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Lived Experience of College Students Who Reduced their Alcohol Consumption

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LIVED EXPERIENCE OF COLLEGE STUDENTS WHO
REDUCED THEIR ALCOHOL CONSUMPTION

by

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Research has indicated that college students who experience alcohol-related problems

may reduce their alcohol consumption without treatment (Alexander & Bowen, 2004; Barnett,

Goldstein, Murphy, Colby, & Monti, 2006; Blume, Marlatt, & Schmaling, 2000; McNally &

Palfai, 2001). However, the literature regarding their overall experience before, during, and after

this self-initiated change process is limited. This qualitative study investigated the lived

experience of eight college students between the ages of 18 and 25 who reduced their alcohol

consumption for a period of at least 30 days after experiencing alcohol-related problems.

Participants had never met the diagnostic criteria for a "severe" substance use disorder, had

never been in treatment, and did not consider themselves to have an addiction to any substance.

A phenomenological approach was utilized for the study. Participants were able to share their

lived experiences and the meaning thereof through in-depth, semi-structured interviews. Initial

and follow-up phone interviews were conducted with each participant. With the permission of

the participants, each interview was digitally recorded. Each digital recording was submitted to a

professional transcriptionist to be transcribed.

As a result of this process, an understanding of the benefits and challenges of excessive

alcohol use, as well as the benefits and negative effects of alcohol reduction, was developed. Six

broad themes were identified from the phenomenological data analysis, including (a) Benefits of

Excessive Drinking, (b) Experiencing Negative Effects Leading to Change, (c) Benefits of Reducing Alcohol Consumption, (d) Challenges of Reducing Alcohol Consumption, (e) How Reduction was Maintained, and (f) Insights After Change. Discussion of findings includes comparison with existing research, implications for mental health providers, limitations and strengths, and directions for future research. These findings may be of benefit for mental health providers and professionals, and may add to the literature on the experience of alcohol consumption reduction among college students.

ACKNOWLEDGMENTS

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CHAPTER I

INTRODUCTION

Alcohol consumption among college students is considered by many researchers (Schulenberg & Maggs, 2002; Wechsler, Dowdall, Maenner, Gledhill-Hoyt, & Lee, 1998) and students (Crawford & Novak, 2010) a normal part of the college experience. About 60.3% of college students report consuming alcohol, and of those, 40.1% report binge drinking (four or more standard drinks at a time for women, and five or more at a time for men; Substance Abuse and Mental Health Services Administration, SAMHSA, 2013). These drinking patterns carry negative effects (e.g., social, legal, academic) which can have profound impacts on students (Ham & Hope, 2003). Despite these negative effects, overall college drinking rates are relatively high. Part of what explains this continued pattern despite associated negative effects is that students experience various benefits of alcohol use. However, a number of students enjoy the benefits but do not desire to experience the negative effects, and therefore reduce their drinking patterns (Alexander & Bowen, 2004; Barnett, Goldstein, Murphy, Colby, & Monti, 2006; Blume, Marlatt, & Schmaling, 2000).

Given the high prevalence of use and complicating associated factors, the topic of college alcohol consumption has been studied in detail. The majority of the research on the topic, however, examines specific variables in isolation rather than together, and in context. For example, problems (Jackson, Sher, & Park, 2006; Jennison, 2004), benefits (Capron & Schmidt, 2012; Lee et al., 2010), and impetus to change (Alexander & Bowen, 2004; Barnett et al., 2006; Blume et al., 2000; McNally & Palfai, 2001) have been studied individually in great depth.

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However, there is a lack of literature regarding the way these factors interact and contribute to the development of alcohol problems and subsequent change. This study examines the lived experience of college students who reduce their alcohol consumption. Specifically, this study focuses on understanding the experiences of college students' alcohol consumption patterns in a number of ways, including: (a) negative effects of alcohol use, (b) benefits of alcohol use, (c) impetus to reduction, (d) benefits and challenges of reduction, (e) process of change, and (f) personal insights post-reduction. A particular focus of the change process in this study is the challenges, or negative effects, of reducing alcohol consumption.

Background of the Study

Many non-pathology based factors unique to college students contribute to patterns of alcohol use. Developmental level (DeMartini, Prince, & Carey, 2013; Schulenberg & Maggs, 2002), campus culture (Perkins, Haines, & Rice, 2005; Wechsler, Lee, Nelson, & Kuo, 2002), perceived norms (Farber, Khavari, & Douglass, 1980; Lee-Zorn, 2013), and drinking benefits such as affiliation and belongingness of college drinking have been shown to explain the elevated rates for this population relative to their non-college peers (SAMHSA, 2013). However, the conceptualization among researchers tends to be a more pathological explanation. Volkow, director of the National Institute of Drug Abuse (NIDA), and colleagues Koob and McLellan (2016) note in an article in the *New England Journal of Medicine* that what often guides research questions and subsequent answers to consumers of substance use literature is that overuse of substances is attributable to a medical condition, or disease. Students' experiences, however, often do not reflect behavior consistent with a chronic illness. For instance, most who consume alcohol to the point that it is problematic are able to quit or reduce on their own without professional treatment (Misch, 2007; Sher, Bartholow, & Nanda, 2001; Vik, Cellucci, & Ivers,

2003). This group therefore deserves an understanding that differentiates them from those with addictions. A holistic perspective on the development of alcohol-related problems, to the benefits and challenges of alcohol consumption reduction can help provide a more realistic understanding of college students' alcohol-related experiences. In particular, college students' alcohol consumption reduction — something said to be impossible for those with addictions (Bennett, McCrady, Johnson, & Pandina, 1999; Colby, Raymond, & Colby, 2000) — is an area to be emphasized. The paragraphs below briefly review factors associated with alcohol consumption reduction among college students, which as mentioned include (a) negative effects of excessive alcohol use, (b) developmental considerations, (c) benefits of alcohol use, and (d) challenges associated with alcohol consumption reduction.

Negative Effects and Alcohol Consumption Reduction

Findings from various college alcohol consumption research studies indicate that in cases of excessive alcohol consumption, problems may arise in various life domains, including social (Merrill, Read, & Barnett, 2013; Milin, 2008; White & Ray, 2014), legal (Harford, Wechsler, & Muthen, 2002; Jackson et al., 2006; Lee, Maggs, Neighbors, & Patrick, 2011), and academic (Corbin, Morean, & Benedict, 2008; Jennison, 2004). College students often experience enough problems that they determine the costs of excessive alcohol consumption are too great to continue with their drinking pattern (Miller & Tonigan, 1996). The impetus to reduce the quantity and/or frequency of alcohol consumption can emerge in such cases (Alexander & Bowen, 2004; Barnett et al., 2006; Blume et al., 2000; McNally & Palfai, 2001). Those who decide to change their drinking pattern are then faced with a dilemma: reduce consumption to avoid negative consequences of excessive alcohol consumption, or maintain the drinking pattern

to keep experiencing the benefits. Whereas there is a vast body literature on the negative effects of alcohol consumption, a growing number of studies have revealed its benefits.

Benefits Given Up During Reduction

Some researchers even make the argument that alcohol consumption within the college population is not only normal, but is beneficial to identity development. The Transition Catalyst model of identity development indicates that alcohol consumption promotes belongingness to peer groups, campus organizations, identification of personal beliefs and values, and determination of sexual orientation, among other things (Schulenberg & Maggs, 2002). These factors are described in other models of identity development as central to healthy personal growth during the late teens and early twenties (Erikson, 1968).

Findings from other studies reveal in greater detail the benefits of alcohol consumption among college students. In particular, social benefits were cited in several studies as the most influential factor, positive or negative, in students' drinking patterns (Lee et al., 2010; Mallett et al., 2013). Hartzler and Fromme (2003) identified affiliation with peers, and Park (2004) described celebratory and social enhancement effects. Emotional benefits are also identified in the literature. Armeli, Toddy, Conner, and Tennen (2008) demonstrated that alcohol consumption can ease anxiety associated with the college experience. Other researchers have described alcohol's effect on anxiety as tension reduction (Lee et al., 2011; Quick, 1999). This is a different type of benefit than those directly correlated with social benefits, but can have a mediating effect (Stewart, Zvolensky, & Eifert, 2001). The less anxiety one feels, the more talkative or disclosing they become (Hart & Ksir, 2015). It is easy to see how anxiety reduction associated with alcohol consumption explains not only disclosing more or initiating conversation

(Capron & Schmidt, 2012), for example, but it also can explain how other social benefits, such as affiliation (Corbin et al., 2008), are possible.

Challenges of Reduction

One can infer that giving up these benefits during the alcohol reduction process may be difficult. Developmental (Schulenberg & Maggs, 2002), social (Copeland, Proctor, Terlecki, Kulesza, & Williamson, 2014), and emotional (Schulenberg & Maggs, 2002) benefits can be very helpful in coping with this transitional life experience (Perkins, 2002). When one or more of these benefits becomes absent, challenges may arise. Those who reduce alcohol consumption must learn to cope with anxiety and stress that can emerge during this formative period. This means they must learn to make new friends, resolve identity issues, gain a sense of belongingness with peer groups, and cope with life without the aid of alcohol. Students may no longer experience problems related to using too much; however, they may be faced with new challenges in reducing or eliminating alcohol use. Chapter II, Literature Review, provides a more in-depth discussion on this and other information outlined in this introduction.

Statement of the Problem

Previous studies have isolated variables related to negative effects or benefits of alcohol consumption, as described above. Others have described how these negative effects can impact the decision to reduce drinking patterns (Alexander & Bowen, 2004; Barnett et al., 2006; Blume et al., 2000; McNally & Palfai, 2001). Researchers have also studied how the stages of change are impacted by negative effects and/or benefits, and suggest that the costs of change are more impactful than the benefits (Prochaska et al., 1994). Together, these studies give rise to the idea that the process of changing alcohol consumption patterns is complex. Although the popular "bottom-out" theory accurately describes the reduction process as one commonly initiated

because of alcohol-related problems (Miller & Tonigan, 1996; Prochaska & DiClemente, 1986), its main focus is on one element of change, rather than accounting for complicating variables (e.g., developmental stages, college environment, benefits of use, etc.). Studies have suggested that individuals have *appraised* the costs of reduction as more influential that its benefits (Prochaska et al., 1994), while others have examined the effects of specific variables (e.g., peer influence) on amount reduced. No study to date, however, has examined the college alcohol consumption reduction process with consideration of the aforementioned complicating variables. Furthermore, no study to date has included the negative effects and benefits of alcohol consumption, as well as the negative effects and benefits of alcohol consumption reduction as described by participants.

Purpose of the Study

Rather than study one or two variables of change, this study considers college students' experience of change from a qualitative perspective that affords the opportunity to consider the negative effects and benefits of drinking, as well as negative effects and benefits of not drinking, together and in context. The most important factor not yet described in the literature is the cost of reduction. The current study explores the experiences of college students who reduced their alcohol consumption from beginning to end. Not only are the individual factors mentioned above addressed, but the process of change itself, and the effects of change, both good and bad, are considered.

Research Questions

1. How does a small sample of college students at a Midwestern university who significantly reduced their alcohol consumption describe the process they experienced before, during, and after they reduced their alcohol consumption?

2. What critical elements motivated these students to reduce alcohol consumption?

3. How did the process of changing drinking behavior occur over time?

4. What sustained and what interfered with these students' commitment to reducing their alcohol consumption?

5. How is life different for these college students after they reduce their drinking (in terms of both negative and positive outcomes)?

6. What did college students learn about themselves during the process of reducing alcohol consumption?

Overview of the Study

This qualitative research study was conducted to gain information about the lived experiences of college students who reduced alcohol consumption for a period of at least 30 days. A phenomenological method was utilized in order to conduct in-depth interviews with participants by phone. Relevant literature for this study was reviewed and is presented in Chapter II. The research methodology is discussed in Chapter III. Findings are presented in Chapter IV, and the study limitations and strengths, and suggestions for further research on college students who reduce their alcohol consumption are discussed in Chapter V.

CHAPTER II

LITERATURE REVIEW

Overview

The purpose of this literature review is to augment the understanding of college students who reduce their alcohol consumption. It is meant to put the experience of the participants of this study into context. The content of this review is driven by the research questions aimed at exploring the process by which college students change their drinking behavior. As such, this review highlights data from the vast body of literature on alcohol use that is most relevant to that particular population and process.

To underscore the significance of the topic, a brief review of problems related to college alcohol use will first be presented. Next, a review of major themes related to college alcohol use will be discussed. The literature in this chapter includes theories of alcohol use etiology, developmental and environmental factors, benefits and negative effects of alcohol consumption, and concepts related to change. No study was found that describes what college students experience before, during, and after they reduce alcohol consumption. Of particular importance, there was no literature available for review concerning the challenges college students experience during and after the alcohol reduction process. The order in which topics are presented mirrors the process by which individuals develop alcohol problems and reduce drinking behaviors. Emphasis is placed on perspectives that suggest college students in particular experience problematic alcohol use and subsequent reduction in a way that is different from other populations.

Many concepts central to the study of alcohol use are not addressed in this review. The most commonly discussed topics left out of this review are "recovery," and "treatment." The construct of recovery was left out because many of the anticipated participants of this study (as well as many college students with alcohol use problems (Perron et al., 2011) do not fit the definition of recovery that is most commonly described in the literature. In his definition of recovery, recovery expert William White (2007) indicated several conditions be met for an individual to be considered in recovery: (1) an individual's substance use was a potentially life-threatening condition, (2) alcohol or drug use problems must be severe and must not be transient (3) individuals must actively manage their vulnerability to these problems, (4) alcohol-related problems have been or are in the process of being resolved, and (5) recovery is more than an aborted or radically altered pattern of alcohol or drug use.

Research suggests that it is quite typical that college students with drinking problems do not meet any of the criteria listed above to be considered in recovery. A study by Sher, Bartholow, and Nanda (2001) indicated that alcohol problems college students experience are often transient, not considered severe, and are not predictive of heavy alcohol use later in life. Additionally, Ryan, Kreiner, Chapman, and Stark-Wroblewski (2010) found that most college students who experience alcohol problems do not actively manage their vulnerability to such problems (e.g., monitor triggers). Furthermore, in a study that examined 91 former binge-drinking college students' experience with alcohol reduction, 22% of the participants reduced their drinking without intervention, and did not consider themselves to be in recovery (Vik et al., 2003). These few examples reveal why a discussion of recovery is not included in this review.

A primary reason why treatment is excluded from this review is because this study aims to examine the process of change college students undergo in the absence of treatment. For these

participants, treatment was not the factor that facilitated change. The main reason for alcohol reduction for students in this study is negative consequences of alcohol use. As such, negative consequences (e.g., social and academic) and accompanying motivation to change models are later reviewed; however, treatment will not be included in the review. The rationale for this is that in the body of research on the topic, very few of the college students who report alcohol problems and reduce their alcohol consumption seek (Caldeira et al., 2009; Cellucci, Krogh, & Vik, 2006) or receive (Baer, Kivlahan, Fromme, & Marlatt, 1994; Bennett et al., 1999; Colby et al., 2000) treatment.

Alcohol Problems Among College Students

Substance use among college students is a widespread phenomenon that affects institutions nationwide. Alcohol use has consistently found to be higher for college students between the ages of 18-22 than their non-college peers (SAMHSA, 2013). Findings from a 2012 survey by the U.S. Department of Health and Human Services revealed that among full-time college students, 60.3% were current drinkers. Of those, 40.1% were binge drinkers, and 14.4% were heavy drinkers (SAMHSA, 2013). In the SAMHSA (2013) study, binge drinking (among men) was defined as having five or more standard drinks on the same occasion (i.e., at the same time of within a few hours of each other) on at least one day in the past 30 days. Heavy drinking was defined as binge drinking (having five or more drinks on the same occasion) on each of five or more days in the past 30 days.

A recent review by Courtney and Polich (2009) found that the most commonly used definition for binge drinking (also known as "high risk drinking") is having five or more drinks in a row for men and four or more drinks in a row for women in a single drinking episode. This will define binge drinking in the current study. One college survey demonstrated 39% of college

students in their study binge drank in the past month (SAMHSA, 2013). In fact, 44% of college students fit the criteria for high risk drinking at least once in the past year (Araujo & Wong, 2005), and 20% met the diagnostic criteria for an alcohol use disorder (Blanco et al., 2008). Numerous studies have demonstrated drinking patterns are consistent across major nationally representative studies and across time.

High risk drinking (defined for the current study as having five or more drinks on the same occasion on each of five or more days in the past 30 days) can result in a variety of alcohol-related consequences. According to Jennison (2004), binge drinking and high risk drinking significantly impacts the academic performance of college students. Researchers have found 21% of students report they performed poorly on a test or project, 24-27% report having missed a class, and 19% report getting behind in schoolwork due to drinking in the previous year (Presley, Meilman, & Cashin, 1996; Wechsler et al., 1998). In addition, social problems, like physical and verbal aggression or relationship difficulties (to be further described later), can arise as a result of drinking. Another common problem is legal involvement, including arrests for driving while intoxicated, or public intoxication (Jackson et al., 2006). In terms of physical consequences, nearly half of all students reported at least one hangover and half reported nausea or vomiting due to alcohol or drug use in a one-year time period. Moreover, self-reported personal injuries due to drinking or other drug use range from nine percent to 20% annually. Lastly, death and drinking-related suicide are another major concern. Individuals with alcohol dependence are at approximately 9.8 times greater risk for completed suicide compared with the general population (Conner et al., 2006). A range of problems and associated drinking patterns have been highlighted in previous studies and will be further developed later in this chapter.

What is also of major importance is how these drinking problems emerge, and why some continue to drink in spite of these negative consequences, while others reduce consumption.

Etiology

This section of the literature review is intended to briefly describe the various models of substance use commonly cited by researchers, clinicians, and clients. Each model presents a unique rationale for why individuals use, abuse, or are dependent on alcohol. These models are useful for conceptually anchoring individuals with alcohol use problems into a theory of treatment and recovery. However, as noted earlier, most college students who successfully reduce alcohol use do not receive formalized treatment (Misch, 2007), and do not necessarily fit neatly into one model (DiClemente, 2003). For these reasons, a variety of models explaining why individuals use or abuse substances is offered, each one honing in on a specific set of variables. More importantly, problematic drinking may be portrayed as much more severe by one model than the other. The level of severity a particular model portrays problematic drinking may be accurate for some college students, but not for others. *The Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*; American Psychiatric Association, 2013) uses diagnoses that describe problematic drinking from mild, to moderate, to severe. Some models capture just one degree of severity (e.g., severe in Disease Model; Saitz, Larson, LaBelle, Richardson, & Samet, 2008), and other models might include the entire range (e.g., Conditioning/Reinforcement model).

Disease of Addiction

Currently, the most widely accepted model physicians and psychiatrists use to explain long-term alcohol dependence is the disease model (Lawrence, Rasinski, Yoon, & Curlin, 2013). This is no surprise given the nature of this explanation is medical. The American Society of

Addiction Medicine (ASAM) defines addiction as a "primary, chronic disease of brain reward, motivation, memory, and related circuitry" (ASAM, 2011). In its accompanying description (long definition), ASAM (2011) indicates that addiction impacts areas of the brain responsible for pleasurable sensations, motivation, memory, impulse control, and judgment. Furthermore, with continued use, an individual is likely to experience the behavioral, cognitive, and emotional changes secondary to changes in the brain (ASAM, 2011, Long definition section, para. 5). The underlying behavioral theme that many include in their characterization of addiction as a disease is the continued use of drugs or alcohol despite cumulative adverse consequences (Grant, Contoreggi, & London, 2000; Hart & Ksir, 2015; National Institute on Drug Abuse, 2014).

During its inception in the early 1950s, the medical model helped shift the view of addiction from a moral defect to an involuntary condition (DiClemente, 2003; Peele, 1984). With that perspective, those who consider themselves as having a disease often experience less shame and guilt about their use (Thombs, 2006). These individuals are often a part of abstinent-based treatment groups, such as Alcoholics Anonymous (Hart & Ksir, 2015), and consider themselves to be permanently at the mercy of their disease to face a lifetime of recovery (Thombs, 2006).

While using this medical model to explain why individuals use substances has its benefits and is based on much hard scientific evidence, it also has limitations. Based on notable definitions (ASAM, 2011; Volkow & Koob, 2015) and criticisms (Satel & Lilienfeld, 2013), one can infer that the disease model approach assumes that those with an addiction are at the mercy of their disease for the rest of their life. They must maintain full abstinence at all times because they lack any control over the disease (Hart & Ksir, 2015). This black and white conceptualization associated with alcohol use problems is not fully supported in research,

especially among college students. For example, there have been a number of studies that indicate that college students who have had severe alcohol problems can and do continue to drink in moderate amounts with complete control of their lives (Misch, 2007; Sher et al., 2001; Thombs, 2006; Vik et al., 2003).

Conditioning/Reinforcement Models

A model more relevant to this study is the reinforcement model. In his review of seven distinct models of addiction, DiClemente (2003) described the reinforcement model as one in which physiological effects of substance use reinforce drug use and drug-seeking behaviors. This approach to the model focuses on the direct, physiological effects of addictive behavior, such as tolerance and withdrawal (DiClemente, 2003). When associated with pleasure, these effects are studied as primary reinforcers (i.e., linked unconditionally to a behavior) and are seen as the key motivating factor behind substance use (Di Chiara, 1999). This view of the model has been criticized for its narrow stance on addiction: the assumption that addictive behaviors are goal-directed.

The model was eventually expanded upon to better account for contextual factors of addiction, such as situational cues. In fact, many studies demonstrated that one did not actually have to ingest a substance to experience at least a partial physiological reaction. Cocaine users, for example, have been known to sweat and get anxious at the sight of any white substance, like sugar or flour (DiClemente, 2003). These associations, or cues, have been shown to be very impactful on those who are trying to become abstinent. For example, Lee, Kwon, Choi, and Yang (2007) demonstrated that individuals in recovery from alcohol dependence report strong cravings (i.e., a strong urge to consume alcohol) when in bars, or around friends with whom they formally drank. Many in recovery describe these situational cues as people, place, and things

that can lead to relapse. These and other contextual factors have been shown to play a major physiological and psychological role in the use of drugs and alcohol.

More recent research has focused on conditioning that highlights cognitive and psychological factors, such as expectancies. Expectancies refer to the belief that people hold about the effects of consuming alcohol (Ham & Hope, 2003). One study revealed that many behaviors thought to be the direct effect of alcohol or other drugs are actually produced by the placebo effect that arises with the appropriate cognitive expectation (Sussman, 2017). For example, increased aggression, or disinhibition, can be achieved even without the use of alcohol if an individual expects to become aggressive and/or disinhibited as a result of drinking (DiClemente, 2003). This is an example of the effect of an expectancy.

Negative and positive consequences of alcohol use have also been shown to greatly influence alcohol consumption (Milin, 2008). Consequences are central to the reinforcement model of substance use (Hart & Ksir, 2015), and their role in problematic drinking and alcohol use has been thoroughly studied (Ham & Hope, 2003). In fact, experiencing negative consequences as a result of alcohol use has been cited to be central to the definition of problematic alcohol use (Ham & Hope, 2003) and is also a part of the diagnostic criteria for substance use disorders in the *DSM-5* (American Psychiatric Association, 2013).

Negative alcohol consequences have been shown to decrease planned or actual alcohol consumption (Barnett et al., 2006; Milin, 2008) and positive consequences of alcohol use have been shown to increase or maintain planned or actual alcohol consumption (Capron & Schmidt, 2012; Lee et al., 2011). Earlier studies on alcohol consequences focused on how consequences alone impact alcohol consumption, whereas more recent studies have included expectancies, motives, and other factors that mediate the effect of consequences (Ham & Hope, 2003; Lee

et al., 2010; Mallett, Bachrach, & Turrisi, 2008). It is not the experience of consequences by itself that has an influence on alcohol consumption; rather, consequences have an impact on drinking because of the way people think about consequences (Merrill et al., 2013).

College students' experiences with negative and positive consequences associated with alcohol consumption therefore need to be studied with greater emphasis on the meaning which is made of those consequences. Contextual factors are central to the process of alcohol use as well (Baer, 2002). Integrating the many variables of alcohol use that college students report with consequences appears to be of great significance in terms of alcohol use etiology.

Social Learning Model

The social learning model of substance use emphasizes social cognitive expectancies, vicarious learning, and self-regulation as mechanisms of alcohol use (Bandura, 1986). Social expectancies in particular are of primary importance, as they have been found to be predictive of initiation of use (Copeland et al., 2014) and are strongly associated with alcohol use consequences (Patrick, Cronce, Fairlie, Atkins, & Lee, 2016). This model also focuses on the role of peers and significant others as models for alcohol use (DiClemente, 2003). With college students in particular, those who associate with more friends who drink tend to consume more alcohol than those who associate with fewer friends who drink (Martin & Hoffman, 1993). For college men, positive alcohol expectancies acted as a mediator between masculine social norms and alcohol use. When college men expected positive results from alcohol use, they perceived alcohol consumption as a behavior typical of those with masculine identities (Iwamoto, Corbin, Lejuez, & MacPherson, 2014). In terms of modeling, male students have been found to match the drinking rate of an experimental confederate (Collins & Marlatt, 1981) and have imitated

drinking patterns of their fathers (Robinson, 2011). Peer influence appears to be one significant factor that explains alcohol use among college students, as evidenced by these studies.

Isolation

Another model of substance use that has recently gained notoriety on social media and major news outlets is one that points toward social isolation. Though the studies upon which it is based are not new, this model is important for the current study because it emphasizes the importance of social connectivity in buffering the addiction process. Early studies on drug addiction focused solely on what researchers of the 1950s thought to be the only true markers of addiction: tolerance and withdrawal (Hart & Ksir, 2015). They sought to examine the physiological components of dependence by putting rats into Skinner boxes alone with addictive substances. These isolated rats were able to inject drugs into themselves by pressing a lever. Under appropriate conditions, rats would press the lever as often as 2,000 times per hour for 24 hours, at the exclusion of other activities, such as eating (Linden, 2011). Some continued this behavior to the point of death (Linden, 2011).

In contrast, a different kind of study was later conducted to differentiate substance use rates of rats in isolation versus those embedded in a community of rats. To illustrate the buffer effect of social connectivity on substance use and addiction, Alexander, Beyerstein, Hadaway, and Coambs (1981) conducted a study using "rat park." "Rat park" was an experimental terrarium with a community of rats, and running wheels for exercise, wood chips for strewing, etc. Substance use of three groups of rats was compared; some were put in "rat park" and others were not. One group was forced to take morphine for 57 consecutive days in isolation, and was then moved to "rat park." The second group was kept isolation throughout the entire experiment. The third group was left in "rat park" from start to end. The rats kept in isolation took morphine

instantly and did not stop. The rats who started and ended in "rat park" resisted morphine, only trying it sporadically. The most interesting result was with the group of rats who were forced to take morphine in isolation and then moved to "rat park." When removed from isolated cages and put in "rat park" these rats hardly consumed any substances at all (Alexander et al., 1981). Even when experiencing physiological withdrawal symptoms, such as tremors, they did not go back to using the drug while in "rat park."

From these studies and a continued pursuit to substantiate his isolation model of addiction, Alexander (2008) described instances in human history in which social and cultural isolation were strongly associated with the excessive consumption of substances. He compared the isolation that occurred in the Skinner boxes to the isolation experienced by humans and drew the conclusion that lack of social connectivity is the cause of addiction (Alexander, 2008). One example was that of colonized natives of Western Canada who were forced to physically separate from their families and psychologically separate from their cultural heritage. Once forced away from their primary sources of social support and forcibly acculturated to mainstream, White culture, many native Canadians developed addictions that continue today (Alexander, 2000).

This isolation model is important to the interview questions aimed at discovering what participants went through before, during, and after alcohol use reduction. Specifically, in looking at how alcohol problems developed, drinking alone and drinking to cope with the negative affect subsequent to isolation are all cited in the literature as having one of the strongest connections to current and future drinking problems (Christiansen, Vik, & Jarchow, 2002). Because isolation has been cited as such a central factor to alcohol problems, it will be

particularly interesting to explore the role of isolation versus social connectivity in drinking patterns for participants of the current study.

Drinking Factors Specific to College Students

Social Context

The amount of alcohol consumed often depends on where the alcohol consumption itself takes place. Studies have shown strong correlations between larger groups and amount of alcohol consumed among college students (Larsen, Smorawski, Kragbak, & Stock, 2016; Perkins & Berkowitz, 1986), particularly in men (Sencak, Leonard, & Greene, 1998). Furthermore, Baer (1994) found that modeling of drinking, peer pressure to drink, and ease of alcohol availability are strongly associated with settings where social contact and drinking are frequent. This may lend itself to higher rates of problematic drinking.

An example of a common social context that can lead to such problems is a "preparty" event. "Prepartying" can be thought of as consuming alcohol in a group context prior to a planned event or outing. Hummer, Napper, Ehret, and LaBrie (2013) found that students who participated in preparty events drank significantly more, reached higher blood alcohol levels (BALs), and experienced significantly more negative consequences compared to the last occasion they drank but did not preparty. Hummer et al. also found that those who played drinking games while prepartying had higher BALs and experienced more negative consequences than those who did not play drinking games. The common social context for college students who experience problems with alcohol consumption is often one that includes one or more of the abovementioned scenarios, such as parties, bars, etc.

Living Environment

Not only does the particular social context contribute to college students' drinking behavior, the place where they live does as well. Ward and Gryczynski (2009) analyzed the data from the 2001 Harvard School of Public Health College Alcohol Study, and found that of the 10,008 full-time undergraduate participants attending 4-year colleges or universities, both living arrangement (e.g., dormitory, with roommates versus without, off campus, etc.) and vicarious learning/social-norm variables were significant predictors of heavy episodic drinking. Wechsler, Lee, Nelson, and Kuo (2002) used the same data and found that residents of fraternities and sororities generally drank more and experienced more negative secondhand effects than all other students. Furthermore, students living in suite halls have been found to have a higher probability of drinking more frequently, drinking more alcohol when they socialize, heavy episodic drinking, and drinking more often than their peers who do not live in suite halls (Cross, Zimmerman, & O'Grady, 2009). Those living in co-ed dormitories have been found to experience greater alcohol-related negative consequences than those living in single-sex dormitories (Harford, Wechsler, & Muthen, 2002). It would appear that the likelihood of experiencing a problem related to alcohol consumption is higher for those living on campus; however, Harford et al. (2002) also found that students living off campus were more likely to drink and drive than those who lived on campus. Although students living off campus tend to experience fewer alcohol problems than those living on campus as a whole, driving under the influence of alcohol has important legal, physical, and social consequences that cannot be ignored.

Perceived Drinking Norms

As noted earlier, peer influence plays a significant role in alcohol consumption and alcohol problems among college students. Studies on modeling have provided evidence linking drinking behavior of peers with individual drinking, but there is also substantial evidence that alcohol consumption may also be related to biased perceptions of overall drinking norms. In their analysis of the 76,145 students from 130 colleges and universities, Perkins, Haines, and Rice (2005) found that a consistently large percentage of students nationwide overestimated the quantity of alcohol consumed by their peers. Furthermore, students' perception of their campus drinking norm was the strongest predictor of the amount of alcohol personally consumed (Perkins et al., 2005). In terms of cognitions that explain these perceptions and behaviors, a study by Crawford and Novak (2010) found that when college students believed that part of the college experience entails abusing alcohol, heavy drinking occurred above and beyond the misperception of college drinking norms. As one would expect, the common overestimation of drinking norms has also been found to be strongly correlated with negative consequences associated with alcohol consumption (Perkins & Wechsler, 1996).

Developmental Factors

In the United States, alcohol use and heavy drinking are embedded in adolescence and the transition to young adulthood (Blane, 1979; DeMartini, Prince, & Carey, 2013) in the college experience in particular (Wechsler et al., 1998). As such, these behaviors (Baer, 1993) and subsequent problems (Johnston, O'Malley, & Bachman, 2001a, 2001b) peak during this time. In their literature review on development and alcohol use, Schulenberg and Maggs (2002) described several major developmental models that may impact alcohol consumption patterns among college students. The most notable models for the current study include those which substantiate

literature that describes the benefits college students perceive about their alcohol consumption. The most salient perceived benefits of college students' alcohol consumption found in the literature were those related to students' social lives (e.g., affiliation, bonding, conformity). Therefore, the most relevant developmental component of college alcohol use found was that embedded in the Transition Catalyst model. According to this model, alcohol use increases because it is believed to facilitate new friendships, romantic/sexual relations, and bonding (Schulenberg & Maggs, 2002). The underlying mechanism in this model that drives potentially problematic alcohol use is the idea that some amount of risk taking is a normal part of healthy personality development (Schulenberg & Maggs, 2002), which includes achieving social goals, such as making new friends (Maggs, 1997). Drinking for social reasons is often not predictive of long-term (post-college) alcohol problems (Ham & Hope, 2003), and therefore this developmental model seems appropriate for the current study.

Other developmental models capture emotional functions of drinking in college, such as reducing stress associated with multiple role transitions (Overload model), and coping with previously existing psychological and emotional problems exacerbated by negotiating new transitions (Increased Heterogeneity model; Schulenberg & Maggs, 2002). These models capture the variables of role transition and psychological distress, which are predictive of both immediate and long-term drinking problems (Ham & Hope, 2003). Transitioning from high school to college can bring about significant stress that many cope with by consuming large amounts of alcohol (Perkins, 2002). These developmental changes in roles and subsequent impact on mood appear to play a significant role in problematic alcohol consumption during college.

It is important to note that *future* (post-college) alcohol problems emerge during the transition from college student to partner, parent, and/or full-time employee (Gotham, Sher, & Wood, 1997). Furthermore, coping with stress and/or emotional problems has been predictive of future alcohol problems, but primarily for those who drink alone (Christiansen et al., 2002). Therefore, there are two types of problem drinkers who are more likely than others to have future alcohol problems associated with maladaptively coping with developmental challenges: (1) those who cope with emotional problems by drinking alone, and (2) those who have difficulty transitioning from college student to a different major life role, such as parent or full-time employee. These individuals may be more likely to fall into the more severe end of the alcohol use spectrum because, as noted above, a shift toward chronic alcohol problems is indicative of addiction.

Though the research reviewed above captures models aimed particularly at development as it relates to alcohol consumption, reviewing a more well-known, general developmental model may also be of benefit to readers of the current study. Erik Erikson's model of identity development postulates that individuals experience eight major psychosocial stages, or conflicts, during their lifespan (Sigelman & Rider, 2014). Conflicts at each stage must be resolved to navigate through subsequent stages in a healthy, "normal" manner; however, due to biological maturation and social demands, individuals are pushed to the next stage regardless of whether the conflict is resolved (Sigelman & Rider, 2014). In this sense, the optimal scenario is for an individual to adaptively cope with and resolve the conflict at each stage before they move onto the next.

The developmental stage or conflict for which Erikson (1968) is best known is identity versus role confusion (Sigelman & Rider, 2014). Though other sources provide different age

ranges for this stage (e.g., 12 to 18; McLeod, 2013), Erikson himself indicated that in the

industrialized world this particular stage extends into the mid-20s (Erikson, 1968). This stage

has been described as a transition from childhood to adulthood in which there is a reconciliation

between the person one is and the person society expects them to become (Wright, 1982).

Individuals figure out where they fit into society, and may change group memberships,

relationships, school majors, etc. Essentially, individuals attempt to define who they are in terms

of career, sexual identity, religion, and so on (Sigelman & Rider, 2014). Failure to create a sense

of identify after exploring and integrating these different factors can prolong role confusion

(McLeod, 2013), in which an individual remains unsure about who they are as they move into

subsequent stages.

The latter phase of this stage (i.e., 18 years through mid-twenties) corresponds with the

common age of college students and those who will be invited into this study. As such,

resolving the conflict in this stage is something participants in the current study will likely be

involved. Alcohol consumption may play a role in navigating elements central to this stage, such

as joining new groups, fulfilling society's expectations, and forming new relationships. The

literature on college alcohol use identifies a strong relation between alcohol consumption and

each of these. For example, college students trying to fit into a new group have been shown to

strongly lean toward excessive alcohol use, whether it be in fraternities or sororities (Wechsler

et al., 2002), in a dormitory suite (Cross et al., 2009), or in college campus as a whole (Perkins

et al., 2005). Additionally, forging new relationships in college has been associated with

overestimated peer drinking (Perkins et al., 2005), and peer pressure and modeling to drink

(Baer, 1994); both of which result in excessive and problematic alcohol consumption. Finally,

fitting into society as a whole has been shown to correlate with excessive alcohol consumption

for those removed from primary social supports (Alexander, 2000), as well those who misperceive college alcohol consumption overall (Baer, 1994).

Though it can be problematic, it appears that alcohol consumption may play a role in identity development among college students. In particular, the social pressures of fitting in, and growing out of childhood and into adulthood appears to commonly be accompanied by excessive and problematic alcohol consumption for this population. There are certainly benefits of navigating through these stages and resolving these developmental conflicts; thus, the accompanying alcohol consumption must in part be of benefit at this age.

<div align="center">**Benefits of College Alcohol Consumption**</div>

The goal of this portion of the literature review is twofold: (1) to note the literature which describes ways in which college students are driven to consume alcohol, and (2) to discuss literature which focuses on explaining what college students might lose during the process of alcohol consumption reduction. A variety of constructs found throughout college alcohol use literature will be discussed, including motives, consequences, expectancies, and valuations. These terms and corresponding ideas are woven into just about every kind of alcohol use study (e.g., studies on benefits of use as well as studies on negative effects of use). Each of these terms carries a number of sub-themes which are quite nuanced and easily misunderstood or mistaken. As a result, differences between constructs can easily become blurred, creating lack of clarity for the reader. In order to prevent confusion, each of these terms will be used and described in common vernacular.

Social

Benefits of alcohol consumption have been demonstrated to be highly influential in evaluation of drinking events and future actual or expected drinking behavior (Capron &

Schmidt, 2012; Lee et al., 2010). In fact, studies have revealed that college students experience twice as many benefits (e.g., affiliation) as negative effects (poor grades; Corbin et al., 2008). More importantly, "fun" or "social" benefits have been reported more frequently than any negative effect (Lee et al., 2011).

Park (2004) has shown that the majority of college students are motivated to drink for celebratory and social enhancement reasons and report more benefits of drinking compared to negative effects. Mallett et al. (2013) reported that it is possible that many students believe experiencing negative effects (e.g., hangovers) is simply part of the drinking experience. They propose that students may be willing to experience negative effects because the downsides of these effects are far outweighed by the desirable benefits, such as social enhancement, that go along with them (Mallett et al., 2013).

A thorough review of the literature related to college alcohol use yielded social factors as the most impactful variable. This finding is not surprising given peer relationships are central to college students' identity development (Schulenberg & Maggs, 2002) and pressure to consume alcohol (Collins & Marlatt, 1981; Fondacaro & Heller, 1983; Martin & Hoffman, 1993; Vaisman-Tzachor & Lai, 2008). Losing these benefits during the process of reduction might have a significant impact on the participants of this study; therefore, it is worth taking a closer look at this area of the alcohol use literature.

Capron and Schmidt (2012) evaluated the role of alcohol consumption benefits in their sample of 222 undergraduate students with hazardous drinking patterns in order to examine the effect of alcohol consumption benefits on problem drinking and alcohol problem recognition. Participants completed a battery of self-report measures about alcohol use (e.g., Alcohol Use

Disorders Identification Test (AUDIT), and behavior change (i.e., Stages of Change Readiness and Treatment Eagerness Scale; SOCRATES).

Positive drinking consequences (i.e., benefits of alcohol consumption) was operationalized as events that have occurred as a result of using alcohol that is perceived favorably by the individual who experiences it. Examples of alcohol consumption benefits used in the study were: (a) participants approaching people who they normally would not have if participants were not under the influence of alcohol, and (b) revealing a personal feeling while under the influence of alcohol that previously had been a secret. Results indicated that benefits of alcohol consumption predicted problem drinking above and beyond other related constructs including reasons to drink (i.e., enhancement and social), and did not appear to play a significant role in alcohol problem recognition (Capron & Schmidt, 2012). Participants were found to be more motivated to drink by benefits than by negative effects. For example, male students who reported being shy indicated that it is worth it to feel hung over if it will mean talking to a pretty girl. Capron and Schmidt (2012) postulate that these benefits may be particularly relevant to certain groups, such as those with elevated social anxiety symptoms.

Lee et al. (2011) examined types of benefits (e.g., social, coping, image) and negative effects (i.e., physical, behavioral, driving) and their relation to alcohol use among a sample ($N =$ 742) of recent high school graduates. The hypothesis was that benefits would be reported more frequently than negative effects and would predict future drinking patterns. Social or fun benefits, such as tension reduction, were reported more frequently than any negative effects, and were related to alcohol frequency, quantity, and frequency of heavy episodic drinking at least as much as negative effects.

Weaknesses of the study were that the sample Lee et al. (2011) used was not a true college sample, as the study implies. Participants had recently graduated from high school, but had not yet begun college. Therefore, participants had not yet begun experiencing the environmental influences of college (e.g., lack of structure and routine, normalized heavy drinking) that often impacts drinking behaviors (Jackson et al., 2006). In contrast, participants in this dissertation research were enrolled in college and had experienced many of the developmental and environmental changes that have shown to impact alcohol consumption.

Lee et al. (2010) investigated benefits and negative effects of alcohol use to understand how college students reach an overall evaluation of a drinking event. Their goal was to determine which was more influential in the formation of overall evaluation of individual drinking events. Results indicated that for heavy drinkers, benefits (e.g., affiliation) were more influential than negative effects (e.g., hangover) in overall evaluation of a specific drinking event, as well as future drinking decisions. Social benefits and negative effects were most strongly associated with students' overall evaluation of their drinking experience (Lee et al., 2010).

Affiliation. One specific type of social benefit that students experience is a stronger affiliation with their peers (Hartzler & Fromme, 2003). Members of sororities and fraternities are particularly prone to heavy drinking as a means of affiliation because of the alcohol-conducive environments of Greek life (Park, Sher, Wood, & Krull, 2009). Furthermore, those who tend to be shy are more likely to feel at ease talking with others while drinking (Capron & Schmidt, 2012), and therefore better able to fit-in, or affiliate with their peers.

Conformity. The desire to gain and maintain strong peer connections through alcohol consumption is also sought when students conform to the drinking norm of their peers (Farber

et al., 1980; Lee-Zorn, 2013). For those who are trying to fit in, and feel anxious about doing so, alcohol consumption takes place just as much to conform as to cope with anxiety (Terlecki & Buckner, 2015). What is more concerning is that conformity-motivated college drinkers tend to be higher in self-consciousness and seem to use alcohol to control feelings of social awkwardness (Stewart & Devine, 2000). Men in particular have a difficult time with this issue, and are more likely to conform by drinking heavily to avoid social embarrassment (Hope & Ham, 2003; Stewart et al., 2001). As fitting in and gaining friends is a major goal of college students (Ham & Hope, 2003), what might be the effect of a major reduction of alcohol use for those who belong to heavy drinking groups?

Coping

Drinking to cope can be conceptualized as consuming alcohol in an effort to avoid experiencing negative emotions, such as depression or anxiety (Ham & Hope, 2003). Khantzian, Dodes, and Brehm (2005) reported that managing intolerable or overwhelming feelings is the most frequently described function for substance use. Taking drugs and alcohol to cope with feelings is also described as "self-medication," which has been found to be significantly predictive of drinking frequency and problems (Topper, Castellanos-Ryan, Mackie, & Conrod, 2011; Wood, Nagoshi, & Dennis, 1992). Furthermore, for those with low emotional self-regulation efficacy, drinking to cope has been linked stronger with alcohol problems than any other reason to drink (Kassel, Jackson, & Unrod, 2000).

Among college students, drinking to cope was identified as the best predictor of high levels of current alcohol consumption, episodes of heaving drinking, alcohol benefits, and negative effects (Park & Levenson, 2002). Furthermore, it was strongly associated with low levels of distress tolerance in general (Shipley, 2015). In terms of managing specific emotions,

drinking to cope is more common among college students with a depressed mood (Stewart & Devine, 2000). Anxiety reduction is also a reason to drink, as college students with high levels of anxiety have been found to begin drinking earlier in the day compared to those with normal levels of anxiety (Armeli, Todd, Conner, & Tennen, 2008).

Drinking to cope has been found to be more common among college women than college men (Foster et al., 2014). What is particularly significant to note is that a qualitative study that examined first year college females' emotion regulation identified themes underscoring binge drinking as a way to cope with stressors, negative emotions, and failed relationships (Logsdon, 2011). In terms of long-term alcohol problems among both genders, Christiansen et al. (2002) found that drinking to cope has also been predictive of post-college alcohol problems among those who drink alone.

Beliefs

College students choose to drink alcohol because they believe it provides them with certain benefits (Gaher, 2008; Lee, Greely, & Oei, 1999). These beliefs are upheld and reinforced when they actually experience the benefits they believe they will experience (Burke & Stephens, 1999). Though the literature is saturated with studies on the benefits (positive consequences) of alcohol consumption and how those benefits perpetuate use, it is also important to describe the underlying thought process that explains *how* these benefits perpetuate use (Young, Oei, & Knight, 1990). When a student holds the belief that alcohol consumption will provide certain social, cognitive, physical, etc. benefits and at the same time believes they will not experience negative effects, they are likely to engage in excessive alcohol consumption (Burke & Stephens, 1999; Park & Grant, 2005). An example is when a person who is shy believes alcohol will be beneficial by making them more sociable, they will be more talkative

and friendly after drinking (Hart & Ksir, 2015). This experience reinforces drinking, increasing

the likelihood of future alcohol consumption (Hart & Ksir, 2015). A thorough review of beliefs

about alcohol consumption is important to this dissertation because people who reduce their

alcohol consumption tend to alter their beliefs about its benefits and negative effects. This

cognitive shift can play a significant part in alcohol reduction, and can also bring about a certain

amount of anxiety that often accompanies changes in beliefs (Beck, 2011).

     A number of studies address the impact of alcohol beliefs on drinking patterns. Lee,

Greely, and Oei (1999) used the Drinking Expectancy Questionnaire (DEQ) to measure the

relative contribution of positive and negative alcohol beliefs to the consumption of alcohol

among 193 community members (non-college). The Khavari Alcohol Test (KAT) was used to

gather frequency and quantity of alcohol consumption. The hypothesis was that positive and

negative beliefs will be related to alcohol consumption. Results showed that negative beliefs

accounted for a greater proportion of the variance of *frequency* of consumption, but that a greater

proportion of the variance of *quantity* of consumption was accounted for by positive beliefs. It

appears that those in this study who believed drinking alcohol would provide a positive outcome

tended to drink more per drinking occasion. This highlights the central role that beliefs have

upon drinking that is likely to be problematic. As it happens, increased assertiveness was a

significant social belief, accounting for the second largest amount of variance of any type of

belief in relation to frequency and quantity of alcohol consumption (Lee et al., 1999). The

relevance of social benefits of alcohol consumption for this age group is underscored, as these

kind of drinking beliefs are found to be highly predictive of experience (Hart & Ksir, 2015). It is

therefore important to further explore this same variable, but do so with college students

Quick (1999) explored both positive and negative beliefs of problem drinkers, non-problem drinkers, and abstainers among 406 undergraduate students. The Student Alcohol Survey II (SAS II) measured alcohol use, and The Comprehensive Effects of Alcohol (CEOA) measured positive and negative beliefs. Hypotheses were as follows: (a) non-problem drinkers and abstainers will endorse a higher level of negative beliefs than problem drinkers, (b) problem drinkers will endorse a higher level of positive beliefs than non-problem drinkers and abstainers, (c) there will not be significant interactions between alcohol consumption style (i.e., problem drinker, non-problem drinker, and abstainer) and gender on either positive or negative beliefs, and (d) there will not be significant interactions between alcohol consumption style (i.e., problem drinker, non-problem drinker, and abstainer) and year in school on either positive or negative beliefs.

Results indicated that abstainers and non-problem drinkers endorsed more (negative) Cognitive and Behavioral Impairment beliefs (i.e., If I were under the influence of alcohol … I would be clumsy") than problem drinkers. Furthermore, problem drinkers endorsed more (positive) Sociability and Tension Reduction beliefs (i.e., "I would act sociable" or "I would feel calm") than non-problem drinkers (Quick, 1999). This simply underscores the important role of college students' beliefs, and subsequent behaviors, related to alcohol use.

Lee et al. (2011) used a survey to examine the relationship between alcohol beliefs, alcohol-related benefits and negative effects, and frequency of intoxication among 719 12th grade students prior to entering college. Beliefs, benefits, and negative effects were derived from 13 items that measured three positive domains (i.e., Fun/Social, Relaxation/Coping, Image), and from eight negative items that reflect two domains (i.e., Physical/Behavioral, Driving). Results indicated that Fun/Social benefits occurred the most; at least 59% of the weeks

during which subjects participated in the study. Furthermore, on weeks when students drank alcohol, they experienced more Fun/Social benefits (3.00) than any other benefit or negative effect. When students drank in moderation and also had the desire to simultaneously experience benefits and avoid negative consequences, their desires came to fruition, and a "belief effect" was found.

Valuations/Values

Another important factor in determining what motivates college drinking behavior is the value placed on the drinking benefit (Bandura, 1977). So far, this review has explained what can perpetuate use (i.e., benefits of use), and why (i.e., beliefs that drinking will benefit them). The question remains of why some people are compelled to drink because of particular benefits and beliefs, while others are not. For example, why does affiliation have the strongest impact on drinking behaviors for one individual, while emotional regulation has the strongest impact for someone else? Additionally, why does one particular negative effect impact the drinking behavior of one individual, while it does not affect the drinking behavior of another? The key factor has been found to be individuals' values.

According to the Bandura's theory regarding beliefs about drinking, the belief will only increase drinking behavior if the individual values the expected outcome (e.g., benefit or negative effect; Bandura, 1977). Individuals may have different subjective values they assign to these outcomes (Fromme, Stroot, & Kaplan, 1993; Grube, Chen, Madden, & Morgan, 1995; Leigh, 1989). For example, whereas some females may believe that aggressiveness associated with drinking is undesirable, some males may view it as a benefit (Dumas, Graham, Maxwell-Smith, & Wells, 2015; Leigh, 1989). Williams and Ricciardelli (1996) demonstrated that heavier drinkers may view negative effects of alcohol consumption as more benign than lighter drinkers,

giving so-called negative beliefs less of an effect in preventing or reducing drinking for this group. In terms of behavioral benefits versus negative effects, some men may view behavioral impairment as a sign of masculinity, and value that impairment. In fact, Ham and Hope's (2003) findings indicated that cognitive and motor impairment, which many researchers consider to be negative effects, were actually positively related to greater drinking levels for men.

Mallett, Bachrach, and Turris (2008) examined 341 freshman college students' perceptions of positivity-negativity of alcohol related negative effects to assess the degree the negative effects were perceived as negative. Alcohol consumption was measured using the Daily Drinking Questionnaire (DDQ), alcohol related consequences were measured using The Young Adult Alcohol Problems Screening Test (YAAPST), and evaluation of each consequence experienced was measured using a five-point Likert scale without validation. Results revealed that perceptions depended on the consequence being assessed. The authors reported that more than 50% of the sample considered consequences as negative; however, "Hangover," "Awoke in another's bed," "Left party alone," "Binge-eating," and "Skipped Evening Meal" were perceived positive or neutral by greater than at least 50% of the sample. Though it is counterintuitive, participants with higher drinking patterns actually perceived what may be commonly thought of as aversive consequences in somewhat of a positive light. Higher perceived positivity of consequences was associated with higher weekly drinking patterns for the following consequences: vomiting, blackouts, regretted sex, late to work/class, skipping an evening meal, and being hungover. No consequence was unanimously perceived as negative (Mallett et al., 2008).

Gaher (2008) examined relationships between evaluations and expectancies of alcohol-related problems among 500 college students (ages 18 through 25), expecting to find that both

evaluation of alcohol-related problems and expected likelihood of negative consequences will be associated with hazardous alcohol use and problems. Alcohol consumption was measured with the Modified Daily Drinking Questionnaire (DDQ-M); alcohol problems were assessed with the Rutgers Alcohol Problem Index (RAPI), and evaluations and expectancies were measured with two 50-item scales developed by Gaher (2008). Results were that weekly consumption was moderately correlated with alcohol-related problems. Furthermore, a favorable evaluation of alcohol problems was positively correlated with binge drinking. Finally, expectation of problems demonstrated moderate positive correlations with problems and number of binge drinking occasions. A major strength of this study was that it further underscored the fact that evaluations and expectancies of alcohol are consistent predictors of alcohol use behavior (Gaher, 2008). Unlike the study by the current author, however, these evaluations were not participants' own words and did not examine whether change in drinking patterns occurred as a result.

In a longitudinal study, White and Ray (2014) examined negative effects of alcohol consumption considered most troublesome by emerging adults (ages 18, 21, or 24), and differences in ratings by sex, age, the frequency of experiencing negative consequences, and college status. The Rutgers Alcohol Problem Index (RAPI) measured negative effects. Frequency of getting drunk, quantity of drinks consumed, and frequency (per day) of consumption were collected through participant self-report. Results indicated that some specific consequence types were found to be more bothersome than others. Findings of the study were that interpersonal problems, such as caused shame and got into fights, were rated relatively highly in terms of bother, as 65.5% of the sample rated their experiences as somewhat or very bothersome. The only types of consequence rated as more bothersome than interpersonal

consequences were those indicative of addiction (i.e., withdrawal symptoms, felt dependent;

White & Ray, 2014).

In essence, college students' valuations of alcohol-related experiences appear to vary.

The same drinking outcomes (e.g., slurred speech) may produce different impacts on future

drinking amount, quantity, and/or frequency based on whether it is viewed as a pro or con. In

the next section theories of change based on individuals weighing the pros and cons of behavior

are described.

Theories of Change

This portion of the literature review is intended to address the theories of change most

relevant to possible descriptions participants may use to convey their process of change.

Specifically, models are presented that include change mechanisms that explain how college

students are motivated to reduce alcohol consumption without formalized treatment.

Transtheoretical Model of Change

Prochaska and DiClemente (1992) developed a model of change that describes a change

in behavior as a process involving a series of stages (Prochaska, 1996; Prochaska, DiClemente,

& Norcross, 1992). The model postulates that both the reduction and cessation of high risk

behaviors as well as the acquisition of healthier alternative behaviors involve a progression

through these stages (Prochaska & DiClemente, 1984). This model is called the Transtheoretical

Model of Change. It is important to review this model in particular because participants of the

current study were asked questions aimed at capturing the *process* of change in drinking

behavior as it occurred over time. The following description of each stage of change is based

upon their model.

The first stage is called Precontemplation, and it is when an individual is unaware of the need to change a problem behavior (Prochaska & DiClemente, 1992). Typically, about 50% of populations at risk are in the Precontemplation stage and do not intend to change in the foreseeable future (Prochaska, 1994). College binge drinkers in particular have been found to be even less aware of alcohol-related problems. Gintner and Laura (2003) showed that, among college binge drinkers, 67% do not see their alcohol use as a problem. In one of their many studies on stages of change, Prochaska et al. (1994) examined the relationship among the stages of change and the pros and cons of twelve behaviors (e.g., quitting cocaine). Findings indicated that for those in the Precontemplation stage of change, the cons of making a healthy behavior change were evaluated as higher (more important) than the pros. This finding can be easily connected to the benefits and negative effects of alcohol consumption among college students. The cons of making the healthy behavior change of reducing alcohol consumption are losing out on the benefits of drinking. Though generalizability to college drinkers was not directly embedded in the 1994 study by Prochaska et al., one can infer that weighing the pros and cons of giving up the benefits of drinking plays a central role to the change process in the reduction of alcohol consumption among college students. The study by Prochaska et al. (1994) demonstrated that the negative effects of change weigh more heavily in the minds of those who are not yet ready to change. More importantly, this idea was also rated higher for those in the Contemplation and Preparation stage, demonstrating that giving up the benefits of a problematic behavior remains central even as the change process progresses.

Once an individual becomes more aware of the problems associated with a behavior, he or she is said to be in the Contemplation stage, and is starting to have mixed feelings about changing (Prochaska & DiClemente, 1992). At this stage, the pros of making a behavior change

are viewed as higher than they were at the Precontemplation stage (Prochaska et al., 1994).

However, though pros are more highly valued than in the previous stage, contemplators are seen

as ambivalent, as they often perceive the costs and benefits of drinking to be equivalent (Rollnick

Mason, & Butler, 1999).

Over time, the decision to change may tip in favor of change, as adverse consequences

(negative effects) begin to outweigh the perceived benefits of the status quo behavior (Miller &

Tonigan, 1996). This process is similar to the popular idea of bottoming out, suggesting a

developmental point at which a person shifts from unmotivated to motivated status after having

experienced enough suffering from their behavior to instigate change (Miller & Tonigan, 1996).

Prochaska and DiClemente (1986) originally termed this point the Determination stage, but more

recently described it as the Preparation stage. Entering this stage happens as an individual begins

to identify and understand more benefits of change and costs of maintaining the problem

behavior. Furthermore, the individual in Preparation stage begins to commit to change and plans

to take action in the next 30 days (Gintner & Laura, 2003).

Once an individual actually begins to change the problem behavior, she or he starts the

Action stage (Prochaska & DiClemente, 1992). It is not until this stage that the pros of making a

healthy behavior change are rated as more important than the cons (Prochaska et al., 1994). This

new perspective propels individuals to change both their behaviors (alcohol and/or drug use) and

their environmental conditions (e.g., people, places, and things) to overcome the problem

(Prochaska et al., 1994).

The Maintenance stage is marked by a new behavior being established and maintained

for at least six months to five years (Prochaska & DiClemente, 1982). For many people, it may

take up to five years to get free from behavioral cues of the problem behavior (Prochaska, 2013).

Individuals have to be prepared to cope with the most common triggers for their problem behavior, which can include times of distress, anxiety, depression, loneliness, and boredom (Prochaska, 2013). Many Americans cope with these types of problems by increasing unhealthy habits (Prochaska, 2013).

These stages of change and the transtheoretical model upon which they are based are backed by the literature. Several measures of readiness to change alcohol use among college students were adapted from Prochaska and DiClemente's work and have been widely used in studies on college alcohol use. The Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES), the Contemplation Ladder (CL), and the Readiness to Change Questionnaire (RTCQ) are instruments commonly used to assess readiness to change (RTC) along the transtheoretical model specifically with regard to problem drinking (Vik, Culbertson, & Sellers, 2000). The studies below are a few that include these measures in capturing students' experience contemplating the pros and cons of drinking. Specially, the negative effects of alcohol consumption are identified as instigators of change. This is relevant to the current study in that criteria for participation included experiencing negative effects of alcohol use and subsequently reducing alcohol consumption.

Negative Effects

Many studies have shown a strong association between negative effects of alcohol consumption and alcohol consumption reduction among college students (Alexander & Bowen, 2004; Barnett et al., 2006; Blume et al., 2000; McNally & Palfai, 2001). In terms of readiness to change, Shealy, Murphy, Borsari, and Correia (2007) demonstrated that college undergraduates who have experienced alcohol-related problems, higher frequency and quantity of alcohol use, and lower levels of life satisfaction have higher levels of motivation to change their drinking.

Additionally, Griffin (2005) demonstrated that as the number of alcohol problems increase, the more likely a college student is to reduce their alcohol consumption. McNally and Palfai (2001) revealed that as students experience more problems related to alcohol they are more likely to be in the Contemplation stage of change rather than the Precontemplation stage.

Vik et al. (2000) examined the motivation to reduce heavy-drinking among 278 undergraduate college students using the commonly utilized Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES). Negative effects of drinking were demonstrated to be factors in movement along the stages of change, as twice as many Contemplators in the study had experienced negative effects such as problem with authorities than had those in the Precontemplation stage of change. Thus, it appears that negative effects of alcohol have an impact on movement along the stages of change.

Barnett et al. (2006) measured heavy drinking patterns among 227 college students (ages 17-21) using the Timeline Followback (TLFB) following either a disciplinary infraction related to alcohol, or a medical evaluation for intoxication. The aim of the study was to identify predictors of motivation to change alcohol use. The Contemplation Ladder (CL) was used to assess motivation to change drinking patterns, and the Young Adult Alcohol Problems Screening Test (YAAPST) was used to measure number of drinking problems. Participants were also asked about aversiveness of the incident. Although alcohol consumption and past year alcohol problems were negatively associated to motivation to change heavy drinking, perceived aversiveness of incidents was positively related to motivation to change drinking (Barnett et al., 2006). This is helpful to the current study in that it underscores the importance of not only outcomes (i.e., benefits and negative effects) of college students' alcohol consumption, but also describes the impact of valuations on change.

Shortcomings of the study were that other than medical evaluation or disciplinary infraction, types of negative effects (e.g., social) participants experienced before making the change were not included. In addition, the measures only focused on drinking amounts, aversiveness of the medical or disciplinary infraction, and Readiness to Change (RTC). They did not examine the difficulties of changing or the overall process of change, from beginning to end.

To test whether college students' subjective evaluations of alcohol related consequences would elicit prospective change in drinking behavior, Merrill et al. (2013) conducted a study on college students' evaluations of recently experienced consequences of alcohol use and changes in alcohol consumption. They hypothesized that it would not be the consequences of alcohol use themselves that prompt change, but one's cognitive appraisal (i.e., subjective evaluation; Merrill et al., 2013).

Participants were 96 college students, pulled from an ongoing longitudinal study on substance abuse and traumatic stress located in northeastern United States, who were asked to report the number of standard drinks consumed each day in the past week (Merrill et al., 2013). Type of negative consequences (e.g., social, behavioral, academic) experienced in the past week were gathered using the Brief Young Adults Alcohol Consequences Questionnaire (B-YAACQ). High consequence drinkers drank significantly more on average per week than low consequence drinkers, and students who reported a consequence perceived as relatively more upsetting or severe than usual were more likely to report short-term reductions in alcohol use and/or consequences the following week (Merrill et al., 2013). Cognitions, and in this case, evaluations of negative alcohol consequences, were found to be significantly related to future alcohol consumption. A weakness to this study was that it did not examine the impact of positive consequences, which, as noted earlier, can have a profound impact on alcohol consumption.

However, it revealed that cognitions relating to consequences play just as important a role as consequences themselves, which strengthens the case to broaden the operant conditioning approach to one that includes other environmental influences (e.g., social) on alcohol consumption. In the context of the qualitative approach of the current study, these environmental and cognitive influences were explored.

Another type of alcohol problem valued enough by college students to propel them to change is intrapersonal. Milin (2008) used the Drinker Inventory of Consequences (DrInC) and the Readiness to Change Questionnaire – Treatment Version (RCQ-TV) to examine RTC of drinking behaviors among 116 participants involved in Alcoholics Anonymous (AA) or the Self-Management And Recovery Training (SMART) program. Consequence type (i.e., physical, impulse control, interpersonal, intrapersonal, social responsibility) was hypothesized to be predictive of stage of change. Current and past alcohol use frequency and quantity was not measured. The purpose of the study was to replicate findings indicating that intrapersonal negative consequences predict increased motivation to change. Findings revealed intrapersonal consequences (e.g., compromising values, feeling guilty and ashamed) predicted significantly lower Precontemplation stage of change scores. Limitations of the study were that it did not include a sample of college students, and participants were in treatment and did not self-initiate change.

Summary

Explaining why college students reduce their alcohol consumption has been widely studied and has been proven to involve multiple layers. Specific interpersonal (Milin, 2008; Schulenberg & Maggs, 2002; White & Ray, 2014) intrapersonal (Milin, 2008), medical (Barnett et al., 2006), emotional (Capron & Schmidt, 2012; Kassel et al., 2000; Wood et al., 1992), and

other negative effects have influenced alcohol reduction. In addition, students' beliefs about drinking outcomes (Lee et al., 1999; Schulenberg & Maggs, 2002), and the degree to which those outcomes are valued (Fromme et al., 1993; Grube et al., 1995; Leigh, 1989), have been shown to explain why those negative effects are associated with reduction (Barnett et al., 2006; Merrill et al., 2013; Quick, 1999).

While many college students are driven to reduce their drinking after experiencing multiple negative consequences, others decide not to change because the benefits of drinking outweigh the negative effects (Capron & Schmidt, 2012; Quick, 1999). In fact, studies have demonstrated that benefits of drinking are actually more important to college students' readiness to change than negative effects (Usala, Celio, Lisman, Day, & Spear, 2015). Though many studies have examined the impact of these benefits and negative effects on college drinking, none to date were found that explore the challenges students' experience as they trade off drinking benefits for a reduction of alcohol problems during the alcohol reduction process. The current study explored those challenges in the context of the overall alcohol consumption reduction process.

CHAPTER III

METHOD

Practical Problem

College drinking and substance use is an ongoing problem; yet, studies show that students can and do make a decision to reduce their alcohol consumption after experiencing negative effects (Barnett et al., 2006; Merrill et al., 2013; Milin, 2008). Though these findings are promising, other studies have demonstrated that benefits which arise from college drinking (e.g., better times with friends, less tension, coping) are more common (Barnett et al., 2006), and can even be more powerful in college students' decision to drink than negative effects (Capron & Schmidt, 2012; Mallett et al., 2013; Merrill, Carey, Reid & Carey, 2014; Park, 2004).

These findings reveal that college students are pulled in two different directions when it comes to drinking: enjoy the pleasurable effects after choosing to participate, or reduce consumption to avoid negative consequences. To complicate matters, students hold the belief prior to the change process that reducing alcohol consumption will lead to negative or uncomfortable effects (Metrik, McCarthy, Frissell, MacPherson, & Brown, 2004). Their drinking reduction is also less reactive to alcohol sanctions if they view close friends' drinking patterns and views as accepting of heavy alcohol use (Merrill et al., 2014).

Research Problem

Many studies have established the negative effects and benefits of excessive alcohol consumption. Furthermore, the negative effects of reducing consumption have been cited as a

complicating factor of alcohol consumption reduction by various models of change (Merrill et al., 2014; Prochaska, 1994; Rollnick et al., 1999). Still, further study was needed to determine both the most critical factors associated with change and how the process of change occurs for students who take up the challenge of recalibrating their behavior with alcohol consumption within the campus culture. Specific consequences and factors that act as key ingredients to change have been identified (Cunningham et al., 1999; Merrill et al., 2013; Park, 2004); however, no study to date was found that explored how the process of change occurs for college students without addictions who previously reduced their alcohol consumption. Specifically, further study was needed to explore how students experience both the reduction in negative effects from excessive alcohol consumption and, at the same time, also experience negative effects as a result of change in that behavior (e.g., changes in relationships with friends, changes in social engagements, etc.) Exploring students' experience of weighing the pros and cons of a specific behavior and subsequently changing a behavior over time adds depth to the understanding of change as described by Prochaska and DiClemente.

Purpose

The purpose of this study was to describe the process of alcohol consumption reduction among a sample of college students who significantly reduced their drinking behaviors after experiencing negative effects of alcohol consumption. This study was also intended to better understand how the participants in this study experienced both the pros and cons of reducing their alcohol consumption. Prior to this study, research described various factors and experiences related to the alcohol reduction, but none had captured the experience in its entirety. For example, studies had given attention to the lived experience of college students (Woodford, 2002) and women receiving treatment (McLeod, 2012) who identify as being in recovery.

Others (Cunningham et al., 1999; Jessup et al., 2014) had examined the process of alcohol or drug cessation in terms of motivation. However, in those studies, participants had more severe drug and alcohol problems (such as addiction) than the typical heavy-drinking college student and had undergone some sort of treatment. Furthermore, a key research gap was the examination of negative effects associated with alcohol consumption reduction. Metrik et al. (2004) identified *beliefs* adolescents have about the negative effects they will experience if and when they reduce alcohol consumption; however, the study did not capture the actual experience of those who reduce.

Merrill et al. (2014) demonstrated that college students who reduced less after an alcohol sanction appraised close friends' drinking behavior as heavy and views of heavy drinking as accepting. In contrast to the current study, participants in the study by Merrill et al. did not identify their views of friends' attitudes toward drinking as a challenge or negative effect of alcohol consumption reduction; rather, these views were measured as variables that impacted the degree to which participants reduced. These social factors directly moderated the degree to which students reduced alcohol consumption, in terms of amount and/or frequency. Furthermore, participants in the study by Merrill et al. were described as being in natural recovery from alcohol and were aware that they were soon to begin a mandated intervention for problematic drinking. Natural recovery, as described by recovery expert William White (2007), is a term used for individuals whose substance use problems are not transient and are proactively managed.

The current study described the experience of those among a population of problem drinkers whose behaviors are too often pathologized. Participants and researchers in other studies have conceptualized college problem drinking as a disease, thus yielding a completely

different subset of variables and concepts, such as abstinence, recovery, and treatment. Much more frequently, college students with drinking problems are not addicted, as evidenced by the transient nature of their drinking problems (Sher et al., 2001), and by their ability to successfully reduce or quit drinking (Misch, 2007). This is demonstrated in studies that provide evidence that college students do not have what is typically regarded as strong indicators of addiction: long-term (post-college) alcohol problems (Misch, 2007; Sher et al., 2001), and the ability to quit or reduce consumption without help (Vik et al., 2003), and without repeated attempts (Bennett et al., 1999; Colby et al., 2000). Their alcohol use and reduction should therefore be studied as behaviors common to those at a particular developmental level. Instead of conceptualizing their alcohol problems and subsequent reduction as indicators of a lifelong problem, the current study aimed to capture their experience in the context of short-term challenges associated with the college experience.

Research Questions

The research questions that guided this study are the following:

1. How does a sample of college students at a Midwestern university who significantly reduced their alcohol consumption describe the process they experienced before, during, and after they reduced their alcohol consumption?

2. What critical elements motivated these students to reduce alcohol consumption?

3. How did the process of changing drinking behavior occur over time?

4. What sustained and what interfered with these students' commitment to reducing their alcohol consumption?

5. How is life different for these college students after they reduce their drinking (in terms of both negative and positive outcomes)?

6. What did college students learn about themselves during the process of reducing

alcohol consumption?

The hope is that these questions will inform researchers about how the lived experience

of reduction of alcohol consumption among college students plays out in terms of compromising

social activities, coping strategies (e.g., drinking to reduce anxiety), and other benefits of

drinking. Ultimately, the aim of this study was to understand students' experiences of trading off

benefits of alcohol consumption for the benefits *and challenges* of reducing alcohol use.

Furthermore, aspects of identity development as it relates to these changes were explored.

Significance of the Study

Clinicians and researchers could be better informed as to how the process of change plays

out for college students who drink in excess. More importantly, problematic college drinking

and associated alcohol consumption reduction can be more accurately conceptualized as

experiences that can emerge during this particular phase of identity development for college

students. With this approach, the difficulties college students experience while reducing their

alcohol consumption can be viewed not as signs of relapse or cravings, but as challenges

associated with the loss of social and emotional benefits of alcohol consumption. This study

filled in the research gap in two ways: (1) by describing the challenges faced during alcohol

reduction, and (2) by viewing the experience in its entirety as one which is not indicative of a

disease requiring treatment.

Research Design

This is a phenomenological qualitative study. The reason I conducted a qualitative study

is because I, like many qualitative researchers, wanted to capture the complexity of the

experience of participants of the study (Bogdan & Biklen, 2007). Using a qualitative method allowed me to portray the many dimensions of participants' experiences of reducing alcohol consumption (Bogdan & Biklen, 2007) rather than narrowing the focus by asking specifically about particular consequences, as is seen in quantitative studies (Crawford & Novak, 2010; Griffin, 2005; Grube et al., 1995; Lee et al., 2011). The qualitative method captures a larger set of variables by exploring the life context of participants within their historical and cultural settings (Creswell, 2013). Furthermore, by using a qualitative approach, I intended to better understand how each individual developed their own subjective meaning of the process of reducing alcohol use (Creswell, 2013). In this spirit, I hoped to better understand the unique reality of each college student who made a drinking reduction while at the same time explore factors common to many of the participants.

The qualitative research design used in the current study enabled participants to describe the meaning they made of the benefits and negative effects experienced before and after reducing alcohol consumption (Creswell, 2013). This is different than the vast body of quantitative data on the subject, which isolates specific causes and consequences of alcohol use without describing the unique reality of each participant. This study used a phenomenological approach in order to capture these unique realities and the many environmental, emotional, and behavioral characteristics that go along with them. This type of qualitative approach was used in order to find the essence of participants' experience (Creswell, 2013), while also attending to the unique factors of each participant's reality.

Phenomenology has been explained as a way to describe the common meaning for several individuals' lived experience of a particular phenomenon (Creswell, 2013). Specifically, it can be thought of as a way to analyze how individuals "perceive it, describe it, feel about it,

judge it, remember it, make sense out of it, and talk about it with others" (Patton, 2002, p. 104).

Each individual is typically interviewed in-depth, and their stories are then analyzed from the

central assumption that there is an essence to the experience that is shared with others who have

also had that same experience (Marshall & Rossman, 2016). Each participant's unique

expression of how the phenomenon is experienced is then analyzed and compared, with a focus

on life as lived (Marshall & Rossman, 2016). The end product of such an analysis is a

description of the essence of "what" individuals experienced, and "how" they experienced it

(Creswell, 2013).

Sampling, Subjects, Access, and Setting

The general setting for this study was at a large, Midwestern university that is a

predominantly White institution (PWI). Within the institution, participants were recruited from

courses either face-to-face or through email. The reason for sampling from this context was to

minimize variation between college students who chose to reduce their alcohol consumption.

That is, these students were enrolled at a major university, were all around the same age, and all

had experiences with problematic drinking in the same or similar context. Recruiting

participants who share factors such as these is consistent with a phenomenological study, as

common characteristics can help to highlight experiential themes (Creswell, 2013). These

themes and common characteristics led to identifying the overall essence of what college

students experience before, during, and after reducing alcohol consumption.

To gain access to this university, I began by requesting approval for the study by the

university Human Subjects Institutional Review Board (HSIRB). A copy of the HSIRB approval

letter can be found in Appendix M. Once approval was made, a volunteer recruiter read a

recruitment script (Appendix C) and distributed a flyer (Appendix F) to each student in selected

classes.

Criteria for Inclusion

Eight participants were recruited face-to-face or through email from among students

enrolled in courses at a Midwestern university. In order to participate in this study, individuals

needed to be between the ages of 18 and 25, and have experienced negative effects related to

alcohol consumption and subsequently reduced consumption while enrolled in this university.

Examples of negative effects include, among other things, social, legal, and educational.

Alcohol consumption reduction was defined as reducing the frequency and/or amount of alcohol

consumption. Furthermore, they had reduced the quantity and/or frequency of alcohol use to the

extent that they no longer experienced its negative effects, and had experienced life changes

concurrent with that reduction for a period of at least 30 days.

Criteria for Exclusion

Exclusionary criteria were described during recruitment (either face to face or through

email, depending on the course), and in the participation checklist (Appendix H) that the

investigator reviewed with each participant after they provided verbal assent. Students who

endorsed any of the following were excluded from the study: (1) currently experiencing

physiological withdrawal symptoms; (2) consider themselves to have an addiction to alcohol or

any other substance; (3) have ever met the diagnostic criteria for substance use disorder, severe;

or (4) participated in any formalized treatment specifically for alcohol use (e.g., counseling,

group therapy, AA, etc.). In terms of excluding students with an addiction, a *DSM-5* screener

that assesses the severity of substance use during a 12-month period was created by this writer

(Appendix H). Though there is no formal diagnosis for addiction in the *DSM-5* (American

Psychiatric Association, 2013), a substance use disorder classified as severe captures behavioral

and physiological symptoms similar to those included in the concept of addiction (American

Psychiatric Association, 2013). Two potential participants had previously met the diagnostic

criteria for substance use disorder, severe, and were therefore excluded from the study.

For face-to-face recruitment, the investigator emailed instructors of selected classes

requesting permission to recruit from their class (Appendix G). A graduate student trained to

recruit participants for the study presented a brief summary of the study (Appendix C) to

students in one of the class sessions. The recruiter also read aloud criteria for participation

(Appendix C). A flyer with the investigator's contact information and inclusionary and

exclusionary criteria was displayed (Appendix F) and distributed to students (Appendix L) of

each class while the recruiter read the script. A $25 giftcard to a retail store was offered as

incentive to complete all of the following: an oral review of the demographic form (Appendix I)

with the investigator, an oral review of the participation checklist (Appendix H; including

inclusionary and exclusionary criteria) with the investigator, an oral review of the *DSM-5*

checklist (Appendix J) with the investigator, a telephone interview with the investigator

(Appendix A), and an oral review of the interview transcript and writer's summary of the

transcript with the investigator (i.e., member check, Appendix B). The graduate student

volunteer also distributed the flyer (Appendix F) to every student in the class. The graduate

student recruiter asked those who were interested in learning more about the study to email or

call the investigator at the number or email address indicated on the classroom screen (which

displayed the PowerPoint slide, Appendix F) and on the flyer distributed to each student. Once

the investigator has been contacted, the informed consent form was sent via email (Appendix K)

to each potential participant.

For email recruitment, instructors in selected courses were sent an email with a brief summary of the study and a request to forward the summary to their students (Appendix E). The email included criteria for participation. A $25 giftcard to a retail store was offered as incentive to complete all of the following: an oral review of the demographic form (Appendix I) with the investigator, an oral review of the participation checklist (Appendix H; including inclusionary and exclusionary criteria) with the investigator, an oral review of the *DSM-5* checklist (Appendix J) with the investigator, a telephone interview with the investigator (Appendix A), and an oral review of the interview transcript and writer's summary of the transcript (i.e., member check, Appendix B) with the investigator. The email asked those who were interested in learning more about participating to email or call the investigator. Once the investigator had been contacted, the consent form was sent via email (Appendix K) to the potential participant.

I closely followed the procedures outlined by the university HSIRB for gaining the consent of each participant prior to the study. The consent document was created in accordance with the Consent Document Development Checklist found in the university HSIRB application. After it was approved, the consent document was emailed to each interested participant prior to the study. Potential participants were told that the primary investigator was available to answer any questions regarding the document. Those who decided to participate were asked to keep a copy of the form for their records. They were invited to ask questions about the study and given time to consider whether they wanted to participate.

Sampling and Recruitment

Criterion sampling was used for this study, and participants had to meet the criteria described above. Students who had contacted the investigator and expressed interest in learning more about participating were emailed (Appendix K) a copy of the informed consent document.

A phone call was scheduled to review the informed consent and answer questions the potential participant had regarding the study and to complete the interview, if appropriate. At the beginning of the scheduled phone call, the investigator and potential participant reviewed the consent form orally over the phone. Participants were made aware that they were required to be digitally recorded in order to participate in the study. The investigator explained that all digital recordings would be kept confidential through digital encryption and passwords, and would only be shared with a professional transcriptionist and themselves. The researcher explained that participation was entirely voluntary, and individuals could withdraw from the study at any time, for any reason, without penalty.

After the informed consent document was reviewed the potential participant had the opportunity to ask questions. After questions were answered by the investigator, each individual chose to participate in the research study. The investigator explained to each participant that by discussing the consent form and verbally agreeing to participate in the study, they were providing verbal assent to begin the data collection process. Recording of the first interview as well as questions related to demographic information (Appendix I), inclusionary and exclusionary criteria (Appendix H), and *DSM-5* symptomology (Appendix J) did not begin until verbal assent was given. Immediately after recording began the participant was reminded that by participating in the phone interview and answering related questions they were consenting to participate in this research study. Each participant stated they understood and agreed to participate. The date and time of the interview was then recorded and the preliminary questions and interview began.

Eight participants in total qualified for and participated in this study. Six were female and two were male. All participants identified as Caucasian, heterosexual, able-bodied, and cisgender. Ages ranged from 18-25, with a modal age of 22.

Data Collection

The following protocol for the data-collection process was recommended by Creswell (2013) for phenomenological studies. First, in-depth interviews with open-ended questions were utilized. As noted above, participants were asked to review with the investigator the consent form detailing the purpose of the study, the amount of time needed to complete the interview, and plans for using the results from the interview.

The interview was semi-structured, one-on-one, and was digitally audiotaped. Each interview was conducted by the investigator of this study, and took place over the telephone. Research questions 1 through 6 above guided the interviews and were accompanied by probes and queries. The interview was facilitated using an interview protocol (Appendix A). Interviews lasted approximately 50 minutes each. Each student was advised that they may contact the providers listed on a referral sheet provided if they wish to further discuss their experience of alcohol consumption reduction with a mental health clinician.

After the interviews, the investigator reminded the participant of the next steps in the data collection process. The investigator stated that that the digital recording of the interview would be sent to a transcriptionist who would type the content of the audio recording. The investigator also explained that the transcript would be emailed to them for review after it was completed. It was explained that the email would also offer dates for the follow-up interview. A password to be used for each transcript was then given to the participant over the phone. The investigator indicated that after the transcript review and follow-up interview, participation in the study

would be complete and a $25 giftcard would be emailed to the participant. Interviewees were thanked for their time at the end of the interview.

Member Checks

After the initial interview, participants were emailed a password protected copy of the interview transcript to review for accuracy. In the email, they were asked to note any mistakes or areas that needed clarification. Additionally, participants were asked if they wished to elaborate on or offer additional information to what was described in transcript. They were invited to connect again by phone for approximately 30 minutes to discuss any corrections or additions to the transcript. The protocol for this member check phone interview can be found in Appendix B. This member check interview gave participants the chance to clarify and expand upon their experiences. Corrections and additions were made together by the investigator and the participant while the meeting was digitally recorded. Participants were emailed a $25 giftcard after the member check.

Data Analysis

The data analysis approach utilized for this research was the Moustakas approach (Creswell, 2013). The first step in this method of analysis is to set aside personal experiences and biases around the topic through a process known as bracketing. The student researcher completed this by recording his own personal experiences helping others with substance use disorders. This researcher's disclosure can be found later in this chapter.

Following each interview, the general process for data analysis in the current study was as follows: (1) converted digital data into transcripts, (2) reduced the data into themes through a process of coding, (3) condensed the codes, (4) organized the codes into meaning categories,

(5) reduced the meaning categories to themes and sub-themes, and (6) represented the data in the results and discussion. This is the general approach used in phenomenological qualitative research (Creswell, 2013). The researcher used the software package Atlas.ti to assist with the process of coding and data analysis.

The starting point for this process was that the current author wrote analytic memos while interviewing each participant, and also while reading the transcript of each interview. Memos are mini-analyses about what the writer is learning during the course of the evaluation. They can be thought of as brief summaries of major findings found in each transcript, or personal thoughts on aspects of the evaluation. Writing analytic memos is referred to as memoing (Creswell, 2013).

Developing themes from the transcripts was guided by the emergent process of coding. The following is a linear process for coding described by Creswell (2013). First, significant units of text were highlighted with Atlas.ti software. These units of text were quotes from the individual interviews that relate to college students' experience with alcohol consumption reduction. The investigator then grouped related statements into codes and themes. This process was repeated until units of text depicted common themes or elements. Each theme or element was given a name to capture the "voice" of the participants.

Those themes were then divided into two categories: descriptive (textural) and interpretive (structural). This division was meant to separate *what* participants describe about the phenomenon (textural) from *how* they experience the phenomenon (structural; Creswell, 2013). The investigator captured the structural description by reflecting upon the setting in which the phenomenon occurred. For this particular study, that meant discussing with participants the college living environment.

Finally, a comprehensive report was written by combining elements from textural and structural quotes. Prominent themes were used to tell the "collective story" of the process of alcohol reduction. This report resulted in describing the essence of the experience of college students who reduced their alcohol consumption. As is the case with most phenomenological qualitative studies, this study tells the reader *what* phenomenon the participant experienced, and *how* they experienced it (Creswell, 2013).

The final step of this qualitative method was the auditing process. This auditing process is a type of verification of accuracy of themes derived by the researcher. It is a form of triangulation, and can be described as a way to utilize outside auditors or sources to confirm or disconfirm evidence (Creswell, 2013). The auditing process for this study meant that one outside auditor reviewed the data to draw his own conclusions about themes identified in the data. This process began after the investigator developed the initial themes, codes, and descriptions found in the interviews. The auditor was a counseling psychology doctoral student at a Midwestern university who was familiar with qualitative research and had experience in participating in qualitative research teams. Furthermore, he had experience treating individuals with substance use disorders and was familiar with the topic. He was chosen because he had experience with both qualitative research and, more specifically, auditing, as well as addictions. He was given access to the de-identified transcripts, analysis notes, and the initial textural and structural description of the data. The feedback provided by the auditor was utilized in identifying and grouping themes in Chapter IV. This process of auditing facilitated reduction of researcher bias in the identification and description of themes found in the data.

The Researcher

My connection to this work emerged out of interest piqued during several points throughout the years in my clinical training to be a counselor and psychologist. In my eight years of clinical training and practice, my area of focus has been addictions. Many of the individuals with whom I have worked have had severe, chronic problems related to substances. As a master's student, I worked for one year in a hospital inpatient recovery center helping individuals who were dually diagnosed with substance dependence and a co-occurring disorder most often related to anxiety or depression. While there I was trained to view issues related to addiction through a medical lens. I was privileged to train with regional leaders in the field of addiction whose emphasis was medication assisted treatment and complimentary psychotherapies. This made quite the impact on me as a novice in the field. In terms of professional development, I viewed those initial supervisors and role models as having the one and only "correct" conceptualization of addiction.

During my doctoral studies, however, my conceptualization and treatment of individuals shifted from a pathology-based stance to one that emphasizes strengths. This change in thinking developed as my case conceptualization skills improved. In my estimation, my case conceptualization skills were enhanced because I was immersed in a multiculturally focused, strengths-based counseling psychology doctoral program. I began to think of individuals not so much as variations of diagnostic criteria with associated problematic behaviors, but rather as complex people from varying backgrounds, ethnicities, strengths, and adaptive life strategies. As I took on this new perspective, my professional identity became more consistent with *counseling* psychology: a strengths-based, recovery-oriented profession for helping people in context instead of just changing their problematic behaviors.

During that time of change in conceptualization I helped individuals with addictions and substance use problems at four different settings: a private-practice in a rural community, two Veterans Affairs (VA) hospitals, and a college counseling training center. While at one VA, I created and facilitated a weekly addictions group for a population of individuals severely impaired by psychotic disorders, depressive disorders, and personality disorders. At that time my counseling psychology perspective was still early in its development. I experienced dissonance regarding the conflict between two opposing viewpoints of addiction: what I had learned to be the "correct," disease-based, pathology-focused view of clients, versus the focus on not just addiction itself but the life circumstances and contextual factors of life from which people develop.

In my work at the college counseling training centers I noticed a difference in the way clients experienced problematic substance use issues. College students more commonly reported temporary problems with substances. Furthermore, their substance abuse behaviors were more often than not embedded in a heavy-drinking, social context. Nonetheless, over the years I still noticed a common pattern for both those in the hospital setting and those who were in college: Individuals who heavily abuse or depend on substances usually do not reduce or quit their substance of choice until the negative effects (i.e., aversive consequences) "nudge" them to change. Interestingly, several college students who I helped while in the process of alcohol use reduction described many challenges that emerged as a result of the reduction process. This was the first time I had really begun to think more critically not just about the negative effects that lead to change, but the negative effects of change itself. Clients reported that after reduction, they felt isolated from their peers, heightened anxiety, difficulties coping with upcoming life transitions (e.g., graduating), and so on. The sense of affiliation they felt when drinking with

their peers was diminished. Clients also stated that they had to begin actually coping with life stressors without the aid of alcohol, which was challenging. At the same time, they were excited to be free from alcohol-related problems. The dichotomy between the cons of drinking and the cons of not drinking seemed to be an enormous challenge**.** My ability to more fully consider contextual factors such as the college social environment helped me more fully take into account not only the benefits of college alcohol reduction, but also the negative effects.

Trustworthiness

This section of the Methods chapter is intended to be a reflection of the steps taken into account by qualitative researchers to ensure trustworthiness of the research. To ensure trustworthiness, the writer made a diligent effort to circumvent the pitfalls sometimes associated with qualitative research. The following strategies are outlined by Mertens (2005) and were utilized throughout the process of the current study.

Credibility

Qualitative researchers are said to build credibility with their research by completing member checks and processing personal biases during the study (Marshall & Rossman, 2016). Through probes, open-ended questions, and use of active listening skills, I facilitated one-on-one interviews to identify what the participant reported to be the most salient issues concerning the process of alcohol reduction or cessation (Mertens, 2005). I captured participants' responses by recording each interview. Before I analyzed these recordings through means described above, I bracketed, or wrote down personal experiences, biases, and preconceived notions about the research topic (described above). This process was intended to compartmentalize my own personal opinions and biases, as well as previous research knowledge, from data in the study. It

was conducted in order to accurately capture the experiences of the participants rather than unintentionally insert my own opinions or knowledge about the existing literature (Creswell, 2013). To further remove personal bias, I engaged in member checks after each interview to verify the accuracy of the transcripts. Member checks, as described above, are when participants read a transcript or summary of their interview and provide corrections or clarifications.

Transferability

For the purposes of this study, transferability is defined as the degree to which experiences reported by participants of this study can be applied to other college students who may have experienced a similar phenomenon. In order for readers of this study to transfer findings, several things about participants should be highlighted. First and foremost, unlike many other studies related to alcohol use, participants in the current study did not have a current or past diagnosis of substance use disorder, severe. Although most participants previously met the criteria for a mild or moderate alcohol use disorder, no participant had a chronic dependence on alcohol (i.e., no clinical diagnosis of alcohol use disorder classified as severe). Second, all participants were college students, and many of them had not yet had full-time jobs, long-term committed romantic relationships, or other life factors often cited in non-college populations. Furthermore, participants of this study had not been treated for alcohol use, and did not consider themselves to be in "recovery." Though they experienced alcohol-related problems, they did not report the same long-term pattern of behaviors often cited in studies on those with addictions. See above for more information on participants, setting, and sample.

Authenticity

In this study, authenticity in this study is the set of actions I took to ensure that this study could be replicated, and that participants' experiences are accurately captured in the themes

derived from their accounts. One step I took in establishing authenticity was that I utilized the

trail-making process. This is a process in which I recorded what specific actions were taken

during each step of the research process. The goal of this was to allow for a future replication

and/or extension of the current study (Creswell, 2013). I also bracketed before the study to gain

a heightened awareness of my assumptions and separate them from the experiences of the

participants. Furthermore, reviewing the data multiple times helped ensure accurate portrayal

and understanding of the interviews. Data were revisited repeatedly to seek elements that may

have been initially overlooked. Finally, salient quotes were identified that give authentic voice

to the distilled findings expressed through themes and sub-themes.

CHAPTER IV

RESULTS

The purpose of this study was to gain an understanding of the experience of college students who have reduced alcohol consumption. Specifically, this study aimed to explore the change process as it relates not only to precipitating factors and benefits of reducing alcohol consumption, but also its negative effects. To accomplish this, the researcher conducted an initial 50-minute interview via telephone and a 20-minute follow-up phone interview with each participant. The researcher utilized a phenomenological approach to analyze the data. The interviews with the participants allowed the researcher to gain a better understanding of the perspectives of college students who experienced problems due to alcohol and subsequently reduced consumption. This chapter describes the demographic make-up of the participants, as well as the themes revealed from the data. Quotes and examples included best capture these themes. Pseudonyms were used in place of actual participant names to ensure confidentiality.

The first section in this chapter captures a demographic profile of the participants. The second and third sections focus on the participants' perception of benefits and challenges of excessive alcohol consumption, respectively. The fourth section focuses on the participants' perception of the benefits of alcohol consumption reduction, and the fifth section describes participants' perceived challenges of alcohol consumption reduction. The sixth section emphasizes participants' discussions of how they sustained reduction. The seventh section focuses on participants' self-report of insight gained during and after the reduction process.

Description of Sample

Six females and two males between the ages of 18 and 25 participated in this study. The youngest was 18 and the oldest was 25, with the modal age being 22. Three first-year students, four fourth-year students, and one graduate student were included. All participants identified as Caucasian, heterosexual, able-bodied, and cisgender. Each participant was a student at a large Midwestern university and had previously experienced negative effects of alcohol consumption and subsequently reduced alcohol intake while enrolled as a student. None of the participants had ever been in treatment for drug or alcohol abuse, considered themselves to be addicted to any substance in their lifetime, or had ever met the diagnostic criteria for substance use disorder, severe.

Benefits of Excessing Drinking

Transcripts of participants' stories of alcohol consumption reduction were first carefully analyzed. As a result of this analysis, the themes of (a) fun social experiences, (b) less social anxiety, and (c) coping with stress emerged regarding the benefits of alcohol use experienced prior to reduction.

Fun Social Experiences

Through careful analysis of participants' stories, one theme that emerged was the "fun" experiences participants had with their peers during the period of time in which they drank significantly more than they did prior to reducing. Most participants described specific instances in which they had fun with their friends while drinking more than they did after the reduction process. In describing an example of a time she went out and had fun, Mary said, "So, yeah, the feeling … just going out and having fun, being social with my friends, meeting new people,

those were the biggest things." In describing seeing an old friend she had not seen in a long

time, Luna stated,

> We were pretty drunk at that point … and it was actually a lot of fun and we got to see
> the headliner [at a concert]. I got to catch up with him after they went on and it was a lot
> of fun.

Kitty described, "It was just like everything about the aspect of drinking was fun. You know,

they've got fuzzy navels — it's a fun name, it tastes good and we all get silly." Sally explained a

"fun story" by stating, "One time me and all my friends went out … we all went out to the bar

and — for some reason were like, all right, let's race home!"

> Lee also described what about his drinking experiences was fun:

> You know … it was just having fun in general. Everybody around me was having a good
> time and I was having a good time. There was a lot of laughter, dancing occasionally—
> because usually there's some music playing. I guess just things of that nature.

> Mary further explained how alcohol facilitated fun social experiences:

> Meeting a lot of new friends that I have now … we're through, you know, going out on
> the weekends and not necessarily based around drinking, but it was just the fact that it
> brought us all together. Yeah, you know, we would have fun, dance, everything … it
> really allows you to let loose I guess?

> Fun social experiences were described as central to alcohol consumption for several of

the participants. These many positive social experiences were associated with a certain mood

and frame of mind. Participants "let loose" with their friends and had a good time, which

brought about a certain enjoyable mindset. This overall experience was reported as "fun."

Less Social Anxiety

In addition to the "fun" spirit of drinking described above, alcohol use also provided the

emotional benefit of reducing stress and anxiety. Several participants described feeling more

relaxed after consuming alcohol and subsequently more friendly and at ease with their peers.

Lee stated, "It would benefit me in the sense of I would … you know … loosen up a little bit and

it'd be easier to talk to people around me and whatnot." Luna echoed this general sentiment

about alcohol as a tool to reduce social anxiety: "You might be more apt to talk to complete

strangers or conversations might flow easier because you're just kind of rambling." Amelia

reported that she used alcohol "as a way to be social and meet people and also feel like I can feel

a little bit socially awkward when I'm first meeting people and alcohol is a nice way to smooth

that over a little bit." Alex described the social effects of alcohol in her own words:

> I wouldn't say I'm antisocial or anything like that, but when I drink I definitely open up more. You know, I'm less stressed and it's like I feel like I can talk to anyone. I want to be able to talk to anyone without … like … you know, I wouldn't say like I would have any … It just like anxiety of being, you know, a teenager and thinking like … what people are thinking about me right now? And like, do I not look good enough? Or anything like that. That's just a security that every … I would say every teenage girl has. And when I was drinking … I would relax and I was like "oh yeah" like I'm having a good time. And so, I mean I would drink just to, you know, be more comfortable in situations and be at what everyone's level is …

> Less social stress is the effect of alcohol that many participants said was particularly

noticeable. It can be thought of the feeling that helps people become more relaxed in the social

context.

Coping With Stress

In addition to alcohol creating a feeling of relaxation and stress relief in a social context,

most of the participants described the negative emotions and worries it reduced in their life in a

general sense. Kitty explained:

> You know, we would go out and we'd get intoxicated and then we wouldn't be thinking about, you know, our argument with our boyfriend or the big assignments we have to do next week. We'd just go out and … it kind of was like you could into a different world almost. Your stress at school, your stress in your relationship, you go get loose and you're in this like I guess, a more free untouchable world … you know, until obviously until that wears off.

> Luna explained in her own words: "Because when I'm drinking, it relieves like … like if

something happens I usually kind of blow it off … I mean, I still remember it when I'm sober,

but I don't care as much at the time." Jeff reported, "When you got like a big study load it is

nice to just like go out and drink and just — takes the stress off at the end of a long week."

Similarly, Alex described alcohol use patterns of coping with family issues and stress:

> I can definitely see a pattern when I drink, for sure. I drink when I'm very, very stressed.
> Like dealing with any family issues or whatever … but like something happened in my
> family and I was super stressed and like I need a drink and I blacked out that night too.

She later emphasized her alcohol use as a means of coping with stress, and stated, "I

realized I have the drinking desire like when I get stressed, but I don't know …" Mary added to

this theme of alcohol use as a coping tool and explained, "The fact that I wasn't thinking about

all the things that I was stressing about earlier in the week … that's probably the biggest thing …

stress."

Whereas some participants focused more on the social ease that alcohol brought them,

others reported that it helped reduce negative feelings and life stressors in general. Participants

who reported that it helped them cope with negative emotions and life stressors described using

alcohol for coping with stress.

Experiencing Negative Effects Leading to Change

Though all participants described ways in which alcohol use was a benefit, they reported

experiencing awareness of alcohol-related problems and negative effects before they reduced

their consumption. However, the experience of the nature of negative effects varied among

participants and included (a) physical, (b) emotional, (c) legal, and (d) relational. These themes

will be discussed below.

Physical

Several participants spoke of the direct negative impact that alcohol use had on them,

physically. Physical consequences were described by Alex during her story of one particular

night that prompted change: "I was experiencing a hangover … my stomach hurt, my head hurt. I was physically exhausted from standing up the whole time." Other negative physical effects were identified by Luna. She stated, "Like one of the times I got too drunk and I was like very dizzy, like I didn't throw up, but I had the spins and I hate that. It is the worst feeling ever." Sally explained, "Oh I'm like a really skinny girl and um every time I drink I usually get sick in the morning."

Mary reported the importance that hangovers the day after drinking had on her life in several areas:

> What led me to reduce my consumption would definitely be the effect of like that physical effect of like a hangover on days that I would have like to go to the gym, do homework, you know … be productive, and instead I laid in bed or you know, ate greasy crappy food and it didn't make me feel any better.

Hangovers, poor physical conditioning, and overwhelming intoxicating effects were reported as negative experiences of excessive alcohol use. Physical negative effects appeared to be a salient theme that motivated participants to reduce their alcohol consumption. They appeared to want to avoid these negative physical effects.

Emotional

Another negative impact of drinking that led participants to reduce their alcohol consumption was emotional. Various negative emotions, such as guilt, embarrassment, sadness, and fear often result either during or after heavy drinking events. Several participants reported behaviors they engaged in while drinking and the way they felt afterward. Alex reported, "Like, immediately, when I saw my roommate, I was like — immediately embarrassed. I was like, wow, I'm such a bad friend. I did all these wrong things. I feel crappy." In the context of her description of vulnerability to addiction, Alex described her fear:

> Like every single time I drank I would think about that. Like, you know … if you keep on doing that you might want to do it more and more and more and then you'll become one of them, like that. I think that it's my biggest fear.

Mary described, "I did experience guilty feelings … just because it's not their [her parents'] job to provide me with money because I'm deciding to spend my money on — irresponsibly I guess." Sally reported, "after the fact of going out and then I'd come back and I'd be like sad about something like stupid, way more emotional." Kitty explained that when she drank and drove she experienced upsetting emotions:

> I would stop drinking for maybe like 45 minutes to an hour before I went home so I felt fine and I felt like I was driving fine … and I probably shouldn't have been driving because I didn't know if I got pulled over what I would blow … you know, blood alcohol or anything like that … so, it was … I mean … the ride home was like severe nervousness!

A variety of negative emotions emerged as an effect of alcohol consumption. Participants reported that guilt, embarrassment, fear, and sadness developed as a result of alcohol use and played a role in motivating alcohol consumption reduction.

Legal

A few of the participants reported experiencing legal repercussions due to alcohol use. In reference to his Driving Under the Influence charge, Lee stated, "I would go home for the weekend and I — I did it one too many times and the last time I got caught being drunk and ended up [getting] in legal trouble for it." In describing the effect this legal repercussion had on his drinking, he explained, "I was not allowed to go to bars or certain points during when I was like going to court and stuff like that."

Jeff provided an in-depth description of how he ended up with a Minor In Possession (MIP) charge:

> I was visiting some friends who go there from high school and I was and we were going to go to the college football game and they were at the tailgate before I was, because that

same day my tennis, my old high school was in the state finals and I played tennis and they didn't, so, I just went by myself. So, I show up to the tailgate kind of late … because I was there and when I got there all my friends were already like drunk … so I had to catch up a bit and the game was about to start … so … I saw all of this alcohol and I wasn't very drunk and my friends convinced me into trying to take it into the game and they found it and took me to a security spot and I got breathalyzed and got an MIP for it.

Later on in the interview, Jeff disclosed why this legal problem motivated him to reduce his consumption:

Well, first off, for my misdemeanor, I had to go on two months of probation to get it off my records, so that's an obvious one, so I didn't drink for two months at all — to get it off my record and then after that, even … now I'm off probation and I still drink less than I did at the beginning of the year. And that's because I just think that drinking too much … is excessive … and I think there's better things that I can be doing at times.

Another participant reported being deterred because of the looming threat of legal consequences. Kitty explained that the threat of being pulled over and getting a DUI made her nervous to continue drinking as much as she once did:

A lot of times I would go out drinking with my friends and I wouldn't consider how I was getting home.… So, drinking under 21 … you know, we would obviously be at somebody's house — 'cause we couldn't order a beer or drink out of the bar, so, you know, we'd have to worry about getting home as long as we trusted that person and then we could stay there. So when I'd go out I wouldn't worry about my ride and I would try to sober up before I would have to go home … so I think that was a big thing, because driving home when you're not super sure what you would blow … is super nerve wracking! And I drive by three police stations — so, it's not a fun feeling that I got.

Not only did the actual legal consequences themselves dictate drinking reduction, but simply fear of legal punishment alone was motivating enough for participants to reduce consumption. Legal consequences, both real and expected, appeared to be a strong motivating factor for alcohol reduction among several participants.

Relational

Another negative effect of alcohol use that most of the participants identified as a factor in their decision to change was relationship complications. Kitty stated:

It's definitely one of the bad things that I experienced from drinking and then also I would get into arguments with my boyfriend because I would be out late and he didn't know that guys that were at the bar. If there were any guys at the bar hitting on me, he'd worry if I was safe … you know … if people were keeping track of…if we were keeping track of each other — you know, you can easily put something in a drink. So, those kinds of things led to arguments with my boyfriend about going out and drinking with my friends.

Not only did alcohol consumption reduction arise out of problems in romantic

relationships, they also emerged after tensions among family members. Lee identified his

mother's disappointment:

The big one … so, my mom — she was a big driver because she was really like hurt in a way I guess when it happened because she was the one who would always tell me that, you know, you need to slow down … I don't think you should've drove home this night or that night and that kind of thing.

Participants also gave accounts of how they came across interpersonally while drinking

more than they did after they reduced. Amelia described discontent with the way alcohol

impacted her interactional style and relationship formation:

I think just wanted to be more like authentic especially with … I feel like particularly getting like kind of flirty with guys and not actually being romantically interested in them and then feeling like awkward the next day if I had like exchanged numbers with them … I would like explain via text like, "Oh no, I was just drunk. Sorry, seemed like I was flirting with you." I've never been a big like — one night stand person … it never evolved into something where I was uncomfortable with like the physical contact but more just the next day being like "oh great" now I have to text this certain person back or you know … that kind of thing.

Other participants spoke of negative feedback they received from others. In particular,

reactions from close friends and family members seemed to impact participants. Alex

commented on her grandparents' reaction to her 3:30 a.m. phone call: "They called me like five

more times in the morning and said 'Hey, are you okay? What happened to you last night?'" She

later reported that "hearing sadness in their voice" made her feel "bad" and want to reduce her

alcohol consumption. "I never want to put them in that position ever again."

When describing her parents' reaction to alcohol use, Mary stated, "They definitely told me that they weren't gonna … that I needed to budget my money and spend it on important things rather than alcohol."

Whether it manifested as negative reactions from others or as complications with interpersonal dynamics, excessive alcohol use reportedly impacted relationships in unpleasant ways. Participants explained that these impacts caused them to reduce consumption.

Benefits of Reducing

All participants reported experiencing, during and after the change process, noticeable differences in several domains in their lives. Although all participants experienced and identified several negative consequences of alcohol use that prompted change, the benefits of alcohol use changes were not always experienced in the form of a simple improvement, or removal, of the negative effect that led to the change. For example, though Sally noted in her interview that one major negative effect that led her to change was saying offensive things while intoxicated, the benefits of reduction that she described did not include improved interpersonal functioning. Rather, the benefit she described was being more productive and hungover less often. This section will discuss benefits of alcohol consumption reduction that participants noticed, both in terms of improvements in areas of life that were experienced as being negatively impacted from alcohol use, as well as those that were not. Areas discussed include (a) being more productive and engaged, (b) focusing on the future, (c) relationship improvements, and (d) physical benefits.

Being More Productive and Engaged

Though academic problems were not identified as a negative consequence that led to reduction, most participants reported noticing an increase in productivity in school after reducing their alcohol consumption. Alex mentioned, "I already can see an improvement in my studying

and just in my education, period." In a similar fashion, Luna noted, "I make time for studying a lot." Kitty explained,

> Definitely doing better this year … this was only like a year ago that I've had the peak in alcohol use so, I've definitely seen a huge improvement in my grades this semester … I've kind of buckled down and taken the extra time.

Mary stated, "I was able to connect more with like the positive parts of life … like I said … mentally, academically, socially." She added, "It's all about schoolwork now." Reflecting up on her change in school work habits on the days she formerly spent recovering from hangovers, Sally explained, "Sunday I am now productive. It could actually be a productive day and get a lot of stuff done … instead of crawling in bed hungover."

Much like the shift in focus toward productivity with academics, a few participants reported an increased involvement in other school activities, clubs, and organizations. In reflecting upon her thought process during the time when she made that transition, Alex reported, "I like joined a whole of bunch clubs." Luna went on to say that she felt good about getting more involved in campus community organizations after she reduced:

> I feel like I'm getting a college experience in the places that most people don't look for it … Most people don't really look for … like their first semester … they don't really think about trying to get involved in campus volunteer groups their first semester and like … so they're volunteering, or whatever, or the community…. A lot of people don't go out in [in the city] and see what's out there. I like trying to get involved in [school] and [the community].

This theme captures the increase in productivity and engagement that students experienced as they reduced alcohol consumption. It includes participants' experience of being more actively involved in school and community activities.

Focusing on the Future

Students as young as 18 noted that around the time of alcohol reduction there was a shift in focus toward what Jeff (age 19) described as "things that matter in the long-term, such as

education and healthier relationships." An example he described in depth was, "I got an internship this summer and I've been putting a lot of time and effort into getting ready for that … so I'll stay in some nights and work on that." Alex explained, "I've been more focused on getting an entrance job this summer and I really started to focus on myself and my future and like, you know, wanting to be doing good, so I don't know." In describing her immediate future week to week, Sally reported:

> I should be more organized with some stuff. More … know what's going on the week ahead. Instead of just like jumping into Monday not knowing what I'm doing, because I don't know, I like to know what I have to do.

Focusing on the future captures the forward-looking mindset that several individuals experienced as they began to drink less. Several of the participants' behavior and attitude became more about future goals after they reduced alcohol consumption.

Relationship Improvements

Most of the participants voiced an increased enjoyment in the quality and the nature of their relationships. Alex stated that she "started attending more family events, which is great because I love doing things with my family." Similarly, Mary reported an increase in the visits she made to see her family. She indicated that she "was able to connect more with like the positive parts of my life … with like family members."

Jeff reported that he now enjoys a different group of friends than he did when he was drinking more. He noted, "Sometimes I'll go out with people too and just not do drinking-related things … like I have friends that don't drink. So, I spend time with them too." Much like Jeff, Amelia also noticed an increase in contact with people who did not drink as much. She indicated:

> I started working at the radio station on campus and I ended up taking more responsibility there and so, just was able to have more social time that felt like more comfortable and

felt more focused around music as opposed to like beer pong and all of the drinking games.

She added,

> I think spending less time with those people [with whom she formerly binge drank] is like ending the [change in drinking pattern] [on] a positive [note] because it made way to spend time with people who I do care about and I'm still friends with now.

Kitty voiced her satisfaction with the improvement she noticed in the relationship with her boyfriend. She described, "I mean, I work really well with my boyfriend and we're really great together and I think that seeing that sustained instead of having an argument was really positive." Kitty went on to explain:

> Instead of bingeing, me and him can go out and be adults and have just a couple of drinks — relax … maybe on a Friday night after a workweek you know … something like that … um … so, those are definitely the most positive aspects."

When she spoke about her own romantic relationship, Mary explained:

> Well, mostly I spent the most of time I would stay with my boyfriend. Most nights we'll just stay in and like make dinner or something instead of going out to the bar and get drinking too much and spending money on alcohol and food after the bar…. It's just better for us because we're both busy. We're up early every day of the week. So it's been good to have him help me. [We] help each other I guess to stay motivated.

Participants described spending more time with friends and family, and changing the way they relate to others. Both of these relationship changes occurred after the alcohol consumption reduction process, and reflect experiencing some relationship changes and improvement after reducing alcohol consumption.

Physical Benefits

Another common theme that emerged as a benefit of reducing alcohol consumption was an improvement in how participants felt, physically. Luna commented on physical changes she noticed: "I feel good physically." Lee also stated that he noticed a marked improvement in the way he felt:

Positively, I had more energy … I would say that I had clearer thought … like I was just kind of quicker on everything. I was definitely better hydrated, but I just drank water basically. More energy led to getting back in better shape.

Amelia also spoke about an improvement in her physical experience:

I think the good ways was just feeling um like better on the weekends instead of feeling hungover … I remember the rest of my friends sleeping off hangovers, but I get up early and [take] the dog out to the trails and feel really good about you know being able to spend my time doing that, instead of like barfing the next day (laughing).

Participants identified physical improvements, both immediate and longer-term, that were associated with drinking less. They reported these physical changes as a benefit associated with reducing alcohol consumption.

Challenges of Reducing Alcohol Consumption

Though many benefits of reducing alcohol consumption were identified, all participants also described challenges that went along with alcohol consumption reduction. Several themes that emerged regarding this experience were identified and will be described below. Those themes include (a) peer pressure, (b) missing the enhanced social life, and (c) missing feeling carefree.

Peer Pressure

The most commonly described challenge that was discussed was pressure participants experienced from their peers. Mary reported, "When I first started reducing alcohol consumption I — like my friends were, you know, like … Why aren't you coming out with us? And all that stuff and it was kind of like a guilty feeling." Lee indicated that after he told his friends he was not going to drink as much as he once did, "they would be like, 'Well, I know you can handle it. Come on you can have one more,' and I was like 'No.' It was mainly just peer pressure, I think." Alex also mentioned that her friends were the single biggest challenge in

reducing her alcohol consumption. She stated, "Um, probably like my friends. Like, 'really don't want to go out right now and don't want to do all this.' Peer pressure a lot and then like yeah, basically just my friends I would say." Amelia described pressure she would spontaneously receive from friends who she did not frequently see:

> I mean there's probably more specific instances where it would be like "oh yeah" that night was interfered because a friend was in town and made me really strong gin and tonic … or you know … like that kind of thing.

Another type of peer pressure came not only directly from friends, but from the pervasiveness of college drinking culture. Participants revealed an awareness that those in their surroundings had an impact on their drinking behaviors. Luna stated:

> I mean, it's not like people are constantly telling me, like "you have to drink" or like "you should get fucked up tonight" but I think the reinforcement is just kind of around me. That the fact that everyone else is holding a bottle or whatever, but I'm not and like everyone is having fun and I'm just …

Luna later described in greater detail how dealing with drinking culture is difficult:

> It's not always in the form of like someone handing me a bottle or something, which has happened too or stuff happens too but it's not always that, it's just in the sense … like in the sense that, it's just kind of re-reinforced. Like everywhere … like if I hear someone in class talking about it or if I go to a party and everyone there is drinking and I'm pretty much like one of the only people there who is not …

She later added, "When you're here and you see people drinking and everyone's drinking and you just kind of keep drinking and not really thinking about it and … I don't know." Jeff explained the challenge he faces in the college drinking culture as well:

> So, that was a big one and what made it hard, was, on college campus having a lot of friends that can drink and are drinking around you. The temptation is definitely there … especially for big events — like game days.

Participants spoke of feeling pressure to drink from their friends and from those who they did not know. They experienced pressure not only in the form of a friend offering an alcohol

beverage, but also in the pervasive attitude and behavior around drinking on a college campus.

Participants described not being able to escape this pressure.

Missing the Enhanced Social Life

A central component to what participants stated they were challenged by during alcohol

consumption reduction was missing out on the enhanced social experience they felt while

drinking. Kitty commented,

> So, that was kind of like what we did and then … you know … we weren't as good
> friends not intoxicated I guess. It was just wasn't as fun to be around each other and so I
> guess I pretty much lost a friend in the process.

> Sally explained: "I mean it's not as much fun. I mean it's like they're like my drinking

friends which is not as much fun when you're the only one who's not … hammered."

Participants explained that not only did drinking less reduce their overall enjoyment of a

social situation in which there was drinking but it also sometimes caused them to be excluded

altogether. Lee explained:

> Negatively, I would say the only negative part would be the aspect that … ah ... was
> maybe with some of my friends — just I haven't been seeing them in a little bit because I
> know they like to go out on Saturdays or something like that and they wouldn't
> necessarily invite me because they knew I wouldn't indulge with them kind of idea … so,
> the only negative aspects would have been not hanging out.

He later emphasized that missing out on the social benefits was the primary challenge of

reduction:

> Just the social part, because it made a difference when you said with the just going out
> with people because not as many people would necessarily be like "Oh, hey, let's go
> hang out" because they knew like I would not partake in the whole of that — that I would
> only be there for them kind of thing.

Most of the participants reported that a big challenge to reducing alcohol consumption

was missing the friends with whom they formerly drank. Alex noted, "I mean I miss, you know,

hanging out with the same people I did." Mary described the biggest challenge of alcohol

reduction: "Yeah. Definitely seeing people that I haven't seen in a while." Kitty went into detail

about not only missing old friends, but actually losing some of her friends:

> What interfered was the fact that the friends that I would go out with, the more I said no with hanging out with them, it was like … the friendship kind of grew apart, which sucked a lot! I liked my friends. It was cool to be around each other … you know … it was the girl time and the less I went out with them the less that we actually talked and the less that we hung out … um … I'm not friends with one of the girls actually anymore … so, it's … that's kind of … was one of the things that hindered it because I didn't like seeing that connection die off …

Luna explained a similar experience in that it was difficult to actually make friends after

she reduced her alcohol consumption:

> It's kind of hard to like … a lot of people … when you want to make new friends, they want to party with you and … and I meet … like I've met some people through volunteering and stuff, but nobody I'm that close to and … it's hard to make a lot of new girlfriends when you're not in a sorority and you don't want to party and…. You know what I mean? It's hard to find a common ground for meeting people who have the same interest and values as you and they want to go out and see things and not just get drunk.

Amelia described the main challenge she associated with her alcohol reduction: "The

only negative I could see of it was just spending like less time with the people who I drank a lot

with."

Participants reported that they experienced missing the heightened social experience

associated with heavy drinking, such as meeting new people, forming strong bonds with friends,

and maintaining friendships. Reducing alcohol consumption caused participants to feel less

connected to others. This reduced social connection was reported as a significant challenge to

alcohol consumption reduction.

Missing Feeling Carefree

Participants also explained that it was challenging to restrict alcohol consumption during

times when they wanted to feel more relaxed and less burdened by day to day worries. Mary

reported, "I mean, I would admit … like the stress level … you know … it would sound really

fun to go out tonight, but in the back of my mind I'm like … No, not a good idea." She later described that she missed "being able to let loose and have fun ... not worry about anything for that amount of time." Kitty described a similar sentiment: "I definitely miss the free … like carefree … just getting drunk because you're in college and you can and you don't have to worry about you know what's going on. I definitely miss the free feeling."

Participants also highlighted that they missed the social aspect of the carefree feeling. Luna stated, "Because it's like … you're warming up to people and you're friendly…. And I miss being in the environment." Sally reminisced on what it was like to talk to people back when she drank more: "I don't know … it makes the anxiety go down and I don't know, give you a little more confidence …"

Participants stated that not drinking as much as they once did not only made them miss the carefree feeling, but the lack of such feelings resulted in unpleasant emotional experiences. Luna reported:

> I would say, like the people that are closer to me … most of them drink at least once a week. And so, if I'm with them and they're drinking and I'm not drinking, I feel like, "oh-oh, they're drinking."

Later in the interview, Luna added: "I think it's put a little bit more anxiety on me — in terms of trying to relate to everyone else." Sally stated, "At first I got this feeling of oh wow this kind of sucks, like, I'm not drinking and everybody's drinking and everybody's like — it seems like everybody's having a good time."

Feeling carefree was experienced by participants as a key aspect of excessive alcohol use they missed. When they drank more, they felt more relaxed socially, and were better able to cope with their worries. When they drank less, the anxiety was back, which was an uncomfortable social and emotional experience.

How Reduction Was Maintained

All participants said that despite experiencing challenges of reducing alcohol consumption, several factors helped to sustain their commitment to change. Participants described a number of things which helped them maintain their reduction. Among those, four salient themes emerged: (a) working toward a productive life, (b) support from others, (c) plans to control drinking, and (d) becoming an adult.

Working Toward a Productive Life

One thing that participants said helped to sustain their alcohol consumption reduction was working toward better grades. Alex commented on how good grades created a desire for more success. She explained, "I don't know, like first achieving a good grade on my quiz makes me want to do better on everything." Later remarking on studying versus drinking, she added, "I would rather, you know, focus on studying." Similarly, Luna stated, "I didn't go out a lot. I study a lot here because I really … like I want to get good grades … I got a 4.0 last semester." She later commented:

> I think that's kind of what it was for me … I just can't drink. Like, there's people who like who drink and then write a paper or who's drinking and then write or whatever. I, I can't do that, nor do I not … I don't want to do that.

Jeff also explained that not only did legal concerns motivate him to sustain reduction, but academics did as well. He stated, "I mean, also, too, when I was on probation, it was like getting towards like finals and all of that, so that was a motivation to stay sober, because I knew I had a lot of work to get done." Finally, Mary described, "Definitely a change in how I could see my motivation towards school and working out is a big thing for me … I tend to … you know, I have a pretty heavy workload, constantly writing papers …"

Participants explained that as momentum picked up in their lives after drinking reduction, not only did they see improvement in grades but they also became more productive and involved in other activities. Several participants attributed maintaining their reduction to this involvement. Luna stated:

> Then I joined some volunteer organizations and I don't know … I like having productive time, and I think that the more productive time that you do have … I mean some other things too. Like even if this just means like hang out with my roommates or something or like going downtown and it's boring or something like that … I think productive time where you can't … when you have to be sober … And I prefer that … but, I mean, like … people who don't drink, it's there if they have to study or if they're driving somewhere, I think that the good reinforces that productive time means they have to be sober, which means they're not going to drink.

Jeff also described the way in which engagement in non-drinking activities was associated with his maintenance of alcohol consumption reduction:

> I am in college and I set myself up for the future and do everything I can to do that… such as … get good grades and get involved in with people and organizations to help me get there and none of that has to do with drinking.

Amelia discussed her transition from going to parties that revolved around drinking to activities that incorporated her true interests:

> I didn't go to as many [binge drinking parties] … just parties that hosted bands and I got really into that. Like [music organization] in the community. And I started working at the radio station on campus and I ended up taking on more responsibility over there and so, just was able to have more social time that felt like more comfortable and felt more focused around music as opposed to like beer pong and all of the drinking games.

Participants reported that they noticed several things that kept their momentum going when it came to sustaining their alcohol consumption reduction. Better grades and more involvement in school and community activities seemed to go together. Experiencing positive outcomes after their reduction in alcohol consumption motivated participants to continue drinking less than they once had.

Support from Others

Whereas outcomes such as better grades and more involvement reinforced alcohol consumption reduction for some, positive reinforcement from friends and family was helpful for others. Alex reported:

> I would say like going to the advisor — my academic advisor and I've had the same one for the past year and she explains your grades and everything else and just hearing that like I am doing better than what I did last semester and like I'm heading to the right direction definitely benefited me.

Alex also noted, "… and I don't know, just like things that my family would say to me, saying like 'Oh we just want the best for you' blah blah blah and it's just like motivation."

In a similar sense, Luna explained that positive feedback from her parents helped her sustain reduction:

> I also visited home a good bit during my first semester … not as much this semester so far, but I think visiting home was a good reminder too because my family is so excited to see me and I just want to spend all my time with them and tell them about all the good things I did here …

She later added:

> My mom wouldn't have cared if I drank … but like I think she was very happy to hear that I hadn't been [drinking] very much and I think she was happy to hear what I have been doing and that gave me a sense of pride and I know I made my family happy too … so, that helps.

Mary briefly identified supportive people in her life who helped with her reduction. She reported, "Well, I mean my … most of my friends and my family and my boyfriend as well have all supported me in [maintaining alcohol reduction]." Similarly, Lee stated. "My mom has been like the main factor that's just like driven me to slow it down a bit."

Positive feedback and support from friends and family motivated students to sustain their alcohol consumption reduction. Hearing encouraging comments from important authority figures also helped with this process.

Plans to Control Drinking

Another helpful factor that facilitated continued reduction of alcohol use was the use of

specific drinking reduction strategies. Lee related his newly developed strategy to the motivation

he received from his mother:

> And so, finally when it did happen she was like — do you believe me now … and I was like … yeah … you might be right. I had to take another step back and set up a whole new plan in a way. So, say, I am at the bar and I have two drinks … our new plan is basically like after two drinks, like I can't have my keys anymore because I don't want to risk it in the first place. So, things like that.

Amelia also described the way in which strategies emerged:

> I think overall it was just hanging out with different people and not drinking liquor and … just trying to be aware…. Oh! There was another strategy … that was an important one that I forgot to mention, which was, eating dinner (laughing).

Amelia later gave a more in-depth description of how she implemented specific strategies

for sustaining reduction:

> I think what helped me to maintain reduction was a handful of things…. One thing was I just started focusing on what I was doing that was making me get so drunk and I noticed that liquor never really ended very well for me so I just didn't … stopped really drinking liquor and kind of switched to only drinking beer and then I would notice too like if I was going out for an evening I would put like seven beers in a bag and just in case anyone wanted any and then I kind of was like "oh" but then I would end up drinking more than I wanted to so I kind of consciously would be like "oh" okay, like if I only drink three beers when I go out then I'll only put three beers in my bag … you know, and … and that would be like "oh yeah, I know I only have enough for me" … that kind of thing? (chuckling). That seems to really help. I also noticed that I the act of sipping on something because it made me feel more comfortable … it had something to do with my hands kind of thing and so I would like ask for a glass of water or just get myself a glass of water when I was going out to like a house party or whatever.

The essence of this theme is participants' collective description of how they implemented

specific strategies to monitor and reduce their alcohol consumption. Whereas others noted

encouragement from others, or noticing improvements in various areas of their lives, participants

who described specific drinking plans formulated concrete ways to self-monitor and control their

drinking habits.

Becoming an Adult

Another interesting factor described by several of the participants as key to sustaining

alcohol reduction was the idea that they were moving toward adulthood. This appeared to be

thought of as a positive thing, as a related theme was described in the discussion around the

benefits of reducing consumption. Mary explained:

> This whole transitioning thing from…. It's like a kid to an adult. I don't know … just
> making more responsible decisions with my money, my health, my relationships with
> people…. You know it's everything has increased in a positive way when I started to
> reduce my alcohol consumption.

> Mary went on to report, "You know, it's all about schoolwork now. It's not really about

… Oh! Let's go get a few drinks tonight. You know, it's definitely more adult and focused and

responsible decisions are being made." Luna discussed how being older and more experienced

with alcohol has impacted her continued reduction:

> For me, it was like … going to college was a big step in my life and it was … for me, and
> I'm a little bit older than most of the freshman's so I know that they're not quite at the
> point that I'm at, but I would hope that they'll get to the point to where they want to like
> start drinking less eventually. But I think it's just like … like basically … I don't know,
> like, the older you get, actually or the more you experience alcohol the more you realize
> that the negatives — like far outweigh the benefits. So, we're going to see people like
> really, really drunk, I'm like…. It's not … I mean … it might be … you might look back
> and you think, "Those were fun times" but they usually weren't fun because you were
> drunk or they're usually fun because you're experiencing something new or you're with
> people and friends and you're laughing …

> Similarly, Jeff noted that growing as a person has contributed to sustained reduction:

> I think going on probation made me like grow up a bit and made me realize I didn't need
> to drink as much as I was. I'm off probation and I'm not going to lie, I still do drink …
> like … here and there, but nowhere near as much as I did or as hard as I did at the
> beginning of the year. And, yeah, it was just a growing experience.

> He later explained, "I think it's just … it's just coming with age … it's a maturity thing."

Participants began to attribute their alcohol consumption reduction to a shift in the way they thought of themselves. This meant transitioning into adulthood and applying what they had previously learned about excessive alcohol consumption to their current alcohol consumption behaviors.

Insights After Change

All participants reported things they learned about themselves during and after the process of alcohol consumption reduction. Themes of self-awareness that emerged include the following: (a) increased authenticity, (b) values, and (c) capabilities and confidence.

Increased Authenticity

A common result of the reduction process for several of the participants was a heightened sense of self-awareness of identity. Participants stated that drinking less coincided with being around people they were more similar to and feeling more genuine. Amelia reported:

> I think the other thing was just that I did have some social anxiety and realizing that helps me realize why I was drinking the amount I was … I think that was a small part of it and I don't know if I realized this then, but now as I'm talking about it now … just like that I will drink less if I have a lot of things in common with the people I'm around, so kind of finding my friends and getting involved in the music scene and I don't know … all of that makes me drink less too.

Amelia gave an additional explanation as to how drinking less and becoming herself went together:

> I think I was used to going to parties with them and playing beer bong and drinking games and drinking a lot and then I started going to these house shows and kind of realized that when I was comfortable and had something else to like center our social interactions around like music that it made me want to drink less. I felt comfortable being more sober around them.

Jeff explained a similar experience: "I just think that when I drink less, I'm more genuine about creating real relationships with people instead of just finding it in a group of people who

just go out and slam booze down with." Speaking in a general sense about how not drinking in

excess is being true to herself, Kitty explained:

> I think there's like a big picture that's being portrayed to students minds that they've got to be these crazy party animals and … you know … like I turned 21 and I'm like, yeah, it's like I can go to bars…. I can be this crazy party animal … but it's not … I mean it's not for me personally … it's just not what it's cracked up to be … it's more fun just hanging out with the people you like to be around.

Participants experienced that realizing drinking less coincided with feeling more

themselves. Participants described becoming more themselves while drinking less.

Values

Whereas the aforementioned theme speaks to what participants experienced when they

drank less, values helps to explain how and why certain drinking experiences (or lack thereof)

occurred. Several participants described their realization that they do not value what heavy

drinking or the college drinking culture entails. Consequently, they stated, they did not desire to

affiliate with heavy drinking peers. Luna explained, "I learned that my values are going differ a

lot from the majority sometimes … and that's okay." She also remarked:

> I don't want to be around people that are drinking all the time … especially if that's not my values. And my roommates, they're cool, and they don't drink excessively. They don't even have to like drink every week … maybe once a week … usually without me too … which is fine, but … I think the people I surround myself with is a big part of what's going to make my path here too. A lot of people think it's completely acceptable and to … and I'm not judging these people … it's making them happy and if that's their path to learning … I understand that … but it's hard to watch that from a perspective where I kind of already learned that and it's kind of hard to understand sometimes that you get like carried away. Because I'm seeing them make mistakes that I made and that hurts. You know what I mean? So, that's hard to see, but, I think I learned that that's still the right path for me … is to … I don't want to be a person who drinks all the time.

Jeff described what reducing his alcohol consumption taught him that what he values is

different than the heavy drinkers with whom he affiliated: "I learned that I can be much more

intelligent and much more of a better person than people around me." In a similar sense, Kitty

indicated that she also realized she wants to live a different sort of life than peers who drink more than her. She stated:

> I think the biggest thing I learned about myself is that I don't need all of that partying to go out and be fun and free without having to binge drink or you don't have to be this college student that's drinking all of the time because I'm a college student. I think that I have found more satisfaction in myself hanging out with people — just surrounding by positive people that I enjoy being around and I can have just as much fun — like we don't have to be drinking, we could be going for a drive to city and going to the mall and things like that. I don't have to have satisfaction in getting crazy.

In terms of specific values, two participants stated that they realized they favored productivity and "being focused" over excessive alcohol use. Luna reported: "One thing I've learned … that I want to be productive over being … like … if productivity has to come first before social for now … because if social means more drinking, then I'm okay with it." Mary explained, "So, I'm very, I guess, more mature now … I have found that I am more mature and more focused. I guess that's what I've learned about myself."

Participants described other college students as valuing heavy drinking, and after reducing alcohol consumption, these participants began to notice they were more satisfied by drinking less and realized things in life that they appreciated more than heavy drinking.

Capabilities and Confidence

Several participants shared that they experienced alcohol consumption reduction itself resulting in an increase in overall confidence. Participants described the increased confidence and feelings of resilience that went along with their reduction. Alex explained:

> I would say that … like serious like that [reducing alcohol consumption] definitely made me stronger as a person and you know, opting out and not going to all these things … you have to have like a backbone and be able to do that and say…. "No, I don't want to go out…. No, I don't to do that…. No, I don't want to drink."… I would rather, you know, focus on studying. I try to think that there's a lot about you and it definitely … just from [reducing alcohol consumption], it like gave me back a confidence booster and made me feel better about myself and like you know, I look in the mirror and I'm like…. Oh, I feel good.

When asked what she learned about herself during the reduction process, Mary reported:

That I'm very capable of achieving goals that I put my mind to. I guess capable of more than I really thought, now that my focus isn't … you know … I'm not sitting in class four days of the week saying … "Oh, I can't wait until Friday so I can … you know … go out with my friends and have fun"… It's more so, like, "This is what you had to do."

Jeff stated, "I've learned I have a higher potential as a person than I thought I did and to be less vague about that I learned that I can do better in school [after reducing alcohol consumption]." Noting the global effect that his alcohol consumption reduction had, Lee reported, "I think it said I was pretty strong-willed."

Participants reported that alcohol consumption reduction resulted in increased feelings of confidence. This was central to what participants realized about themselves after they reduced alcohol consumption.

Summary

A number of themes of the lived experience of college students who reduced their alcohol consumption emerged after analysis of the data. Seven categories of themes emerged which were directly related to the research questions, and within each category, several sub-themes were identified and described. These themes and sub-themes capture the most salient portions of what participants described about their experience of alcohol consumption reduction. See Figure 1 below for a visual depiction of these themes.

Benefits of Excessive Drinking included sub-themes of fun social experiences, less social anxiety, and coping with stress. These sub-themes captured the lighthearted, social spirit of drinking undertaken by these participants. The theme of Experiencing Negative Effects Leading to Change captured aversive consequences described by the participants, characterized by physical, emotional, legal, and relational sub-themes. Participants described various things in

| Benefits of Excessive Drinking | • Fun Social Experiences
• Less Social Anxiety
• Coping with Stress |

| Experiencing Negative Effects Leading to Change | • Physical
• Emotional
• Legal
• Relational |

| Benefits of Alcohol Consumption Reduction | • Being More Productive and Engaged
• Focusing on the Future
• Realtionship Improvements
• Physical Benefits |

| Challenges of Reducing Alcohol Consumption | • Peer Pressure
• Missing the Enhanced Social Life
• Missing Feeling Care-Free |

| How Reduction was Maintained | • Working Toward a Productive Life
• Support from Others
• Plans to Control Drinking
• Becoming an Adult |

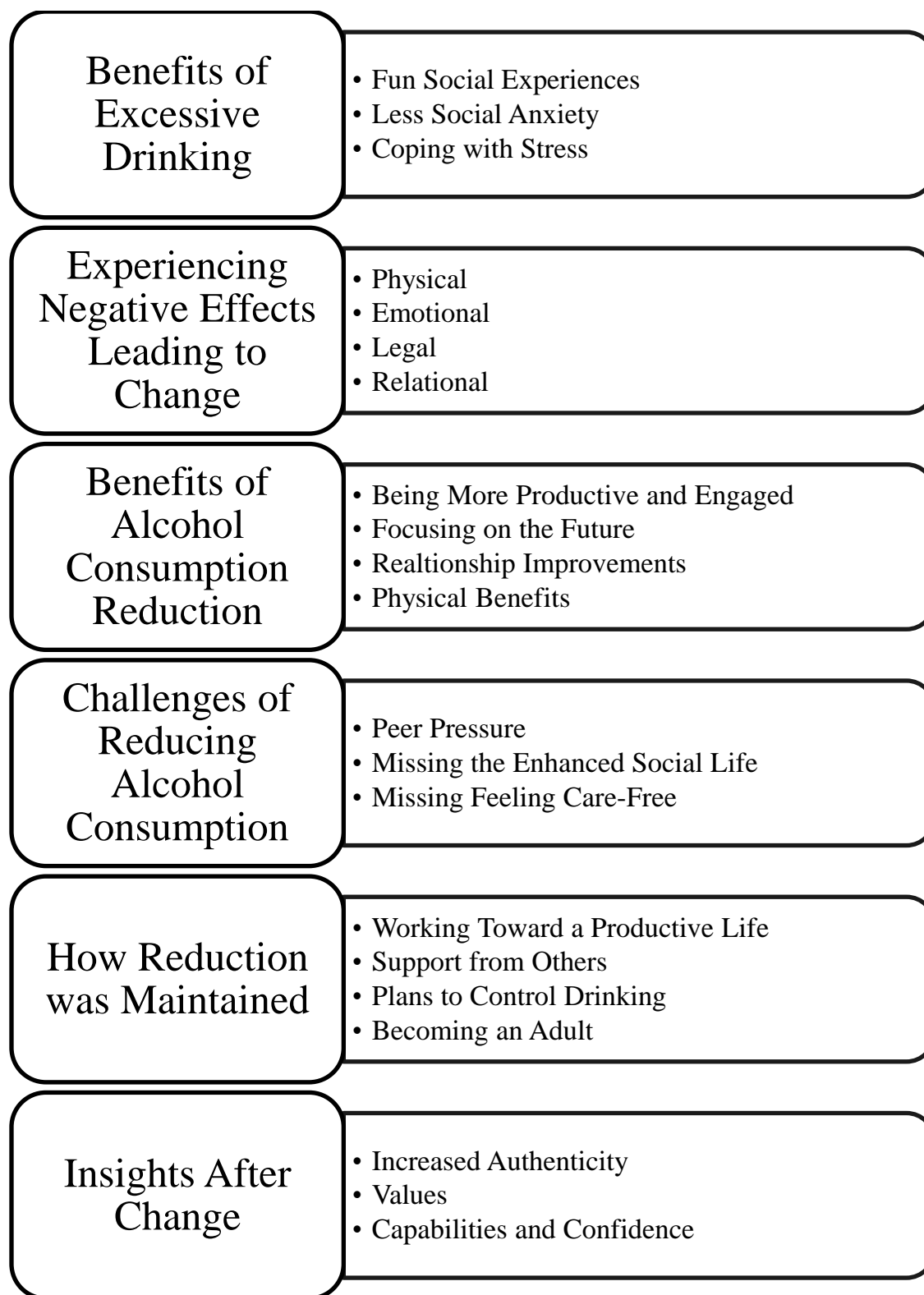| Insights After Change | • Increased Authenticity
• Values
• Capabilities and Confidence |

Figure 1. Themes and sub-themes.

their lives that changed for the better after the alcohol reduction process as well. The theme of Benefits of Reducing alcohol consumption included these positive aspects as sub-themes, and includes being more productive and engaged, focusing on the future, relationship improvements, and physical benefits. Peer pressure, missing the enhanced social life, and missing feeling carefree are themes that describe aspects of heavy drinking participants mentioned. They were part of the larger theme of Challenges of Reducing Alcohol Consumption. How Reduction was Maintained was a theme that identified strategies or factors participants reported using to sustain drinking reduction. Sub-themes of this are working toward a more productive life, support from others, plans to control drinking, and becoming an adult. Finally, participants reported insights they gained about themselves after the alcohol consumption reduction process, which was characterized in the Insights After Change theme. Insights experienced sub-themes include increased authenticity, values, and capabilities and confidence.

In a general sense, participants experienced drinking heavily because they enjoyed it in some way; most commonly, the social or "fun" aspect. They began to reduce when they noticed certain areas of their lives were being negatively impacted by heavy alcohol use, such as relationships or emotions. As they began to reduce consumption, they noticed they began to miss certain aspects of heavy drinking, such as the carefree social experience. Though the social aspect of alcohol consumption appeared central to participants' motivation to drink, the reduction process was commonly maintained by supportive others. Some made this process easier, while others made it more challenging. Peer pressure and college drinking culture contributed greatly to these challenges. Finally, insights were gained during and after the process of alcohol consumption reduction as well. People learned more about who they were and what they valued, and that they were capable of living out those values. In a culture of

heavy drinking and peer pressure, these participants became more themselves. Next, a

discussion of the findings is presented in Chapter V.

CHAPTER V

DISCUSSION

Using a phenomenological approach, the investigator sought to understand the lived experience of college students who reduced their alcohol consumption. The investigator included students who were between the ages of 18 and 25 who had experienced negative consequences of alcohol use and subsequently reduced their alcohol consumption for a period of at least 30 days while enrolled at a Midwestern university. It is important to note that there is an extensive literature base on college alcohol use, especially with regard to negative and more recently, positive consequences of consumption. Findings of this research study will be discussed in the context of the literature on these topics. However, the central pieces missing from the literature are the effects of reducing alcohol consumption, both positive and negative. There are only a handful of articles on ideas related to this topic, and none have included an examination of what individuals actually experience during the reduction process. Therefore, the key contribution of this study is its description of the challenges that a group of college students faced during and after they reduced their alcohol consumption.

The purpose of this chapter is to describe, synthesize, and interpret some of the key findings and themes from the participants' experiences of reducing alcohol consumption. This chapter begins with an analysis and discussion of the findings. It is important to keep in mind the main areas of emphasis embedded in the research questions: (a) benefits and negative effects of alcohol consumption, (b) benefits and negative effects of reducing alcohol consumption, (c) maintaining change, and (d) insights gained.

The purpose of the following section is to discuss the findings within the context of the existing literature on college alcohol use. The second section of this chapter reviews possible implications for mental health clinicians. The third section presents a discussion on both the strengths and limitations of the study. The final section of the chapter discusses possible future directions for research on college students who reduce their alcohol consumption.

Benefits of Excessive Drinking

Participants of this study described ways in which they found alcohol consumption to be beneficial. When it came to the topic of alcohol consumption patterns prior to reduction, they spoke mainly about the positive social aspects of drinking. These social aspects were described as "fun" experiences with friends often facilitated by disinhibition and bonding that excessive alcohol use created. Participants in the study also identified emotional benefits and their overlap with the social aspect of drinking, while others reported a focus on the use of alcohol as a coping strategy for life stressors and negative emotions.

Fun Social Experiences

The most commonly described benefit students reported experiencing during the peak of their alcohol consumption was "fun" social experiences. Included in their description of having fun was dancing, laughing, being "silly" and "letting loose." These experiences, they stated, were always shared with friends or among new acquaintances. The literature on college alcohol use identifies a plethora of benefits that alcohol consumption can provide for college students, but a repeated variable studied is "fun" experiences. Just like participants in this study, college students in the 2011 college alcohol consumption study by Lee et al. reported "fun" or "social" benefits more frequently than any positive or negative effect. Similarly, in a 2014 study by Collins et al. that examined advantages and disadvantages of drinking through analysis of 760

college students' decisional balance worksheets, social/fun experiences was tied with psychological benefits (i.e., stress and anxiety reduction) as the most common factor identified.

Participants in this study who described the fun they had with friends emphasized that one of the ways in which alcohol consumption was fun was that it helped them make new friends and maintain close friendships. Several described this as a key component to having fun and enjoying their time drinking. The literature on this topic indicates that alcohol use increases for college students in part because it is believed to facilitate new friendships and bonding (Schulenberg & Maggs, 2002). Similarly, it has been reported to create a stronger sense of affiliation with peers (Hartzler & Fromme, 2003). The link between alcohol consumption and bonding with friends and new acquaintances by having a fun time is central to the premise of this study.

Several developmental models that account for problematic alcohol consumption, including the Transition Catalyst model, postulate that many college students consider problematic alcohol use as included in the risk taking required to achieve social goals in developing into a young adult (Schulenberg & Maggs, 2002). A primary social goal that most identity development models include is making new friends (Maggs, 1997) and bonding with peers (Erikson, 1968). Every participant described alcohol consumption as a part of their social life which helped develop, sustain, and/or enhance friendships. Drinking for social reasons is not predictive of long-term alcohol problems (Ham & Hope, 2003) and has been studied as a factor of identity development. The participants of this study reported social and fun experiences with alcohol consumption consistent with the literature.

Less Social Anxiety

A related topic that participants reported was the use of alcohol to reduce social anxiety. Participants reported that it was easier for them to talk with others while they were drinking alcohol. They explained that not only was it easier to talk with people they were just beginning to meet, but it was also easier to disclose more and feel more "relaxed" socializing with close friends. Research on this topic reveals others have similar experiences. Drinking to reduce social anxiety has been studied in a number of ways, focusing on motives (i.e., reasons for drinking), expectancies (i.e., beliefs about what drinking will provide), benefits (positive drinking outcomes), and other sub-categories of the broader topic of reducing social anxiety through alcohol use.

A 2012 study by Capron and Schmidt revealed that those who tend to be shy are more likely to feel at ease talking with others while they are drinking. Similarly, Terlecki and Buckner (2015) reported that for many college students, alcohol consumption helps ease the anxiety that accompanies trying to "fit in" to a particular social environment. Participants of this study explained that when they drank they were more likely to speak to strangers and get to know them. As was indicated in the study by Stewart and Divine (2000), participants of this study also said alcohol consumption benefitted them in the sense that it reduced feelings of social awkwardness. All participants in the current study who reported that excessive alcohol use reduced social anxiety also experienced negative effects of alcohol use. This is consistent with the study by Villarosa, Kison, Madson, and Zeigler-Hill (2016), which indicated that students with more social anxiety who drank in order to be accepted by their peers were more likely than others to engage in more problematic and less safe drinking behaviors. Experiences of participants of the current study underscore previous finding identified in the literature that

college students' social anxiety is reduced as a result of drinking, but with the cost of negative effects of alcohol use.

Coping with Stress and Negative Emotions

Drinking to cope can be conceptualized as consuming alcohol in an effort to avoid experiencing negative emotions, such as depression or anxiety (Ham & Hope, 2003). Similarly, tension reduction theory of drinking (coined in the 60s) posits that alcohol use is thought to reduce the negative effects of stress (Wolff, Rospenda, Richman, Liu, & Milner, 2013). Both concepts utilize the theory of negative reinforcement, in which an aversive experience (e.g., anxiety) is removed through drinking alcohol. Several participants in this study reported that they tended to benefit from alcohol consumption not only because of the added social effects, but also because it helped them cope with unpleasant feelings and life stressors. The experience was described as a way to escape the worries of an upcoming exam or the distress related to a fight with a romantic partner, for example. Other experiences also captured the idea of escaping life stressors and associated negative emotions. This pattern is expected among the sample in this study who all experienced alcohol-related problems, as drinking to cope is strongly associated with heavy alcohol consumption (Logsdon, 2011) and alcohol-related problems (Armeli et al., 2014). The literature on alcohol use indicates that post-college alcohol problems is very strongly associated with drinking to cope with negative affect (Christiansen et al., 2002). Participants in this study were able to reduce their alcohol consumption to the point where it was no longer problematic for a period of at least 30 days with no additional information available regarding subsequent drinking patterns beyond the period of data collection for the present study.

Negative Effects that Led to Change

Though participants reported that alcohol use had many benefits, they also identified its drawbacks. Participants of this study described several types of negative experiences that led them to reduce alcohol consumption. The literature on college alcohol consumption and change tends to focus on the negative effects of alcohol use as a precursor to reduction (as opposed to insight driven motivation; Alexander & Bowen, 2004; Barnett et al., 2006; Blume et al., 2000; McNally & Palfai, 2001). This relationship between alcohol-related problems and alcohol consumption reduction is enhanced by the number of problems experienced (Griffin, 2005). Much of the research indicates that the reason this occurs is because experiencing negative alcohol consequences facilitates movement along the stages of change (McNally & Palfai, 2001; Shealy et al., 2007). Whereas some may not have experienced particular negative experiences as burdensome enough to change, participants of this study were able to specifically name and recall each incident or major negative effect of drinking that led them to change. Research on this topic underscores this, as the perceived aversiveness of an incident varies among individuals. Those who interpret a negative effect as significant tend to be motivated to change as a result, whereas those who only perceive the event as a normal cost of drinking are not (Barnett et al., 2006).

Physical

Participants reported that physical repercussions of alcohol consumption, such as hangovers and decreased physical fitness, motivated them to reduce alcohol consumption. They spoke of disliking physical sensations that accompany too much drinking, such as feeling dizzy, as well. These factors reportedly motivated them to reduce the amount of alcohol they consumed. Similarly, a qualitative study by Collins et al. (2014) indicated that college students

noted physical side effects (e.g., hangovers) more commonly than any other negative effect on a decisional balance scale worksheet. The negative physical effects participants in this study reported are similar to those identified by college students in a study by Dupree, Magill, and Apodaca (2016). In their study, Dupree et al. reported that the physiological effects of alcohol consumption, such as getting sick and having hangovers, were characterized by participants as especially aversive. They reported that those negative aspects of drinking motivated them more so than any other to quit or reduce their drinking.

Participants of this study also explained that alcohol consumption caused them to get out of shape. One participant noted that not only did she begin to feel less fit and become less satisfied with her appearance during her period of excessive alcohol use, but it also became harder for her to utilize her most effective coping tool: exercise. She and a few other participants reported that they noticed that it became harder to use working out to relieve stress. This impacted them in the sense that they realized they had given up a healthy coping tool in favor of one that was detrimental in the long-run. This is consistent with more recent research on college alcohol use and its relationship with physical activity. A study by Kopp et al. (2015) debunked the common alcohol-physical activity relationship that purports heavy alcohol use is strongly associated with high levels of physical activity. Their study demonstrated an inverse relationship between physical activity and alcohol consumption. The findings of the study by Kopp et al. are similar to what participants in the current study reported in that participants of the current study chose exercise over alcohol consumption during the time period of the experienced phenomenon.

Emotional

Negative emotions that arose as a result of alcohol consumption was another commonly identified reason for alcohol consumption reduction. As the previous theme of physical negative

effect was described, it is easy to see how difficult emotions might accompany other negative effects of drinking. For example, participants said they felt guilty for being a bad friend or a bad daughter after heavy nights of drinking. They said that this guilt was a major catalyst for alcohol consumption reduction. Their reported experience is consistent with what is found in the literature. For participants in the 2013 study by Dearing, Witkiewitz, Connors, and Walitzer, guilt due to alcohol consumption was associated with reductions in heavy drinking. Similarly, a study by Treeby and Bruno (2012) indicated that alcohol-related shame-proneness was positively associated with problematic alcohol use whereas guilt-proneness was inversely related to alcohol problems. In these cases, it appears that for non-addict problem drinkers, difficult emotions can play a role in reducing alcohol consumption.

Participants in this study also reported feeling fear about bad things that might happen as a result of drinking in excess. Feeling scared about legal consequences was identified as a proximal stressor, as the threat of being pulled over while intoxicated was an immediate threat. A participant described troublesome thoughts and unpleasant physical sensations associated with her fear of getting a DUI. This fear was part of what led her to reduce her alcohol consumption, and is consistent with findings of Lehto, James, and Foley (1994). Their study indicated that drinking reduction is likely when the risk of negative consequences is perceived as realistic and likely. The fear of becoming an alcoholic was described as a more distal potential consequence by another participant. That individual worried about developing an alcohol addiction one day in the future like members of her family. Though this fear motivated her to reduce her alcohol consumption for the duration required for participation in this study, there are no data to indicate whether or not that fear will facilitate long-term changes in alcohol use.

Legal

Though not as common among college students as their non-college peers (Glanz, Maddock, Shigaki, & Sorensen, 2003), several participants in this study reported that their drinking reduction was impacted by either actual or feared legal consequences of alcohol use. Research indicates that as individuals who drink transition from high school to college, a significant increase in legal consequences occurs (Gliksman, 1988). Furthermore, when experienced, legal consequences often lead to alcohol reduction (Hustad et al., 2011). Participants in this study reported experiencing legal consequences and changing their behavior as a result. Two participants were essentially forced to reduce alcohol consumption after legal consequences. They explained that they were tested for recent alcohol and drug use, and/or were barred from going to bars, etc., where alcohol might be served. They said they did not want to get into further legal trouble and began a trajectory of drinking and lifestyle change as a result.

Other participants reported that they reduced their consumption not because they actually experienced a legal consequence, but because they feared it. Drinking and driving was cited in particular. Research on this topic supports these findings. A study by Berger and Marelich (1997) indicated that as individuals gained greater awareness and associated fear about legal consequences of drinking and driving, they were less likely to drink before driving than those that showed less awareness of potential legal consequences. Participants of this study reported thinking about the possibility of being pulled over while driving after consuming alcohol, and attributed the reduction in consumption to these thoughts and associated fears. They were afraid of being pulled over while intoxicated to the point where they felt nervous and scared while drinking. Participants noted that these thoughts and feelings motivated them to reduce alcohol consumption.

Relational

Participants of this study explained that various aspects of relationship dynamics changed in a negative way during the time period where they drank significantly more. They reported that they let others down, were not able to truly be themselves, and experienced problems with their partners during that time. When they spoke of these concerns, participants did so in a tone that reflected guilt, anxiety, and sadness, though they did not explicitly describe those emotions. Therefore, it appeared their interpersonal concerns were particularly bothersome.

This is consistent with research on how alcohol-related relationship problems in particular are very troublesome for college students. A study by White and Ray (2014) found that interpersonal problems, such as caused shame and got into fights, were rated relatively highly in terms of bother, as 65.5% of the sample rated their experiences as somewhat or very bothersome. Furthermore, a 2016 study by Dupree et al. found that interpersonal consequences impacted drinking behavior more so than any other type. This profound impact that interpersonal consequences had was shown to be very impactful in drinking behaviors, just as it was for participants in this study. A 2013 study by Merrill et al. revealed that students who reported a consequence perceived as relatively more upsetting or severe than usual were more likely to report short-term reductions in alcohol use and/or consequences. Participants of this study expressed remorse about the way their drinking impacted friends, family, and romantic partners. They explained that it bothered them so much they felt the need to remove that burden from those with whom they were close by reducing alcohol intake.

Benefits and Negative Effects of Alcohol Consumption Reduction

Participants of this study were asked to describe the benefits they experienced after they reduced their alcohol consumption. Likewise, they were asked to explain what made

maintaining alcohol reduction difficult, and what they missed about drinking more than they did prior to reduction. Participants spoke about a number of things they experienced regarding both factors of reduction.

Literature on the actual challenges and benefits experienced of reduction is scarce. Additionally, these studies tend to focus on those with addictions and on treatment outcomes, and examine mainly health factors such as mortality rates (Bendimerad & Blecha, 2014). Even among studies that focus on themes or factors that emerge on decisional balance worksheets (an intervention for alcohol reduction that examines the pros and cons of drinking, as well as the pros and cons of not drinking), benefits and negative effects of *not* drinking (or drinking less) are not reported in articles identified to date (Carlson, 1991; Collins et al., 2014; Dupree et al., 2016). These studies are based upon participants' *expected* benefits and negative effects of reduction or abstinence, as opposed to *actual* benefits and negative effects. A study by Metrik et al. (2004) indicated that adolescents anticipated certain negative effects of reduction but the study did not examine the actual lived experience of the reduction process and associated negative effects. Finally, Prochaska (1994) and Rollnick et al. (1999) indicated that the negative effects of alcohol consumption reduction complicate the decision to change and expectations of those who eventually do change, but these studies do not include actual negative effects experienced during and after the reduction process.

This lack of research may be due in part to assumptions some researchers may make about the experience of drinking less or not drinking at all. It may be assumed by researchers that the pros and cons of drinking less are simply the opposite of the pros and cons of drinking. For example, it may be assumed that relationship problems that occurred prior to reduction will result in improvement in relationships during and after reduction: A simple "positive opposite"

conceptualization. In this study, that was not the case. Participants reported actual benefits or negative effects of reduction that did not always correspond to benefits and negative effects of heavy alcohol use. A review of the benefits of alcohol consumption reduction identified in this study is discussed next.

Benefits of Alcohol Consumption Reduction

Being More Productive and Engaged

One aspect of life that participants said improved after alcohol consumption was reduced was that they became more productive with academics and engaged in school and community activities. Participants attributed this change in part to spending less time recovering from alcohol use the day after big nights of drinking. They also explained that after their shift in drinking patterns, they were more likely to replace time formerly spent drinking in the evenings and nights with studying and involvement in groups or activities that did not focus on drinking. Participants stated that these behaviors were the "positive parts" of their lives. Actions taken began to shift toward working hard to do well in school and become involved in things that were "productive." It was as if participants were able to use time in a way that it had not yet been used while in college. This appeared to be as much as about discovery of what could be done with free time as it was about behaviors that improved areas of life negatively impacted by drinking. Participants reported that they found themselves to be more productive after alcohol consumption reduction, which seemed to build momentum for what they considered a more productive life.

Focusing on the Future

Participants in this study stated that after they reduced alcohol consumption they began to think and behave in a way that helped them focus on upcoming jobs, internships, and educational

goals. They began to think more about the future and spend more time working toward it. This is another example of a benefit without a reported corresponding negative effect. Participants who described this shift toward forward thinking did not report that this was a part of their life impacted for the worse by excessive alcohol use. They did not indicate ever having it in the first place prior to alcohol use reduction. Rather, this goal-directed mindset reportedly became noticeable after they reduced alcohol consumption.

A reason for this might be that most participants reported that excessive alcohol use and subsequent reduction occurred during their first or second year in college, around age 18, 19, or 20. They may have not had a chance to live by these forward-thinking goals and priorities at all prior to the time they began to reduce. This is evidenced by participants' description of heavy drinking being a normal part of college life during their early college years. Meeting new people, enhancing social bonds, and developing a friendship group were prioritized during that period of their life. These factors are also central to the identity development framework around which this study is based. As alcohol use decreased, sometimes at the cost of missing these social benefits, an unforeseen shift toward future goals was experienced. Participants let go of living the party life and found that there was much more to experience without excessive alcohol use. Their focus shifted toward long-term goals and behaviors required to meet them.

Relationship Improvements

Though making new friends and gaining a sense of belongingness and connectivity with peers was identified as a benefit of heavy alcohol use, many participants explained that their friend group and interpersonal style was not as enjoyable during the time in which they drank more than they did after alcohol consumption reduction. Individuals reported feeling more "comfortable" around people who drank less and getting more satisfaction from their romantic

and family relationships. They stated that although those old friends and heavy drinking

interpersonal dynamics were fun, they felt a sense of relief to connect with others in a way that

did not include heavy alcohol use.

Though the focus of this theme is relationships, it is not the "positive opposite" of

relationship problems associated with heavy drinking described above. Alcohol consumption

reduction did not simply repair damage to relationships caused by alcohol consumption; rather, it

caused an increase in what participants described as "positive" relationship types and dynamics.

This meant new friendships, and/or different dynamics with old friends emerged that were more

enjoyable. It may be that heavy alcohol consumption was experimental and did not result in the

type of interactions and relationships that participants ultimately felt satisfied with.

Physical Benefits

Physical benefits of alcohol consumption reduction that participants reported emphasized

"feeling good," physically. This included a few different things, such as having more energy,

thinking faster and clearer, and not experiencing hangovers. These types of benefits facilitated

participants doing things like working out more and taking their dog for a walk rather than

"barfing the next day [after heavy drinking]." This is another factor of alcohol use reduction that

has not been studied among those in this particular population and drinking pattern, even in the

context of literature on natural recovery (i.e., alcohol reduction without treatment).

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Challenges of Alcohol Consumption Reduction

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The themes discussed below are based on participants' descriptions of challenging

experiences that emerged as a result of reducing alcohol consumption. As noted above, these

challenges are not to date featured in the body of literature on college alcohol use. The themes

and related experiences will therefore be compared to research that relates to the subject but not to the exact topic.

Peer Pressure

Peer pressure was identified as the most difficult part of maintaining alcohol consumption reduction. Participants explained that not only did their friends directly try to talk them into drinking more, but the subtle influence of college drinking culture created a "pull" toward heavy drinking. Participants explained that peer pressure was experienced just as much while overhearing classmates talk about a party, and by seeing others with drinks in their hands as it was when their friends tried to encourage them to drink. They explained that pressure to drink a lot was hard to avoid because they felt as though heavy drinking was the norm.

Literature on this topic indicates that amount and/or frequency of alcohol reduction can be strongly associated with the perception of others' drinking attitudes and behaviors. A 2014 quantitative study by Merrill, Carey, Reid, and Carey indicated that students mandated for treatment after an alcohol-related sanction who perceived that their friends drank more and also held more accepting views of drinking reduced their alcohol consumption to a lesser degree than those without that perception.

The study by Merrill et al. (2014) highlights the importance of friend's drinking behavior and attitudes on those trying to reduce their consumption. Participants identified *perceptions* about friends' drinking, which alone was enough to moderate how much they reduced. Participants of the current study explained that at times their friends and acquaintances tried to directly sway them to drink, but it was just as much the "reinforcement" of the campus drinking culture that made sustaining their reduction difficult. They described a sense of awareness that everyone else was drinking more than they were at the time and that they had to be content with

that. Participants of the current study reported a different outcome than those in the study by Merrill et al. in the sense that they reduced to the degree they desired rather succumbing to peer pressure.

Not only can perceptions of close friends' drinking patterns and attitudes about drinking be impactful in how much college students choose to reduce (Merrill et al., 2014), but perceptions of friend's level of acceptability of reduction can impact reduction maintenance (Reid et al., 2015). College students in the current study reported that after they began reducing alcohol consumption their friends would sometimes directly suggest they drink more than they wanted. Participants of the current study described this as a central challenge to maintaining reduction, but not one they gave into.

Missing the Enhanced Social Life

Participants of the current study described several different types of social challenges that occurred during and after the alcohol reduction process. They reported that after they reduced alcohol consumption, they felt not as close to friends who continued to drink in excess. This meant feeling less intimacy with others in a given outing and also less contact with old drinking friends. A few even spoke of losing friends altogether. Furthermore, participants reported that without excessive alcohol, they had more difficulty actually making friends. They explained it was harder to easily open up to others who they were meeting for the first time at a party, for example.

Though no literature to date has examined what participants experience missing about heavy alcohol use, studies have identified social benefits of "liquid courage" participants feel when drinking, including easier disclosure of feelings and initiating discussion with the opposite sex (Capron & Schmidt, 2012). This captures the nature of what participants reported missing,

socially, after reducing alcohol consumption. Furthermore, the social elements of excessive drinking that participants of the current study described missing may have contributed to the "fun" aspects of drinking discussed earlier. It is likely that social enhancement made drinking occasions more enjoyable and therefore reduced drinking patterns cause participants to miss old drinking habits.

Missing Feeling Carefree

Another aspect of heavy drinking participants reported missing was the carefree feeling that alcohol reduction brought. It spoke to the experience of "letting loose" from day to day worries that excessive alcohol use provided. In the current study, this aspect of alcohol reduction captures the experience of those who reported that a benefit of excessive drinking was that it helped them cope with anxiety and stressors. Those who drink to cope with negative affect, rather than for social reasons, tend to be more likely to have a dependence on alcohol (Carpenter & Hasin, 1999; Dvorak, Pearson, & Day, 2014), physiological symptoms of dependence (Menary et al., 2015) and long-term alcohol problems (Holahan, Moos, Holahan, Cronkite, & Randall, 2001). Participants of research studies such as these on coping with alcohol focus on drinking to cope with negative affect as a *motive* rather than a benefit. Furthermore, they indicate that drinking *alone* to cope, versus drinking socially, is a much stronger predictor of long-term alcohol problems (Christiansen et al., 2002; Gonzalez & Skewes, 2013). Participants of the current study explained that they noticed stress reduction during times of excessive alcohol use, and a temptation to return to old drinking habits to cope with the "stress level." No participant explained that they drank alone or were motivated to return to drinking primarily to cope with negative emotions; rather, they stated that they missed the relaxed and "carefree"

feeling they once had when they drank in excess around friends. Their stories were in some

ways similar to what is cited in the literature about drinking to cope, and in some ways different.

Maintaining Change

All participants of the current study described factors that helped them maintain alcohol

consumption reduction. Participants spoke of feeling a desire to continue the pattern of success

and productivity that was experienced as reduction began. Others described creating and

implementing particular strategies to monitor and control their drinking, while others reported

that their support from friends and family helped. Interestingly, the transition into adulthood and

feeling responsible to live out that role was identified by participants in the study, even by

participants who were 18, 19, or 20. The following is a discussion on what those experiences

were like and how they compare to current literature on factors that help college students

maintain drinking reduction.

Working Toward Being More Productive

Participants of the current study described a sense of momentum building in their lives

once they reduced alcohol consumption. They identified positive changes they wanted to see

continue. Participants reported that a shift in better grades, for example, "made [them] want to

do better on everything." As participants noticed these positive changes, they felt compelled to

repeat them. Furthermore, they reported realizing that things they felt were more fulfilling "had

nothing to do with drinking." Because they realized these satisfying outcomes were not the

result of heavy drinking, participants noted that they had to replace excessive drinking behaviors

with alternatives to drinking. This general replacement of unfulfilling behaviors with those that

appeared to be more fulfilling is similar to theories on why people choose to do one thing over

another.

Positive psychology is a framework some mental health clinicians use to conceptualize individuals they help. According to its founder Martin Seligman, this conceptualization is predicated on the belief that people want to lead meaningful and fulfilling lives to cultivate what is best within themselves, and to enhance their experiences of love, work, and play. This idea that people want to do what is meaningful and enhance various aspects of their lives resembles what participants in the current study described. They reported that alcohol consumption reduction resulted in a "productive" mindset that inspired hard work in school, involvement in extra-curricular activities and groups, and other activities they enjoyed and were satisfied with. The essence of what appeared to help maintain alcohol reduction was that these new outcomes and life philosophies (e.g., being productive) facilitated a sustained tempered drinking pattern.

Another way to interpret these changes is that non-excessive drinking behaviors and outcomes were more reinforcing than their former, excessive alcohol consumption patterns outcomes. Better grades and involvement in more non-drinking groups and activities became more rewarding than the effects of excessive alcohol use. According to the reinforcement model of addiction, also known as the psychological model of addiction, primary and secondary reinforcers of alcohol use perpetuate continued excessive drinking (Hart & Ksir, 2015). That is, individuals continue to use despite negative effects because they experience the physiological and/or social benefits of drinking, for example, as more rewarding than the effects of less drinking. Those in the current study were able to maintain reduction or cessation of alcohol use for at least the time period required for participation in the study, indicating they were not caught in the reinforcing cycle of addiction.

Support From Others

In the current study of alcohol reduction, participants explained that part of what helped them sustain reduction was the support and encouragement they felt from others. Specifically, friends, family, romantic partners, and academic advisors said things to the participants that motivated them to continue drinking less. Positive feedback was identified by all participants who explained that others helped them maintain reduction. These findings are supported by the literature. A 2016 study by Smith, Davis, Ureche, and Dumas revealed that upon embarking in alcohol reduction or cessation, individuals between the ages of 18 and 25 were more likely to maintain changes if their peers provided alcohol-specific social support. Similarly, Reid et al. (2015) found that not only was initiation of alcohol use reduction impacted by social networks of college students, but maintenance was as well. The more college students felt that their friends supported their drinking reduction, the more likely they were to sustain changes.

Plans to Control Drinking

Whereas the two previous contributing factors of sustained reduction came from others or a general shift in mindset associated with academic achievement or involvement in rewarding activities, plans to control drinking were concrete, specific strategies implemented on drinking occasions. Participants of the current study spoke about monitoring their drinking and deciding in advance how much they would drink on a given occasion. They found these strategies to be effective in helping them sustain reduction. Findings from alcohol consumption reduction literature reflect this. For example, DeMartini, Palmer, et al. (2013) reported that lower alcohol consumption was found for college students who implemented direct drinking strategies, such as spacing drinks out over time. One student in the current study explained that she chose to no longer drink liquor and remembered to eat prior to drinking.

Becoming an Adult

A few of the participants in the current study explained that a key to sustaining their alcohol consumption reduction was that they began to think of themselves more as adults. They reported that becoming an adult included a number of things, such as being more responsible with not only alcohol, but also health, money, and relationships. Furthermore, participants described their sustained reduction was a part of "growing up," "coming of age," and being more "adult focused." These descriptions came out of discussions that focused on movement not only toward a mindset, as discussed above in the being more productive theme, but also toward new roles. Although these roles were not necessarily connected to becoming parents, or full-time employees, they are similar to role transitions associated with "maturing out" identified in the literature.

O'Malley (2005) found that after drinking patterns peak at age 22, individuals soon reduce because heavy drinkers take on roles and responsibilities associated with adulthood. His study found that as individuals take on adult responsibilities such as employment, marriage, and parenthood, they reduce alcohol consumption partly because of the limitations these responsibilities place on social activities, as well as because attitudes toward drinking change. Furthermore, O'Malley's 2005 study indicated that those who at one point met the criteria for alcohol dependence are less reactive to these new roles and responsibilities, and are less likely to reduce their alcohol consumption as a result. Participants in the current study also reported taking on new jobs, internships, and meaningful relationships as a part of the reduction process. They reported shifting their drinking behaviors as their roles as students and friends changed. Participants noticed a growing interest in employment and meaningful relationships was more important than continuing a pattern of heavy drinking which limited their ability to successfully

navigate those roles. They were likely more reactive those new roles because they had never met

the criteria for alcohol dependence (O'Malley, 2005).

A 2013 study by Lee, Chassis, and Villalta indicated that "maturing out" is relevant

primarily for those who engage in high risk drinking, rather than those who drink in moderation.

Furthermore, studies have found that maturing out earlier, rather than later while individuals are

in their 20s is more common for "Anglos" than for non-whites (Neff & Dassori, 1998). These

studies appear consistent with the findings in the current study, as participants of the current

study more often than not did not drink in moderation prior to reduction, as they were all

required to have experienced problems as a result of alcohol consumption to qualify for the

study. Furthermore, all participants were white. Findings of previous research related to

transitioning into adulthood support those described by participants of the current study.

Insights Gained

Though past studies seem consistent with many of the findings of the current study, the

area of insights gained post-reduction was to date not found in the literature on college alcohol

use. Only articles that describe broad areas related to each theme will be discussed. The

discussion on the three insight-related themes identified by participants of the current study will

therefore be explored as one topic rather than broken up into individual categories. Though the

topic of insights gained post-reduction was not identified in the literature, insights participants

described were very significant, as they appeared to be closely tied with individuals discovering

who they are.

Several participants reported that they felt they became more authentic during and after

the alcohol reduction process. The central idea behind this notion was that participants were

more "genuine" around others when they were not drinking, or had more fun "hanging out" with

those who shared their interests and also drank less. Furthermore, participants reported that they

tended to feel more comfortable around others who did not drink in excess. They explained that

they believed this comfort came as a result of having more in common with groups of people

who did not drink as much as participants once did.

Another significant factor that participants of the current study reported realizing about

themselves as a result of alcohol consumption reduction was that heavy drinking did not align

with their values. Values are important to this discussion because research on alcohol use

indicates that heavy drinking will only continue to occur if individuals value the outcome of

corresponding drinking behaviors (Bandura, 1977). Studies described in chapter two of the

current study indicate that individuals differ in what they find to be aversive versus reinforcing

about drinking. Participants of the current study indicated that they came to not value heavy

drinking or what heavy drinking culture entails. They explained that outcomes of excessive

drinking do not align with the kind of person they wanted to be. Others distinguished themselves

from their heavy drinking friends by explaining that they felt like a "better person" than those

around them who drank in excess. All the participants who described this experience reported

that they wanted to be different than the heavy drinkers with whom they affiliated.

Characteristics that participants valued over drinking include being more mature and

productive. In fact, those who indicated that they valued being productive said they realized

their desire to be productive was the most important thing they learned about themselves. Others

explained that they realized drinking less meant they were more mature and focused on what is

important. Living out their values was likely important to participants of the current study, as

research has shown that those who felt drinking violated their values were more likely to be

aware they had a problem with drinking and were therefore less likely to be in the

Precontemplation stage of change, as described by Prochaska and DiClemente (Milin, 2008).

Finally, several participants of the current study indicated that they realized that reducing

alcohol consumption required discipline and resilience. They explained that this brought a

heightened sense of confidence and reported that they gained the insight that they were capable

of more than they originally thought. They stated that being able to go against the grain (in

terms of common drinking culture) meant they had "a backbone." Ultimately, they learned they

were stronger, and more capable and confident than they previously realized.

Implications for Mental Health Providers

Mental health clinicians may find it helpful to be mindful of the lived experience shared

by college students in the current study when providing services for college students who have

issues related to drinking. The change process for those in this population entails consideration

of various contextual and psychosocial factors that may be easily overlooked. One issue that

clinicians may consider includes conceptualizing college students with alcohol problems

differently than they might those at residential treatment facilities or other clinical settings. In

fact, given that most who experience alcohol problems during college reduce on their own

without the help of a professional, it may be of benefit for providers to focus on a strengths-

based, client-centered approach. Furthermore, validating the difficulties clients may experience

as they reduce may be important to consider.

Participants of the current study all reported challenges and negative outcomes related to

drinking reduction which clinicians may need to consider. The pros of drinking less are not the

only consequence experienced during and after alcohol reduction. There can be many challenges

as well, such as the removal of factors important to identity development. For example, a sense

of belongingness and affiliation may be impacted as clients lose friends and feel unique in a culture of heavy drinking. Missing these benefits may be challenging for clients as they transition from groups of friends who heavily drink on a regular basis to those who drink less. Furthermore, making new friends may be difficult for some, as social anxiety may be more noticeable after alcohol is removed or decreased in social situations. Finally, after these changes occur, clients may feel like different people than they did prior to reduction. Though there may be many benefits of this new identity, it may be stressful and cause difficult emotional experiences. Therefore, it may help students to process the losses that occur as they drink less.

Another factor that may be helpful to think about is that younger clients (first year students) may be more forward-thinking than assumed. Participants of the current study reported thinking about future-oriented issues when it came to their decision to reduce and maintain their change in drinking. It may be assumed, based on previous research, that "maturing out" of drinking comes primarily from transition from student to full-time employee or into roles such as parent or spouse. Those types of roles were not described by those in this study. Instead, roles and responsibilities were focused on a shift toward being a better student, or an intern, for example. It did not require participants to be at the cusp of transitioning from student to non-student in order for these alcohol consumption changes to take place.

Providers may also wish to advocate for students similar to participants in this study. Professionals in the helping field may assume that problematic drinking is a character defect or a predictor of a long-term issue with alcohol. Current and past findings do not support this (Ham & Hope, 2003; Misch, 2007; Sher et al., 2001). Participants of the current study reported drinking in excess to enhance their social life and gain a care-free feeling with their peers during heavy drinking occasions. This yearning for a sense of belongingness and acceptance by others

is typical for this particular age group, as various developmental models have described. Those in this study were able to successfully cut down or quit, despite the fact that alcohol helped them connect with their peers at one point.

Limitations and Strengths

There are several important limitations to note when reviewing this study. First, though this study is phenomenological and therefore not intended to be grounded in theory, by design it operated under prior theoretical research that indicates problems associated with alcohol consumption are associated with change. Participants were therefore selected based on whether or not they had experienced problems related to alcohol use. The assumption was that these individuals therefore had a rich experience.

Other important shortcomings include the blurred lines inherent in distinguishing those who are dependent on substances from those who abuse them. This study was not intended for those with chronic alcohol problems; however, there is one similar quality of participants of this study to those who do have long-term problems: experiencing negative effects before taking action to change.

Another limitation of the current study is that alcohol use, both for college students and their non-college peers, peaks at age 22 (O'Malley, 2005). The modal age for participants of the current study was 22 (three participants), but at least half the participants were in their first year of college during the period of time in which they experienced problems as a result of alcohol consumption and subsequently reduced or quit. As they age, those participants may resume old drinking patterns given they had not yet reached the most common age identified in the literature for peak alcohol use. This was not the case for the 25-year-old in the current study, but nonetheless is a factor to consider for other participants. Another weakness related to age as a

moderating factor of alcohol consumption is that participants of the current study were not asked to describe their specific age when alcohol problems and associated reduction occurred. One participant volunteered that she was a first-year student, and three others were first-year students when they participated in the current study. It is not known for certain when the other four participants experienced this heightened period of drinking and subsequent reduction.

Additional weaknesses of this study include issues related to race and gender. Participants of this study were all White and predominantly (six out of eight) female. In terms of race, variation of this sample lacked in part because this study was conducted at a Predominantly White Institution (PWI). Problematic drinking patterns are much more strongly correlated with PWIs than Historically Black Colleges and Universities (HBCUs; Barry, Jackson, Watkins, Goodwill, & Hunte, 2016). This disparity may have limited the likelihood of participation of African Americans. Furthermore, drinking rates are usually significantly lower for African Americans than they are for Whites (Zapolski, Pedersen, McCarthy, & Smith, 2014). The fact that part of the inclusionary criteria for participation was the experience of previous drinking problems may have related to African Americans being less likely to be included in the study.

Regarding gender, the themes developed by this sample may be skewed toward experiences more commonly associated with females than with males. College males, for example have been found to have a greater number of drinking problems as a whole (Perera, Torabi, & Kay, 2011), and experience more consequences than females (both for self and others) that involve public deviance (Perkins, 2002). This difference in experiences participants identified as "negative" may be explained by differing valuations. An illustration of this gender difference in valuations was described in a study by Dumas et al. (2015), who found that males believe that aggressiveness associated with drinking at a bar is a positive thing.

In terms of emotional and interpersonal consequences, Perera et al. (2011) found that women experience these types of consequences more so than any other, and just as frequently as men. This lean toward personal and private consequences may have contributed to the emergence of certain sub-themes identified in this study, such as emotional and relational negative effects, and themes related to stress and anxiety reduction. Furthermore, sub-themes of benefits of alcohol use may have differed given some men's preference toward consequences that females find aversive. Themes of a different nature may have emerged if more males had been involved in the study.

A major strength of the current study is that it involved in-depth interviews which allowed the researcher to capture participants' experience in their own words. This is different than the majority of studies found in college alcohol use literature. Previous studies have utilized surveys or other measures to gauge particular variables associated with college alcohol consumption (e.g., perceptions of friends' drinking levels and acceptability of drinking behaviors), but no study was found that allowed participants to decide on their own what was most challenging about the process, and what the negative effects were. This process was likely facilitated by the investigator building a trusting relationship which seemed to have created an atmosphere where participants felt at ease disclosing their experiences.

Directions for Future Research

This dissertation focused on the limited research on challenges college students face as they reduce their alcohol consumption. More importantly, it examined the full process of change, from beginning, to middle, to end. Exploration of the difficulties of this process appears to be in its early stages, and the review of this process as a whole should be further explored. Based on the findings of this study, there appears to be a need for more research on the negative

aspects of alcohol consumption reduction. A closer examination of the losses (e.g., loss of social enhancement, missing feeling carefree) and added challenges (e.g., peer pressure) associated with drinking reduction may be warranted. Specifically, losing drinking friends and gaining a new set of friends was found to be challenging and stressful for participants of this study as they began to transition into a life that does not involved as much drinking. Although developing new friends was challenging, participants did share feeling more authentic and comfortable with their new friends and this may be another area for study.

Future research on college students' strengths may be an interesting topic to learn more about as well, as an important part of this study was that participants reported learning that they possessed certain positive qualities which allowed them to reduce their alcohol consumption despite the challenges of college drinking culture. Future studies focusing on the experiences of people of color and minorities may also be helpful. Additionally, studies focusing on students reducing their alcohol consumption over longer periods of time are also needed. Given that most college students with alcohol problems reduce on their own, and this age group appears to be learning who they are, it may be of benefit to gain a fuller understanding of how those who reduce "come of age" in the process. Understanding students' experience in reducing alcohol consumption on their own appears to be an important area for future research.

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Appendix A

Data Collection Protocol – Initial Interview

Data Collection Protocol – Initial Interview

This is an interview protocol to answer research questions and gather the lived experience of college students who have reduced their alcohol consumption.

Primary research question: How does a sample of college students at a Midwestern university who significantly reduced their alcohol consumption describe the process they experienced before, during, and after they reduced their alcohol consumption?

Thank you for agreeing to participate in this study about how college students experience alcohol reduction. This research is to learn more about the lived experience of college students who have reduced their alcohol consumption. For the purpose of this study, alcohol consumption reduction is defined as reducing quantity and/or frequency of alcohol use. We are trying to fully understand what happened before you reduced your alcohol consumption, what the change process was like, and how your life has been impacted by the change, both for better and for worse. The goal is to better understand not only what you experienced, but also how you experienced it. We want to hear your story.

I would like to begin by explaining a few terms and phrases you'll hear me say as I'm asking you questions. I'd like to do this so I don't misunderstand part of your story or leave anything out. The first term has to do with bad things that can go along with drinking, or, negative effects of alcohol use. Negative effects of alcohol use can be described as aversive factors that arise as a result of alcohol consumption. Examples include legal problems, academic difficulties, etc. The second term identifies a different type of bad experience; one that can impact people as they drink less. It has to do with the things people miss, or lose out on that they once enjoyed when they drank more. It can also be thought of as uncomfortable experiences that emerge during and after the reduction process. It is called negative effects of reducing alcohol consumption. We are defining negative effects of reducing alcohol consumption as any sort of loss experienced during the reduction process, and/or aversive thoughts, feelings, behaviors, and/or beliefs that arise as a result of reducing alcohol consumption. Examples include missing drinking friends who you formerly spent more time with, or missing the feeling of relaxation that goes along with drinking. You might think of the third term as sort of the opposite of the second. It has to do with good things that happen when people don't drink as much, and is called benefits of alcohol consumption reduction. Benefits of alcohol consumption reduction is defined as ways in which the outcome of reduction has impacted your life in a positive manner.

Let's briefly review what we'll talk about before we begin. In our interview today, we are interested in your experience of change during the time when you reduced alcohol consumption, and the impact that change had on you. We are interested in what led up to the change, and what impacts that change had on you, both positive and negative.

Again, thanks for letting me interview you about your experience reducing alcohol consumption.

(1) Please tell me where you are from and how you ended up attending this university??

(2) Will you please describe your drinking pattern before you came to college?

(3) I would like you to hear about what things were like around the time period in your life when you drank significantly more (in amount and/or frequency) than you do now. Will you please tell me about your past drinking experiences, and include what those experiences were like, and how they benefitted you?

(4) Please tell me about your drinking experiences and what led you to desire to reduce your alcohol consumption.

(5) What critical elements or negative consequences motivated you to reduce your alcohol consumption?

(6) How did the process of changing drinking behavior occur over time? Please describe this process.

(7) What sustained and what interfered with your commitment to reducing your alcohol consumption?

(8) What are some things you miss/missed the most about drinking, socially, behaviorally, and emotionally?

(9) How did life change after you reduced your drinking (in terms of both negative and positive outcomes)?

(10) What did you learn about yourself during the process of alcohol consumption reduction?

Appendix B

Member-Check Interview

Member-Check Interview

This is an interview protocol to correct, clarify, and/or add to the initial interview about college students who reduce alcohol consumption.

Thank you for meeting with me again to discuss your experience of reducing alcohol consumption. Today I want to give you the opportunity to correct and/or add to anything from the summary of the interview I previously gave you.

(1) Please tell me what part of the summary you want to clarify.

(2) What, if any, corrections and/or additions would you like to make?

(3) Just to be sure, you want me to change_____ to_____and add_____.

(4) Thank you very much for your participation in this study. I wish the best of luck in your studies and future endeavors.

Probes to be used during the initial interview and clarification interview may include: (1) Tell me/Say more…(2) How so…(3) What do you mean…(4) I'm not certain I understand what you meant by…(5) What are some examples…(6) What stands out in your mind about that…(7) How did you feel when…(8) What were you thinking when...(9) What other details can you give me about that?...(10) What happened after that…(11) How do you know it was...

Appendix C

Recruitment Script

Recruitment Script

Greetings:

Have you ever come to a point while enrolled at this university when you found yourself drinking alcohol too much and/or too often? Did you later decide to reduce how much and/or how often you drank for at least 30 days after some bad things happened to you as a result of drinking too much? A doctoral student named Devin Jordan will be interviewing students for his dissertation to learn more about why people change their drinking habits, and what happens to them when they do. He wants to hear your story.

In order to participate, you need to be a student at this university between the ages of 18-25 who has reduced alcohol consumption for at least 30 days after experiencing negative consequences of excessive drinking. You must have never been in formal treatment for alcohol abuse, such as AA or therapy, and have never met the criteria for alcohol use disorder classified as severe as described in the 5th edition of the Diagnostic and Statistical Manual. Additionally, you must not consider yourself to have an addiction to alcohol or any other substance, and must not be currently in a state of physiological withdrawal.

If you believe you meet the criteria listed above and are interested in participating, please contact the investigator at the phone number or email listed on the screen and on the flyer. After the initial correspondence you will be emailed a consent form which will later be orally reviewed and immediately followed by an in-depth interview. A transcript and summary of the interview will then be sent to you to check for accuracy and you will be asked to make any changes or additions during a brief second interview. Altogether, the time commitment for participation in this study will be about 2 hours. A $25-dollar giftcard will be awarded after you review the transcript and summary.

Devin Jordan, Ed.S., M.S.
Doctoral Candidate

Appendix D

Email Recruitment Script

Email Recruitment Script

Greetings:

Have you ever come to a point while enrolled at this university when you found yourself drinking alcohol too much and/or too often? Did you later decide to reduce how much and/or how often you drank for at least 30 days after some bad things happened to you as a result of drinking too much? My name is Devin Jordan, and I am interviewing students for my dissertation to learn more about why people change their drinking habits, and what happens to them when they do. I want to hear your story.

In order to participate, you need to be a student at this university between the ages of 18-25 who has reduced alcohol consumption for at least 30 days after experiencing negative consequences of excessive drinking. You must have never been in formal treatment for alcohol abuse, such as AA or therapy, and have never met the criteria for alcohol use disorder classified as severe as described in the 5th edition of the Diagnostic and Statistical Manual. Additionally, you must not consider yourself to have an addiction to alcohol or any other substance, and must not be currently in a state of physiological withdrawal.

If you believe you meet the criteria listed above and are interested in participating, please contact me at the phone number or email listed below. After the initial correspondence you will be emailed a consent form which will later be orally reviewed and immediately followed by an in-depth interview. A transcript and summary of the interview will then be sent to you to check for accuracy and you will be asked to make any changes or additions during a brief second interview. Altogether, the time commitment for participation in this study will be about 2 hours. A $25-dollar giftcard will be awarded after you review the transcript and summary.

Devin Jordan, Ed.S., M.S.
Doctoral Candidate

Appendix E

Recruitment Email to Instructors

Recruitment Email to Instructors

Hello,
My name is Devin Jordan and I am a 5th year doctoral student in the Counseling Psychology program at Western Michigan University. I am currently trying to recruit participants for my dissertation and would greatly appreciate it if you would consider sending the information below to your students.
Thank you,
Devin

Greetings:

Have you ever come to a point while enrolled at this university when you found yourself drinking alcohol too much and/or too often? Did you later decide to reduce how much and/or how often you drank for at least 30 days after some bad things happened to you as a result of drinking too much? My name is Devin Jordan, and I am interviewing students for my dissertation to learn more about why people change their drinking habits, and what happens to them when they do. I want to hear your story.

In order to participate, you need to be a student at this university between the ages of 18-25 who has reduced alcohol consumption for at least 30 days after experiencing negative consequences of excessive drinking. You must have never been in formal treatment for alcohol abuse, such as AA or therapy, and have never met the criteria for alcohol use disorder classified as severe as described in the 5th edition of the Diagnostic and Statistical Manual. Additionally, you must not consider yourself to have an addiction to alcohol or any other substance, and must not be currently in a state of physiological withdrawal.

If you believe you meet the criteria listed above and are interested in participating, please contact me at the phone number or email listed below. After the initial correspondence, you will be emailed a consent form which will later be orally reviewed and immediately followed by an in-depth interview. A transcript and summary of the interview will then be sent to you to check for accuracy and you will be asked to make any changes or additions during a brief second interview. Altogether, the time commitment for participation in this study will be about 2 hours. A $25-dollar giftcard will be awarded after you review the transcript and summary.

Devin Jordan, Ed.S., M.S.
Doctoral Candidate

Appendix F

Face to Face Recruitment Slide

Contact and Study Info

Contact Devin Jordan

To participate, you must:

$25 GIFTCARD FOR PARTICIPATING

1. Be a student at this university between the ages of 18-25
2. Experienced negative consequences as a result of alcohol consumption
3. Reduced alcohol consumption for at least a period of 30 days while enrolled at this uniersity
4. Not consider yourself to have an addiction
5. Never have been in treatment for drugs or alcohol (such as therapy or AA)
6. Never have had a diagnosis of alcohol use disorder classified as "severe"
7. Not be in a state of physiological withdrawal

Appendix G

Request to Instructors to Allow Recruitment

Request to Instructors to Allow Recruitment

Hello,

My name is Devin Jordan and I am a 5th year doctoral student in the Counseling Psychology program at Western Michigan University. I am currently on predoctoral internship in Illinois and am trying to recruit participants for my dissertation. A graduate student volunteer has been familiarized with my study and trained to help me recruit by reading a recruitment script. If you might consider having the graduate student volunteer take approximately 5 minutes of your class time to distribute flyers and read the script aloud to your students I would greatly appreciate it. I also have a power point slide with my contact information to display on your classroom monitor while the graduate student volunteer reads the script. I would greatly appreciate your consideration in helping me with this. If you are willing, please email me and copy the graduate student volunteer on your response so we can set a day and time for she/he to come recruit. If you have any questions please feel free to email me or call me at the number below.

Thank you,

Devin

Appendix H

Criteria for Participation

Criteria for Participation

___Are you a student at this university?

___Are you between the ages of 18-25?

___Have you experienced problems as a result of alcohol consumption while enrolled at this university? (This can include problems with friends, family, the law, school, grades, campus organizations, emotions, etc.)

___Did you reduce how much and/or how often you drank for at least a 30-day period while enrolled at this university?

___Have you experienced life changes (good or bad) during or after the alcohol reduction process?

___Did you reduce alcohol consumption without help from a professional (e.g., counselor, therapist) or from an organization (Alcoholics Anonymous)?

___Have you been in formal treatment for drugs or alcohol at some point? (Formal treatment includes counseling, therapy, Alcoholics Anonymous, or other similar programs)

___Do you have an addiction to alcohol or some other substance

___Are you currently experiencing physiological withdrawal symptoms, such as any of the following:

    _Increased heart rate or sweating
    _Seeing, feeling, or hearing things that others don't
    _Shaky hands
    _Sleeplessness
    _Vomiting/Nausea
    _Anxiety
    _Seizures
    _Constant fidgeting of arms and/or legs

Appendix I

Demographic Form

Before asking any questions the investigator stated the following: *By participating in this phone interview you are consenting to participating in this research study.*

Date:
Time:

Demographic Form

Pseudonym:

Age:

Class (First year, sophomore, etc.):

Sex: Male   Female

Gender: Male   Female   Transgender   Gender neutral

Ethnicity/Race: Hispanic/Latino   African American/Black Asian

         Indian or Alaskan Native Mixed Race   Other

         White/Caucasian

Sexual Orientation: Heterosexual/"Straight" Lesbian   Gay Bisexual

Ability Status: Able bodied   Impaired

Appendix J

DSM-5 **Alcohol Use Disorder Checklist**

DSM-5 **Alcohol Use Disorder Checklist**

Pseudonym:

Think back to the time in your life when alcohol consumption was most problematic for you. **This must be restricted to any 12 consecutive months.** I will now ask you questions about that twelve-month period. Please answer "yes" or "no" to each question.

___As time progressed, you needed to drink more and more each time to get the same "buzz."
___Drinks affected you less and less as time went on
___When you stopped or reduced drinking, did you experience:

      _Increased heart rate or sweating
      _Seeing, feeling, or hearing things that others didn't
      _Shaky hands
      _Sleeplessness
      _Vomiting/Nausea
      _Anxiety
      _Seizures
      _Constant fidgeting of my arms and/or legs

___You drank more or for longer than intended

___You craved alcohol or strongly desired to drink

___You really wanted to cut down on your drinking and/or were unsuccessful in drinking less

___You spent a great deal of time trying to get alcohol, use alcohol, or recover from hangovers

___You continued drinking despite knowing it was causing physical or psychological problems (An example is continued drinking even though you knew it was making you depressed)

___You kept on drinking even though you failed to fulfill major life role obligations.

___You drank in situations in which it is physically hazardous (An example is drinking and driving)

___You continued to drink even though you had a lot of social or interpersonal problems caused by drinking

___You gave up or reduced involvement in things like work, social clubs, or sports because of alcohol use
        (2 – 3 = MILD)   (4 – 5 = MODERATE)   (6+ = SEVERE)

Appendix K

Email to Participants With Consent Document

Email to Participants With Consent Document

Hello (potential participant's name),

Thank you for agreeing to participate in my study on college alcohol consumption reduction. It was nice connecting with you and I look forward to hearing your story. When we next talk on (date of phone interview appointment) I would like to review the attached informed consent document before we begin the interview and preliminary questions. Please have the attached consent document available to read over and review with me on (date of appointment). Thanks again, talk to you soon!

Devin

Appendix L

Recruitment Flyer

Recruitment Flyer

Tell Your Story of Reducing Alcohol Consumption

Contact Devin Jordan

To participate, you must:

Take part in a phone interview with student researcher (up to 2 hours) about your experience reducing alcohol consumption, and...

$25 GIFTCARD FOR PARTICIPATING

1. Be a student at this university between the ages of 18-25
2. Experienced negative consequences as a result of alcohol consumption while enrolled at this university
3. Reduced alcohol consumption for at least a period of 30 days while enrolled at this university
4. Not consider yourself to have an addiction
5. Never have been in treatment for drugs or alcohol (such as therapy or AA)
6. Never have had a diagnosis of alcohol use disorder classified as "severe"
7. Not be in a state of physiological withdrawal

Appendix M

**Human Subjects Institutional Review Board
Letter of Approval**

WESTERN MICHIGAN UNIVERSITY

Human Subjects Institutional Review Board

Date: January 18, 2017

To: Patrick Munley, Principal Investigator
         Devin Jordan, Student Investigator for dissertation

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number 16-11-23

This letter will serve as confirmation that your research project titled "The Lived Experience of College Students Who Reduce Their Alcohol Consumption" has been **approved** under the **expedited** category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may **only** be conducted exactly in the form it was approved. You must seek specific board approval for any changes in this project (e.g., *you must request a post approval change to enroll subjects beyond the number stated in your application under "Number of subjects you want to complete the study*)." Failure to obtain approval for changes will result in a protocol deviation. In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

Reapproval of the project is required if it extends beyond the termination date stated below.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: **January 17, 2018**