses in this sub-theme described how some students may need time before attending the SPARK intervention. However, no absolute time was described in these responses. For example, one participant perceived that he needed time to evaluate his mistake (after receiving the alcohol violation) before going in to talk to someone about his drinking behavior. SPM6 stated,

I feel like at first, you may need some time to yourself after the violation, and analyze yourself and then meet up with someone. I felt like I made a big mistake and sometimes you need some time to cool down after that. I guess I needed to evaluate my mistakes. I felt really bad about what happened. I shouldn't have done it.

Theme 7: Denial of Problem

Theme 7 is related to the participant's denial of problem. Although two males reported not changing their drinking behavior at all, SPM18 stated that he changed his drinking behavior for personal reasons. He was very angry because he received an alcohol violation at the university because he did not believe he was doing anything wrong by drinking alcohol, nor did he believe that he deserved the harsh sanctions handed down from the university. In fact, the participant continued to express how he is a very experienced drinker and that he knows how to handle himself while drinking alcohol. Also, the participant believed that if his parents thought that it was OK for him to drink alcohol, then the university should allow him to also. SPM18 stated,

I honestly did not think I needed to come to this [SPARK]. I didn't need any reinforcements of my drinking habits cause I was very aware of what I do. I feel like this program is set up for those who have serious alcohol issues. And, most college students- I don't feel have any problems. Some kids do, but that's not the majority. If my parents are fine with me drinking then why isn't the university fine with me drinking.

SPM20 is the only participant who reported making no change in his drinking behavior after completing the SPARK alcohol intervention. However, when asked to describe the SPARK program he recalls how he was assessed as having a drinking problem by the AUDIT (alcohol screening), and that he did not realize how much he was drinking after the initial SPARK session. Thus, the SPARK program did increase his awareness of a potential drinking problem. He stated,

Well, it kind of assessed how heavy a drinker I was, and I think it [AUDIT] did kind of decide I did have a drinking problem. It was a good assessment of how you're drinking and where you stand in your drinking habits. At the same time, I feel like I have a higher tolerance than the program is usually set up for. So, it was eye-opening to find out how much I drink and how much other people drink, but I don't think it necessarily made me want to change. I feel like I'm a responsible drinker.

In the same discussion, he stated that he was a heavy drinker, and he also admitted that the SPARK program was helpful. He stated,

I'd say the program was helpful, but I'd say I kind of disregarded the helpfulness because I just felt that I don't feel like I have a very bad problem. I do my school fine. I get all A's-like I know that Sunday to Thursday afternoons are my time to study and I get to have fun on the weekends-like binge drinking, I don't see it as a problem in my life. I do know people that have a problem with it. I personally don't think I have a problem. I go to class and everything.

Theme 8: Delivery Method Preference

When participants were asked to describe their experience in the SPARK program, 100% of participants reported how unhelpful the computer-based intervention was, and how meeting face-to-face or 1-on-1 in the SPARK program was more beneficial. The theme delivery method preference emerged from the data. This theme was the most unexpected theme to emerge. SPF2 stated, "The program helped a lot. I would prefer SPARK over online program. SPARK gave me a new perspective about my drinking behavior. SPARK was better than online program." Although SPM20 mentioned not making any changes in his drinking behavior, he adamantly supported the SPARK program, and preferred SPARK over the computer based intervention program. He stated, "The online program was a waste of time. But, if you have to come to a program, SPARK is better than the online program because you have no distractions-you're probably paying a lot more attention." In the same discussion he also mentioned how easy it is to cheat while completing the computer based intervention program. He stated,

When I did the online program, I just pulled it up in one window and did my homework- and every minute or so, just click play. I wasn't even paying attention-so the online program doesn't demand your attention at all-you can just click play and then watch TV or something. I think the person would learn a lot more from SPARK than the online program. They might learn that they had a drinking problem in this [SPARK] program. If you did have a drinking problem and missing class and stuff-and you came to this

program-you might realize that you have a drinking problem. I know kids that don't pay attention cause there are people who you can pay \$50.00 to do your online intervention program for you-and he made a killing. He would just take the test for them, whereas, you couldn't pay someone else to come to this [SPARK] program.

Another participant (SPM4), whose words seemed to indicate being disgruntled and furious with university policies, mentioned that he would also refer the SPARK program over the computer-based intervention program for several reasons. He stated,

I would refer the SPARK program for people like me [disgruntled] and not an online program-not distant and you can see the seriousness in their face (facilitator) rather than watching cartoons on a TV screen [computer-based intervention]. The online program didn't help much.

One participant described how her experience in the SPARK program affected her personally, and that she may not have learned anything if she had only completed the online intervention program. SPF17 stated,

I had a positive experience in the SPARK program. I would keep the program. I like being able to talk to someone about it. If I had just had the online program, I wouldn't have learned. I learned how it affected me personally. I really like the SPARK as an alternative.

SPM19 described how it would be more difficult to receive help (if needed) after completing a computer-based intervention program then if someone had to talk to someone in person about their alcohol problem. He stated,

It feels good-and if you have problems, it would be a lot better to talk to someone about that, rather than get told you have problems via the computer because after the computer program-it would probably be harder to get help...I really think that if they [students] have issues with alcohol, it would be more beneficial to talk to someone and express and communicate it to another person instead of expressing it to a computer.

One female reported enjoying the SPARK program better than the online because the session was a face-to-face meeting. SPF7 stated,

I like the program being face-to-face. Face-to-face makes learning about alcohol facts a totally different experience than an online program. I would recommend SPARK, even though you learn the same things-but the online was repetitive. I like the SPARK program better.

SPM3 reported how the SPARK program should be recommended for the first alcohol violation because he didn't pay any attention to the online program. He stated,

I think that the SPARK program should be implemented instead of the online program for the first violation. All the answers of the online program are online and most people just click it and don't really listen. But with SPARK, you have to interact with it [SPARK facilitator], and talk through the issues. The SPARK program is a lot more beneficial. So just meeting with a person one-on-one is better. I didn't pay any attention to the online program.

SPM15 reported how he lied on half of the surveys in order to complete it quicker. He stated,

The Online program was terrible. It wasn't interactive, and probably lied on half of the surveys, cause I just wanted to get through it. It wasn't effective. When it is online and you are doing it because you have to- it changes things, and makes you not care as much. I would refer SPARK, because it is more in depth for someone who got a violation like I did, but it wouldn't hurt to have a seminar at orientation for freshmen that they will be accountable to and they have to listen to someone and then take a test or have someone influential that they would listen to.

Theme 9: Drinking Behavior at Time of Receiving Alcohol Violation

Drinking behavior at time of receiving the alcohol violation emerged as theme 9. Within Theme 9 emerged four sub-themes: 9.1) binge drinking; 9.2) minimal drinking; 9.3) not drinking at all and; 9.4) perceptions of why students binge drink (see Table 9).

Sub-theme 9.1: Binge Drinking at Time of Receiving Alcohol Violation.

The majority ($n=13$, 65%) of participants reported binge drinking when they received alcohol violations. The majority of females (71%) and males (69%) experienced a black out as a result of binge drinking. Several participants reported drinking jungle juice, which is a mixture of different concentrated fruit drinks, carbonated soda, and Ever Clear liquor. Every participant

(who reported drinking jungle juice at a party) either blacked-out or suffered from severe alcohol poisoning and transported to the hospital. SPM18 expressed how shocked he was when he blacked-out after a long day of partying. He stated,

At break, I blacked out, and when I woke up-I was just like wow!...but when I get back to school-I was like damn, that was bad. I do not need to do that anymore. I did not like not remembering. It feels weird to me. I've never had it [blackout] happen-it's just not a good feeling to not know what you're doing.

Another participant (SPF5) mentioned how she drank an excessive amount of jungle juice because she wasn't feeling the buzz fast enough. She stated,

They had jungle juice, so I started drinking that. It didn't taste like alcohol much. It tasted mostly like kool-aid, so I just kept drinking it a lot in an hour. I didn't feel it at first, and then it just hit me all at once. That was a problem because I drank a lot of cups of jungle juice. And, I also had like shots of whiskey.

Another participant reported how he drank several strong mixed drinks one after another because he wasn't getting drunk quick enough. SPM12 stated,

I was making mixed drinks, and I guess I wasn't really feeling it, and I wasn't. So when I was finished with one, I made another, and then I made another, because I didn't feel like I was getting drunk fast enough. There could have possibly been 3 shots in each solo cup.

Sub-theme 9.2: Minimal Drinking at Time of Receiving Alcohol Violation.

Six participants (30%) reported only having two drinks when they received alcohol violation. One participant (SPM11) reported only having two drinks. He stated, "I only had two beers over 2 or 3 hours. It was a fluke deal. The police officer was kind of a dick. It was just a pissed off cop because he had to be out. I was in the party and out front waiting for a ride...and the cop came over to me and he [cop] said I smell alcohol on your breath, you're going to jail."

Sub-theme 9.3: Not Drinking at Time of Receiving Alcohol Violation.

Only one participant reported not drinking at all when they received the alcohol violation. SPF8 stated, “I wasn’t drinking. The dorm got a noise complaint and there was alcohol in the dorms. Everyone got the alcohol violation.”

Sub-theme 9.4: Perceptions of Why Students Binge Drink.

Participants reported peer pressure and the environment as the main reason why students binge drink. Twenty-four percent of responses were related to how binge drinking helps them to wash away their problems. Another 24% of responses were related to how binge drinking makes them feel more outgoing. Sixteen percent of responses considered binge drinking a rite of passage (see Table 10).

One participant expressed how guys will pressure the girls at a party to have a drinking competition with them. SPF13 stated,

I think that right now, a lot of the guys will tell the girls to come on and drink, and see if you can out drink me. I think a lot of them do it for status, like saying that I’m a better drinker than you, kind of like a competition-not really for the alcohol, but just as a competition to say that I can do this better than you.

SPM19 perceived that stress or being involved in a fraternity or sorority may influence a college students’ drinking behavior. SPM19 stated,

Maybe stress-maybe their environment is bad, and they are trying to fit in-maybe to fit in with a certain group, like they just got involved in a fraternity or sorority-maybe because they think its college and they feel like they need to drink in college.

Another participant described how freshmen students in fraternities drink far more than other students in college. SPM11 stated, “I think that freshmen in fraternities drink significantly more. That’s my take.” SPM12 described how some students drink excessively because they want to drink away their problems. He stated, “Some students binge drink if there is something going on

in your personal life-they could be covering something up and they need something to cover it up and they need alcohol to cover it up.” In the same discussion he expressed how he enjoys binge drinking because he perceives himself to be more outgoing while partying. He stated,

A lot of people enjoy the really high level of intoxicity like being at .15, because it makes you go wild, it makes a lot of people fun. I know that when I drink heavily, I’m chugging over a long period of time and I’ll be dancing and the life of the party. Laughing, talking to people, a lot of people including myself, like to get very intoxicated because of the effect it produces. The difference between a night just sipping a beer and taking stout drinks-it is just 100% different based on the action and people you meet and the stories you tell. It’s just a different experience.

After reviewing the data throughout the themes, four overarching principles were revealed by analyzing the connections between and interrelationships among themes.

Overview

The demographics described in the current study were identified as mostly heterosexual Caucasians, mean age of 18.8, and lived in campus dormitories, which is consistent with the majority of the research studies regarding mandated students. The majority of participants also reported drinking more responsibly or choosing to quit drinking alcohol as a result of the SPARK intervention. Additionally, the current study found that enhanced motivational interviewing was perceived as a helpful communication method for the facilitator to use because participants were able to self-reflect (in their own words) how the incident unfolded the day of receiving the alcohol violation. Participants in the SPARK intervention perceived that they were in a trusting and caring environment which is helpful in reducing resistance in college students who are mandated to attend an alcohol intervention program. Furthermore, when participants perceive that the facilitator cares about them, the participant is more likely to increase their readiness to change. Every participant in the current study experienced an incident that prompted a referral to the SPARK intervention. Overall, participants described their experiences

in the SPARK program as positive, and perceived that the program played a role in reducing their risky drinking behavior and changing their attitude about alcohol abuse. Although a few students reported other factors (i.e., incident, sanctions) these students also stated that the SPARK program was helpful because it gave them tools (i.e. BAC chart) to change their attitude and behavior. An interesting finding was that mandated students (100%) in the current study preferred the alcohol intervention program called SPARK over the computer-based program. Although one participant (SPM20) reported not changing his drinking behavior, he did prefer the face-to-face intervention over the computer-based program.

CHAPTER V: INTERPRETATION, RECOMMENDATIONS AND CONCLUSION

Researchers have acknowledged that alcohol abuse among college students is a major public health problem in U.S. colleges and universities (Neighbors et al., 2010). Many university administrators and researchers have begun to address the need for effective alcohol intervention strategies on college campuses (Logan, 2013). As a result, most colleges engage in various alcohol prevention/intervention programs in an effort to reduce risky drinking behavior and alcohol-related harms (Carey et al., 2007). Interventions utilizing cognitive behavioral skills, norms clarifications, and enhanced motivational interviewing with personalized feedback have been effective in reducing alcohol-related harms among high-risk drinkers and mandated college students (USDHHS, 2007). Some studies (Barnett et al., 2006; Qi et al., 2014) found that mandated students may not benefit from the same type of intervention as those students who are identified as volunteers. Carey, Henson, Carey, and Maisto (2009), indicated that study volunteers reported decreases in drinking behavior whereas, mandated students reported increases in drinking behavior after attending the same intervention program. Carey et al. (2009) suggest that volunteers and mandated college students respond differently to intervention programs or do not process the information in the same manner. Perhaps those students who are mandated to attend an alcohol intervention program are experiencing a loss of autonomy, and as a result have feelings of shame, embarrassment, defensiveness, or anger.

Prior research has demonstrated inconsistent outcomes regarding the effectiveness of alcohol intervention programs involving mandated college students. To further explore the participants' experiences in the SPARK intervention program, this study sought to understand the meaning of these experiences through the mental representations of the participants' words. Twenty students who were mandated to attend the alcohol intervention program called SPARK

in 2011-2014 volunteered to participate in the current study. By analyzing student's perspectives qualitatively, the current phenomenological study identified nine emerging themes. These themes contained responses which were coded as separate sub-themes and sub-sub-themes. The following pages will present notable findings within the themes, sub-themes, and sub-sub-themes, and examples of responses from the participants' transcripts to illustrate the findings. Although I presented themes separately in Chapter IV, my interpretations of the student's perspectives of the SPARK alcohol intervention program are best made by analyzing the connections between and interrelationships among themes. This chapter consists of the purpose of the study, reinstatement of the research questions, interpretations of the four overarching principles, answers to the research questions, recommendations, and the conclusion.

The purpose of the study was to explore the influence of an alcohol intervention, implemented in one Southern university, on attitudes, behaviors, and knowledge of students who had been mandated to attend the program. The general research questions are:

1. What protective behavioral strategies are college students currently using when going out drinking, and do they use the protective behavioral strategies that were presented in the alcohol intervention program?
2. How does the student describe his or her own drinking behavior at the time of receiving the alcohol violation?
3. How does the student describe his or her experience in the mandated alcohol intervention program?
 - a. What are the key components from the alcohol intervention program that students learned?

- b. Which components, if any, within the intervention, are perceived as helpful or unhelpful?
- 4. What do students perceive to be the factors, if any, that influenced a motivation to change their attitude and or behavior about drinking?

Overarching Principles

The qualitative analysis revealed some notable patterns among the data which could be related to the effectiveness of the MI communication method and the therapeutic process and the satisfaction with the facilitator and the intervention program. In addition, there were several issues which emerged from the data which were of interest to the researcher in terms of improving alcohol intervention programs in the college setting. The following discussion will be conducted in the context of the overarching principles that emerged. The themes that are related to the principles will be noted and described. The overarching principles are: 1) autonomy in the therapeutic process; 2) enacted knowledge increases motivation to change; 3) satisfaction with the facilitator may increase satisfaction with the intervention; and 4) externalizing feelings increase therapeutic benefits and motivation to change (see Figure 1). The principles are supported by the nine themes, participants' words, and the literature.

Principle 1: Autonomy in the Therapeutic Process

Autonomy in the therapeutic process is the first principle. The majority of the themes in the current study will be used as evidence to support Principle 1. Christman (2015) described individual autonomy as “the capacity to be one’s own person, to live one’s life according to reasons and motives that are taken as one’s own and not the product of manipulative or distorting external forces” (para 1). The loss of autonomy typically manifest itself into various negative

psychological reactions (i.e., embarrassed, ashamed, mad). Analyzing the data within the themes, I realized how important the notion of autonomy is to the study participants, and how the loss or gain of autonomy can impact the therapeutic process and ultimately affect the intervention's effectiveness.

Mandated students are described in the literature as only those students who violated university alcohol policies and received alcohol violations as a result. Thus, these mandated students (study participants) experienced psychological reactions regarding the incident (i.e., arrest, hospital transport), the sanctions, and to being forced to attend the SPARK alcohol intervention. Although psychological reactions surrounding the incident has been studied somewhat (Logan, 2013), there are no known studies that discuss the psychological reactions that a mandated student experiences prior to attending the intervention. As a result, the intervention may not be as effective when used with mandated students as compared to volunteer study participants. Prior research (concerning intervention effectiveness) is often conducted with study volunteers, and not the mandated population. For this reason, the intervention may be effective in reducing risky drinking behavior in volunteer study participants, but not effective in reducing risky drinking behavior in mandated students.

The data in the current study indicates that the majority (65%) of mandated students reported binge drinking (Sub-theme 9.1), experienced a blackout, and were arrested at the time of receiving their alcohol violation. As previously mentioned, mandated students can receive an alcohol violation for several reasons (e.g., alcohol in dorm, arrest, or hospital transport). Hustad et al. (2011) indicated that college students reported drinking significantly more on the day of receiving an alcohol violation than their typical drinking day. The remaining participants (15%)

were not binge drinking, but they did receive alcohol violations and similar university sanctions. As a result, the majority of these mandated participants experienced a loss of autonomy.

College years represent a unique developmental stage referred to as emerging adulthood. Incoming college students are identified as emerging adults (ages 18-25) because they are not seen as adolescence or as adults (Arnett, 2000; 2001). The brain of an emerging adult is experiencing biological changes, thus experiencing cognitive and moral developmental changes. White and Jackson (2004) indicate that emerging adults place great emphasis on their identity and independence (autonomy). For instance, emerging adults understand that adults are consuming alcohol, and may consider campus alcohol-policies (based on age) as unfair. Emerging adults are also experiencing more independence from their parents (living away from home) and are spending more time with their peers. The college environment can present many high-risk situations which are not monitored by their parents (Arnett, 2000). As a result, emerging adults are able to participate in more risk-taking behavior (i.e., binge drinking).

Research (Neighbors et al., 2010) indicates that emerging adults are more likely to test the alcohol-related information found in education-only intervention programs because they see themselves as an adult. Further, emerging adults do not want to be told what to do, they like to be able to choose what to do. For example, SPF5 stated, "I listened to other alcohol programs, but I never really listened, because I felt they were telling us what to do. I think if a program just tells me to stop drinking that it won't do anything." SPF2 mentioned how previous alcohol programs were not helpful. She stated,

Obviously, the education that I learned earlier didn't help me. I liked the fact that it [SPARK] was different than what I expected. It wasn't a rehash of stuff I already knew. It was basically, you made a mistake, and this is why it was a mistake. The program helped me to understand the real dangers. The SPARK program didn't go over things

like- not everyone on campus drinks, but saying, if you drink this much, this will be your BAC. I liked the fact that it focused on the dangers of drinking rather than just alcohol in general.

Characterizing her comparisons of previous alcohol programs and the SPARK intervention program, her words appear to suggest that earlier programs, in which she attended, were more authoritarian in nature, and were not effective in changing her drinking behavior. This comment suggests that the SPARK intervention was not accusatory, nor authoritative, and that the educational information (Theme 4 and 5) was perceived to be more helpful than previous alcohol programs. Education-only interventions are viewed as negative by the emerging adult because they are assumed to lack the knowledge necessary to change their own behavior and as a result, the authority figure must enlighten the student by forcing the education (Miller & Rollnick, 2004). Thus, students react negatively and do not change their drinking behavior.

Generally, mandated students do not see their drinking as a problem (Theme 7), until they have been forced to evaluate their drinking behavior. For example, SPM20 stated that he did not have a drinking problem. He stated, "...Thursday, Friday, and Saturday every week I drink about 15 or 20 each night, either beer or pulls of whiskey." He also stated, "I'd say the program was helpful, but I'd say I kind of disregarded the helpfulness because I just felt that I don't feel like I have a very bad problem...I go to class and everything." However, he stated that the university should eliminate the computer-based intervention (Theme 8) for mandated students because it doesn't demand your attention. He stated,

When I did the online program, I just pulled it up and did my homework, and every minute or so, just click play...so the online program doesn't demand your attention at all...but if you have to come to a program like this, and there's no distractions, you're probably paying a lot more attention...they might learn that they had a drinking problem in this program.

When I asked SPM20 to describe his drinking behavior the day of receiving the alcohol violation he stated, “I was barely drinking that night...I wasn’t drunk that night...they threw the book at me too...The strict rules after receiving the alcohol violations made me livid with the university.” Although SPM20 was in denial and appeared defensive, he still acknowledged that the SPARK intervention alerted him (Sub-theme 1.3, Theme 4, and Sub-theme 5.1) about his drinking behavior. He stated,

Well... it [SPARK] kind of assessed how heavy a drinker I was and I think it did kind of decide I did have a drinking problem. At the same time, I feel like I have a higher tolerance, then the program [SPARK] is usually set up for...I remember that some of my scores were high on some of them [AUDIT]. It was a good assessment of how you’re drinking and where you stand in your drinking habits...Hey, I still have the blue and pink BAC charts. They’re still hung up on the door.

SPM20 recognized that he was an excessive alcohol drinker, which would imply contemplation stage. However, this student is actually in the pre-contemplation stage because he does not recognize that his drinking behavior is a problem, and is not planning to make any changes. The SPARK intervention raised an awareness by assessing his drinking behavior (i.e., AUDIT) as a heavy drinker thus, alerting him to a possible drinking problem. However, the student does not recognize his drinking behavior as negative (he most likely has positive alcohol expectancies). Researchers (Palmer, 2004; Palmer, Kilmer, Ball, & Larimer, 2010) found that mandated students reported more defensiveness than volunteer study participants. Participant (SPM18), who I describe as defensive, denied having a drinking problem also. He stated, “... there is nothing that I could apply...I feel wrongly accused...I was frustrated that I had to go through the process.” When asked about what he did learn in the SPARK intervention, he stated, “nothing absolute, no concrete knowledge, we’re in college, the profile is to go to school and party. It is my rite of passage.” It is possible that SPM18 had positive expectancies about drinking alcohol

and he believed that the SPARK intervention was not applicable to him and his drinking behavior. However, the statement he made, “it is my rite of passage” is suggesting that he has the right to do what he wants because this is what all college students do, and suggests that the university should not take this right away (loss of autonomy). He stated, “I don’t feel I have any problems. Some kids do, but that’s not the majority.” SPM18 admitted to having 15 or 16 beers on the day he received the alcohol violation; but, because he was not drinking when the Residential Advisor (RA) found him, he felt wrongly accused. SPM18 stated,

Most of the information I already knew, because I didn’t think I needed to be here. I just breezed by. I still gave honest answers though. Drinking age is such a subjected age... That day was a game day, I probably had 15 or 16 beers, and that was earlier in the day. I had taken a nap and there was a beer next to me. I wasn’t drinking at the time that the RA gave me the alcohol violation.

The words of SPM18 suggest that he blamed others for his problem and did not take responsibility for his actions. Brown and Lent (2008) indicates that mandated students are typically angry and defensive about being required to attend an alcohol intervention. My findings are aligned with other studies (Logan, 2013; Mastroleo et al., 2011; Osberg et al., 2011) in suggesting low readiness to change may increase defensiveness. Logan (2013) also found that when students blamed others for their consequences, defensiveness increased. Lewis, Neighbors, Oster-Aaland, Kirkeby, and Larimer (2007) found that individuals who perceived the incident as less aversive had higher alcohol use; whereas, individuals who perceived the incident as more aversive reported reduced alcohol use. Research (Palmer et al., 2010) revealed that higher defensiveness increased drinking behavior after an alcohol intervention. Logan (2013) found that male Greeks reported more defensiveness prior to the intervention. Both of these male participants were members of Greek life. It is also possible that these two Greek members

(SPM18, SPM20) viewed drinking alcohol as culturally acceptable hence, they were less likely to be motivated to change. However, it is also possible that both SPM18 and SPM20 were defensive due to a loss of autonomy. Palmer (2004) suggests mandated students who display defensiveness are reacting negatively due to a loss of autonomy. Logan (2013) suggests that when individuals are defensive, they are experiencing a psychological reaction. SPM18 and SPM20 were the only participants who reported not changing their drinking behavior (Sub-theme 3.4, 3.5) as a result of the SPARK intervention.

Although SPM18 and SPM20 experienced psychological reactions in the form of defensiveness, other participants reacted to their loss of autonomy displayed in other feelings (i.e., shame, embarrassment). The next three participants describe in detail how they felt about the incident and about being forced to attend the SPARK intervention. For example, SPM12 stated,

I did get in trouble. It was a wake-up call. I accepted it. It was frustrating. I was more embarrassed because I got in trouble and knowing what I had to do. I wanted to get it done as soon as possible. I did get arrested and I had never got in trouble before at all with the law previous to that.

Another participant (SPF13) stated,

I've never been in trouble with alcohol before. It was all a new experience for me...I was feeling like I would be judged because I was in trouble and I would have to come and talk about what I did, and I kind of didn't want to talk about. I was ashamed of it, not because of anyone else; I just didn't want to talk about it. After the meeting, I realized that you deal with a lot of this stuff, so I didn't feel as bad, and you weren't judgmental. Because if I talked to a parent, they would just be disappointed and stuff...I decided to quit drinking until I am 21.

SPF16 stated, "I was scared going into this program, because you don't want to be judged...I would refer this program. I tell my friends that this is a very helpful thing because you learn a lot from it and not disciplined by it." These comments suggest that participants who are feeling

embarrassed, shamed, or judged are also reacting negatively due to a loss of autonomy. The majority of the participants (90%) benefited from the SPARK intervention because they took responsibility. Borsari, Murphy, and Carey (2009) found that when individuals took responsibility for the occurrence, the incident was perceived to be more aversive. Additionally, participants experienced the therapeutic benefit of MI (Theme 1) thus, resolving ambivalence.

Motivational interviewing used in the SPARK alcohol intervention is not simply a communication method, it is specific style of interacting with the student, which focuses on therapeutic change in a non-confrontational manner (Miller & Rollnick, 2002). For example, SPM4 described how his own personality becomes resistant and defiant when pushed too hard by authority figures. He stated, “They shouldn’t say, you shouldn’t do this, you shouldn’t do that, because the way my personality is, it makes me want to do it even more. I feel like some forms of authority are trying to overuse their authority-but not this program.” Arguing or pushing a message to an emerging adult is counterproductive. The MI principle is “to have the client, rather than the counselor, voice the argument for change” (Miller & Rose, 2009, p. 527). A trained MI interviewer will be “focused on evoking and strengthening the client’s own verbalized motivations for change” (Miller & Rose, 2009, p. 527). Rollnick and Miller (1995) emphasized that an effective MI interviewer will be more collaborative than authoritarian, and honor the client’s autonomy. As stated in Theme 2, participants reported that the facilitator’s characteristics were important factors in the therapeutic process and increased motivation to change, because the participants believed that the facilitator cared about them and that the words they shared, would be kept in confidence. When students state their own reasons for changing their behavior, then it becomes their idea, and not the facilitator’s idea. Participants feel more

successful in the therapeutic process if they sense they are in control of the situation, which is a goal of MI.

Principle 2: Enacted Knowledge Increased Motivation to Change

Enacted knowledge increased motivation to change is Principle 2 and emerged as a result of identifying a connection between and interrelationships among Theme 3 (factor influencing change), Theme 4 (applied protective behavioral strategies), and Theme 5 (learned cognitive behavioral skills). Principle 2 revealed that participants applied the protective behavioral strategies that were learned in the SPARK alcohol intervention.

The majority of participants (19 out of 20) reported applying protective behavioral strategies. Martens et al. (2011) defines protective behavioral strategies as cognitive behavioral strategies that a student can apply while out drinking and strategies to protect themselves from alcohol-related problems. In addition, Martens et al. suggest that protective behavioral strategies are designed to help students to be more responsible and to be more cautious while consuming alcohol. The SPARK alcohol intervention program includes cognitive behavioral skills, which are also called worksheets or components by the researcher and SPARK participants in the current study. As previously stated, a motivational intervention typically consists of cognitive behavioral skills which involve personalized feedback. The literature describes cognitive behavioral skills as those skills that help modify beliefs or behaviors associated with alcohol abuse (Cronce & Larimer, 2011). Cognitive behavioral components may include values clarification, specific alcohol-focused skills training, self-monitoring/self-assessment of alcohol use or general information that may appear helpful in reducing risky drinking behavior and alcohol-related harms. However, the cognitive behavioral skills utilized in the SPARK

intervention typically consisted of BAC chart, Daily Drinking Questionnaire, AUDIT screening, and various educational material that targeted the individual participants' needs. So, not all participants received the same cognitive behavioral skills. Sub-theme 4.1 is related to avoiding alcohol-related harms. As previously stated, alcohol-related harms are the consequences of excessive alcohol use which include blackouts, deaths, unintentional injuries, assaults, academic problems, drunk driving, vandalism, property damage, and police involvement (Hingson et al., 2009; Howard et al., 2007). The majority of respondents reported avoiding alcohol-related harms while out drinking. Sub-theme 4.2 is related to the participant limiting /quitting drinking alcohol. SPM12 reported quitting drinking. He stated, "I was so embarrassed, I quit drinking." Thus, his psychological reaction (embarrassment) to the incident may have been a factor influencing motivation to change. One female vividly described how she is always thinking about protecting herself. SPF16 stated,

I just need to think of all these things so I'm not getting out of control and wild every time...It's like that person is heavier than me so they can drink more. Or, that person is on medicine and I need to watch them, like say don't drink today.

SPM3 stated, "I changed my drinking behavior after learning how I drank my alcohol. I applied what I learned in the SPARK program. Now I avoid jungle juice, 4 Locos, and strong drinks." SPF17 reported how he changed how he drinks alcohol and avoids hard liquor after the SPARK program. He stated,

The easiest thing was slowing the drinking pace-that way you just drink less in a shorter amount of time. I definitely drink different things now. So, I slow down and I don't mix alcohol now, cause I get sick. I avoid different hard liquor now.

One study (LaBrie et al., 2011) showed that protective behavioral strategies are routinely utilized by heavier drinking subgroups of college students and that these strategies have shown to

be effective in reducing alcohol- related harms after attending a multi-component alcohol intervention program. Therefore, interventions employing protective behavioral strategies “aimed at those students most in need of reducing drinking and consequences offer an important avenue for future harm reduction approaches” (LaBrie et al., p. 355). In the same study, LaBrie et al. (2011) indicated that women applied protective behavioral strategies more often and more effectively than men. My findings in the current study indicated that women applied the protective behavioral strategies (i.e., avoiding alcohol-related harms, limit/quit drinking) more often than men. However, my findings also indicated that men applied the protective behavioral strategy (i.e., mode of drinking) more often than women.

The cognitive behavioral skills that were learned by the participants in the current study were categorized in the order of frequency and cited as Sub-themes 5.1-5.4 – learned from the BAC chart, learned harm reduction strategies, learned to make a plan before going out drinking, and learned how alcohol affects men and women differently. SPF16 stated, “You can make like personal changes because I have all these tools now so that I can still go out and drink, and I can still have fun like everyone else.” One participant (SPM6) described how the program gave him the tools to change his behavior. He stated, “The program gave me tools to change things and made me realize that I needed to change things, and now I feel like I have the tools to change my behavior for the better.” My findings indicate that the majority of respondents learned the most about the BAC chart. One participant (SPM14) described how he learned by reviewing the BAC chart (regarding the day he received the alcohol violation). He stated, “I used to think, I’m a tank, I can drink a lot and then when we went through what I was drinking and what my BAC would be, I thought, Whoa!” Previous findings (Haines et al., 2006; LaBrie et al., 2011; Martens

et al., 2004) indicated that interventions incorporating cognitive behavioral skills, such as the BAC chart, reduce alcohol-related harms and consequences. Furthermore, cognitive behavioral skills are easily learned and utilized while out drinking (Haines et al., 2006). Sub-theme 5.2 is related to harm reduction strategies. Harm reduction strategies are taught in interventions to “enhance motivation to avoid alcohol-related harm and learn moderation techniques” in an effort to reduce risky drinking behavior (Marlatt, Larimer, & Witkiewitz, 2011, p.75). SP5 mentioned how she learned to limit her drinking and understand how the alcohol is affecting her body. She stated,

The SPARK program told me how to limit my drinking and taught me how to understand what is happening to your body, and it helps me think more logically and realistically of how to control your drinking instead of just stopping your drinking.

The concept of harm reductions of alcohol is from the disease model of alcoholism which encompassed program and strategies that are designed to reduce the harm to individuals that are associated with alcohol abuse (Marlatt, Larimer, & Witkiewitz, 2011). Although protective behavioral strategies and harm reduction strategies are the same, the study participant reported the words ‘harm reduction strategies’ in the data. Another participant (SPM11) described how the program taught him about how alcohol affects women differently than men. He stated, “Knowing the difference between men and women was very helpful. I knew it obviously, but the program showed me that the facts are real.” Another participant (SPM20) stated,

I’ll tell you that learning about the differences between men and women was the most helpful cause when I am out drinking with girls, you can’t have a girl drink as much as you can, cause they’ll get a lot more drunk than you, and then end up in the hospital like they always do.

Theme 3 (factor influencing a motivation to change) was also noted to have a connection with Themes 4 and 5. Five out of 13 participants reported the SPARK intervention as the single

factor for motivating change. For example, one participant (SPM14) described how he changed his behavior after participation in the SPARK intervention. He stated, “The SPARK program is when I decided to make a change because I didn’t really change after I got the violation.” A study by Mun, White, and Morgan (2009) found that mandated students who were involved in serious infractions (requiring police or medical assistance) were more likely to reduce drinking behavior following a motivational intervention. However, Mun et al. (2009) did not look at any other factors (e.g. incident, sanctions, or personal reasons) that may have influenced the students to change their drinking behavior. Another participant (SPM3) changed his drinking behavior after participating in the SPARK program. He stated, “I changed my drinking behavior after learning how I drank my alcohol. I applied what I learned in the SPARK program.” The data indicates that the majority of respondents (from both single and multiple factors) reported that the SPARK alcohol intervention was the leading factor that motivated change. For instance, one participant (SPF5) mentioned that everything influenced her to make a change in her drinking behavior. She stated,

The [incident], SPARK, personal reasons, and the university sanctions made me change...Before the [incident], I had never got this sick before, so I started to make changes right after my [incident], but the SPARK program taught me how to take more precautions...The [incident] was a wakeup call because I was drinking a lot before then. The sanctions sucked, but it really helped me because I don’t know how I would be drinking right now...I would probably still be drinking a lot. I don’t drink near as much as I used to.

Principle 3: Satisfaction with the Facilitator May Increase Satisfaction with the Intervention Program

Satisfaction with the facilitator may increase satisfaction with the intervention emerged as Principle 3. There was a relationship between Theme 1 (program characteristics, Sub-theme 1.1 and 1.2) and Theme 2 (facilitator characteristics, Sub-theme 2.1-2.3). The data indicate how

salient the facilitator's characteristics are, and how the intervention could be positively or negatively impacted. However, after thoroughly analyzing the participants' meanings of their words (when describing the facilitator), I realized that participants were actually attributing their satisfaction toward the intervention's process and not necessarily toward the facilitator's characteristics. This was a revelation. There are no known studies discussing whether satisfaction in the program is related to the facilitator's competence in following the MI process. For example, participants described the facilitator's personality as nice, caring, and welcoming, suggesting perceived satisfaction with the SPARK facilitator. SPF13 stated, "The person should be warm, and kind, and open, and greeting so that the person won't close up and not want to tell you about themselves...just very friendly, open person." Although the participants reported positive characteristics about the facilitator's personality, they were actually experiencing, and participating in, an enhanced motivational intervention with a competent motivational interviewer. When a person is trained in MI and effectively utilizes the skills, their personality characteristics may be perceived in a positive light. Mastroleo, Mallet, Ray, and Turrisi (2008) reviewed 44 universities with peer alcohol programs and found that the training for peer interviewers varied from 3-100 hours of didactic training. Additionally, 84% of these programs did not follow-up after the intervention.

Although there was not a set of characteristics required to facilitate the SPARK alcohol intervention program at the institution at which this study was conducted, the facilitator was trained in the MI communication method. Counselors, therapists, and substance abuse facilitators are typically trained in processes very similar to MI communication methods. Evidence suggest that a mandated student who has a positive experience with the facilitator is

more likely to increase satisfaction with the intervention, which may influence motivation to change (Carey, Henson, & Carey, 2010; Kraemer, Wilson, Fairburn, & Agras, 2002; Larimer & Cronic, 2007; Logan, 2013; Miller, M. et al., 2013). One male (SPM4) stated, "...In this program, I didn't feel like someone was telling me 'if you don't do this, you're going to die,' strange stuff like that...once I started talking to you, I felt better about being in the program...I felt totally detached from the online program." Many health professionals are trained to exhibit certain characteristics in an effort to elicit change talk and to help the client relax. Miller and Rollnick (2002) suggest that effective counselors should exhibit the following characteristics: 1) empathic listener; 2) good communicator; 3) non-judgmental; 4) multi-cultural; and 5) flexible. Kazmeni et al., (2013) indicated, "The constructs of MI are person centered, non-confrontational, supportive, empathetic, and nonjudgmental yet directive; enhance change talk; and solidify students' self-efficacy and commitment to change" (p. 221). SPM15 expressed how different the intervention experiences would have been if the facilitator were rude. He stated,

If they [facilitator] are stern, and mean, and harsh, you're just going to almost want to disregard it...if they are concerned and nice, respectful, understanding, you're more likely to apply the information and listen to it as more of a positive experience rather than a negative one.

Miller and Moyers (2006) stated, "The MI counselor seeks to evoke the client's own motivation for change" (p. 5). Logan (2013) briefly explored the relationship between satisfaction with the program to be positively associated with facilitator satisfaction and intent to change. Other comments in the current study indicated satisfaction with the facilitator included "I felt like I was able to talk to you and say everything I needed to say.," "...someone approachable.," "someone to be encouraging.," "...caring, and not tell you what is right, just lead you.," "...concerned and nice." These findings suggest that participants perceived the SPARK

facilitator in a positive manner, which appeared to be a leading factor influencing the participants' readiness to change. One participant (SPM15), who I describe as disgruntled stated,

I felt wrongly accused...Usually the people that do this kind of thing are kind of stern, and I didn't feel that, which is a positive thing; because if you would have pushed it on me, then I would have pushed back. You handled it very well, even though I didn't want to do this program.

I did not ask SPM15 as to what he was referring to when he said "people that do this kind of thing are kind of stern," however, I assume he had attended previous alcohol programs as a consequence of the university sanctions and court ordered programs. As stated previously, one of the goals in MI is to resolve ambivalence. Resolving ambivalence involves not pushing any behavior change on a client, only meeting a client where they are. If a facilitator is more authoritative and demanding of the client, they will shut down, tune out, or rebel. For example, participant (SPF16) stated, "I was scared going into this program because you don't want to feel judged or anything...I tell my friends that this [SPARK intervention] is a very helpful thing because you learn a lot from it and not disciplined by it...cause when you are disciplined by it, and someone doesn't want to be, they are not going to change. It is better to teach someone, it would be a better way." Another participant (SPM20) described how previous facilitators were more aggressive. He stated, "They [facilitator] are there to listen. Because I've been to things where people have been aggressive and telling me that I have drinking problems and that just makes you mad." One participant mentioned how the facilitator should adapt to every student's drinking issue differently. SPM15 stated, "The facilitator needs to adjust to who they work with, because some kids are going to say that they don't have a problem, and they are probably the ones that need the most help." Other comments related to facilitation skills included "...someone who is empathetic... cause if you're going to meet with someone (this is a touchy

subject) you want that person to be as honest as possible...” SPF13 stated, “I was feeling like I would be judged because I was in trouble and I would have to come and talk about what I did...I was ashamed about it. After the meeting [SPARK intervention] I didn’t feel so bad, you weren’t judgmental.” These comments suggest that participants need to feel as though they still have some control over the situation. Further, the participants needed to feel that they are in a trusting environment with a facilitator that is concerned for their well-being.

Enhanced motivational interventions with MI increases treatment retention, helps develop intrinsic motivation, and improves the provider-client relationship (Miller & Rollnick, 2012). My findings indicate that the participants had a positive experience with the facilitator and as a result, they had a positive experience in the SPARK intervention, which may have increased motivation to change.

Although the majority of participants reported about the qualifications of an effective facilitator, they also reported (Sub-theme 2.3) that they would not have learned if the SPARK intervention were in a group setting, or led by a peer facilitator. Although these responses did not account for a large number of responses relating to facilitator characteristics, I found them quite profound. One participant (SPM15) mentioned how he may listen to a doctor or someone in a clinical setting. He stated,

If it’s not you [researcher/facilitator], then it should be someone in a lab coat-would have medical knowledge...like I’ve noticed that you make sure that the person is really comfortable around you and that’s what makes the experience a little easier and a little bit more effective....I thought it would be like you criticizing me like for everything that I was talking about.

This comment suggests that some students may perceive a doctor, or someone wearing a white lab coat as more educated, knowledgeable, and professional, thus more qualified to

facilitate an alcohol intervention program. It is possible that this participant views an alcohol drinking problem as a disease, and believes that individuals need to be treated in a medical setting. One participant (SPF13) commented about how the facilitator should be like a mother figure. She stated, "...they should be like a motherly type of person." The comment suggests that the participant perceives an effective facilitator as a kind and caring authority figure, who will be nonjudgmental and forgiving, regardless of their behavior. SPM19 described how the facilitator of the SPARK intervention should not be a college student. He stated,

I think it shouldn't be a college student, cause I probably wouldn't take him seriously. It probably would have to be someone in their late 20's-because they are older and they have been through a lot, and they have lived 10 or more years than you and they know how life works.

Another participant (SPM14) had similar feelings. He stated,

So, you do a good job at it. I think the person should be older, if it were someone my age telling this stuff, I would be like, yeah, whatever. I would be like-why are you here talking to me about this? I wouldn't like it. I wouldn't show a male peer as much respect. If she were a young female peer, it might not be so bad. If it were an older male that would probably be OK. I wouldn't feel as comfortable if it were a young peer.

Since peer educators have been substituted for many trained professionals due to cost restraints in U.S. colleges and universities (Mastroleo et al., 2008), this comment was very surprising. SPARK participants perceived an undergraduate student as not experienced, and not credible, and preferred someone with more life experience. I believe that mandated students require a specific alcohol intervention program targeting their individualized needs.

A longitudinal randomized study (Larimer et al., 2001) involving 12 fraternities at a West Coast college, compared the efficacy of motivational interventions delivered by peer interviewers or professional research staff. Results showed that both groups (in fraternities) reported consuming less alcoholic drinks per occasion, regardless of the provider (peer or

professional staff), suggesting that peer interviewers were just as effective as the professional research team in delivering a motivational intervention. However, the peer interviewers used in Larimer's study were masters and doctoral clinician students from the counseling department. This study by Larimer et al. is the first and only known study that evaluated a peer interviewer verses a professional provider of alcohol prevention services. The term *peer interviewer* can be somewhat misleading in the literature. I did not find any research that used young peers (same aged peers as study participants) in delivering an enhanced motivational intervention with MI.

After further evaluation of effective intervention programs (Tier 1), the majority of colleges and universities use peer interviewers (facilitators) that are trained in the MI communication method. These peer interviewers are typically master and doctoral clinicians from the counseling or psychology departments. Logan (2013) and Mastroleo et al. (2011) indicated that facilitators should be deemed competent in MI before implementing a brief motivational intervention in an effort to reduce defensiveness. However, my findings suggest that a person competent in the constructs of MI will lead to perceived satisfaction in the intervention program.

Principle 4: Externalizing Feelings Increase the Therapeutic Benefits and Motivation to Change

After analyzing the data within the themes, *externalizing feelings increase therapeutic benefits and motivation to change* emerged as Principle 4. Program characteristics (Theme 1), timing of intervention (Theme 6), and delivery method preference (Theme 8) are the themes that are interrelated and support my interpretation of Principle 4.

Tomm (1989) describe externalizing feelings as a “linguistic separation of the distinction of the problem from the personal identity of the patient” (para 1). Ramey, Tarulli, Frijters, and Fisher (2009) have a similar description, “Externalizing involves using language to position problems and other aspects of people’s lives outside of themselves” (p. 262). For example, SPF16 stated, “It took me taking a step back and thinking about it...So whenever I realized how I drank and looking at it from the outside perspective, I didn’t know that I was like that.” In SPF16’s statement, she separated herself from the problem (i.e., risky drinking behavior). When the problem is externalized, the problem becomes identifiable. In other words, externalizing can free a person of negative feelings (i.e., guilt) because they now realize that they are not the problem; the behavior (e.g., binge drinking) is the problem. The constructs of the MI process are the key component of an enhanced motivational intervention, and my findings indicate that the most frequently reported responses in program characteristics (Theme 1) were self-reflection/self-realization (Sub-theme 1.1), and meeting face-to-face (Sub-theme 1.2) thus supporting my interpretation of Principle 4.

To re-establish the context of this discussion, the SPARK intervention consists of several components such as alcohol screening, teaching protective behavioral strategies, cognitive-behavioral skills training (e.g., self-monitoring BAC), meeting face-to-face, personalized feedback, and MI, which are all considered effective components (Cronce & Larimer, 2011). However, MI is the key component of the SPARK intervention. The facilitator asks the participants open-ended questions, which elicit change talk; whereas, closed-ended questions can suggest an interrogation. Cronce and Larimer (2011) and Logan (2013) identified MI as an active ingredient in effective motivational interventions. SPF2 acknowledged that part of the

value of her SPARK experience was attributed to self-reflection. She stated, “I think that it was very helpful to come in and talk, and write it down. Once you write it down, or say it out loud, it makes it reality.” The tenets of MI include rolling with resistance, expressing empathy, and developing discrepancy (Miller & Rollnick, 2002). The process of self-reflecting helps an individual correct their mistaken thoughts or actions, and learn from them (Maldonado, 1996). When participants are able to externalize their experience, they are also able to alleviate feelings of guilt. Tuckman (2001) indicates that verbalizing feelings have a therapeutic effect on the brain. When participants identify their feelings and verbalize them out-loud, they become more confident and capable of coping with a difficult situation and more able to move forward in life. Participant (SPF5) described how she never realized how much she was drinking until she had to write it down. She stated, “Actually, it helped me to see how much I was drinking. I didn’t even think about how much I was drinking ever.” Once again, it can be seen in this illustration that externalizing the experience allowed the participant to see her drinking behavior in a new perspective, as if she were looking through the window at another person’s life. When a participant writes down their drinking frequency in a week, they are able to view the drinking behavior. As a result, participants are now labeling their own drinking behavior (i.e., heavy drinking, minimal). When a participant is able to label their own drinking behavior, they learn from it, and will more likely be motivated to change. For example, SPM18 expressed how he was shocked about the number of times he has been drunk since he began drinking in his early teens. He also mentioned how he had never counted out his drinks on paper before. He stated,

Looking at the numbers was really kind of shocking of how many nights I was drunk...I have never counted how many times I’ve been drunk before-I mean I know I was drunk a lot but I never counted it. But when you look at the numbers as a whole-yeah, after that, I really realized how much I really do drink.

Kraemer et al. (2002) indicated when participants were made aware of their risky drinking behavior, they moved from the pre-contemplation to the contemplation stage. The communication method of MI presents reasons to change, confidence to change, and helps to resolve ambivalence. In order to resolve ambivalence, the facilitator needs to be able to recognize and reinforce change talk by allowing the participant to self-reflect (e.g. arrest, hospital transport), and to weigh the pros and cons (decisional balance). Dumas, Workman, Navarro, and Smith (2011a) stated, "Decisional balance is used in the spirit of motivational interviewing, which may minimize participants' perceptions of condemnation or judgment and increase their motivation to change" (p. 66). Borsari and Carey (2005) found that interventions are efficacious when students are ready and motivated to change their drinking behavior. SPARK participants agreed that meeting face-to-face allowed them to express their feelings openly, thus relieving any negative emotions. My findings are consistent with Elliott et al., (2008), who describe a face-to-face intervention as having therapeutic benefits. For example, participant (SPF13) described how meeting 1-on-1 helped her to discuss her problems. She stated, "I made a big change; coming here really helped in the one-on-one- really helped me open up. It helped a lot. It really helped me with the alcohol problems and outside the alcohol problem." Another female (SPF17) stated, "I guess it was kind of nice to talk about it and find out what went wrong." SPM12 stated, "SPARK wasn't like a therapy session- it was just going in to talk." These statements reveal how important meeting face-to-face during an intervention can be. I believe that it is imperative for a mandated student to meet face-to-face and receive personalized feedback because mandated students have experienced a negative incident. As a result, the participant has extreme emotions that must be managed through the process of MI in

order for the student to express and relieve these negative feelings and have a therapeutic benefit. Verbalizing words in a 1-on-1 session may help an individual sort through a problem or see a negative situation more clearly. Additionally, talking to someone about a problem may help the student release built-up tension and help identify further options that may not have been thought of before. Maldonado (1996) indicates that verbalizing our words out loud helps us to problem-solve. For example, in the following quote, the participant (SPM6) comments on how nice it was to have someone listening to him in a 1-on-1 session. He stated,

I liked the fact that it was more personable. It was nice to have someone listening to me and give me feedback just 1-on-1 like that. I had two 1-hour sessions and I'm happy I went through the program to be honest.

Participant (SPM12) described how meeting with someone in person helped him to feel better about himself. He stated,

I think meeting with someone in person... did help a lot. And just going over and just talking to you about my [incident] did help me because I mean- since my parents live far away, I didn't want to talk to them about it, and then I got in trouble. SPARK did help me and I did learn a lot. And then just being able to talk about it, and just getting everything off my chest (I guess you could say) made everything better.

When a facilitator engages in a MI style conversation, drinking patterns are revealed through the process of self-reflection/self-realization, thus developing discrepancies between one's perception of their drinking behavior and their actual drinking behavior. This discrepancy in a behavior is a milestone in the behavior changing process. Prochaska et al. (2002) states, "Interventions should be individualized and matched to students' readiness to change to reduce resistance, reduce stress, and reduce the time needed to implement the change by accelerating movement toward the Action change" (p. 40). Motivational interventions that utilize MI methods also integrate the stages of change (Prochaska & Diclemente, 1992) in an effort to

influence motivation to change. When met with resistance, the interviewer should meet the client where they are. In the original SPARK intervention, students met with the facilitator face-to-face; the facilitator was able to recognize the demeanor of the student, thus, determine his or her emotional state, and proceed accordingly. Although the SPARK intervention is not a counseling session, the MI communication method used in the session is considered to exhibit therapeutic benefits, similar to counseling. Counseling is a process of self-discovery that can help people learn to cope with substance abuse and addiction, as well as many other issues. Counseling also helps people develop skills needed to cope. Counseling also increases our self-awareness and as a result, individuals are able to gain a better understanding of their own behavior. SPF2 described her experience in the SPARK intervention in the following way. She stated,

Now, I understand on a personal level. I understand how many drinks it would take to make me black-out. In the interview [initial SPARK intervention], I realized that this experience is real... You can't pretend it didn't happen. It also helps you understand when you say it out loud or writing it down..."

Theme 6 (specifically Sub-theme 6.1) describes how soon after receiving the alcohol violation that a student should complete the SPARK intervention program. The majority of participants ($n = 15, 75\%$) reported that a student should attend the SPARK intervention as soon as possible, but before 3 weeks after receiving an alcohol violation. Participants reported that attending an intervention (sooner rather than later) is more beneficial because feelings can be expressed and somewhat relieved of their shame thus, supporting the therapeutic benefits of externalizing feelings. For example, SPF2 stated,

They should go to a program right away because you feel too much shame and you really needed someone to talk to... The longer the time that went by, the more shame I felt. If it

is too much time, then you will either forget about it or you will just feel terrible about yourself.

Another participant (SPM18) reported that talking about the incident while it is fresh in your mind might be helpful.

I would recommend within 2 weeks for sure. Cause then I feel like, I was done with getting caught, and there was a lot of consequences and stuff, and while you're at it, why not talk about it while its fresh in your mind. Maybe you'll stop what you were doing or maybe you'll be safer.

One participant (SPF13) stated, "I think they should see someone within a month of the violation." In the same statement she also stated, "I feel like the longer they wait, the crankier they get about why they need to go see this person about my alcohol problem, where if they come to the program right after the violation, they will feel better." This participant suggests that the SPARK intervention could help them relieve unwanted feelings sooner, which is a positive comment regarding the importance of the timing of the intervention. One male (SPM20), whom I labeled as the outlier of the current study (because he reported making no changes in his drinking behavior) suggested that the SPARK intervention program was only for alcoholics. He stated, "I think the program is geared towards alcoholics...I only feel like a program like this [SPARK] should be implemented if they blew an extremely high BAC or is completely hammered." My findings are consistent with a previous research study by Logan (2013) who found that mandated students may have better outcomes if the intervention is scheduled and completed sooner. However, there is no research indicating the most appropriate time to conduct an intervention. Further research is needed to investigate the student's feelings and emotional state after the incident and before the intervention.

So far I have discussed Sub-themes 1.1, 1.2, and Sub-theme 6.1. The last theme that supports the concept of Principle 4 is Theme 8 (delivery method preference). Theme 8 reveals that every participant ($n=20$, 100%) in the current study reported preference for the SPARK intervention meeting face-to-face as compared to the computer-based intervention. The majority of participants' reported that the computer-based intervention was not helpful, and that a personalized intervention, such as SPARK may be able to clearly identify alcohol problems in college students. The computer-based intervention used at this university incorporates evidence-based strategies that inspire students to reflect on and consider changing their drinking behavior (AlcoholEdu for College, 2008). All first year college students are required to complete the same computer-based intervention. Before attending the SPARK intervention, every participant is required to complete the same computer-based intervention that targets mandated students. Thus, the computer-based intervention is similar to the program required for first time college students. Also, if the student is a member of Greek life, they are required to complete the same computer-based intervention that targets Greek members. As a result, some of the SPARK participants have completed the computer-based intervention as many as three times. For example, participant SPF17 stated,

I had already done the freshmen online and the Greek life online program. And so this was my 3rd time doing the online program. Then it makes you take a survey, honestly I was so done with it, I was just clicking the same answer. I was so bored with it, I didn't like it. The SPARK program was a lot more interesting.

Other study participants had similar feelings "...I wouldn't even suggest AlcoholEdu for a person that got a violation for having a beer in his room. Maybe just get a warning or assessment, or go talk to someone.," "I could look up the answers online and listen to music and turn down the online program.," "I think that the school should start with SPARK instead of the

online program.,” “If I had just had the online program, I wouldn’t have learned... watching the AlcoholEdu videos, I don’t think that anyone is going to intently watch them.,” “... I would say I would just recommend the SPARK program. I personally hated the online program...the online program was terrible... I would refer SPARK because it is more in depth for someone who got a violation like I did... you actually don’t have to pay attention to the online program.,” “SPARK helped me a lot more than AlcoholEdu, cause you can go 1-on-1.” and “Well, I don’t want to hate on the alcohol online program. I know some other people that would just go through the alcohol online program and they wouldn’t learn. I would refer SPARK to my friend.”

Carey et al. (2009) found that college students reduced their alcohol use following a face-to-face intervention as compared to a computer-based intervention. Another study (Carey et al., 2010) indicated that both male and female students who had violated campus alcohol policies reported reducing drinking behavior after one month following a face-to-face brief motivational intervention in comparisons to computer-based interventions. Although computer-based interventions reach more individuals, the face-to-face interventions are more effective in reducing risky drinking behavior because of the therapeutic benefits (Elliott et al., 2008). For example, SPM19 stated,

I think I should have had to do SPARK for the first violation, cause I just am not a fan of the online program. I would recommend SPARK for the first violation and recommend coming back to SPARK for the second violation just to talk about what you didn’t get, or if you didn’t learn, talk about it. I don’t know- if I would have met with you the first time, and then I came back and then talk about what happened this time.

Research is inconsistent as to whether computer-based interventions are more effective than a counselor-based intervention. For example, Mastroleo et al. (2011) indicated that mandated students who reported lower personal responsibility (about the incident), benefited

from a computer-based intervention as compared to a counselor-based intervention. Mastroleo et al. (2011) suggested that these students did not accept responsibility for the incident; as a result, the students did not benefit from the counselor-based intervention because they were defensive. Although my findings reported two participants as defensive, 100% of participants in the study, including the two participants noted above, preferred completing the SPARK motivational intervention (meeting face-to-face) than the computer-based intervention.

Externalizing feelings increased therapeutic benefits, because participants had the opportunity to self-reflect in a face-to-face, enhanced motivational intervention with MI (key component of the SPARK intervention), thus increasing motivation to change. These positive therapeutic benefits may not have been experienced if the participants had only completed the computer-based intervention.

Answers to the Research Questions

The first research question was related to the protective behavioral strategies that were presented in the SPARK intervention program and whether the participants applied these strategies. Participants reported applying protective behavioral strategies as a result of learning cognitive behavioral skills presented in the SPARK intervention program. The protective behavioral strategies applied: 1) avoided alcohol-related harms; 2) limit/quit drinking; and 3) mode of drinking. Participants reported learning the following cognitive behavioral skills: 1) BAC chart; 2) harm reduction strategies; 3) making a plan; and 4) learned how alcohol affects men and women differently. Research indicates that mandated students are more likely to apply protective behavioral strategies because they found it easier to apply these strategies while out drinking. As a result, cognitive behavioral skills should be included in alcohol interventions.

The second research question was related to the participants' drinking behavior on the day of receiving their alcohol violation. The majority of participants (65%) reported binge drinking, 30% reported minimal drinks, and 5% reported not drinking at all on the day of receiving the alcohol violation. This answer indicates that the majority of mandated students engage in risky drinking behavior (i.e., binge drinking). Because binge drinking has been linked to unintentional injuries, deaths, and poor academic performance, colleges need to be prepared to meet the needs of mandated students by implementing an enhanced motivational intervention with MI and cognitive behavioral skills.

The third research question was related to how participants described their experience in the SPARK intervention program. The majority of responses (37%) indicated that program characteristics (specifically self-reflection/self-realization) were the most helpful aspect of the SPARK alcohol intervention program. Motivational interviewing is the component within the SPARK intervention that encouraged participants to self-reflect, thus externalizing their feelings increased therapeutic benefits and their motivation to change their drinking behavior. This answer indicates that the MI communication method is a critical component of an effective alcohol intervention. Research (NIAAA, 2002) indicates that a Tier 1 intervention will include the MI component. It is important to design interventions with the MI component and to have competent MI interviewers. This information is important in forming potential theory based intervention strategies.

The fourth research question was related to the factors that influenced a motivation to change their drinking behavior. The majority of participants reported the SPARK alcohol intervention as the leading factor (single and multiple factors) that influenced a motivation to

change their behavior. The incident was the next leading factor (single and multiple) that influenced a motivation to change. This answer indicates that the SPARK alcohol intervention was important in influencing mandated students to change their drinking behavior. This also indicates that the SPARK program is of value and helps mandated students to reduce their risky drinking behavior and alcohol-related harms.

Recommendations

This study was designed to explore the influence of an alcohol intervention program, implemented in one large Southern university, on attitudes, behaviors, and knowledge of college students who had been mandated to attend the program. Analysis of the literature and the data from this study indicate several areas of attention for those involved in the implementation and evaluation of alcohol intervention programs in colleges and universities. The following recommendations are listed as: a) method of delivery; b) timing of intervention; c) program components; d) personnel and; e) future research and suggestions.

Method of Delivery

- Because we know that mandated students may experience a loss of autonomy, an enhanced motivational intervention with MI should be delivered via face-to-face.
- Based on my findings, I recommend eliminating the computer-based intervention for mandated students in an effort to reduce defensiveness and increase motivation to change.
- If the university insists on keeping the computer-based intervention for mandated students, I recommend that the face-to-face enhanced motivational intervention with MI be conducted before the computer-based intervention program.

- In-coming college students should be required to complete the computer-based intervention.

Timing of Intervention

- The majority of participants reported that the alcohol intervention should be implemented as soon as possible, and no longer than 3 weeks after receiving the alcohol violation.
- Research indicates that mandated students should attend an intervention as soon as possible in an effort to reduce defensiveness, and externalize feelings (Logan, 2013).
- Enhanced motivational interventions with MI should be implemented for the first alcohol violation, instead of waiting until the student receives a second violation.
- Future research should investigate the timing of an intervention for mandated students.

Program Components

- The cognitive behavioral skills should include the BAC chart, harm reduction strategies, planning strategies, and educational information regarding how alcohol affects women and men differently. Cognitive behavioral skills equip participants with the tools and knowledge that can lead to better decision making skills while consuming alcohol.
- Because the majority of responses (64.7%) cited avoiding alcohol-related harms, as compared to limit/quit drinking (24.5%) and mode of drinking (10.7%); alcohol interventions should focus on teaching students how to avoid any harm related to alcohol consumption. Haines et al. (2006) suggests that college students may be more likely to learn and apply protective behavioral strategies.

Future Research and Suggestions

- Future research is warranted in understanding the relationship between the facilitator and the intervention program.
- In an effort to improve the efficacy of an alcohol intervention program, more research is warranted in exploring how facilitator characteristics impact the satisfaction of the intervention.
- Future research is warranted in exploring how MI interviewers are trained and evaluated.
- Because RAs and hearing officers are typically the first officials that will meet with the students immediately following the violation, they should be trained to use the MI communication method, in an effort to elicit change talk and reduce defensiveness.
- The SPARK alcohol intervention should be continued at this university and additional trained staff should be hired so that mandated students can receive a timely, effective intervention.

Conclusion

The researcher conducted a phenomenological study and interviewed 20 students who previously were mandated to attend the SPARK intervention from the years 2011-2014. After analyzing the data, nine themes emerged: 1) program characteristics; 2) facilitator characteristics; 3) the SPARK alcohol intervention was the leading factor influencing a motivation to change their drinking behavior; 4) participants applied protective behavioral strategies; 5) participants learned cognitive behavioral skills; 6) the intervention should be implemented as soon as possible-3 weeks after receiving an alcohol violation; 7) denial of problem; 8) participants (100%) reported that they would rather complete the face-to-face SPARK alcohol intervention

than complete the computer-based program; and 9) the majority of participants were binge drinking at the time of receiving the alcohol violation. Principles were revealed throughout the themes and are supported by the participants' words and the literature. The four principles are: 1) Autonomy in the therapeutic process; 2) Enacted knowledge increased motivation to change; 3) Satisfaction with the facilitator may increase satisfaction with the program; and 4) Externalizing feelings increase the therapeutic benefits and motivation to change.

Some researchers and university officials are aware that peer pressure and enticing party environments have been implicated in the culture of excessive drinking. Currently, only 1 in 5 college administrators are actually aware of the intervention strategies considered most effective (i.e., Tier 1 interventions) for reducing alcohol related consequences and risky drinking behavior in college students (Nelson, Toomey, Lenk, Erikson, & Winters, 2010). Numerous studies (Doumas, Workman, Smith, & Navarro, 2011b; Logan, 2013; Palmer, 2004) have indicated that motivational interventions utilizing MI communication methods are more effective than education only, and computer-based interventions. However, research has yet to identify a specific component of an intervention that may result in a mandated student to reduce risky drinking behavior (Kraemer et al., 2002; Misch, 2007). Palmer et al. (2010) suggest that mandated students face different challenges than volunteer students and tend to be more defensive because they have actually experienced the negative consequences of their behaviors.

A Tier 1 intervention consist of an enhanced motivational intervention with MI, cognitive behavioral skills, and norms clarifications (NIAAA, 2002). My findings indicate that the SPARK alcohol intervention influenced a motivation to change their drinking behavior. Additionally, the participants learned and applied the protective behavioral strategies. Under

these guidelines, the SPARK alcohol intervention program qualifies as a Tier 1 intervention. My data revealed that the participants perceived the SPARK alcohol intervention as an effective intervention and reduced their risky drinking behavior as a result. The information learned in this current study could be important in guiding alcohol intervention programs for other campuses, in the future. Further efforts, on college campuses across the country, should be made to tailor intervention programs for specific high-risk populations in an effort to reduce alcohol-related harms.

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Table 1
Demographic Characteristics by Gender (n=20)

Demographic Characteristics by Gender	Total (n=20)		Women (n=7)		Men (n=13)	
	n	%	n	%	n	%
Age						
18	11	55.0	4	57.14	7	53.85
19	5	25.0	3	42.86	2	15.38
20	3	15.0	0	0	3	23.08
21	1	5	0	0	1	7.69
Race/Ethnicity						
White, Non-Hispanic	16	80	6	85.71	10	76.92
Black or African American	1	5	0	0	1	7.69
Latino or Hispanic	2	10	1	14.29	1	7.69
Native American	1	5	0	0	1	7.69
Class Standing						
Freshman	10	50	5	71.43	5	38.46
Sophomore	5	25	2	28.57	3	23.08
Junior	4	20	0	0	4	30.77
Senior	1	5	0	0	1	7.69
Greek Involvement Status						
No	8	40	3	42.9	5	38.5
Yes	12	60	4	57.1	8	61.5

(Cont)

Table 1 (Cont)

Demographic Characteristics by Gender (n =20)

Demographic Characteristics by Gender	Total (n=20)		Women (n=7)		Men (n=13)	
	n	%	n	%	n	%
Current Relationship Status						
Single	12	60	5	71.4	7	53.8
Dating	5	25	1	14.3	4	30.8
In a Serious Relationship	3	15	1	14.3	2	15.4
Family Alcoholism						
No	13	65	4	57.1	9	69.2
Yes	7	35	3	42.9	4	30.8
Able to Drink Alcohol with Family						
No	6	30	3	42.9	3	23.1
Yes	14	70	4	57.1	10	76.9
Smoke Cigarettes						
No	19	95	7	100	12	92.3
Yes	1	5	0	0	1	7.7
Smoke Marijuana						
No	16	80	7	100	9	69.2
Yes	4	20	0	0	4	30.8

(Cont)

Table 1 (Cont)

Demographic Characteristics by Gender (n =20)

Demographic Characteristics By Gender	Total (n=20)		Women (n=7)		Men (n=13)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Diagnosed with ADD or ADHD						
No	13	65	4	57.1	9	69.2
Yes	7	35	3	42.9	4	30.8
Do you take Medication for ADD or ADHD?						
No	15	75	5	71.4	10	76.9
Yes	5	25	2	28.6	3	23.1
Residence						
Dorms On-Campus	15	75	6	85.7	9	69.2
Off-Campus Apartment	4	20	1	14.3	3	23.1
Greek Housing	1	5	0	0	1	7.7

Table 2

Frequency of Study Participant Responses for the Nine Themes

Frequency of Study Participant Responses for the Nine Themes	Total Responses 777
1. Program Characteristics	280
2. Facilitator Characteristics	90
3. Factors Influencing Motivation to Change	31
4. Applying Protective Behavioral Strategies	102
5. Cognitive Behavioral Skills Learned	213
6. Timing of Intervention	20
7. Denial of Problem	1
8. Delivery Method Preference	20
9. Drinking Behavior at Time of Receiving Violation	20

Table 3

Theme 1: Program Characteristics

Theme 1: Program Characteristics	280 Responses	% Percent
Sub-theme 1.1: Self-Reflection/Self-Realization	167	59.64
Sub-theme 1.2: Face-to-Face	99	35.36
Sub-theme 1.3: Other Factors	14	5

Table 4

Theme 2: Facilitator Characteristics

Theme 2: Facilitator Characteristics	90 Responses	% Percent
Sub-theme 2.1: Personal Characteristics	62	68.89
Sub-theme 2.2: Facilitation Skills	16	17.78
Sub-theme 2.3: Other Aspects	12	13.33

Table 5

Theme 3: Factors Influencing Motivation to Change

Theme 3: Factors Influencing Motivation to Change	Single (<i>n</i> =13) Factors		Multiple (<i>n</i> =7) Factors		Both (<i>n</i> =20) Factors	
	(R = 13)	%	(R =18)	%	(R =31)	%
Alcohol Intervention (SPARK)	5	38.46	6	33.33	11	35.48
Incident	4	30.77	4	22.22	8	25.81
Sanctions	1	7.69	6	33.33	7	22.58
Personal Reasons	2	15.38	2	11.11	4	12.90
No Change	1	7.69	0	0	1	3.23

Note. R = Responses

Table 6

Theme 4: Applying Protective Behavioral Strategies

Theme 4: Applying Protective Behavioral Strategies	102 Total Responses	% Percent
Sub-theme 4.1: Avoided Alcohol-related Harms	66	64.71
Sub-theme 4.2: Limit/Quit Drinking	25	24.51
Sub-theme 4.3: Mode of Drinking	11	10.78

Table 7

Theme 5: Cognitive Behavioral Skills Learned

Theme 5: Cognitive Behavioral Skills Learned	213 Total Responses	% Percent
Sub-theme 5.1: Blood Alcohol Content Chart	83	38.97
Sub-theme 5.2: Harm Reduction Strategies	66	30.99
Sub-theme 5.3: Make a Plan	44	20.66
Sub-theme 5.4: How alcohol affects men and women differently	20	09.39

Table 8

Theme 6: Timing of SPARK Intervention

Theme 6: Timing of SPARK Intervention	N=20	% Percent
Sub-theme 6.1: ASAP-3 Weeks	15	75.00
Sub-theme 6.2: 1-3 Months	3	15.00
Sub-theme 6.3: Depends on Person	2	10.00

Table 9

Theme 9: Drinking Behavior At Time of Receiving Alcohol Violation

Theme 9: Drinking Behavior At time of Receiving Alcohol Violation	N=20 Males (n=13) Females (n= 7)	% Percent
Sub-theme 9.1: Binge Drinking	13	65.
Male	8	61.54
Female	5	71.43
Sub-theme 9.2: Minimal Drinking	6	30.
Male	4	30.77
Female	2	28.57
Sub-theme 9.3: Not Drinking at time of violation	1	5.
Male	1	7.69
Female	0	0

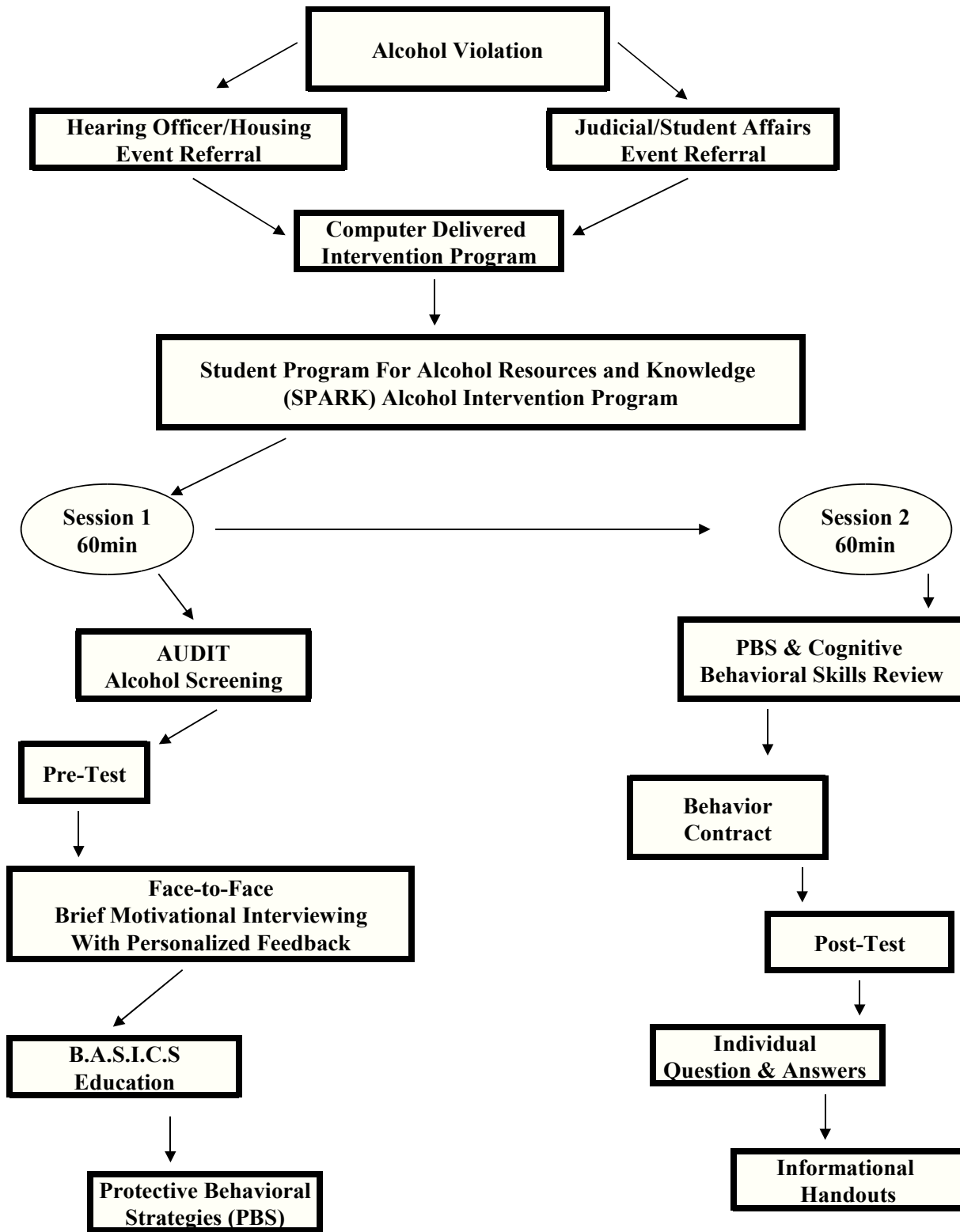
Table 10

Sub-theme 9.4 Perceptions of Why Students Binge Drink

Perceptions of Why Students Binge Drink	25 Total Responses	% Percent
Peer Pressure	9	36
Feel More Outgoing	6	24
Wash Away Problems	6	24
Rite of Passage	4	16

APPENDIX A

SPARK Alcohol Intervention Flow Chart



APPENDIX B

Email Sent to SPARK Study Participants

Dear SPARK Participant,

My name is Suzanna Guizar and we met during a SPARK session at the University of Arkansas.

At that time, you indicated an interest in possibly participating in my research study. I am writing to tell you that I believe you may be interested in my research study called “Student’s Perspectives after participation in a Mandated Alcohol Intervention Program called SPARK.” Your participation is voluntary and you will be compensated with a \$25.00 Visa gift card in exchange for a 1-hour, individualized audio taped interview with me at the Pat Walker Health Center. You are free to refuse to participate in the research and to withdraw from this study at any time. The Purpose of the Study is to explore how students describe his or her experience in the SPARK program. You will be assigned a code number and only I will know your name, but will not divulge it or identify your answers to anyone. All information will be held in the strictest of confidence. All transcripts will be kept in a sealed envelope and stored in a locked cabinet. All information will be kept confidential to the extent allowed by applicable State and Federal Law. The study will help me to explore, understand, and describe college students’ self-reported experiences after participation in a mandated alcohol intervention called SPARK. I hope that the research will assist health professionals, particularly in college health settings, in future planning of evidence-based alcohol intervention programming.

If you are interested, please contact me via email and we can set up a date and time to meet.

Thank you so much

Suzanna L. Guizar, Doctoral Candidate

Prevention of Substance Abuse, GA

SPARK Facilitator

Wellness & Health Promotion Instructor/Pat Walker Health Center

University of Arkansas, Fayetteville

APPENDIX C

Office of Research Compliance Institutional Review Board



Office of Research Compliance Institutional Review Board

March 31, 2014

MEMORANDUM

TO: Suzanna Guizar L. Jean Henry

FROM: Ro Windwalker
 IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 14-03-565

Protocol Title: *Student Perspectives after Participation in a Mandated Alcohol
 Intervention (SPARK): A Phenomenological Qualitative Study*

Review Type: EXEMPT EXPEDITED FULL IRB

Approved Project Period: Start Date: 03/31/2014 Expiration Date: 03/23/2015

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (<http://vpred.uark.edu/210.php>). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 20 participants. If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval

prior to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 210 Administration Building, 5-2208, or irb@uark.edu. 210 Administration Building • 1 University of Arkansas • Fayetteville, AR 72701 Voice (479) 575-2208 • Fax (479) 575-3846 • Email irb@uark.edu

The University of Arkansas is an equal opportunity/affirmative action institution.

APPENDIX D

Informed Consent

Informed Consent

- Title:* Students Perspectives on the Overall Efficacy of a Mandated College-Level Alcohol Intervention Program
- Investigator:* Suzanna L. Guizar, Doctoral Candidate
Leah J. Henry, Ph.D. Faculty Advisor
University of Arkansas
College of Education and Health Professions
Department of Community Health Promotion
- Description:* This study will interview students previously mandated to attend the alcohol intervention program, called SPARK. The purpose of the study will be to: 1) determine whether the students currently use protective behavioral/harm reduction strategies when going out drinking; 2) determine how students define binge drinking; 3) determine how students describe his or her experience in the mandated alcohol intervention program; 4) explore what factors are potentially motivating a change in attitude and or behavior and; 5) determine whether students perceive that changes in attitude and or behavior resulted from the alcohol intervention program. I will also investigate the difference in perceptions between male and female students. SPARK is a program within the Wellness and Health Promotion department, which encourages students to reduce his or her heavy drinking behavior. The study's participants will be both male and female college students who self-identify with being sanctioned by the same university, and shared the same experience of attending two 1-hour alcohol intervention sessions with the same facilitator. Only students who attended SPARK from 2011-2014 will be asked to participate in the study. Approximately 150 students have completed the alcohol intervention program from 2011-2014. Every student will be contacted by email and asked if they would be willing to participate in the research study and then random sampling through Excel will be conducted to reduce bias. It is my goal to interview between 15-20 students who participated in the SPARK program. This number is based on Creswell's (2009) and Ryan and Bernard's (2003) recommendation as an appropriate sample size for this type of study.
- Risk and Benefits:* The benefits include contributing to the knowledge base of how students, who are mandated to attend, perceive the college-level alcohol intervention program. There are no anticipated risks to participating in the study.

Informed Consent (Cont)

Voluntary Participation: Your participation in the research is completely voluntary. In exchange for your one hour interview, you will be paid \$25.00 per one hour interview.

Confidentiality: You will be assigned a code number that will be used to match documents and interview questions. All information will be audio taped to ensure accuracy. Only the researcher will know your name, but will not divulge it or identify your answers to anyone. All information will be held in the strictest of confidence. Results from the research will be reported as aggregate data. Hardcopies of transcripts (including the signed informed consent form, instrument paper, and audio tapes) will be kept in a sealed envelope and stored in a locked cabinet. All information will be kept confidential to the extent allowed by applicable State and Federal law.

Right to Withdraw: You are free to refuse to participate in the research and to withdraw from this study at any time. Your decision to withdraw will bring no negative consequence-no penalty to you.

Informed Consent: I, _____, have read the description, including the purpose of the study, the procedures to be used, the potential risks and side effects, the confidentiality, as well as the option to withdraw from investigator. The investigator has answered all of my questions regarding the study, and I believe I understand what is involved. My signature below indicates that I freely agree to participate in this qualitative study and that I have received a copy of this agreement.

Signature

Date

APPENDIX E

Interview Protocol

Interview Protocol

Establishing Consent:

I will ask the student to: “please review the following document (Informed Consent Form) and let me know if you have any questions. If you agree to participate in the study, please sign the form.”

I will remind the student that the interview will be recorded, but that no identifying information will be included. I will also remind the student that the audio files will be destroyed after transcription and that all files will be kept in a secure location, on a password protected computer.

Interview:

I will ask the participant if he/she has any questions prior to starting the interview. I will then tell the student that I am going to start recording and begin the interview.

After the interview is complete, I will thank the student for their time, turn off the recorder and present them with the gift card.

APPENDIX F

Demographic Questions

Demographics

1. Age at time of Violation _____

2. Birth Sex:

Male

Female

3. Sexual Orientation

Bisexual

Gay

Lesbian

Straight/Heterosexual

Questioning

4. Ethnic Background:

Non-Hispanic/Non-Latino (a)

Hispanic/Latino (a)

5. Ethnic Background:

Asian/Pacific Islander

Black/African American

Native American/American Indian

White/Caucasian

Multiracial

Other (please specify)

6. Class Standing:

Freshman

Demographics (Cont)

Sophomore

Junior

Senior

7. GPA at time of alcohol violation:_____

8. Current GPA_____

9. Where did you live at time of violation?

Fraternity or Sorority House

Off-Campus/Apartment/House

Residence Halls/Dorm Room

With Parents

10. Is your residence currently designated as substance free housing?

No

Yes

11. Relationship Status

Single, not dating

Single, dating

In a serious relationship

Engaged

Married

Divorced

Demographics (Cont)

12. Extracurricular Activities (circle all that apply)

Intercollegiate athletics

Regular attendance at religious services

Volunteering

Political Activism

Intramural athletics

Outdoor clubs

Work

Honors program

Other (please specify)

13. Are you a member of a fraternity or sorority?

No

Yes

14. Family History of Alcoholism?

No

Yes

15. Are you allowed to drink alcohol with your family?

No

Yes

16. How long after receiving your alcohol violation before you attended the SPARK program? _____

17. How long has it been since completing the program? _____

Demographics (Cont)

18. Have you ever been diagnosed with ADD or ADHD?

No

Yes

19. Do you currently, or were you taking medicine when you received alcohol violation) take any medicine for ADD or ADHD?

No

Yes

20. Do you smoke cigarettes? If so, how often? _____

No

Yes

21. Do you smoke marijuana? If so, how often? _____

No

Yes

APPENDIX G

Interview Questions and Probes

Interview Questions and Probes:

1. Describe a typical night when you go out drinking.

Probe: Describe your own drinking behavior when you go out drinking.

Probe: What do you do to prepare to go out drinking?

Probe: What do you do to protect yourself when you go out drinking?

2. What do you think of when you hear the term binge drinking?

Probe: For example, binge drinking is a term often heard on college campuses.

What do you think binge drinking is?

3. Describe, in detail, your experience in the program.

Probe: Tell me what you remember learning from the program?

Probe: What components do you remember most from the program?

Probe: What, if any, was the most helpful and least helpful component of the program and why?

Probe: Which component, if any, was the easiest to apply when out drinking?

Probe: Describe the ideal person to facilitate this program?

Probe: Do you feel that the program was helpful in preparing you to make better decisions about your drinking behavior?

Probe: When, if at all, do you feel that this program should be implemented?

4. Looking back, at which point in time or event did you decide to make a change, if at all?

Probe: For example, some students realize that he or she needs to change because they were arrested, do you remember a time or event that made you change?

Probe: If you did not make any changes, can you describe why?

APPENDIX H

Coding Framework for SPARK Participants Responses

Coding Framework for SPARK Participant Responses

Theme 1: Program Characteristics

Sub-themes:

1.1: Self-Reflection/Self-Realization

Examples of Statements Extracted from Text (that mentions anything about self-reflection/self-realization)

1. When you say it out loud, its reality
2. Just realizing how much I drank
3. When we did the breakdown of how much I was drinking

1.2: Face-to-face

Examples of Statements Extracted from Text (that mentions 1-on-1, or personable)

1. Making it personable
2. Talking with someone helped me to be OK with myself.
3. Meeting one-on-one is better

1.3: Other Factors

Examples of Statements Extracted from Text (that mentions any other information about program)

1. Educational Materials were helpful
2. Just a nice and mellow program.

Theme 2: Facilitator Characteristics

Sub-themes

2.1: Personality Characteristics

Examples of Statements Extracted from Text (regarding Personality Characteristics)

1. Kind
2. Understanding

2.2: Facilitation Skills

Examples of Statements Extracted from Text (regarding Facilitation Skills)

1. Empathy
2. Intelligent
3. Good Listener

2.3: Other Aspects

Examples of Statements Extracted from Text (any statement that mentions anything other than a facilitation skill or personality characteristics)

1. If not you, then someone in a lab coat
2. It can't be a student
3. The person needs to be older

Theme 3: Factors Influencing Motivation to Change

Sub-themes

Examples of Statements Extracted from Text (that mentions a single or multiple factor influencing motivation to change)

3.1: Single Factors Influencing Motivation to Change

- 3.1.1: SPARK Influenced Motivation to Change
- 3.1.2: Event Influenced Motivation to Change
- 3.1.3: Personal Reasons Influenced Motivation to Change
- 3.1.4: Sanctions Influenced Motivation to Change
- 3.1.5: No Change

3.2: Multiple factors Influencing Motivation to Change

1. The Sanctions, SPARK, personal reasons, everything made me change
2. Everything made me want to change

Theme 4: Applying Protective Behavioral Strategies

Sub-themes

4.1: Avoiding Alcohol-related Harms

Examples of Statements Extracted from Text (these statements would be anything that mentions ways to avoid danger while consuming alcohol)

1. Don't bring car keys
2. Pour my own drink
3. Eat bigger dinner

4.2: Limit/Quit Drinking

Examples of Statements Extracted from Text (these statements would be anything that mentions stopping or limiting alcohol use)

1. Set a limit
2. Don't take all my beer out
3. Quit drinking

4.3: Mode of Drinking

Examples of Statements Extracted from Text (these statements would be anything that mentions the mode of drinking)

1. Keep track of drinks
2. Space out drinks
3. Avoid shots

Theme 5: Cognitive Behavioral Skills Learned

Sub-themes

5.1: Blood Alcohol Concentration (BAC) Chart

Examples of Statements Extracted from Text Regarding Learning about Personal BAC

1. Learned that mixed drinks are not a standard drink.
2. Learned what a standard drink is.

5.2: Harm Reduction Strategies

Examples of Statements Extracted from Text Regarding Learning about Harm Reduction Strategies

1. Learning to go with someone you trust
2. Learned the dangers of mixing drinks like Jungle Juice & 4 Loco

5.3: Making a Plan

Examples of Statements Extracted from Text (that mentions anything about planning before going out drinking)

1. Learned to have a plan
2. Plan to have friends remind you if you drink too much

5.4: Learned how alcohol affects men and women differently

Examples of Statements Extracted from Text (that mentions learning about how alcohol affects men and women differently)

1. Learning about women facts
2. Learning dangers of having drinking contest with women

Theme 6: Timing of Intervention

Sub-themes

6.1: As soon as possible to 3 weeks

Examples of Statements Extracted from Text (that mentions the time-frame as soon as possible and up to 3 weeks).

1. Go immediately to SPARK after the violation
2. Go at least by 2 weeks

6.2: 1-3 Months

Examples of Statements Extracted from Text (that mentions the time-frame from 1 month up to 3 months).

1. Someone should go to SPARK at least by 4 weeks
2. Maybe within a few months

6.3: Depends on the Person

Example of a Statement Extracted from Text (that mentions something other than a time frame)

1. Depends on the person

Theme 7: Denial of Problem (No sub-themes in Theme 7)

Example of a Statement Extracted from Text (any statement that mentions not having a drinking problem)

1. I don't have a problem.

Theme 8: Delivery Method Preference (No sub-themes in Theme 8)

Examples of Statements Extracted from Text (that mentions how participants preferred meeting face-to-face over computer-based intervention programs)

1. I'd prefer SPARK over online program
2. SPARK was more personal than the online program
3. The online program was a waste of time

Theme 9: Drinking Behavior at time violation

Sub-themes

9.1: Binge drinking at time of receiving alcohol violation

Examples of Statements Extracted from Text (that mentions more than 4 or 5 drinks in a short period of time)

1. 15 or 16 drinks
2. 4 or 5 stout drinks of jungle juice

9.2: Minimal drinking at time of receiving alcohol violation

Examples of Statements Extracted from Text (that mentions 3 or less drinks)

1. 2 or 3 beers
2. I just had a couple of beers

9.3: Not drinking at Time of Receiving Alcohol Violation

Example of a Statements Extracted from Text (that mentions not drinking any alcohol).

1. Not drinking at all

9.4: Perceptions of why students binge drink

Example of a Statements Extracted from Text (that mentions why students binge drink).

1. Peer Pressure
2. More Outgoing
3. Drink away my problems

APPENDIX I

Four Overarching Principles and Supporting Themes and Sub-themes

Figure 1. Four Overarching Principles and Supporting Themes and Sub-themes

