THESIS

EXAMINING COLLEGE STUDENTS IN RECOVERY

FROM A SUBSTANCE USE DISORDER THROUGH

INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS

Submitted by

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ABSTRACT

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INTERPRETATIVE PHENOMENOLOGICAL ANALYSIS

The purpose of this study was to examine the dichotomous relationship of Substance Use Disorder (SUD) recovery and the collegiate environment. Increasingly, academic institutions are implementing Collegiate Recovery Programs (CRPs) to address these environmental challenges and specifically support their students in recovery maintenance from a SUD. By conducting a needs assessment, the challenges recovering college students confront in this environment were investigated, as well as the specific needs of this minority student population.

A review of current literature indicated previous studies focused on established CRPs and recovering students already engaged with these resources. This study differed greatly in that it was conducted at Colorado State University (CSU), an academic institution currently lacking campus-based SUD recovery resources; thus this study revealed the cognitions on the challenges and needs of recovering college students who, despite a lack of acknowledgement, continue to thrive in higher education. CSU is currently in the planning stages of CRP implementation; this needs assessment assisted in determining many effective potential service provisions for a campus-based SUD recovery maintenance program at this institution.

Four key informant interviews were conducted with Colorado State University (CSU) students who self-identify as being in recovery maintenance from a SUD and the subsequent qualitative data was examined to extract corroborating themes through the use of Jonathan

Smith's Interpretative Phenomenological Analysis (IPA). These key informant interviews consisted of nine open-ended questions about the recovering students' experiences of simultaneously attending college while maintaining their SUD recovery. Although many questions surrounded their cognitions about challenges and needs of this student population, the participants were also requested to discuss other topics pertaining to recovery.

The quadripartite IPA process was thoroughly conducted with each interview to determine corroborated "Central Themes" and, concurrently, the transcriptions were consistently referenced to isolate excerpts from participants and validate these themes. This qualitative analysis process is suggested to be most effective when the researcher is extremely knowledgeable about, and/or identifies as a part of, the population being studied; due to this aspect of IPA, specific effort was made to mitigate researcher bias throughout this study (Brocki & Wearden, 2006). This study suggests IPA is an effective explorative method when dissecting smaller amount of qualitative data and discussing the cognitions of individuals who may be hidden or stigmatized within a social system; this method of analysis also proved to be effective in comprehensively assessing characteristics of recovering college students within a given social context.

The findings of this study revealed, not only challenges and needs of recovering college students, but also other characteristics pertaining to this student population. This study suggests the two main challenges recovering students confront in the collegiate environment are the environmental influences to reengage in substance abuse and the isolation experienced resulting from stigma associated with not using psychoactive substances while attending higher education. This study additionally suggests the greatest need for recovering college students is to combat this isolation through interacting with likeminded peers who are also committed to recovery lifestyle. Recovering students greatly emphasized the need for sober activities where recovering

students could socialize, find mutual support, and fully engage in the college experience, as well as a campus-based locale to find respite from environmental influences.

At an academic institution without supportive SUD recovery resources, recovering students desire a CRP that is located in a "safe" campus location, and provides substance-free housing specifically designed for willingly abstinent students. The term safety was referenced multiple times by recovering students; this study suggests these students feel the need to protect themselves, and their SUD recovery, while attending college. Although participants reported difficulties cohabiting off campus with individuals who drink, they assumed residing on campus would pose additional challenges and discussed the of necessity on-campus recovery housing.

Concurrently with evaluating the needs and challenges of recovering college students, this study suggests other consistent characteristics exist among this student population. Recovering college students associated the term "recovery" with living differently and consistently making different choices while concurrently not abusing substances. Many attributed their initial success achieving SUD recovery to engaging in Twelve-Step Facilitated Groups (TFGs), such as Alcoholics Anonymous (AA). Although recovering students report varied current attendance at TFGs, they comprehensively reported regularly engaging in both healthy daily habits and activities related to their SUD recovery maintenance program.

Using a standardize formula endorsed by the Substance Abuse and Mental Health Services Administration (SAMSHA), it is estimated that approximately 450 CSU students identify as being in recovery maintenance from a SUD and/or are currently seeking treatment for their problem (Texas Technical University [TTU], 2005). This study lastly suggests recovering college students desire acknowledgement within their academic institution, as well as the opportunity to prosper both academically and socially.

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I have been supported by many people throughout my educational journey; these individuals and groups have provided me with, not only vital assistance to succeed academically, but also the encouragement to preserve through adversities and learn from those challenges.

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DEDICATION

This project is dedicated, not only to college students in recovery, but to anyone who has experienced the horrors of substance abuse and decided to start making different choices…

This project is dedicated to all recovering CSU students: past students, who share their memories; present students, who share their experiences; and future students, who share their hope…

This project is dedicated to the numerous CSU faculty who further understanding about SUD recovery at this institution; those who acknowledge and support us. You are appreciated more than you know…

Recovery begins with willingness to change; this project is dedicated to that change.

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CHAPTER I: INTRODUCTION

Statement of the Problem

Increasingly young adults in the United States are being identified with and treated for a substance use disorder (SUD) (White & Hingson, 2013). The Substance Abuse and Mental Health Services Administration (SAMHSA), a division of the United States Department of Health and Human Services, annually conducts the National Survey on Drug Use and Health (NSDUH) to gain information on the use of alcohol and other drugs in the general population (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014a). Using the American Psychiatric Association's Diagnostic and Statistical Manual (DSM) V (2013), the universal classification tool for all psychiatric diagnoses, including substance abuse, this survey suggests the percentage of individuals ages 18-25 meeting the criteria for a SUD was significantly higher than adults 26 years of age or older (17 versus seven percent) (SAMHSA, 2014a). The NSDUH reports alcohol as the most misused psychoactive substance within this age demographic and suggests individuals enrolled full-time in college are more likely to report current drinking and/or alcohol abuse than their same aged peers not attending an academic institution (SAMHSA, 2014a). This survey additionally reports that 1.8 million enrolled college students meet the criteria for an alcohol use disorder (AUD) and over 39 percent of college students misuse alcohol; research suggests young adults who engage in binge drinking are at an increased risk of developing an AUD (Barnett et al., 2013; SAMHSA, 2014a; White & Hingson, 2013).

An examination of current literature suggests a multitude of negative outcomes associated with alcohol misuse among college students. Although some of these negative outcomes pertain to all young adults, regardless of college enrollment, many are specific to the collegiate

environment. Negative outcomes, such as decreased academic performance and unintentional injury, affect only the individual student abusing alcohol; however, other negative outcomes perpetuated by alcohol consumption, such as physical and sexual assaults, as well as drinking after driving, greatly impact the overall campus community (LaBrie, Napper, & Ghaidarov, 2013; Messman-Moore, Ward, & DeNardi, 2013).

Research suggests a multitude of risk factors which contribute to a young adult's propensity for abusing alcohol and developing an AUD; however, young adults attending college are at an increased risk for alcohol abuse due to a combination of environmental risk factors posed by the collegiate environment and specific individual risk factors attributed to alcohol abuse in college students (Hingson & White, 2014). Drinking alcohol while attending college has become ritualistic and, research suggests, college alcohol abuse is a significant public health problem (National Institute of Alcohol and Alcoholism [NIAAA], 2013). Collegiate environmental factors contributing to escalated risk for alcohol abuse in students are largely based on increased freedoms experienced while attending college coupled with ease of access to liquor and numerous gatherings both on and off campus, where alcohol is served (Zamboanga et al., 2009). Research suggest college students are highly influenced by their peers to abuse alcohol and that students who chronically abuse alcohol tend to socialize together (MacKillop et al., 2013).

In conjunction with environmental risk factors posed by the collegiate environment, research suggests certain individual risk factors increase the likelihood of a college student abusing alcohol and potentially developing an AUD (White & Hingson, 2013). Individual factors, such as pre-collegiate drinking history and parental attitudes toward alcohol, develop the student's relationship with alcohol prior to commencing higher education and research suggests students

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with a history of alcohol abuse prior to attending higher education are more likely to develop an AUD while attending college (Turrisi et al., 2013; Zamboanga et al., 2009).

In an effort to combat both risk factors and negative outcomes associated with alcohol abuse among college student populations, institutions of higher education nationwide have implemented a myriad of substance abuse intervention and prevention programs. These collegiate programs vary greatly amongst academic institutions but are usually a combination of both educational programs designed to influence student population in its entirety and programs intended to assist identified students in mitigating or stopping their substance abuse (Merril, Read, & Colder, 2013; SAMSHA, n.d.). A review of current literature provides a framework to examine many of these collegiate intervention and prevention programs and their impact in reducing incidents of alcohol abuse at academic institutions overall.

Colorado State University, a large, traditional, academic institution located in Northeastern Colorado, combines a myriad of both substance abuse intervention and prevention programs with an on-campus substance abuse treatment program entitled Back on TRAC (Treatment, Responsibility, and Accountability on Campus) (Colorado State University Health Network [CSUHN], 2013). Unique in its approach to supporting students abusing alcohol and other psychoactive substances, this program effectively provides students with the tools necessary to redirect their priorities and, once again, excel in the collegiate environment. However, a gap in service provision has been identified in that CSU does not offer on-campus support services for students in recovery maintenance from substance abuse.

Purpose of this Study

Research suggests Collegiate Recovery Programs (CRPs) are filling this gap in service provision for recovering students at many institutions of higher education throughout the nation

(Watson, 2014). The Association of Recovery in Higher Education (ARHE) (2015) reports over 100 CRPs are currently in existence and over 200 academic institutions, including CSU, are in the planning stage of implementation. A review of current literature suggests many intrapersonal and environmental risks to recovery posed by attending an academic institution; many of these risks surround balancing recovery maintenance activities with academic obligations or the lack of a sober social network on campus (Smock, Baker, Harris, & D'Sauza, 2011). Many programmatic components necessary for a CRP to be successful in service provision and differences among currently implemented programs are provided, as well as how these programs positively impact, not only the recovering student, but also the academic institution overall (Laudet et al., 2014).

In assessing gaps in service provision, current literature states needs assessment tools are regularly conducted with young adults and within the collegiate environment. Although research suggests this assessment measure is used to gain quantitative and qualitative data on mental health needs of college students, it does not provide a framework to examine the readiness of an academic institution to integrate recovery maintenance services into their university system (Hardy & Aruguete, 2014). The purpose of this study is to assess Colorado State University's overall readiness for on-campus services for recovering students, as well as identify the challenges these students face and their specific needs. Using focus groups of CSU students who either identify as being in recovery from a SUD and/or are currently abstaining from psychoactive substance use, this study will gather qualitative data to inform future planning and implementation of a supportive recovery maintenance program at this institution.

Significance of the Study

The gap in service provision for CSU students in recovery from a SUD has previously been identified; due to the efforts of both key faculty members and a small number of recovering students within the CSU community, planning for a Collegiate Recovery Program (CRP) has already commenced. This study will obtain qualitative data from this specific student population and the analysis of this data will aid in deciphering both the challenges and needs of recovering students, as well as assess the academic institution's overall readiness to implement recovery maintenance services on campus. The evidence-based research gained from this study may serve as a framework for the creation of on-campus recovery maintenance services and may provide valuable insight into the needs of this "hidden" CSU student population.

Summary

Although research suggests the number of college students identified as actively engaging in substance abusing behavior is increasing, research also suggests students in recovery maintenance from a SUD is simultaneously increasing. Due to the vast negative outcomes associated with college student substance abuse at both an individual and institutional level, universities, including CSU, have implemented on-campus SUD prevention and intervention programs but do not institutionally support recovering students. To address this gap in service provision, numerous universities nationwide have created Collegiate Recovery Programs (CRPs) to provide a myriad of on-campus resources for this student population.

This research study commences with an examination of current literature pertaining to alcohol abuse among college students nationally, including the associated negative outcomes of this phenomena and the risk factors researchers attribute to SUDs in college students. Next, collegiate SUD prevention and intervention programs are described, as well as the programs

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CSU specifically employs to combat substance abuse among its student population. Finally,

research on currently implemented CRPs throughout the nation provides insight into, not only

the characteristics of recovering students, but also the components of these programs and

challenges posed to execution in the academic environment.

CHAPTER II: EXAMINATION OF CURRENT LITERATURE

Introduction

The aim of this examination of current literature is to comprehensively discuss phenomena of substance abuse among college students, and its associated negative outcomes, while also addressing the increase in recovering students attending academic institutions. By reviewing studies conducted on presently implemented CRPs, the literature provides further information on the specific components necessary for successful integration into the academic institution and potential barriers to program execution.

Alcohol Use/Abuse Among College Students

The aforementioned Diagnostic and Statistical Manual (DSM) V categorizes all substance use and dependence into a single disorder, which is evaluated on a continuum from mild to severe; each specific psychoactive substance misuse is considered a separate disorder but are diagnosed using the same criteria (DSM, 2013). Some of these criteria include, but are not limited to: inability to moderate alcohol consumption, continuing to drink despite negative alcohol-related consequences, and placing oneself in risky situations while drinking; the development of a psychological tolerance, requiring a higher volume of consumption and/or withdrawal symptoms in the absence of alcohol are additional diagnostic criteria (SAMHSA, 2014b).

As with all psychoactive substance misuse evaluated within the DSM-V, symptomology of alcohol abuse is diagnosed as an alcohol use disorder (AUD) if the individual meets at least two of the criteria. The classification of a mild, moderate, or severe AUD is based on how many of the 11 diagnostic criteria the individual meets (NIAAA, 2015a). Although poly-substance abuse, the simultaneous misuse of two or more psychoactive substances, is not one of these criteria,

many individuals diagnosed with an AUD report abusing other substances in conjunction with misusing alcohol (Steiker et al., 2014).

The criteria for AUDs found within the DSM-V surrounds the experiencing of negative consequences as a result of drinking and does not evaluate individuals based on the amount or frequency of consumption. However, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) classifies both binge drinking and heavy drinking based on these two factors. NIAAA defines binge drinking as consuming five or more drinks on one occasion in the previous month and this behavior is also referred to as "alcohol misuse" or "hazardous drinking". Additionally, "heavy drinkers" are classified as people who binge drank five or more times in the previous month (National Institute on Alcohol Abuse and Alcoholism [NIAAA], 2014).

Research suggests college students who binge drink are at an increased risk of experiencing negative outcomes associated with drinking; furthermore, students who are considered heavy drinkers (binge drink five or more times a month) usually advance from less to more severe consequences as their behavior progresses (Merrill, Wardell, & Read, 2014; NIAAA, 2014). Hingson & White (2014) reported the following:

> Compared with students who binge drink one or two times in a 2-week period, those who binge three or more times are twice as likely to experience alcohol-induced memory loss, not use protection during sex, engage in unplanned sex, get hurt or injured, and are equally likely to need medical treatment for an overdose. (p. 205)

Although the individual students engaging in hazardous drinking directly experience these negative consequences, other students, the university, and the community as a whole also experience these consequences secondhand. These researchers additionally suggest students who report being "drunk" once a week are more likely to: be injured, require medical attention, cause injurious traffic accidents, and be sexually assaulted (Hingson & White, 2014). The following section addresses some of the more common negative consequences college students

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experience as a result of hazardous drinking, to include: academic performance, alcohol-induced blackouts, physical injury and assault, sexual assault, drinking after driving, police involvement, alcohol overdoses and its synergistic effects, death, and the development of an alcohol use disorder (AUD).

Negative Alcohol-Related Outcomes Among College Students

Alcohol Use Disorders (AUDs)

Increasingly, heavy drinking young adults are experiencing enough of the vast subsequent negative consequences to be diagnosed with an AUD; research suggests approximately 20 percent of all college students meet the criteria for, at least, a mild AUD within a given year (White & Hingson, 2013). Research suggests young adults who begin drinking before the age of 15 are four times more likely to form an AUD during their lifetime than those who commence drinking after 21; these early onset drinkers are likely to develop the disorder at an earlier age and are at an increased risk for relapsing chronically on alcohol and/or other psychoactive substances (Hingson & White, 2014). These researchers additionally suggest early drinking onset also increases the negative consequences associated with binge drinking, including unintentional injury, car accidents, risky sexual behavior, physical assaults, suicidal behavior, dating violence, and prescription drug misuse.

In response to the high incidents of alcohol use among college students, and the previously discussed myriad of negative associated consequences, institutions of higher education across the nation are implementing on-campus alcohol prevention and intervention programs. Through a variety of collegiate therapeutic milieus, these institutions are targeting this epidemic from an individual and systemic level with varying success. Furthermore, they enlist a multitude of both substance abuse intervention and prevention programs, as well as an on-campus intensive

outpatient treatment program. The following other negative consequences resulting from alcohol misuse vary with regard to individual versus institutional impact; however, research suggests the individual negative outcomes students experience as a result of misusing alcohol has the potential to greatly impact the university system as a whole (Harkins & Roth, 2007).

Academic Performance

Through their meta-analysis, White and Hingson (2013) estimate 25 percent of all college students report negative academic consequences as a result of drinking and cite multiple studies which found heavy alcohol use positively correlated with low grade point average. Poor academic performance as a result of heavy drinking can be linked to: missing classes or assignments, doing poorly on exams, falling behind in classes, and overall increased irresponsibility. Although research suggests more college students drink on weekends, students who binge drink at least three times per week are significantly more likely to: receive a poor grade on a test or assignment, miss class, or report memory loss as a result of drinking; dropping out of college, working menial jobs, and increased incidents of alcohol dependence were also linked to chronic binge drinking in college (White & Hingson, 2013). Additionally, binge drinking alcohol-induced blackouts, periods in which the intoxicated person is consciously engaged with their surroundings but later has no memory of the events that occurred, have been linked to short-term memory damage and research suggests this physical consequence may be linked to poor academic performance (Hingson & White, 2014). Additionally, decreases in critical thinking and decision making skills can also be linked to physical injury and assault of college students, as well as many other associated negative outcomes; the inverse correlation between high alcohol consumption and inhibited cognitive functioning may be linked to the high

number of inebriated college students who are unintentionally injured each year (Barnett et al., 2014).

Physical Injury and Assault

Research suggests male college students experience more negative consequences as a result of alcohol misuse than female students (Barnett et al., 2014). As was previously stated, male students tend to encounter negative consequences of a public nature; conversely, female students are more likely to experience more private negative consequences. Consistent with associated gender norms, female students report more interpersonal conflicts as a result of heavy drinking, while male students report more encounters with the law (Barnett et al., 2014).

The previously mentioned *2007 Call to Action* associates underage drinking with a myriad of harms students incur as a result of heavy drinking, including: injurious car accidents, unintentional injuries, and physical fights; this document additionally estimates 599,000 intoxicated college students are unintentionally injured each year while drinking and approximately 646,000 students are physically assaulted by another student who was also intoxicated (Hingson & White, 2014). Although research suggests male college students are more likely to be physically injured as the result of binge drinking, female college students are more likely to be sexually assaulted or raped (Barnett et al., 2014; Messman-Moore, 2013).

Sexual Assault

Heavy drinking has been linked to sexual assaults of college students; although sexual assault is experienced by both genders, most research in this area has been conducted on female students. Additionally, both male and female students use alcohol to increase sexual experiences or attraction but female students are more likely to regret the subsequent sexual encounter (Barnett et al., 2014).

The influence of alcohol misuse in sexual assault. Research suggests female students who misuse alcohol or drink heavily are at an increased risk of being sexually assaulted; additionally, female students who engage in consensual sex while drinking are at a higher risk of being victimized (Messman-Moore et al., 2013). An intoxicated victim's inability to perceive and respond to potentially dangerous sexual advances has been linked to the high occurrences of sexual assaults in female college students. Additionally, intoxication increases the likelihood a male student will escalate his sexual advances as a result of misinterpreting a sexual situation (Messman-Moore et al., 2013; White & Hingson, 2013).

Expected outcomes associated with drinking further influence a student's sexual behavior; those students who expect negative consequences as a result of drinking were less likely to consume alcohol and thus less likely to be victimized sexually (Messman-Moore et al., 2013). Associating positive sexual outcomes with drinking or habitually surrounding themselves by others who are hazardously consuming alcohol increases a student's risk for sexual assault. A study conducted by Lawyer et al. (2010) found 96 percent of college student sexual assaults involve the victim drinking beforehand (Lawyer, Resnick, Von Bakanic, Burkett, & Kilpatrick, 2014). Although binge drinking is strongly correlated with alcohol-facilitated rape of female college students, sexual behavior while intoxicated and number of sexual partners have also been identified as risk factors (Messman-Moore et al., 2013).

Different levels of intoxication have been linked to distinct forms of sexual assault. For example, students who habitually binge drinking are more likely to be involved in an incapacitated rape occurrence; due to significant impairment produced by heavy drinking the victim cannot consent to the sexual intercourse (Messman-Moore, 2013). Additionally, Lawyer et al. (2010) suggest, although not as prevalent, sexual assaults in which the victim was

"drugged" or involuntarily intoxicated while drinking contribute to the high incidents of forcible rapes on college campuses; college students are five times more likely to experience drug-related rapes and sexual assaults than forcible assaults. Most of these victims of drug-related rapes voluntarily consumed alcohol prior to being drugged and many were administered the drug through an alcoholic beverage.

Alcohol misuse following sexual assault. Research suggests sexual assault or attempted sexual assault, regardless of whether the victim was intoxicated, can serve as a catalyst for increased drinking behavior and mental health problems (Messman-Moore, 2013). Research on the co-occurrence of Post-Traumatic Stress Disorder (PTSD) and alcohol misuse suggests PTSD symptomology usually develops before the maladaptive drinking begins (McLean, Su, & Foa, 2014). Students who were occasional drinkers before a sexual assault often use alcohol to cope with the traumatic event; this self-medication can lead to heavy drinking and even an alcohol use disorder (AUD). The aforementioned Diagnostic and Statistical Manual of Mental Disorders (DMS-V) combines alcohol abuse and alcohol dependence into a single disorder which is further classified by severity (mild, moderate, or severe) (American Psychiatric Association [APA], 2013). The negative outcome of alcohol use disorders (AUDs) as a result of heavy college student alcohol use is further discussed later in this section.

The overall risk associated with certain alcohol-related consequences, such as physical or sexual assault, is localized to specific students and does not often randomly affect the outside community. However, although the legal consequences of drinking after driving (DAD) continue to increase nationwide, the increasing incidents of college students DAD poses a threat to, not only the individuals in the car, but also the community in which they are driving (Hingson & White, 2013).

Driving After Drinking (DAD)

According to LaBrie, Napper, & Ghaidarov (2013), driving after drinking (DAD) is a primary cause of death and injury for college students. Research suggests approximately three million college students choose to drive after drinking annually and by doing so put themselves and countless others at risk (Hingson & White, 2013). The Spring 2014 ACHA-NCHA II reports 21 percent of college students surveyed drove after drinking in the previous 30 days; additionally two percent of students reported driving after consuming five or more drinks in the same time period (ACHA, 2014a).

Labrie et al. (2013) estimate 49 percent of all fatal traffic accidents among college students involve alcohol. Researchers now attribute a multitude of individual factors which put college students at an increased risk for DAD, including: male students, students affiliated with Greek organizations, students over the age of 21 and those students with a family history of alcohol misuse. The cross-sectional study of 2,219 college undergraduate students conducted by Labrie et al. (2013) measured the number of students who had driven after drinking in the past three months; using The Injunctive Norms Questionnaire they attempted to measure how approving the students were of themselves and their peers were of drinking after driving. Their research suggests an individual college student's attitude toward DAD greatly influences the likelihood of that student engaging in the risky behavior. College students overall overestimate how approving others are of DAD; this subliminally promotes more students to drive intoxicated and has been attributed to the high incidents of fatal crashes; students who assume their friends are more approving of DAD are also at a higher risk (LaBrie et al., 2013). Researchers estimate more than 1,800 college students, ages 18 to 24, die annually from alcohol-related unintentional injuries, which includes alcohol-related vehicular deaths (White & Hingson, 2013).

Police involvement

A multitude of maladaptive behaviors college students engage in when intoxicated, including drinking after driving, have the propensity to necessitate the involvement of law enforcement. With the inhibited reasoning ability and critical thinking skills commensurate with alcohol intoxication, college student involvement with law enforcement has also been attributed to student alcohol misuse. Roughly five percent of college students attending traditional, four-year institutions are contacted by police or campus security as a result of being intoxicated (White & Hingson, 2013). Alcohol-related behaviors by college students which perpetuated law enforcement contact include, but are not limited to: public intoxication, underage drinking, fighting, driving after drinking, and property damage. Research suggests half of institutions with high incidents of drinking report having a moderate or major problem with property damage as a result of student intoxication (White & Hingson, 2013).

Every system level with which an individual college student is associated has the potential to be negatively affected by alcohol-related conduct which instigates law enforcement contact. Often coupled with civil punitive charges, college students may be increasingly penalized for their illegal behavior through their institution's conduct policies. Violations of university conduct policies (with or without the involvement of alcohol) are handled autonomously by each institution and vary greatly with regard to potential penalties. Institutions further differ on how they address students who are chronically cited for alcohol (and/or other psychoactive substance) use violations. While some institutions suspend or expel students who are habitually cited abusing alcohol, others have university intervention programs which attempt to identify and support potential alcohol dependent students. Additionally, many institutions have implemented a multitude of programs designed to prevent alcohol misuse by its student population and

mitigate the subsequent potential negative ramifications. Collegiate programs of this nature will

be discussed in the "Collegiate Intervention and Prevention Programs" section of this paper.

The previously discussed outcomes intoxicated college students experience, such as physical

violence, overtly demonstrate the vast negative impact of alcohol misuse; however, other

consequences have a more internal manifestation.

Alcohol-Induced Blackouts

Research suggests binge drinking and experiencing alcohol blackouts are positively

correlated. White & Hingson (2013) estimate: 10 percent of non-binge drinking students, 27

percent of infrequently binge drinking students, and 54 percent of heavy drinking students have

experienced at least one alcohol-induced blackout in the past year. Their research further

suggests approximately 51 percent of college students who have consumed alcohol in their

lifetime experienced at least one alcohol-related blackout with six being the average number of

blackouts a college student has experienced.

Due to the limited short-term memory recall associated with blackouts, binge drinking

college students are often unaware of their behavior which is often linked to other negative

outcomes associated with heavy drinking. Research suggests the involvement of alcohol-

induced blackouts in many of the previously discussed negative outcomes, to include:

unintentional injury, physical fights, sexual assault, driving after drinking, and contact by law

enforcement, which affects not only the individual student and their surroundings, but also the

community at large (Hingson & White, 2013). Additionally, although blackouts are often the

result of solely alcohol intoxication, college students simultaneously ingesting other

psychoactive substances are at an increased risk for this negative outcome.

Alcohol Overdoses and Synergistic Drug Effects

Binge drinking and alcohol overdoses have been positively correlated due to the high volume of alcohol consumed and small timeframe; such episodes can be autonomously fatal as vital reflexes, such as breathing, are inhibited (White & Hingson, 2014). Through data provided by the Nationwide Inpatient Sample, these researchers suggest overdose hospitalizations attributed solely to alcohol consumption in traditional-aged college students (18-24) increased 25 percent from 1999-2008. This nationwide survey contains discharge records from approximately 20 percent of hospitals nationwide which they further estimate approximately 30,000 of the 59,000 hospitalizations instigated by overdose in this age demographic exclusively involved alcohol; additionally, due to approximately 33 percent of young adults nationwide, 18-24 years of age, being enrolled in college, these researchers estimate over 20,000 students were hospitalized for alcohol overdoses in 2008 (Hingson & White, 2013).

Although heavy alcohol use independently affects the drinker both physically and mentally, the synergistic effect caused when alcohol is used in conjunction with other physiologically depressing drugs can inherently lead to substance-related overdoses and death among college students. Data from the 2011 Drug Abuse Early Warning Network (DAWN), an annual report of all drug-related emergency department (ED) visits published by SAMSHA, suggests overdoses combining alcohol and, at least, one other drug accounted for 38,067 of the ED visits in young adults (White & Hingson, 2014). When combined with even a limited amount of alcohol, both licit (legally obtained) and illicit (illegally obtained) depressive psychoactive substances can potentially be fatal; drugs in this category include, but are not limited to: opiates, benzodiazepines, tranquillizers, and other narcotics. However, alcohol is autonomously fatal

when consumed hazardously and, due to the wide range of alcohol use histories and physical tolerance within this population, individual lethality levels greatly vary (MacKillop et al., 2013).

Death

Although many college student deaths related to hazardous drinking are the result of unintentional injury or drinking after driving, some are solely the result of alcohol overdose. Due to heavy alcohol consumption greatly inhibiting the body physiologically, students who binge drink are at high risk for death. Additionally, most college students drink heavily with other intoxicated peers who are often unaware someone is in imminent harm (MacKillop et al., 2013).

Death due to alcohol overdose. In 2004 a female undergraduate student attending Colorado State University died as a result of consuming an estimated 30-40 alcoholic beverages in an 11 hour period; her body was discovered in the fraternity house in which she had last been socializing (ABC News, 2004). The resulting Student Alcohol Management (SAM) Spady Foundation created by her parents is dedicated to reducing the risk of alcohol abuse and potentially prevent future college student deaths from occurring (Student Alcohol Management [SAM] Spady Foundation, n.d.). Despite prevention and intervention efforts of universities nationwide, the trend of college student deaths resulting from alcohol overdose has continued. Compelled to Act, a community initiated organization designed to bring awareness to the epidemic of college student deaths resulting from alcohol overdose, lists all college students who have died since 2004 as a result of alcohol; through the personalization of each student's story, this organization promotes defensive action against this epidemic (Compelled to Act, n.d.).

Suicidality. In addition to alcohol overdoses, hazardously drinking college students are also dying as a result of suicide. The Suicide Prevention Resource Center [SPRC] (2014) reports

suicide as the leading cause of death among college students; approximately two percent of college students tried to commit suicide as a result of drinking and/or drug use in the previous year; due partially to experiencing more negative consequences resulting from drinking, heavy drinking college students are at an increased risk for suicidal thoughts or actions (Hingson & White, 2013). The *2014 Behavioral Health Barometer*, published by SAMSHA, reports seven percent of young adults in the United States had serious thoughts or had attempted suicide; this is over three percent higher than any other age demographic (Substance Abuse and Mental Health Services Administration [SAMSHA], 2015).

Many characteristics contribute to an individual student's risk for suicidal behavior, to include: depressive disorders, substance use disorders, previous suicidal attempts, and self-harming behavior; students with co-occurring depressive and substance use disorder symptomology are at the highest risk for suicidal behavior (SPRC, 2014). Research on the general population suggests people with an alcohol use disorder (AUD) are six times more likely to die as a result of suicide than non-drinkers (Sher et al., 2009). Due partially to the reduction in inhibitions associated with binge drinking, alcohol intoxication has been linked to higher rates of suicide lethality; they further suggest alcohol was a factor in 30-70 percent of attempted and 18-66 percent of completed suicides. However, their research found women were less likely to use alcohol prior to attempting suicide and thus suggest a stronger correlation between AUDs and suicidal behavior in men (Sher et al., 2009).

Summarizing Negative Alcohol-Related Outcomes

The negative outcomes college students experience as a result of abusing alcohol are vast and affect, not only the individual, but also the university system as a whole. Alcohol abuse has been linked to student deaths due to: overdose, unintentional injury, drinking after driving (DAD), and

suicide; additionally, research suggests college students experiencing traumatic events may abuse alcohol and/or other substances to cope with the associated stress (Messman-Moore, 2013; White & Hingson, 2014). Researchers associate a multitude of both individual and environmental risk factors that contribute to alcohol abuse among college students; the following section will outline these risk factors and discuss their impact on individual students' alcohol abusing behavior.

Risk Factors Associated with Alcohol Abuse Among College Students

Collegiate enrollment and alcohol consumption have been synonymous for decades. A combination of environmental risk factors such as: ease of accessibility, peer modeling, overall campus attitudes toward alcohol, living situation, lack of authoritative supervision, and event-specific drinking, make the university an ideal setting for in both episodic and chronic binge drinking (Foster, 2014; White & Hingson, 2013).

Research suggests, due to alcohol use peaking during transitional adulthood (18-25 years old), the environmental risk factors posed by the collegiate environment often correlate to the most at-risk time in a person's life for abusing alcohol (MacKillop et al., 2013). Individual risk factors for alcohol abuse include, but are not limited to: perceived use, drinking identity, pre-collegiate drinking history, parental attitudes toward alcohol, collegiate drinking patterns/binge drinking, ethnicity, gender, socioeconomic status (SES). Additionally, students with a mental health diagnoses and those involved in collegiate athletics are at an increased risk for alcohol misuse.

The negative ramifications of binge and heavy drinking among college students have far reaching effects that go beyond the individual. The maladaptive behaviors of students engaging in alcohol abuse also negatively affects the institutions of higher learning they attend, throughout

the communities in which these universities are located, and on the nation as a whole. A meta-analysis conducted by White and Hingson (2013) entitled "Excessive Alcohol Consumption and Related Consequences Among College Students" concluded that the negative consequences include: unintentional injury, physical and sexual assault, memory loss, health problems, drunk driving, property damage, police involvement, suicide attempts, alcohol overdoses, student deaths, and incidents of early onset alcohol dependence.

The following section outlines both environmental and individual risk factors associated with the trend of heavy college drinking on college campuses. Subsequently, negative implications at both an individual and systemic level are discussed to demonstrate the overall destructive nature of this populations' propensity to engage in alcohol misuse. The current literature provides insight into the comingled effects specific environmental and individual risk factors have on hazardous drinking among college students.

Collegiate Environmental Risk Factors

The collegiate environment inherently lends itself to drinking alcohol. The removal of parental supervision, easy access to alcohol, and unlimited social gatherings where alcohol is served without discretion provide the perfect milieu for alcohol misuse among college students. By offering few restraints to alcohol consumption, campuses further increase the likelihood of their students engaging in hazardous drinking behavior (Zamboanga et al., 2009). Some of these environmental risk factors pertain only to young adults within this age demographic (18-25) attending an institution of higher learning, while others apply to all people within this age bracket.

Due, in part, to the larger variation size and composition of universities nationwide, each institution of higher learning possesses its own environment surrounding alcohol consumption.

Research suggests some universities have a high prevalence of alcohol abuse, while at other institutions the number of students abusing alcohol is limited (NIAAA, 2013). Contributions to an institution's propensity to find students engaging in alcohol abuse include, but are not limited to: ease of accessibility, peer influence and campus attitudes toward alcohol, living situation/lack of authoritative supervision, time of year, and event-specific drinking.

Ease of accessibility. Ease of accessibility refers to the relative ability for students to locate, obtain, and consume alcoholic beverages and has been linked to hazardous drinking among college students (Zamboanga et al., 2009). Nationwide the legal age to purchase and consume alcohol is 21 but with the lack of discretion in which alcohol is served at large parties, or the use of fake identification to acquire alcohol illegally, a college student's age has little bearing on alcohol consumption (Hingson & White, 2014). Combined with a lack of authoritative supervision, most college students find themselves inundated with a multitude of opportunities to misuse alcohol regardless of prior drinking experience or behavior.

Although much of the alcohol served to college students is not legally purchased at liquor stores or bars, alcohol laden college parties on and off college campuses nationwide suggest it is being served, disregarding age, in large quantities. Through inventions such as "jungle juice" (a large quantity of anonymous liquors combined with powdered fruit drink mix to masque the taste), many students are unaware of the volume of alcohol they are truly consuming. Discount nights at local bars surrounding campus, the high prevalence of fake identification, low liquor store prices, and the indiscretion with which some establishments serve their patrons, all further contribute to heavy drinking among college students.

Peer modeling. In conjunction with effortless access to alcohol, the influences of both peer modeling and overall campus attitudes toward alcohol can promote or hinder excessive drinking

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by its students. Although these risk factors can be seen from both an individual and systemic perspective, this section will focus on the overall phenomena of peer modeling and implications of an institution's relationship with alcohol. Peer modeling or peer influence is defined as the effect transitional youths' social networks have on engagement in both healthy and unhealthy behaviors (Guzman, 2007).

Research suggests peer influences, such as: misperceiving consumption rates of fellow students, fostering relationships with binge drinking students, and the positive enforcement of underage drinking by the media serve as catalysts for alcohol misuse (Hingson & White, 2014). Additionally, heavy drinking college students tend to gather which leads to increased drinking among different social groups and is increased by the lack of parental supervision usually associated with attending college (MacKillop et al., 2013). Risk factors such as peer pressure and misunderstanding standard drink size for safe consumption are environmental risk factors which permeate the lives of all young adults regardless of college enrollment; conversely, campus attitudes toward alcohol apply specifically to students attending that particular institution.

White and Hingson (2013) consistently found college students, and the general population, do not know what constitutes a "standard drink" and thus underestimate their actual consumption. With regard to most distilled spirits, such as vodka or whiskey, NIAAA (2015b) defines a standard drink as one and a half ounces; this organization additionally states 12 ounces of most beers and five ounces of wine are standard serving sizes. In one study analyzed by White and Hingson (2013) students were asked to pour single servings of distilled spirits into various containers; overall students poured an average of four and a half fluid ounces, much larger than the standard set by NIAAA. Researchers suggest this underestimation in actual consumption

volume may potentially be skewing self-report assessments targeted at measuring intake volume

within this demographic; after becoming aware of the actual standard drink size, students in this

study revised their self-reported levels of consumption significantly upward (White & Hingson,

2013).

In conjunction with peer influences, an institution's attitude toward alcohol considerably

impacts the drinking patterns of its students; through normalizing the association of heavy

drinking with a myriad of college experiences, institutions subliminally condone this behavior.

Although some institutions are "dry" and thus prohibit consumption of alcoholic beverages on

campus, many allow drinking in certain locations and/or have on-campus bars (Toomey &

Wagenaar, 2002). Additionally, as of August 2014, 32 National Collegiate Athletic Association

(NCAA) on-campus stadiums serve alcohol at collegiate sporting events (Associated Press,

2014).

Living situation and minimal supervision. Research suggests the impact of peer modeling

and campus attitudes toward alcohol on college students is furthered or hindered by where they

currently reside. Although many young adults, regardless of college enrollment, commence

independent living after high school, certain large domiciles, such as residence halls or fraternity

houses, are unique options only for those attending college; research suggests perceived social

norms and attitudes associated with these collegiate environments have the propensity to

influence residents' drinking patterns (Zamboanga et al., 2009). Most institutions nationwide

prohibit alcohol in residence halls but this does little to deter students from misusing alcohol

both on and off campus. Furthermore, locales regarded as "party houses" or larger off-campus

houses, such as fraternity houses, serve as the ideal situation for high incidents of unsafe

drinking. Research suggests residing: with parental figures, in residence halls, and in fraternity houses greatly influences alcohol misuse among college students.

Residence halls. Research suggests the heavily populated residence hall environments inherently intensifies student alcohol use; by coupling numerous opportunities to misuse alcohol with fledgling independence these incoming college students overall consume more alcohol than those who continue living at home (Barnett et al., 2014). A residence hall is an on-campus dwelling, which can be accessed through multiple entrances, with capacity to house 75 or more students; the staff have limited ability to monitor the resident population in its entirety and often the resulting behaviors include irresponsible, sometimes illegal, alcohol use (Zamboanga et al., 2009).

Due to the high nationwide incidents of drinking within these on-campus domiciles, extensive research has been done on how living in a residence hall effects drinking patterns. Research from Zamboanga et al. (2009) suggests students living in residence halls engage in higher consumption rates and view their college, fellow residents, and academic peers as concurrently participating in unhealthy drinking behaviors; on an individual level, students living in residence halls possess more positive expectations about the effects of alcohol use and are more likely to endorse parties as important social activities. Additionally, research suggests students residing in a mixed-gender halls consume more alcohol and have more alcohol-related consequences than those living in single-gender halls (Barnett et al., 2014).

Fraternity houses. Paralleling students living in residence halls, students residing in fraternity houses are at an increased risk for alcohol misuse. Although all fraternity house residents are male, these often substantial domiciles provide the setting for large parties at which alcohol is irresponsibly served to students of both genders. Zamboanga et al. (2009) suggest

students living in fraternity houses consume higher levels of alcohol and encounter more associated negative consequences than those students living in residence halls; this may be due to the higher acceptability and positive expectations associated with alcohol use within this environment. In Greek Life the strong association between celebration and heavy drinking, coupled with a lack of authoritative supervision, leads to a myriad of problems at multiple system levels. Individual student members, unassociated students, the Greek chapter with which the fraternity house is associated, and the institution of higher learning overall are affected by alcohol misuse and the subsequent negative consequences. A gap exists in the current literature regarding the correlation between where students reside and their drinking patterns; although much research has been conducted on the effect ethnicity and gender have on individual student drinking patterns, these variables are not fully addressed in studies conducted on students living in residence halls or fraternity houses (Barnett et al., 2014; Cacciola & Nevid, 2014).

Time of year. Although extensive research has been conducted on a multitude of environmental risk factors associated with college binge drinking, such as living situation, time of year has only recently been linked to changes in these behavior patterns (Barnett et al., 2014). Although time of year, seasonal changes, and/or holidays can directly impact the drinking patterns of the general population, college students are further impacted by semester schedules and seasonal breaks. Research suggests alcohol use is greater during the first semester of an academic year and at the beginning of semesters, when scholastic expectations are low (Barnett et al., 2014). These researchers further suggest alcohol use and risky drinking behaviors decline as academic semesters progress and students drink more on weekends than on weekdays.

Event-specific drinking. In conjunction with the influences posed by the time of year in college student alcohol misuse is the environmental risk factor of event-specific drinking; the

negative impact of this phenomena potentially affects all young adults, regardless of college enrollment. While sometimes attended by non-college students, events such as spring break or collegiate sporting events tend to be occasions where college students engage in heavy drinking. Conversely, twenty-first birthdays or other life cycle milestones, such as commencing independent living, are inherently experienced by all people within this age demographic.

Research suggests specific festive collegiate events and breaks tend to perpetuate alcohol binges for students who otherwise abstain or drink moderately; additionally students who normally limit their drinking are more likely to endure negative consequences during these events than their peers who typically binge drink (White & Hingson, 2013). These events lend themselves to increased drinking due to factors such as: traveling during a school break, influence from others' drinking behaviors, unlimited alcohol supply, and implementing drinking games. Due partially to the intrinsic stress generated by attending college, extended school breaks provide many students the opportunity to reduce responsibility; this, often coupled with a lack of supervision, perpetuates episodic heavy drinking devoid of the collegiate environment. When reporting on the previous Spring Break, White & Hingson's (2013) meta-analysis found the following: approximately 42 percent of students surveyed "got drunk" at least once, 11 percent blacked out (did not remember all or part of their intoxication) or passed out, 32 percent reported hangovers, and two percent were contacted by the police. They additionally suggest students with a history of binge drinking, and those with the intention of "getting drunk", are most likely to misuse alcohol. Collegiate prevention efforts designed to alter students' intentions of over intoxication during events, such as Spring Break, are suggested to reduce peak drinking during these times (Prince, 2013; White & Hingson, 2013).

Collegiate sporting events, especially NCAA I football games, are venues where college students engage in heavy drinking. Although some college stadiums nationwide do not serve alcohol, students compensate by excessively drinking prior to the game during "tailgating events", sometimes conducted on university property, and/or concealing alcohol on their person before entering the stadium. Another phenomena associated with tailgating and consuming large quantities of alcohol prior to an event, is the highly normative behavior of "pre-gaming" or "pre-partying"; this rapid consumption of a large amount of alcohol often leaves students highly intoxicated before they depart for the celebratory event. Research suggests the consequences of pre-gaming can include blackouts, alcohol poisoning, and even death; a study of 2,526 college students conducted by Labrie and colleagues in 2011 found that 25 percent of students who pre-gamed had blacked out at least once in the previous month (White & Hingson, 2013).

Drinking games are also often associated with event-specific drinking; these often multiplayer games similarly encourage consuming large quantities of alcohol quickly. This, coupled with an inevitable inability to regulate consumption amount, tends to leave the drinker highly inebriated in a short amount of time and often leads to blackouts and alcohol poisoning. Research suggests residence halls and fraternity houses often serve as the locale for these drinking games; this further condones heavy drinking in these environments (White & Hinson, 2013; Zamboanga et al., 2009).

Research suggesting alcohol use greatly increases in the first year of college, as does the associated morbidity and mortality (Barnett et al., 2014). Morbidity refers to the extent to which the student is negatively affected by alcohol consumption, while mortality signifies the correlation between drinking and college student deaths. Independent of individual risk factors, the academic setting serves as a catalyst for heavy alcohol use and the negative consequences

associated with this behavior; however, these individual risk factors attributed to each distinct student must also be considered.

Individual Risk Factors

Since the National Institute on Alcohol Abuse and Alcoholism (NIAAA) first reported on college student alcohol misuse in 1976, a vast amount of research has been conducted on this specific population; the resulting data offered insight into a myriad of factors which are now attributed to an individual student's risk for alcohol misuse (White & Hingson, 2013). In the following paragraphs the influences of: perceived use; drinking identity (DI); pre-collegiate drinking history and parental attitudes toward alcohol; as well as, collegiate drinking patterns and binge drinking on individual college students is discussed. Subsequently, the risks associated with a student's: ethnicity, age, socioeconomic status (SES), and/or mental health diagnoses are conveyed.

Perceived typical use. Perceived typical use is defined as the volume and frequency of alcohol consumption college students assume their peers are engaging in. The Spring 2014 ACHA-NCHA II additionally collected data on perceived typical use; consistently, students surveyed perceived significantly higher overall alcohol use of the general college student population than was actual reported in the data collection (ACHA, 2014a). For example, only one percent of college students surveyed actually consumed alcohol all 30 days of the last month, while 13 percent of those surveyed perceived daily alcohol use by fellow students (ACHA, 2014a). Researchers suggests college students who assume their peers are chronically binge drinking are at an increased risk for alcohol misuse themselves (Hingson & White, 2013).

Research suggests a student's perceptions related to both their own alcohol use and that of their peers greatly influences that student's drinking behavior. An individual student's

motivation for drinking and their anticipated effects as a result of drinking is another risk factor for alcohol misuse; students expecting positive outcomes as a result of their drinking are at an increased risk for misusing alcohol (White & Hinson, 2013; Zamboagna et al., 2009). Concurrently, students whose motivations for drinking relate to enhancement or increased sociability are at an increased risk for hazardous drinking behavior; researchers, such as Foster (2014), measure these internal motivations for alcohol consumption through the concept of Drinking Identity (DI).

Drinking Identity (DI). By quantifying college students' motivations for alcohol consumption through the Drinking Identity (DI) factor, Foster (2014) attempts to conceptualize how important drinking alcohol is to a person's sense of self; through an adaptation of the Smoker Self-Concept Scale, this researcher measured the level at which drinking alcohol was ingrained into an individual student's identity. Her research suggests individual motivations for drinking, such as: social, coping, enhancement, can highly influence actual college student consumption rates; additionally, students with an "explicit drinking identity", who highly endorse alcohol as part of their lives, have a propensity for hazardous drinking (Foster, 2014). More widely used assessment measures, such as the Drinking Motives Questionnaire (DMQ), also attempt to quantify individual enticement for drinking using the aforementioned motivations for drinking (MacKillop et al., 2013). Prep-collegiate drinking patterns, parental attitudes toward alcohol, collegiate drinking patterns, and engaging in binge drinking are closely linked to DI and pose additional hazardous drinking risk factors.

Pre-collegiate drinking and parental attitudes. Research suggests a student's pre-collegiate drinking behavior is heavily indicative of their propensity for heavy alcohol use; often alcohol misuse is the perpetuation of previous behavior (Turrisi et al., 2013; Zamboanga, 2009).

Students' experiences with alcohol varies greatly as they enter college with some students being familiar with alcohol and its effects, while others possess little or no drinking experience. Away from authoritative support, some incoming college students with a limited drinking history concurrently commence abusing alcohol when attending college; however, research suggests heavy drinking prior to attending college is highly indicative of continued alcohol misuse and alcohol-related consequences throughout the higher education experience (White & Hingson, 2013).

The aforementioned annually conducted NSDUH reported high incidents of binge drinking among high school seniors nationwide. Results suggest that, although the proportion of teens engaging in binge drinking continues to decline, some 12th-graders report drinking 10 or more drinks on a single occasion in the past two weeks (SAMHSA, 2014a). These "extreme binge drinking" high school seniors are at a much higher risk of continuing to drink hazardously and thus endure the negative consequences associated with this behavior. The negative effects associated with college student alcohol misuse is discussed in-depth in the "Negative Alcohol-Related Outcomes Among College Students" section of this paper.

Research additionally suggests parental attitudes of individual college students toward alcohol influence underage drinking and thus the pre-collegiate drinking patterns of their children. Parents who are themselves heavy drinkers are twice as likely to have children who drink heavily and/or meet the criteria for alcohol dependence as those parents who abstain from alcohol altogether. Underage youth whose parents permit drinking in the home also have a higher propensity for binge drinking (Hingson & White, 2014).

Collegiate drinking patterns and binge drinking. Although hazardous drinking is often the continuation of previous maladaptive behavior, drinking patterns specifically found in the

college student population provide further insight into individual risk factors for alcohol misuse. Previously discussed overall trends in collegiate drinking patterns are the result of individual college student's decision to engage in risky drinking behavior. The Spring 2014 ACHA-NCHA II reported only 57 percent of students surveyed drank four or less alcoholic beverages the last time they socialized; conversely, 22 percent reported consuming seven or more drinks during their last binge. This national survey additionally asserts 23 percent of research subjects engaged in binge drinking once or twice in the previous two week period (ACHA, 2014a). Data from NSDUH, Monitoring the Family (MTF), and the Harvard College Alcohol Study (CAS) suggests college students who are drinking are consuming in excess; those students who regularly engage in binge drinking suffer more negative consequences and have a higher propensity for alcohol dependence (White & Hingson, 2013). Furthermore, research suggests the higher frequency and larger quantity of alcohol a student consumes directly correlates to them experiencing more negative alcohol-related consequences (Barnett et al., 2014).

As was previously stated, living in certain places associated with or on campus, such as residence halls or fraternity houses, increases the likelihood of a student's exposure to heavy drinking and thus can affect that student's behavior. Studies, like that of MacKillop et al. (2013), suggest college students misusing alcohol tend to cluster together and that an increase in a student's "drinking network" concurrently raised their actual consumption rates. In the social milieu unique to the university setting, research suggests ethnicity, gender, age, and socioeconomic status (SES) additionally influence a college student's risk for misusing alcohol and also with whom that student chooses to associate (Barnett et al., 2014; Cacciola & Nevid, 2014).

Demographics. Demographic factors, such as age or gender, are applicable risk factors for alcohol misuse in all young adults, regardless of college enrollment status; these individual factors affect: how the student, and their family, perceive alcohol and the associated consequences. For example, research suggests female students who are closely bonded to their families drink less than their same-gender peers, while closely bonded male students drink more (Orcutt & Schwabe, 2012). Furthermore, although most research is conducted on traditional-aged (18-25 years old) college students, age specific trends within this demographic also provide insight into patterns of college drinking.

Age. Although most research is explicitly conducted on college students ages 18-25, a gap exists because research conducted on drinking patterns does not delineate data by specific age. A multitude of studies, such as that of Zamboanga et al. (2009), exclusively collect data from incoming, first-year, freshman college students but, again, do not discuss the variation in age of this university subpopulation. Research also suggests non-traditional students (those students attending a traditional, four-year institution, who are outside the normative age range) drink less than traditional-aged students but more research is needed on this specific student population (Cacciola & Nevid, 2014). Furthermore, research resulting from national initiatives, such as the *2007 Surgeon General's Call to Action to Prevent and Reduce Underage Drinking,* focuses on the overall phenomena of underage drinking but does not comprehensively address differences in specified ages or the effect college enrollment has on individual drinking patterns. Future research on the effect age differences have on college drinking trends may prove helpful in fully comprehending the individual drinking patterns of students as they progress through their higher education.

Gender.   In conjunction with the ethnic differences which exist in college student drinking patterns, an individual student's gender greatly influences, not only their risk for hazardous drinking, but also their risk for experiencing certain negative alcohol-related consequences (White & Hingson, 2013). The Spring 2014 ACHA-NCHA II reports male college students consistently drink more and with a higher frequency than their female counterparts. For example, 13 percent of male students versus seven percent of female students surveyed engaged in binge drinking three to five times in the previous two week period. Male college students have historically consumed more alcohol than female students but current research suggests this gender disparity continues to decline (Cacciola & Nevid, 2014). However, according to the last Monitoring The Future (MTF) survey conducted on college students in 2011, 37 percent of female college students reported getting drunk in the last month and 32 percent reported binge drinking in the past two-week period. While there has been a decline in the binge drinking rates among high school seniors, this is largely attributed to male students drinking less; the rate of female drinking in this age demographic continues to remain comparatively stable (White & Hingson, 2013).

The section of this paper entitled "Negative Alcohol-Related Outcomes Among College Students" will discuss the vast continuum of negative alcohol-related consequences experienced by college students as a result of drinking; nevertheless, an individual student's proclivity for hazardous drinking may be related to the perceived alcohol-related consequences associated with that student's gender. Research suggests male college students experience more negative alcohol-related consequences of a more public nature, such as harming others; female students experience more private consequences, such as self-harming behaviors (Barnett et al., 2014). Some of these negative consequences are more often experienced by one gender, such as the

higher incidents of sexual assault experienced by female students; conversely, research suggest male students are more likely to experience positive outcomes during and after drinking, such as increased sociability or consenting sexual experiences (Barnett et al., 2014). These researchers further propose gender differences exist in the correlation between volume of alcohol consumed and experiencing negative outcomes as a result of drinking.

Although individual risks posed by both ethnicity and gender have been extensively studied, research is limited on how age and socioeconomic status (SES) effect a student's proclivity for hazardous drinking.

Ethnicity. Although many studies provide an ethnic breakdown of their data, there is limited research on the role ethnicity solely plays in an individual student's risk for hazardous drinking while attending college. Nevertheless, researchers suggest higher incidents of alcohol use among (non-Hispanic) Caucasian college students than racial or ethnic minority students; additionally, they suggest non-Hispanic Caucasian students more frequently abuse alcohol and exhibit dependence symptoms than African-American students (Barnett,2014; Cacciola & Nevid, 2014). Some of these drinking patterns may be attributed to cultural family values associated with a specific ethnicity; likewise parental attitudes toward alcohol consumption can often times be influenced by ethnic background and cultural norms. Many ethnic minorities place a strong emphasis on family and an individual student's cultural values, such as that of familism in the Hispanic culture or communalism in the African-American culture, may serve as protective factors against hazardous drinking while attending college (Cacciola & Nevid, 2014).

In relation to the previously discussed concept of drinking identity, studies suggest an individual student's perception about the positive and negative outcomes of alcohol consumption vary by ethnicity. Research suggests non-Hispanic Caucasian students perceive more positive,

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but not more negative, consequences associated with drinking, which may serve as a reinforcement factor for continued alcohol use. The correlation in higher reports of alcohol use in this demographic of college students provides further authentication that perceived outcomes and ethnicity concurrently contribute to an individual student's risk for hazardous drinking (Barnett et al., 2014).

Socioeconomic status (SES). Another gap in the literature surrounding individual risk factors for hazardous college drinking exists because socioeconomic status (SES) is rarely considered. Even though all students attending an institution of higher learning are paying the associated tuition and fees, the ways in which students are paying for their education vary greatly; through the use of funding sources, such as: grants, scholarships, and loans, the range in SES of those attending college is vast. Limited empirical research exists on the influence this potential risk or protective factor has on a student's risk for alcohol misuse. Researchers, such as Cacciola and Nevid (2014), speculate students with a lower SES might live at home or work while attending college which may serve as protective factors for those students. Further research may provide insight into the influence of this factor on both an individual student's risk for alcohol misuse and overall college drinking trends.

Mental health diagnoses. Contrary to the lack of research being conducted on the influence of both age and SES, a multitude of studies examine the influence of a mental health diagnosis on an individual student's propensity for alcohol misuse. A new paradigm shift has transpired in the research and subsequent treatment of people who exhibit both substance abuse and mental health symptomology. Previously, due to a lack of understanding in how these two diagnoses interact, researchers had independently assessed these two phenomena. Currently, extensive

research is being conducted on co-occurrence of alcohol misuse and mental health problems in different populations nationwide to better understand the resulting negative effects.

Paralleling the general population, college students with a mental health diagnosis are at an increased risk for hazardous drinking. A 2012 study conducted by the Association for the University and College Counseling Center Directors reported 95 percent of university counseling center directors consider psychological problems to be a growing concern and that depression is heavily prevalent in the demographic (Merrill & Reid, 2014). These students with mental health problems, who concurrently engage in hazardous drinking (or meet the threshold for alcohol dependence), often use alcohol, and other psychoactive substances, to self-medicate their mental health problems. Both overt and covert symptomology of mental health disorders, such as: anxiety, post-traumatic stress disorder, and depression, have all been linked to increased alcohol consumption in college students (Foster, 2014).

Although research on the symbiotic nature of substance abuse and mental health in college students is relatively new, researchers, such as Merrill & Reid (2014), are focusing on the co-occurrence of depression and alcohol abuse; their research suggests a correlation between depression symptomology and alcohol misuse in college students. Even those students who are subconsciously suffering from mild depressive symptoms are at an increased risk for heavy drinking. They additionally suggest more than 80 percent of college students experiencing depression, or other mental health problems, drink alcohol and that many of these students are chronically binge drinking (Merrill & Reid, 2014). "Depressed young adults have the highest rates of comorbidity with symptoms of suicidal ideation, anxiety, substance use, and other mental illness than any other age group" (Mason, Zaharakis, & Benotsch, 2014, p. 471). Furthermore, those students with depression, or other mental health disorders, are at an increased

risk for experiencing certain negative consequences as a result of drinking, to include: physical health problems, academic struggles, interactions with the police, and social issues (Merrill & Reid, 2014).

Athletics and special involvement. Although research suggests the disengagement and isolation associated with many mental health diagnoses perpetuates college student alcohol misuse, students involved in collegiate athletics and/or other specified institutionally-based organizations are also at increased risk (Cadigan et al., 2013; Mason et al., 2014). As was previously mentioned, individual student involvement in specific organizations put them at an increased risk for hazardous drinking behavior. For those students associated with Greek Life, this is partially due to the previously discussed environmental risk factors associated with living in this environment (Zamboanga et al., 2009). With the concurrent peer influences and easy access to alcohol these students are provided unlimited opportunities to engage in heavy drinking. White and Hingson (2013) suggest membership in a Greek organization contributes to an individual student's excessive drinking, regardless of whether or not the student resides in the Greek house associated with that chapter. Additionally, those students who are affiliated with a Greek organization and are also collegiate athletes are at an increased risk for hazardous drinking behavior and the ensuing negative consequences (Cadigan et al., 2013).

Intercollegiate athletes are another specific college student population with an increased risk factor associated with hazardous drinking behavior. Although involvement in intermural or club sports can also serve as a catalyst for increasing in a student's drinking, the correlation researchers have drawn between athletic involvement and high rates of alcohol misuse has been conducted on intercollegiate athletes. Cadigan et al. (2013) suggest both male and female collegiate athletes consume more alcohol and experience more alcohol-related negative

consequences than non-athlete students. In their longitudinal study of 3,720, first-time college

student athletes from large, National NCAA I, midwestern universities, these researchers found

unique trends within this specific college population. Consistent with other studies, Cadigan et

al. (2013) reported increased alcohol misuse in student athletes compared to their peers not

participating in athletics. Heavy drinking patterns of those students who begin participating in

athletics as incoming freshman are comparable to those students who engage in athletics later in

college; however, by their final year, consistent athletes drank less than those students who

joined athletic teams after their incoming semester. Conversely, those who ceased participating

in collegiate athletics by their last year of college reported consuming less alcohol than

consistent athletes.

Although the vast negative outcomes of hazardous drinking by college students is discussed

in-depth in the following section, student athletes can experience distinct negative outcomes as a

result of drinking. Due to the central nervous system damage caused by (excessive) drinking,

athletes may experience decreased athletic ability through inhibited motor functions and

increased behavioral problems (Cadigan et al., 2013). The apparent dichotomy of the

physiological consequences of binge drinking, coupled with the physical and mental acuity

necessary to perform at the collegiate level may cause a student athlete's performance to suffer.

Participation in collegiate athletics and other presented individual risk factors, coupled with

the environmental influences posed by the academic environment, greatly impact college

students' inclination for alcohol misuse. This maladaptive behavior negatively impacts, not only

the individual student, but also the institution as a whole and, at times, the host community of

that institution; these negative alcohol-related consequences are vast and vary greatly with regard

to severity and impact. The following section will outline many of the individual and

institutional consequences resulting from college student alcohol misuse and their subsequent actions.

Currently Implemented Collegiate Prevention and Intervention Programs

Through the use of nationwide assessment measures, such as the National Survey on Drug Use and Health (NSDUH), sponsored by the Substance Abuse and Mental Health Administration (SAMSHA), the epidemic of heavy drinking among college students is statistically being validated and institutions are aggressively combating this trend. According to the NSDUH conducted in 2010, 44 percent of college students reported binge drinking at least once in the past 30 days (Hingson & White, 2013). In 2000 the American College Health Association (ACHA) initiated the National College Health Assessment II (ACHA-NCHA II), a bi-annual, nationwide research survey designed to provide university administrators and health care providers insight into their student population; each participating institution received data about their student population's behaviors and attitudes surrounding pertinent health topics, including alcohol and drug use (American College Health Association [ACHA], 2014a). The spring 2014 ACHA-NCHA II collected data on alcohol use from 79,266 college students at 140 institutions nationwide; their research suggests 66.8 percent of college students consumed alcohol in the past 30 days. Using standardized predictive variables, they further suggest 72.2 percent of college students' Estimated Blood Alcohol Content (eBAC) was over legal intoxication level to drive in the United States (< .08 eBAC) the last time they "partied" (ACHA, 2014a; American College Health Association [ACHA], 2014b).

The previously referenced *2007 Surgeon General's Call to Action* discussed ways in which colleges and universities could mitigate the sizeable negative consequences linked to underage drinking at all system levels; college initiatives, computer interventions, campus-wide internet

interventions, and college/community partnerships are all presented as strategies in reducing

college student alcohol use (Hingson & White, 2014).

Research suggests, efforts which use a combination of institutional policies and programs

have the highest efficacy in holistically identifying any students who may be experiencing

alcohol-related problems (Toomey et al., 2013). Some collegiate programs are educational in

nature and target either the entire student population or specifically those students who have

violated the institution's substance use policy; other programs, such as the Colorado State

University's Drug Alcohol and You (DAY) Program, are designed to give students facing

university suspension, as a result of substance misuse, the opportunity to remain enrolled at the

institution. Consistently, these individually-based collegiate interventions use a combination of

behavioral modification and motivational interviewing to change a student's (maladaptive)

relationship with alcohol (Toomey et al., 2013). Although most students are mandated to these

collegiate programs, the aim is to help the students recognize and change their relationship with

psychoactive substances.

In conjunction with the increase in college students being identified as alcohol dependent is

the increase in students who abstain from alcohol and consider themselves to be in recovery from

addiction. Although select institutions throughout the nation are now offering on-campus

support services for recovering students, research suggests this student subpopulation is under-

recognized and thus underserved. Due to the identification of this gap in services for these

students with minimal subsequent research, experts such as Laudet, Harris, Kimball, Winters, &

Moberg (2014) refer to recovering students as a "hidden group" in academia. The following

section will discuss approaches institutions employ to identify students abusing alcohol in

conjunction with various evidence-based intervention and prevention strategies currently in use

by universities to combat hazardous college student drinking. Finally, the intervention and prevention programs specific to Colorado State University are also described in detail.

Mandated Referrals

Due to the maladaptive behavior associated with most individual violations of institutional substance abuse policies, collegiate intervention and prevention programs designed for mandated students are effective in reducing future alcohol misuse; however, research suggests the alcohol-related consequence, for which the mandated referral was generated, may independently influence student behavior (Hustad et al., 2010; Merrill et al., 2013). This statement is further authenticated by researchers, such as Hustad et al. (2010), who suggest 70 percent of college students report reducing their alcohol consumption before engaging in the mandated on-campus program. Conversely, these researchers additionally suggest extenuating circumstances which may account for the reduction in drinking following alcohol-related consequence, such as a higher than normal consumption rate on the day of the violation. With the lack of AUD self-identification linked to college students, these mandated referrals assist university personnel in the identification of students within their population who exhibit (potential) disorder symptomology (Epler, Sher, Loomis, & O'Malley, 2009; Hustad et al., 2011). Contrary to college students mandated to engage in collegiate intervention and prevention programs, voluntary students self-identify their alcohol use as problematic and independently seek on-campus services.

Self-Identification of Alcohol Use Disorders (AUDs)

Research suggests young adults are more likely than any other age demographic to report an alcohol use disorder (AUD); however, they are also unlikely to self-identify their disorder or seek treatment (Epler et al.). As was previously stated, for many college students, alcohol

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misuse is a continuation of behavior prior to college matriculation; researchers have argued for alcohol prevention before college enrollment, but these efforts have had little impact on the overall phenomena (Turrisi et al., 2013). In a longitudinal study of 2,084 incoming freshmen college students, Epler et al. (2009) examined, among other variables, participants' receptiveness to alcohol treatment options; their research suggest approximately 15 percent of college students who drink are interested in moderating their alcohol consumption and five percent want to stop drinking entirely. Although these students were given multiple potential treatment modalities for alcohol misuse, this study suggests college students are most likely to seek treatment through: individual therapy, self-help books and self-help programs, such as Alcoholics Anonymous (AA) (Epler et al., 2009).

Through education and behavior modification, collegiate prevention and intervention programs attempt to change individual students' relationships with alcohol and thus reduce the incidents of hazardous drinking in the overall student population. In an effort to target college student drinking at all system levels, the National Institute on Alcohol Abuse and Alcoholism [NIAAA] (2013) suggests effective collegiate programs provide a combination of prevention, intervention, and treatment approaches.

Collegiate Environmental Interventions

In 2002, a shift with regard to collegiate intervention and prevention ensued; realizing any health-related maladaptive behavior, including college student alcohol misuse, is influenced by multiple system levels, institutions nationwide began addressing the epidemic of heavy drinking among college students at an environmental level (DeJong & Langford, 2002). It was at this time United States courts increasingly began to demand universities take reasonable action to reduce potential risks for heavy drinking among their student population by creating a safe

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academic setting. Research suggests a combination of the environmental intervention strategies created as a result of this mandate are most effective in reducing college student alcohol misuse. Some of these collegiate interventions include, but are not limited to: educationally-based programs, discussed later in this paper; peer mentoring and social norm campaigns; campus-based alcohol and other drug task forces; collegiate mass media campaigns; coalitions between campuses and the communities in which the institution is located (Dejong & Langford, 2002; Hingson & White, 2014).

Peer mentoring, social norm campaigns, and task forces. Both peer mentoring and social norm campaigns operate under the premise that college student alcohol misuse is the result of interpersonal or group processes encountered in the institutional environment. National peer mentoring programs, such as the Peer Education Network, instructs student volunteers on the implementation of various educational programs and awareness campaigns; these students additionally serve as role models which others can model their behavior after, if they so choose (DeJong & Langford, 2002; Prince, Carey, & Maisto, 2013).

Social norm campaigns are based in the aforementioned pattern in which college students greatly overestimate the alcohol consumption of their peers; through campus-based mass media, such as: newspapers, college news stations, posters, and emails messages, institutions provide accurate information about alcohol use among college students nationally and within their student population (Dejong & Langford, 2002; Hingson & White, 2013).

Campus-based alcohol and other drug task forces regularly conduct a comprehensive examination of an institution's environment to identify ways to enhance the academic environment and concurrently deter students from settings which pose a high risk for alcohol misuse. By examining environmental aspects related to substance use, such as: collegiate alcohol

and drug policies, academic calendars, and the university organization in its entirety, these task forces attempt to mitigate alcohol misuse by addressing campus-wide norms and identifying students with potential AUDs (Dejong & Langford, 2002). Additionally, these collegiate task forces may use institutional resources, such as campus-based media, to propagate information on the ramifications of binge drinking.

Mass media campaigns. Collegiate mass media campaigns are founded on the premise that media is used to motivate behavioral changes in its audience, as well as address important social causes. Although some of these campaigns are targeted at reducing alcohol-related advertising, many attempt to change college students' behaviors, attitudes, and knowledge concerning alcohol misuse (Dejong, 2002). Collegiate mass media campaigns are delineated based on the purpose of the movement. Informational campaigns raise awareness about alcohol misuse and the related consequences while advocacy campaigns create changes in institutional, community, and/or public policy; additionally, social norms marketing campaigns are designed to reduce high-risk drinking through altering the misconceptions about college student drinking norms (DeJong, 2002). Although the implementation of these mass media campaigns are widely campus-based, increasingly institutions are also enlisting community media resources and generating collaborative relationships with community professionals.

Campus and community coalitions. Based on the previously mentioned ease with which college students can access alcohol off-campus, coalitions are being formed between institutions of higher learning and the local communities; however, research suggests nationally this collegiate intervention is only utilized by one-third of institutions (Hingson & White, 2014; Ringwalt et al., 2011; Zamboanga et al., 2009). By uniting civic, religious, and governmental community officials with higher education officials, such as university presidents, these

coalitions attempt to reduce the underage access to and irresponsible vending of alcoholic beverages (DeJong & Langford, 2002). New laws and regulations regarding alcohol misuse and the related consequences, such as driving after drinking and illegal sale of alcohol to minors, may further curtail college student alcohol misuse (DeJong & Langford, 2002; LaBrie et al., 2013). Additionally, university administrators nationwide internally address hazardous drinking among their student population through institutional policies and procedures.

Nationwide Institutional Alcohol Policy and Procedural Trends

Researchers, such as Wechsler et al. (2000; 2004), have extensively studied the efficacy of institutional policies and procedures preventing college student alcohol misuse; by surveying administrators from approximately 700 colleges and universities, these researchers determined institutions using multiple policies are most successful at mitigating hazardous drinking among their student population (Lenk et al., 2012a). Their research suggests these policies and procedures vary by institution type and size. Larger and/or public institutions are less likely than smaller schools to prohibit alcohol sales or "tailgating" (previously described) at collegiate sporting events than smaller institutions; however, substance-free housing was predominately found to be provided by larger institutions (Lenk et al., 2012a; White & Hingson, 2013).

Ringwalt, Paschall, & Gitelman (2011) suggest multiple categories to classify collegiate alcohol mitigation efforts using evidence-based alcohol prevention strategies provided by the NIAA; these include, but are not limited to: informational strategies, the creation of alcohol-free environments, reducing availability, and restricting alcohol-related marketing. Although some continuity exists nationally in institutional alcohol policies and procedures, research suggest institutions vary greatly with regard to allowance of alcoholic beverages on campus. Almost all universities prohibit the advertisement of alcohol on campus but many larger institutions,

including Colorado State University, have an on-campus bar encouraging students to consume alcohol in the academic environment; additionally, research suggests approximately half of institutions prohibit alcohol consumption at on-campus: dances, concerts, banquets, receptions, and other university sponsored events (Lenk et al., 2012a). In conjunction with these policies and procedures, institutions further address alcohol misuse through a multitude of collegiate screening tools and treatment modalities.

Collegiate Substance Abuse Screening Tools

Research suggests comprehensive collegiate prevention and intervention programs actively screen their student population to identify students who are misusing alcohol, as well as students who may need treatment referrals for AUDs; these screenings are delivered through a multitude of on-campus providers, to include: physical and mental health clinics, law enforcement, campus security, residence hall staff, and athletic training staff (Lenk, Erickson, Winters, Nelson, & Toomey, 2012b). Lenk et al. (2012b) conducted a cross-sectional analysis of 541 four-year colleges to ascertain the prevalence of collegiate substance abuse screening tools nationwide. Their research suggests most institutions screen their student population for substance misuse but these screenings usually occur after an alcohol-related incident.

However, these researchers additionally suggest more than 70 percent of institutions regularly screen their students during physical health or mental health appointments; this systematic screening process may serve as the catalyst for alcohol misusing student to seek help and decrease the probability of them experiencing future alcohol-related consequences (Lenk et al., 2012b). Through a continuum of care model, students identified as misusing alcohol through this screening process are generally referred to an educationally-based collegiate prevention and intervention program.

Educationally-Based Collegiate Prevention and Intervention Programs

Educationally-based collegiate intervention and prevention programs inform college students about alcohol and the potential physiological effects. Additionally, programs of this nature challenge fictitious campus norms surrounding hazardous drinking and the resulting negative outcomes. Some institutions require all students complete some form of alcohol education as a condition of enrollment, while others institutions enlist the use of these educationally-based programs as a punitive consequence for substance use policy violations; the aim is to intervene and change the individual student's attitude, and possibly their relationship, with alcohol before more serious consequences are endured. Collegiate internet-based interventions, brief motivational interventions (BMIs), Brief Alcohol Screening and Intervention of College Students (BASICS), and parent-based interventions (PBIs) are examples of widely implemented, evidence-based, collegiate intervention and prevention programs.

Internet-based interventions. Many institutions nationwide are currently using internet-based programs to address alcohol misuse among their student population. At least six of these commercial programs are specifically intended for college students and vary in length and scope; some programs, such as e-CHUG (eCHECKUP TO GO) and MyStudentBody, are designed for students who recently engaged in heavy drinking (Hustad, Barnett, Bosari, Jackson, 2010; Paschall, Antin, Ringwalt, & Saltz, 2011). Concurrently, in an effort to address the continuation of alcohol misuse from high school to college, CollegeAlc and AlcoholEdu for College Students are specifically for incoming freshmen students (Paschall et al. 2011). Common characteristics of all internet-based collegiate interventions include, but are not limited to: alcohol education, information on normative drinking patterns, and protective strategies (e.g., harm reduction) (Hustad et al., 2010).

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As was previously stated, the incidents of heavy drinking among all college students, especially incoming freshmen, decrease as the fall semester progresses indicating the need for deliberate timing of these internet-based interventions; over 500 institutions nationwide now require all incoming freshmen students to complete AlcoholEdu for College Students before attending classes (Barnett et al., 2014; Hingson & White, 2014; Paschall et al., 2011). This program provides students with a vast array of information, to include: personalized feedback, education on the physiological effects of alcohol, challenges to beliefs and expectations surrounding excessive drinking, ways to reduce alcohol-related harms, and suggestions for sober activities (Hingson & White, 2014). Research suggests students who participated in AlcoholEdu reported a reduction in alcohol consumption, binge drinking episodes, and negative outcomes associated with heavy drinking (Hingson & White, 2014). However, due to the lack of efficacy in spring semesters, research additionally suggests this internet-based intervention is most effective with newly arrived freshmen students, when they are at the highest risk for alcohol misuse (Paschall et al., 2011).

Through their randomized controlled trial, Hustad et al. (2010) additionally suggest both AlcoholEdu for College Students and e-CHUG are effective in reducing college student drinking; on average, students who participated in either internet-based intervention reported a reduction in their alcohol use, while student in the control group increased their use. Additionally, other institutions, such as Colorado State University (CSU), use internet-based alcohol intervention programs to assess individual student alcohol use and their level of overall risk as a result of that use. In conjunction with other criteria, the information gained determines the on-campus program most appropriate for the student; programs specific to CSU are discussed in full detail later in this paper (Colorado State University Health Network [CSUHN], 2013).

Although execution varies by institution, many collegiate alcohol intervention and prevention programs revolve around brief therapy modalities focused on identifying the motivation for drinking and modifying behavior. Additionally, the therapeutic aim of these programs is often to reduce the amount students are drinking and do not focus on complete abstinence.

Brief motivational interventions (BMIs). Research suggests brief motivational interventions (BMIs) are one evidence-based, harm reduction modality found to be effective treating AUDs intended to motivate individuals engaged in maladaptive behaviors, including substance abuse, to change that behavior (Substance Abuse and Mental Health Services Administration [SAMHSA], n.d.a). These evidence-based counseling sessions educate individuals on the risks associated with alcohol misuse and can be used by addictions professionals as a screening tool and subsequent referrals to more intensive treatment modalities for AUDs (Substance Abuse and Mental Health Services Administration [SAMHSA], n.d.b).

A meta-analysis was conducted by Cronce and Larimer (2011) in which 36 studies were reviewed between 2007 and 2010 using 56 intervention strategies; their research suggests BMIs with personalized feedback are consistently effective with college students (Hingson & White, 2014). Based on James O. Prochaska and Carlo DiClemente's Transtheoretical Model (TTM), collegiate BMIs attempt to change the individual student's maladaptive behavior surrounding alcohol by addressing their motivations for drinking. Aptly named, the TTM incorporates multiple theories of change in an effort to provide a theory which can be used with a variety of maladaptive behaviors, such as alcohol misuse (Prochaska et al., 2008). Centralized within the TTM is the Stages of Change concept, which proposes people progress through a normative series of stages when modifying maladaptive behavior; specific interventions are used at each

Stage of Change to: minimize resistance, enable progress, and prevent relapse (Prochaska et al., 2008).

In the academic environment, most on-campus BMIs are mandated subsequent to violating that institution's substance use policy. Due to this reciprocal process, mandated students often receive a BMI shortly after experiencing other negative consequences as a result of drinking. Research suggests experiencing negative alcohol-related consequences can serve as a motivating factor for change; by mandating students to complete the BMI shortly after the provoking incident occurs, institutions have been able to make the greatest impact on individual student behavior (Merrill et al., 2013).

Brief Alcohol Screening and Intervention of College Students (BASICS). Many institutions nationwide, including Colorado State University, use the standardized Brief Alcohol Screening and Intervention of College Students (BASICS) (Merrill et al., 2014). Created by Dr. Allan Marlatt and colleagues at the University of Washington (1999), the BASICS model couples harm reduction with the principles of TTM and Motivational Interviewing (SAMHSA, n.d.a). In this two-session intervention the student's current and past drinking history is discussed; additionally, based on the individual student's motivation for change, they are encouraged to realistically discuss their future plans regarding alcohol use. With the goal of harm reduction, BASICS encourages students to mitigate their drinking through alcohol education and correcting common misconceptions regarding college student alcohol use (CSUHN, 2013; Ringwalt et al., 2011).

Although students may enter the program in any of the aforementioned Stages of Change, the goal of BASICS is to guide the participating student into the action stage in which they actually attempt to change their drinking patterns. After the initial interview, students monitor their

alcohol consumption over the next month and then report back for a second interview. During

the follow-up session the student is provided with: individual feedback about their alcohol use,

strategies to mitigate risk associated with drinking, and a myriad of ways for the student, if they

so choose, to change their relationship with alcohol long-term.

Research suggests BASICS is effective in reducing alcohol misuse among non-treatment

seeking college students at large, traditional universities and has been named a "Model Program"

by SAMHSA (CSUHN, 2013).   Hingson and White (2014) additionally reinforce the validity of

BASICS by citing a meta-analysis of 18 randomized controlled trials in which participating

college students reported an average of one and a half fewer drinks per week less than the control

group who did not receive the intervention; additionally, students who engaged in the

intervention reported a 13 percent decline in negative alcohol-related consequences. Institution

personnel execute most collegiate alcohol prevention and intervention programs; however,

although not widely implemented, parent-based interventions (PBIs) are currently being used

collegiately to reduce student alcohol misuse (Turrisi et al., 2013).

Parent-based interventions (PBIs). Based on parental figures being a primary source of

information and support for college students, they are provided with a handbook to have

empathetic and informative conversations about alcohol use with their student (Turrisi et al.,

2013). The aim is to accurately inform the student about the potential risks associated with

alcohol misuse while conveying support and understanding.

Many national organizations, such as Mothers Against Drunk Driving (MADD) and

NIAAA, suggest the effectiveness of PBIs but differ on how and when to deliver the

information. Due to the large variance in drinking experience for students entering college, there

is also some question as to the ideal timing and "dosage" of PBIs; research suggests students are

less likely to start drinking if they are abstinent from addictive substances before college and if their parental figures reviewed the PBI handbook (Hingson & White, 2014; Turrisi et al., 2013). Incoming college students with limited drinking experience can indirectly experience negative outcomes of other students' alcohol misuse and may benefit from PBIs delivered after starting college; those students who misused alcohol in high school, and may have previously experienced negative outcomes as a result of drinking, conversely benefit more from PBIs that are delivered before college matriculation. Furthermore, research is limited on if and how PBIs should be tailored to the individual student based on their previous drinking experiences (Turrisi et al., 2013).

As previously stated, research implies that institutions which use both prevention and intervention strategies are most effective in mitigating not only the risk factors but also the associated negative consequences of substance abuse among their student populations (Laudet et al., 2014; Toomey et al., 2013). The use of environmental and educational evidence-based collegiate intervention programs additionally are suggested to support both the institution and the (potential) substance abusing college student in the identification and treatment of substance abuse disorders (SUDs) (Hustad et al., 2010; Ringwalt et al., 2011). At an individual institutional level, Colorado State University (CSU) utilizes a myriad of substance abuse intervention and prevention approaches designed to reduce the incidents of alcohol misuse among its student population; this institution further supports students who exhibit the symptomology for a SUD by creating an on-campus treatment program. Although most students engaged in on-campus treatment modalities at CSU are referred for alcohol misuse or abuse, some students are also referred for misusing marijuana or other psychoactive substances.

Current Prevention and Intervention Programs at Colorado State University (CSU)

Colorado State University (CSU) is a land-grant institution of higher education founded in 1870. Located in Northern Colorado, the main campus accommodates over 30,000 students, including approximately 26,000 on-campus, resident-instruction students, 5,600 of which reside in a university residence hall. (Colorado State University [CSU], 2014). Although 75 percent of the student enrollment consists of Colorado residents, students from each of the United States are also in attendance; additionally, international students represent five percent of the total student population (CSU, 2014). CSU currently reports 18 percent of its student population identify as ethnic minorities and is equally divided with regard to gender.

Institutional Alcohol and Drug Policy

This institution attempts to control the dichotomy of providing a safe, academically conducive environment while addressing the subsequent negative effects of substance use at all system level through the university policy entitled "Alcohol and Drugs" (Colorado State University [CSU], 2015). This policy discusses the phenomena of substance use as both the result of individual action as well as the shared responsibility of the university and its compliance with all local, state, and federal regulations regarding the consumption of alcoholic beverages and other psychoactive substances (CSU, 2015b). Additionally, due to the recent irresponsible on-campus use of alcohol by individuals employed at CSU, such as individuals grading papers on-campus while drinking alcohol, this policy also addresses substance use in the workplace through its compliance with the Drug Free Workplace Act of 1988 (CSU, 2015b).

Although the institution provides an on-campus bar, consumption of alcoholic beverages outside this location, or the use of other drugs, on campus is strictly prohibited. Additionally, the State of Colorado legalized marijuana in 2012 through the passage of Colorado Amendment 64

for individuals over 21, and those over 18 with a Colorado Medical Marijuana (MMJ) Red Card; however, due to the federal regulations regarding marijuana use, and the institution's partial federal funding, this psychoactive substance is also banned on campus (Colorado General Assembly, 2012; CSU, 2015b).

CSU actively participates in the aforementioned American College Health Assessment (NCHA) II conducted annually by the American College Health Association (ACHA). However, this institution denied the request for institution specific data regarding substance use and mental health stating, "We are not able to provide specific CSU substance use data for class projects, as guided by our PR [Public Relations] and External Relations Departments." Unfortunately, due to this internal institutional policy, the national assessment information on substance use of the CSU student population cannot be further discussed or provide statistical authentication for their provision of on-campus SUD intervention and prevention programs.

Substance Abuse Intervention and Prevention Programs

In an effort to mitigate substance use and the associated negative outcomes in their student population, Colorado State University currently provides a myriad of on-campus SUD intervention and prevention programs through the Specialty Counseling Services department of the CSU Health Network. Most students are mandated to participate in one of these programs as the result of violating the institution's alcohol and drug policy; however increasingly students are voluntarily engaging in substance abuse treatment and programs, such as Open To Change (OTC), designed for both mandated and voluntarily referred individuals (Colorado State University Health Network [CSUHN], 2014). This section will discuss the initial online assessment and the substance use intervention and prevention programs offered at CSU.

Blue Sky Assessment

Readily accessible online, the BlueSky Assessment uses the self-reporting current and past experiences with psychoactive substances through a standardized measurement process; the resulting individualized feedback is used to help determine the appropriate level of intervention for that student (Colorado State University Health Network [CSUHN], 2013) Although all educationally-based, the subsequent intervention and prevention programs vary in how the information is presented and how many sessions students must attend. Additionally they are required to pay the variable costs associated with each program, as well as the Blue Sky Assessment fee. Based on this assessment and their conduct history at CSU, those students who are considered "low risk" are referred to Live Safe 101; students who do not meet this criteria are mandated to engage in a higher level of treatment modality (CSUHN, 2013)

Live Safe 101

The intervention and prevention program at CSU which students are frequently initially referred is Live Safe 101. This one-time, three-hour meeting aims to educate participants on binge drinking and the potential negative alcohol-related consequences; through videos and activities these students are challenged to self-reflect on their relationship with alcohol (CSUHN, 2013). Topics presented include, but are not limited to: standard drink size, current college substance use patterns, drinking endorsement by the media, and physiological consequences of alcohol consumption. Multiple experiential activities are used as a catalyst to generate discussion on the negative influence of substances on college students (CSUHN, 2013). Based on the information provided, the students self-assess their current relationship with alcohol and what, if any, future changes they want to make regarding their alcohol use. With the programmatic goal of harm-reduction, Live Safe 101 is a low-level intervention; students

previously referred to this program or who are originally identified as being "higher-risk" for alcohol misuse are referred to on-campus alcohol treatment.

On-Campus Treatment Programs

Determined in part by the BlueSky Assessment, students at Colorado State University who are identified as having a potential Substance Use Disorder (SUD) are mandated to engage in an on-campus treatment program. Drugs Alcohol and You (DAY) individual sessions are for CSU students voluntarily seeking help for substance use; additionally, the Open To Change (OTC) Program is open to both voluntary and mandated students. The two mandated on-campus treatment programs offered at CSU are Taking Steps and Back On TRAC (Treatment, Responsibility, & Accountability on Campus). Taking Steps is an individualized substance abuse treatment program specifically tailored to the student's situation and current use, while Back On TRAC is a more standardized program for students facing potential suspension from the institution (CSUHN, 2013). The next section will discuss, in-depth, the current provision of on-campus substance use intervention and prevention programs at CSU.

Drugs Alcohol and You (DAY) individuals. According to the latest nationwide study conducted by the National Center of Addiction and Substance Abuse at Columbia University in 2012, 37 percent of college students fear seeking help for substance abuse because of the perceived associated stigma; of those students who meet the aforementioned diagnostic criteria for a SUD provided by American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders V* (2012), only six percent seek help (Bell et al., 2009). Although currently no on-campus substance abuse treatment program at CSU exists solely for voluntary students, the CSU Health Network offers treatment services for these students on an individual basis. Voluntary students are often experiencing daily negative consequences as a result of drinking

and/or drug use and are independently seeking treatment for their substance misuse. By addressing these concerns on an individual basis, the student is able to maintain their anonymity within the academic community and thus may reduce some of their apprehension in seeking services. Additionally, the recently implemented OTC Program is specifically designed for both voluntary and mandated students.

Open To Change (OTC). With the goal of introducing students to a substance free lifestyle, CSU implemented the Open To Change Program (OTC) in 2014. Student participants are required to remain abstinent for eight to ten weeks while concurrently engaging in individual and group counseling (Colorado State University [CSUHN], 2014). Research suggests college students mandated to complete treatment programs are as much, if not more, likely to report a reduction in their substance use as were voluntary students (Epler et al., 2009). The aim of the OTC program is to assist students in examining their relationship with psychoactive substances and how this has affected their ability to be successful holistically as a student. Rooted in a multitude of evidence-based clinical practices, such as: BMI, Stages of Change, Cognitive Behavioral Therapy, and Group Therapy, OTC attempts to comprehensively address the individual student's substance use (CSUHN, 2014).

During this period of abstinence, the first goal for participating students is to consider how psychoactive substances have affected their lives and tools to make better decisions in the future. Due to the negative affect substance misuse has on academic performance, OTC additionally focuses on the student's scholastic trajectory and their individual educational goals. "The second focus of the program is to review academic goals, assist students in developing skills to successfully achieve those goals, and create an intentional plan that provides a clear road map to graduation" (CSUHN, 2014, p. 4). Additional clinical objectives, such as: increasing resiliency,

clarifying congruency of values and behaviors, and mindfulness skill building further equip

participating students to make positive future decisions regarding substance use.

Taking Steps. Taking Steps is one of two mandated on-campus substance abuse treatment

programs at CSU and is designed to be specifically tailored to individual student needs. "The

goal of the program is to provide the kind of support each student needs to avoid future

consequences of drug and/or alcohol abuse" (CSUHN, 2013, p. 2). Similarly to those students

mandated to complete Live Safe 101 or BASICS, referrals to Taking Steps are a consequence of

violating CSU's Alcohol and Other Drugs Policy; these punitive consequences are often referred

to as sanctions at CSU and must be completed for the student to remain at the institution.

Taking Steps commences with a two-session intake with a professional where a contract is

created with specific goals; this client-centered approach allows the student to direct and thus

individualize their treatment program (CSUHN, 2013). Items on the treatment contracts may

include, but are not limited to: individual and/or group counseling, psycho-educational

workshops, monitored abstinence, academic skill building, and additional referrals to other

collegiate and community resources. "After the creation of a contract, student and clinician work

to achieve identified goals through the various interventions" (CSUHN, 2013, p. 2). Each

mandated student must complete all components of their individualized Taking Steps Contract

before the sanction has been fulfilled and failure to do so could result in further consequences or

that student's suspension from the institution.

Back On TRAC (Treatment, Responsibility, & Accountability on Campus). Students

facing potential suspension from Colorado State University, as a result of substance misuse, are

referred to the Back On TRAC (Treatment, Responsibility, & Accountability on Campus)

program. Modeled after adult drug court, "the program emphasizes accountability and personal

responsibility while providing on-campus treatment resources, case management, peer support, and individually tailored contracts" (CSUHN, 2013, p. 2). Commensurate with the drug court model, an interdisciplinary team of CSU professionals meet weekly to discuss individual student progress. Additionally, this team addresses Back On TRAC contract violations and issues appropriate sanctions; violations include, but are not limited to: behavioral problems, substance use, missing appointments, and non-engagement in contractual requirements.

A multiphasic program, Back On TRAC guides student participants through the process of potentially making positive lasting changes in their substance use. "Whereas the first phase of the program focuses heavily on initial comprehensive intake assessment and transitioning to abstinence, the second phase is designed to empower students to explore and maximize their potential" (CSUHN, 2013, p. 3). The third and final stage enables the student's transition out of the intense structure of the first two phases; students additionally commence contemplation and discussion around legal substance use after program completion. Underage students are encouraged to refrain from alcohol consumption entirely, while discussions with students over the age of 21 are focused on responsible alcohol use. Furthermore, due to the passing of Colorado Amendment 64 in 2012, the legality of marijuana for students over 21, and those over 18 with a Colorado Medical Marijuana (MMJ) Red Card, legal marijuana use is addressed with some Back On TRAC participants.

Concurrent with progression into the third phase, students are rewarded with a reduction frequency of drug and alcohol screens and participate in wellness activities which holistically enrich the student's experience in the program. Students complete a post-treatment plan which either condones a harm reduction or total abstinence strategy based on that student's unique situation. Research suggests, many college students engage in episodic, and not habitual, alcohol

abuse and significantly more students are interested in reducing their drinking versus abstaining

from it (Epler et al., 2009, p. 27). For many mandated students in Back On TRAC, their

treatment goal is harm reduction rather than long-term abstinence; those students who choose to

embrace a sober lifestyle long-term are encouraged to engage in community resources, such as

Alcoholics Anonymous. Although currently no formal services for recovering students exist at

CSU, the implementation of a Collegiate Recovery Community, with on-campus Twelve-Step

Facilitated Group (TFG) Group meetings, is forecasted.

Substance Abuse Recovery in the Collegiate Environment

The post-treatment goal for most young adults is moderate drinking but increasingly

individuals in this age demographic are choosing complete abstinence from alcohol and other

drugs and consider themselves to be in recovery from a substance use disorder (Cleveland,

Harris, Baker, Herbert, & Dean, 2007). Due to scholastic difficulties linked to substance abuse,

many recovering young adults have yet to earn their degree; the resulting paradoxical situation

places recovering young adults in a collegiate environment enveloped by substance use

(Cleveland & Harris, 2010). Recovering individuals are faced with "not only avoiding the use of

addictive substances but also restructuring their daily lives to avoid the behaviors and social

triggers that may lead to use"; research overwhelmingly suggests attending an academic

institution poses additional challenges to a sober lifestyle (Cleveland et al., 2007, p. 14).

Research suggests recovering students who cannot remain abstinent throughout college are less

likely to: graduate, achieve economic stability, or attain long-term sobriety, which may cause

vast long-term financial effects (Cleveland et al., 2007).

In this section the increasing phenomena of recovering college students nationally is

discussed, including specific characteristics associated with recovering students as well as some

of the main challenges these students face in attending college. Next, tertiary collegiate

substance abuse programs, designed for students in recovery, are comprehensively described, as

well as the challenges posed in the implementation process. Additionally, the terms "recovering"

and "sober" will be used interchangeably to describe individuals in substance abuse recovery and

does not imply engagement in any specific recovery maintenance activity.

Characteristics of Recovering College Students

Researchers often refer to college students in recovery from substance abuse as a "hidden

[college student] population" in that nationally collegiate personnel has only recently begun to

recognize and support these student; furthermore, evidence-based research literature on recovery

support services in the collegiate environment is limited (Bell et al., 2009). However, research

suggests many recovering college students formerly abused multiple psychoactive substances

and that the incidents of relapse, or returning to substance abuse, are high among individuals in

this age demographic (Laudet et al., 2014). Additionally, researchers have identified the

aforementioned social stigma associated with substance abuse recovery as a barrier to recovering

students seeking supportive services both on and off campus (Laitman, Kachur-Karavites, &

Stewart, 2014).

Former poly-substance abuse. Progressively, recovering college students report previously

abusing more than one psychoactive substance, which is also known as poly-substance abuse

and, research suggests, one of these substances is usually alcohol; individuals in this age

demographic who abuse alcohol are also suggested to commence using "hard drugs", such as

methamphetamines or opiates, to name a few, as their addiction progresses (Steiker et al., 2014).

Additionally, many young adults in self-help support groups, such as Alcoholics Anonymous,

identify as either an alcoholic or a drug addict but report former addiction to multiple psychoactive substances.

The previously discussed National Survey of Drug Use and Health (NSDUH) reports underage drinkers were more likely to use other (illicit) drugs within two hours of alcohol use (SAMHSA, 2014a). Approximately 20 percent of young adults surveyed combined psychoactive substances during their last drinking occasion versus six percent for individuals over 21 years of age and one point six million underage individuals reported combining marijuana consumption with their most recent drinking episode (SAMHSA, 2014a).

The aforementioned synergistic effect of simultaneously consuming multiple psychoactive substances often exacerbates both the physical ramifications and increases the magnitude of negative consequences (White & Hingson, 2013). Current research suggests poly-substance abuse among young adults may be a contributing factor in the increasing numbers of young adults seeking treatment for their SUD because these individuals often experience the associated negative outcomes earlier than they would if they only abused alcohol (Steiker et al., 2014). Furthermore, poly-substance abuse may increase a recovering young adult's propensity for relapse due to a multitude of factors, including additional relapse triggers and occasions to use their "drug of choice" or the psychoactive substance they preferred abusing.

High incidents of relapse. The nationwide increase in young adults admitted to substance abuse treatment programs may be a contributing factor in more recovering individuals attending institutions of higher education (Cleveland et al., 2007). Concurrent with the nationwide adult population, young adult post-treatment relapse rates are increasing; research suggests, 60 to 80 percent of young adults treated for a SUD relapse within the first-year post-treatment, with over 90 percent relapsing within the next five years (Laudet et al., 2014).

Factors attributed to the high relapse rates of young adults include, but are not limited to: stress, depression, social situations, peer pressure, availability of substances, and academic pressure (Laudet et al., 2014). Similar to adults diagnosed with SUDs, many young adults re-engage in treatment after relapsing and have been treated multiple times; however, research suggests relapse rates for young adults participating in a campus-based recovery support program are lower than the national average. According to the ARHE (2015), the average relapse rates for recovering students engaged in a CRC/CRP is only five percent. Research suggests the mitigation of challenges posed by the collegiate environment through these supportive, on-campus programs may contribute the low relapse rates of recovering students (Laudet et al., 2014).

Social stigma. The growing number of young adults admitted for substance abuse treatment nationwide has greatly increased the number of recovering young adults yet to complete their college education (Cleveland et al., 2007). Research suggests the collegiate environment is hostile toward abstinent students; the convergence of sober young adults and this "pro-drug culture" creates a public health concern (Bell et al., 2009; Cleveland et al., 2007). At a time when peer interaction and "fitting in" are of paramount importance, this paradoxical situation lead to isolation and/or accommodating peer pressure to reengage in, psychoactive substance use; until recently recovering students were obligated to excel in the collegiate environment without substance-free social networks (Laudet et al, 2014; Steiker et al., 2014).

In response to the increasing trend of recovering young adults choosing to attend college, many institutions nationwide have implemented supportive services; often referred to as collegiate recovery programs or communities, these resources provide a safe environment in which to interact with other sober students and attend sober activities. By implementing these services on campus, institutions additionally attempt to normalize abstinence from psychoactive

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substances in the collegiate environment. This not only decreases the stigma for the individual recovering student but also inform: the current student population, the community, and potential future students of the institution's dedication to supporting all marginalized student populations, thus affecting both retention and recruitment (Bell et al., 2009).

Environmental challenges. Substance use disorders (SUDs) are chronic conditions which cannot be cured; the symptomology can be impeded and the condition managed through consistent sobriety maintenance activities (Laudet et al., 2014). Whether commencing their higher education experience already in recovery, or committing to abstinence while attending an institution, recovering students are faced with additional threats to their sobriety. Research on recovering college students suggests: balancing recovery commitments with academics, lack of a (sober) social network, and living within the on-campus residence hall system are some of the most commonly reported concerns (Bell et al., 2008; Laudet et al., 2014).

Balancing recovery and academics. Although conducted in 2009 using a limited sample, the research on recovering students at Texas Technical University (Texas Tech) by Bell et al. (2009) assisted in discovering common challenges to sobriety that recovering college students must endure. Their longitudinal study suggests recovering students struggle with balancing their recovery maintenance activities with academic obligations. Recovery maintenance activities, things an individual in recovery needs to remain sober, differ based on individual need but often include commitment to a self-help group, such as Alcoholics Anonymous, and/or ongoing therapeutic interventions (Steiker et al., 2014). Students reported knowing their recovery "ought" to be their primary concern but, their research suggests, recovering college students prioritize their academic obligations and often reduce their recovery maintenance activities to study (Bell et al., 2009). Without the social connectedness essential for recovering young adults in the

collegiate environment, many students reengage in using addictive substances; recovering freshmen students may be further isolated by living away from home and possibly from their recovery support network as they attempt to succeed both academically and socially while remaining abstinent (Laudet et al., 2014).

Challenges specific to residence halls. Across the nation, many academic institutional policies dictate incoming freshman students reside on campus during their first year of attendance. As was previously stated, research surrounding residence hall life links heavy alcohol use to these large, on-campus domiciles; for college students in recovery from substance abuse, residing within this environment consistently threatens their commitment to sobriety (Bell et al., 2009; Zamboanga et al., 2009). In their longitudinal study, Bell et al. (2009) found recovering students primarily struggled with the lack of power involved in living in a residence hall regarding the immaturity of other students and a lack of independence. Increasingly academic institutions, including Colorado State University, are offering a myriad of on-campus, substance-free housing options; recovering students additionally reported frustration with a lack of rule enforcement in residence halls, whether or not they were living in substance-free housing (Bell et al., 2009; Laitman et al., 2014). The frequently implemented individual components of collegiate recovery programs, including on-campus recovery housing, are discussed in the following section; however, evidence-based research consistently advocates for the inclusion of this vital resource for sober students in the academic environment (Laitman et al., 2014).

Lack of social network and sober activities. Research overwhelmingly suggests lack of a sober social network and the nonexistence of sober leisure activities within the collegiate environment are significant challenges recovering students face while attending an institution (Bell et al., 2009; Laudet et al., 2014). Many recovering students feel alienated and

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misunderstood by their peers; this could be due, in part, to the aforementioned stigma associated with young adults abstaining from addictive substances (Bell et al., 2009). Research suggests that during emerging adulthood, young adults are increasingly influenced by their peers. This factor, combined with evidence-based research highlighting the importance of possessing a sense of belonging during recovery maintenance, reinforces the need for a peer-driven, supportive environment in which recovering college students may interact with other sober individuals and find the fellowship they need on campus (Laudet et al., 2014; Steiker et al., 2014).

National Collegiate Substance Abuse Recovery Programs

The Association of Recovery in Higher Education (2015), a fellowship offering to support academic institutions offering recovering services, involves "providing support, preventing relapse, and promoting academic performance" in a peer-driven environment. Although the number of academic institutions offering substance abuse recovery services to their students has greatly increased in the last ten years, the first collegiate recovery program (CRP) was established in 1977 at Brown University. Additionally, the Center for the Study of Addictions at Texas Technical University (TTU), in collaboration with SAMHSA, effectively influenced collegiate recovery services with the creation of a guide in 2005 that other institutions can use to implement supportive programs; currently academic institutions are implementing two to five new CRPs annually (Association of Recovery in Higher Education [ARHE], 2015a; Laudet et al., 2014; Steiker et al., 2014).

The following section will outline principle components of CRPs, as well as differences and similarities between currently implemented programs. Additionally, the benefits to both the individual recovering students and the academic institution are discussed.

Components of Collegiate Recovery Programs (CRPs).

Although many academic institutions currently use the aforementioned Texas Tech curriculum to design and implement their own collegiate recovery programs (CRPs), individual components differ greatly based on overall student need and maturity of the program; generally, institutions which have well established CRPs are able to offer a myriad of supportive resources and assist more recovering students than recently executed programs (Laudet et al., 2014). However, research suggests multiple essential components necessary for an effective CRP, to include: peer-driven recovery support, a campus-based location, adequate staffing, and secure funding. Additionally, offering resources relating to both academics and recovery, while incorporating on-campus self-help groups, were of paramount importance in supporting recovering students in the academic environment (Steiker et al., 2014).

Interpersonally supportive. Research suggests interpersonal (e.g. peer-to-peer) support is a foundational component of CRPs. A meta-analysis, conducted by Smock et al. (2011) on the role of social support in CRPs states "that a ready-made community of fellow recovering students was the most essential component of student's recovery maintenance" (p. 38). Analyzing both qualitative and quantitative data from seven publications, these researchers concluded peer social support assists students in both relapse prevention and thriving at an academic institution. They additionally suggest male college students may particularly benefit from peer-to-peer support from same-sex recovering peers; this is especially important because male students are more likely than females to develop social networks engaging in maladaptive behavior while attending an academic institution (Smock et al., 2011).

The premise of interpersonal support was initiated by Alcoholics Anonymous, the first substance abuse self-help group created in 1935 and, although CRPs are not associated with this

organization, they serve as a replacement for substance-abusing social networks (Watson, 2014).

Research suggests interacting with other students with a history of substance abuse and

experiencing a sense of inclusion within the recovery community assisted students in

maintaining abstinence and succeeding in the academic environment (Cleveland et al., 2007;

Watson, 2014). Research additionally suggests CRPs which offer a stable, on-campus location,

where recovering students can retreat and readily interact with sober peers, are more effective in

achieving a welcoming and inclusive atmosphere (Laudet et al., 2014).

Campus-based location. The curriculum designed by Texas Tech greatly emphasizes the

need for CRPs to be campus-based; this not only creates a safe space on campus for recovering

students but also serves as the locale for a multitude of recovery maintenance activities, such as

on-campus self-help groups (Laudet et al., 2014; TTU, 2005). In an academic environment

consistently inundated with both addictive substance use and relapse triggers, this "recovery

friendly" environment fosters a sense of community between recovering students; the aim of

these campus-based locales is to support students in their continued recovery as well as

academically and emotionally (Laudet et al., 2014).

Research suggests that by being placed within the host institution's organizational chart and a

welcoming physical location on campus, recovering students are able to build authentic

identification and a sense of belonging within the university system (Steiker et al., 2014). In

addition to this "gathering place" for recovering students, more established CRPs may also offer

on-campus recovery housing, usually separated from the recovery center; the importance of

recovery housing in the collegiate environment is described, in detail, later in this paper (Laitman

et al., 2014).

Funding and institutional support. Research suggests funding greatly affects both CRP location and service provision; investment from the host institution, actual financial subsidy and/or the donation of office space for the recovery center, assists in the establishment and maintenance of the CRP (Laudet et al., 2014). The source and amount of funding for CRPs nationwide vastly differs with some programs operating with an annual budget of less than five thousand dollars and others, such as Texas Tech, with a hundred-thousand dollars or more (ARHE, 2015b). Initial funding sources for the implementation of a CRP on campus also vary greatly. Although many universities use grants, donations, and/or state government funding to start their campus-based recovery programs, the ARHE emphasizes the necessity of eventually securing institutional funding; this assists in the stabilization and authentication of the CRP within the university system (ARHE, 2015b).

Gaining support from key personnel within the host institution may assist potential CRPs in both securing funding and establishing a physical campus-based location. The creation of the previously discussed TTU curriculum entitled *Collegiate Recovery Communities: Creating the Vision*, in 2005 assisted in establishing federal support for a continuum of recovery support services from high school through college graduation. In conjunction with the United States Department of Education in the President's Drug Strategy, this curriculum served as a catalyst in creating almost 30 additional CRPs nationwide over the next 14 years (Laudet et al., 2014). Nevertheless, successful recovery programs are supported by the host institution, not only through financial means, but also in the availability of resources and services for their recovering student population.

Staffing. Many of the CRPs nationwide are categorized within the Division of Student Affairs in the university system; the Association of Recovery in Higher Education (ARHE)

(2015) suggests appointing staff using the job descriptions of the academic department with which the program is associated in the academic institution. Although not consistent among all current CRPs, many hire individuals professionally trained in the field of addictions and who are often themselves in recovery from substance abuse. Additionally, programs usually have a core small staff of between two and six and supplement staffing responsibilities by putting certain recovering students in leadership roles; however, many fledgling CRPs possess no official staff and are solely operated by recovering students and faculty volunteers interested in assisting in the establishment of recovery services on their campus (Laudet et al., 2014). How and when to hire formal staff is ambiguous and is often dictated by the overall investment in the program by the university and available funding; these institutional factors further influence the continuum of services provided by the (potential) CRP.

Recovery maintenance resources. As was previously stated, substance abuse is a chronic condition which cannot be cured but can be managed through individualized activities dedicated to sobriety maintenance (Laudet et al., 2014). In an effort to emphasize the balance between attending to both academic obligations and recovery maintenance activities, one of the primary goals of CRPs is to offer a variety of recovery maintenance resources for their students (Bell et al., 2009). Research suggests most currently implemented CRPs offer on-campus self-help meetings in combination with individual and/or group counseling designed to discuss issues related to collegiate recovery issues (Laudet et al., 2014).

Campus-based self-help meetings. Research suggests that, even though CRPs are not affiliated with any self-help group, many of the 12-step principles of Alcoholics Anonymous (AA), such as being abstinence-based, are usually emphasized (Laudet et al., 2014; Steiker et al., 2014). Additionally, the on-campus recovery community location often houses a variety of self-

help group meetings on a weekly basis; these groups include, but are not limited to: AA, Narcotics Anonymous (NA), and Celebrate Recovery, a national religiously affiliated self-help organization (Cleveland et al., 2007; Steiker et al., 2014).

Research suggests affiliation with a 12-step group or other self-help group is one of the greatest predictors of, not only maintaining abstinence, but also longevity in sobriety (Cleveland et al., 2007). Additionally, research on the effects of AA membership on recovery suggests, the fellowship within the program assists college students in replacing old substance-using social networks and helps to guard against relapse triggers found within the collegiate environment (Cleveland et al., 2007). Participation in self-help groups while attending college also helps recovering students build a foundation to continue a sober lifestyle after graduation because they can continue engaging in this recovery maintenance activity away from the academic environment (Smock et al., 2014).

Individual and group support. In conjunction with self-help groups on campus, many CRPs also offer a vast array of individual and group recovery maintenance services. Professionally facilitated individual therapy sessions are usually provided as needed and are often conducted with students who report currently struggling or may have recently relapsed; additionally, CRPs often offer individualized interpersonal resources for both recovery and academic support (Smock et al., 2011). Group sessions, whether based in interpersonal or professional support, serve as a sounding board for both academic and social struggles, as well as a method to teach relapse prevention skills (Laudet et al., 2014).

Additionally, CRPs may host recovery discussions, often open to the entire student population, in which relevant topics related to substance abuse recovery are presented by sober students or professionals within the institution or the community (TTU, 2015). The aim of these

professionally led discussions is to give students information about substance abuse (recovery) from experts in multiple disciplines, while student facilitated "recovery talks" provide information provision while also highlighting common challenges recovering students face in the academic environment (Steiker et al., 2014). Research suggests consistent engagement in service opportunities, such as facilitating recovery workshops, assists recovering individuals in gaining altruism and interest in helping their community (Cleveland et al., 2007).

    Service opportunities and sober activities. As was previously stated, many CRPs nationwide operate using the guiding principles of Alcoholics Anonymous, which includes engaging in useful service to others as a tenant to maintaining sobriety. Research suggests recovering students both benefit from and enjoy the opportunity to be of service as a way of "giving back"; they also appreciate the ability to represent the recovery program positively on campus and throughout the community (Bell et al., 2009).

    Due to the peer-driven philosophy of CRPs, the planning and initiation process at an academic institution must be directed by recovering students (TTU, 2005). During this stage of program development, involved recovering students often host sober events or coordinate planning sessions; united with invested university faculty and staff, these recovering student pioneers additionally attempt to identify others in recovery and gain institutional support. Conversely, some well-established CRPs, such as the program within Texas Tech, offer a formalized service organization for recovering students in which a group community service project is selected annually; recovering students additionally take AA meetings into the local jail on an individual basis (TTU, 2015).

    Along with a multitude of service opportunities for recovering college students, CRPs nationwide also offer sober leisure activities conducted both on and off campus. Many of these

activities are facilitated by recovering students and are designed to either foster connectedness within an already established CRP or publicize programs which are in the formation stage of development. Sober leisure activities for recovering students vary greatly by program often include attending campus events as a cohesive sober group that students report; research suggests many recovering students do not attend university sponsored events, such as collegiate sporting events, because they fear the alcohol-laden environment (Bell et al., 2009; Watson, 2014).

Academic support. In conjunction with recovery maintenance services, most CRPs offer academic support services in addition to recovery maintenance services. The aforementioned research conducted by Bell et al. (2009) found recovering students benefited from interacting with academic advisors who understood collegiate substance abuse recovery and the specific needs of this student population. Although peer-to-peer academic tutoring and academic advising are consistent among many CRPs, many larger programs also offer other supportive academic resources, such as weekly seminars on addiction (Laudet et al., 2014). These seminars are conducted to develop a relationship between CRP members, while also giving students the chance to receive interpersonal guidance and feedback from their peers on "life issues" (TTU, 2015). Some of these larger, well-established CRPs offer scholarship opportunities for individuals within this marginalized student population, which are intended to offset some of the costs associated with higher education; other scholarships are rewarded to recovery program members to reside in recovery housing offered by the academic institution (TTU, 2015).

Recovery housing. Whether residing on or off campus, research suggests one of the largest challenges recovering students face while attending college is their living environment (Bell et al., 2009; Laitman, 2014). While some institutions nationwide, including Colorado State University, currently include a "substance-free residence hall" option for students, research

suggests many students who reside within these living communities are not in recovery from

substance abuse; additionally, other Residence Life offices often move recovering students

struggling with the on-campus living environment to single rooms, which may temporarily

alleviate the problem but does not resolve the associated socialization issues for that student

(Latiman, 2014).

With the opening of Rutgers Recovery House in 1988, this institution hosts the oldest on-

campus recovery housing program in the United States (Laitman, 2014). Latiman et al. (2014); a

case study of the Rutgers Alcohol and Other Drug Assistance Program (ADAP) was conducted

in 2013 which suggests recovering college students greatly benefit from a secure and supportive

on-campus living environment. Their research suggests recovering students initially struggled

with concerns about both privacy and the stigma associated with substance abuse recovery in the

collegiate environment; by not delineating the on-campus housing as specifically for recovering

students, Rutgers successfully implemented and sustained this program on their campus for over

30 years (Laitman et al., 2014). Although not all existing CRPs are able to offer this resource for

their recovering student community, research suggests on-campus recovery housing is a vital

component to an effective and comprehensively supportive recovery program (Watson et al.,

2014).

Differences Among Currently Implemented CRPs

As was previously stated, Collegiate Recovery Programs (CRP) nationwide offer similar

resources for their recovering student population, but many programs differ with regard to

certain characteristics such as requirements for students to enter or remain in the program

(Steiker et al., 2014). Additionally, the completeness of service provision offered by different

CRPs often surrounds both the funding and the duration of the program's existence. This section

will discuss key differences found within current literature between established implemented CRPs.

Entry and participation requirements. Many well-established CRPs nationwide have created various entry requirements for acceptance into their programs and thus eligible for campus-based resources (Laudet et al., 2014). In their meta-analysis of evidence-based research on collegiate recovery, Laudet et al. (2014) found some CRPs require student applicants to complete substance abuse treatment and maintain sobriety for a minimum duration of time (usually three to 12 months) before entering the on-campus recovery program; these programs often also require a formalized application process in which student are required to complete a written standardized document, which is reviewed by CRPs staff and/or other recovering student members.

Continuing participation. Research suggests, CRPs nationwide vary greatly with regard to continuing participation requirements for recovering students engaged in the on-campus program and are receiving recovery maintenance resources (Laudet et al., 2014; Steiker et al., 2014). As was previously stated, some CRPs require students to attend a weekly seminar class on addiction recovery, while others offering on-campus recovery housing require members to reside within these living communities; additionally, although many CRPs are free to recovering students, due to funding restrictions, some CRPs services and resources are fee-based (Laudet et al., 2014; TTU, 2015).

With regard to suspected substance use among CRP members, research further suggests some currently implemented on-campus recovery programs have implemented sobriety monitoring through urine samples and/or require students who relapse to abide by a sobriety contract (Steiker et al., 2014). Many programs additionally necessitate students who reengage in

substance abuse to attend self-help groups, though others require meeting attendance as a condition for recovering student members receiving services (Steiker et al., 2014). Based on differences in funding and establishment within the university system, CRPs have the availability to offer a wide array of additional recovery maintenance resources and services, to include: professional counseling services, scholarship opportunities, on-campus recovery housing, and sober leisure activities (Laudet et al., 2014; Steiker et al., 2014).

Positive Individual and Institutional Impact

Research suggests Collegiate Recovery Programs (CRP) positively impact not only the individual student engaged in the program, but also the institution as a whole (Laudet et al., 2014). In their 2013 data analysis on recovering students engaged in the CRP at Texas Technical University (TTU), Laudet et al. (2014) additionally found the grade-point average (GPA) of CRP students was consistently higher than that of TTU undergraduates overall (3.2 GPA versus 2.9 GPA). This institution also reports a seventy percent graduation rate for students engaged in campus-based recovery maintenance resources; this is fourteen percent higher than the national average and ten percent higher than the overall graduation rate at TTU (Laudet et al., 2014).

Unlike graduation rates and grade-point averages, relapse rates of recovering students enrolled in CRPs cannot be verifiably compared with those rates of other non-enrolled recovering students (Laudet et al., 2014). Current literature uses paralleling data from adults engaged in community-based resources, similar in nature to CRPs, but a gap exists in evidence-based research comparing relapse rates for recovering students engaged and not engaged in campus-based recovery resources (Cleveland et al., 2007; Laudet et al., 2014). However, research does suggests Collegiate Recovery Programs positively affect an institution's retention rate and, with the increase in recovery high schools nationwide, may also attract incoming

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recovering freshman students to apply (Hingson & White, 2013). "These programs provide the only route to college graduation for many recovering students, thus [positively] affecting recruitment and retention" (Bell et al., 2009, p. 651).

Assessing an Academic Institution's Level of Readiness

Although CRPs are a relatively new concept in higher education, currently over 100 colleges and universities nationwide provide students with on-campus recovery maintenance services; unfortunately this is a small fraction of institutions and CRPs are by no means the norm (ARHE, 2015). The Association of Recovery in Higher Education reports over 200 new CRPs across the nation are in the planning stages, including Colorado State University (CSU). Using the formula provided by the TTU curriculum, it can be estimated that over 1,800 students currently enrolled at CSU meet the criteria for a substance use disorder and over 450 students are seeking help for their problem or are in recovery from a SUD (TTU, 2005). As was previously stated, CSU provides its students with a myriad of substance abuse prevention and intervention programs but does not currently provide formalized recovery maintenance services on campus; however, individuals within the institution, both students and faculty, have recognized this gap in service provision and are actively working to start a CRP to meet the increasing student demand. But the question still remains, is Colorado State University overall ready to both implement and sustain a CRP on their campus?

Assessing Need for Recovery Maintenance Services

The United States Department of Education (USDE) (2001) defines a needs assessment as "a systematic set of procedures that are used to determine needs, examine their nature and causes, and set priorities for future action" (p. 2). This assessment tool attempts to discover gaps in service provision or problems (the "need") which have previously gone unrecognized.

Additionally, needs assessments are conducted to make informed decisions regarding the allocation of resources and program planning. Through the use of survey research, needs assessments focus on a specific "target group"; in an academic setting common target groups include, but are not limited to: students, parents, teachers, administrators, and the outside community (USDE, 2001).

Mental Health Needs Assessments

A review of current literature suggests needs assessments are conducted at institutions of higher education on a variety of topics and that these assessments guide the university system in setting priorities that will improve service provision and/or the organizational structure (USDE, 2001). Current literature suggests this assessment tool is used to gather data from both students and faculty in the academic environment to better determine: access to resources, educational and social barriers, and gaps in services (Kvenild & Bowels-Terry, 2011). For example, researchers at Lincoln University of Nebraska conducted an assessment of 300 students to identify their support needs; through developing a 36-item measure entitled the Student Support Needs Scale (SSNS), these researchers established six dimensions of student support: knowledge, motivation, self-efficacy, knowledge, environment, and feedback (Hardy & Aruguete, 2014).

Current literature also suggests needs assessments are used with subpopulations of young adults to determine their needs concerning mental health and substance abuse. For example, a qualitative study of 107 American Indian (AI) urban youth in Chicago was conducted to ascertain their mental health needs. Through the facilitation of 16 focus groups, these researchers examined, among other variables, the availability and use of mental health support services, including substance abuse treatment of this young adult subpopulation (West, Williams,

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Suzukovich, Strangeman, & Novis, 2012). Similarly, Watt, Robin, Fleming, and Graf (2013) assessed the needs of youth with co-occurring substance abuse and mental health disorders using a multi-method evaluation process. By conducting interviews and reviewing client files, these researchers measured the effectiveness of an existing service provider; their research suggests needs assessments are used, not only to determine the needs of individuals, but that findings may also be used to inform service organizations, including universities, about potential gaps in service provision (Watt et al., 2013).

Addressing Gaps in Current Literature

Although research suggests needs assessments are used to examine the mental health needs of college students, studies evaluating the needs of recovering college students and/or the readiness of an institution to implement recovery maintenance services are very limited (Hardy & Aruguete, 2014; Kvenild & Bowels-Terry, 2011). Previously referenced studies of currently implemented CRPs assist in the evaluation of existing programs and their effectiveness in providing supportive resources for recovering students; yet, they do not discuss how and if they determined the readiness of the academic institution to accept the program prior to execution (Cleveland & Harris, 2010; Smock et al., 2011; Watson, 2014).

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Summary

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This examination of current literature offers evidence-based research on both college students abusing alcohol and those who are in recovery maintenance from a SUD. The overall problem of alcohol abuse in the academic environment, in conjunction with data collected on collegiate substance intervention and prevention programs, provides information on ways institutions, including Colorado State University, are addressing this maladaptive behavior from an environmental and individual student perspective. This literature review also provides

information on presently operational CRPs to determine organizational components necessary to create and sustain on-campus supportive recovery maintenance services and challenges programs faced in program implementation. However, current literature does not provide a method to assess an academic institution's overall readiness to add recovery maintenance resources to their on-campus service provision.

The aim of this study is to determine, the needs of recovering students at Colorado State University (CSU); even though a CRP is currently being planned, the collection of qualitative data in this study will inform both the planning process and creation of the program. Using the theoretical principles of both Ecological Systems Theory and the Transtheoretical Model as a guide, this needs assessment will address both the environmental and interpersonal influences affecting substance abuse recovery at this institution; additionally, these theoretical frameworks will assist in assessing CSU's overall readiness to modify their service provision to include on-campus recovery maintenance services.

CHAPTER III: THEORETICAL FRAMEWORK

Introduction

Substance abuse and recovery from a substance use disorder (SUD) are based on the interplay of both individual and environmental factors. Research suggests the phenomena reengaging in substance abuse after a period of abstinence, also known as relapsing, surrounds both external and internal motivating factors (Witkiewitz & Marlatt, 2007). For young adults these heightened provocations to abuse substances are partially due to the paradoxical situation of increasing peer influence, while parental influence simultaneously decreases; concurrently, many young adults commence higher education during this time period and are consistently confronted with opportunities to abuse substances (Cacciol & Nevid, 2014; Zamboanga et al., 2009).

A university is a complex social system of groups and communities which have defined roles, boundaries, and tasks (Harkins &Roth, 2007). In assessing the needs of an academic institution regarding the implementation of a Collegiate Recovery Community, Ecological Systems Theory (EST) is used to inform researchers about both the external influences of the academic environment on the recovering individual and the institution's overall acceptability of services for this marginalized student population (Wittchen et al., 2013).

College students who abuse substances, and those in recovery maintenance from a SUD, are further influenced by their internal level of motivation, or lack thereof, to modify their maladaptive behavior. Using Prochaska and DiClemente's (1983) Transtheoretical Stages of Change Model (TTM), research suggests individuals abusing substances can be categorized into five exclusive categories based on their motivation to change their psychoactive substance use; although these Stages of Change (SOC) are progressive in nature, with the final stage being

recovery maintenance, they are not linear and individuals often regress back into previous stages during their path to sobriety (Prochaska, DiClemente, Norcross, 1997). TTM assists in assessing needs of recovering college students in that this model is used in measures determining both internal and external relapse triggers; additionally, aspects of these assessments can be used with an entire university system to ascertain their willingness to accept and support a CRP.

In this chapter EST and TTM are examined as they relate to substance abuse recovery in the collegiate environment, as well as how these theories inform the assessment of an institution's need for recovery maintenance services. Components of EST are used to aid in understanding the interconnected components within the university system that contribute to both substance abuse among its student population and relapse in recovering individuals within the system (Randle, Stroink, & Nelson, 2015). Additionally, the supplementary cognitive components to the SOC process provided by the amended TTM of Intentional Behavior, as well as situational influences surrounding substance abuse relapse, are discussed.

<center>**Ecological Systems Theory (EST)**</center>

Research suggests no theory comprehensively explains substance abuse recovery due, in part, to the simultaneous interaction of both biological and environmental factors associated with the progression of SUDs; however, using Bronfenbrenner's Ecological Systems Theory (EST) (1979), the environmental factors associated with recovery in the collegiate environment and the multiple systems influencing the recovering individual can be explored (Bogg & Finn, 2009). By focusing on this theory, as it relates to the progression of substance abuse from initiation to recovery maintenance, collegiate personnel are better able to provide targeted interventions and have a higher probability of reducing this public health crisis at their institution (Wittchen et al., 2014). Research suggests academic institutions which implement and sustain on-campus

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recovery maintenance services additionally enlist the theories of EST to create a subsystem designed to holistically support recovery students and prevent substance use relapse (Laudet et al., 2014).

EST is based on the premise that an effective, healthy system is founded on the individual needs, expectations, and attributes of people living within the system. Bronfenbrenner (1979) delineated systems influencing human development into four categories: micro, meso, exo, and macro, while defining a microsystem as "the complex of relations between the developing person and environment in an immediate setting containing that person (e.g., home, school, work-place, etc." (Bogg & Finn, 2009, p. 447). He suggests that, although recovering college students are influenced by all system levels, the actual choices recovering students make pertain to the specific characteristics of a microsystem itself because the time and place are identifiable, and participants and roles are established (Bogg & Finn, 2009).

Universities as Complex Social Systems

As was previously stated, university campuses are complex social systems in that they host multiple groups and communities which have "defined inputs and outputs accomplished by individuals with designated boundaries, roles, authority, and tasks" (Harkins & Roth, 2007, p. 47). Individual college students are considered to be both the input and output of this consistently changing (dynamic, open) system; additionally, boundaries are clearly defined regarding space, or the physical campus location, and time, or the normal duration of enrollment to attain an undergraduate degree (Harkins & Roth, 2007). Roles within the collegiate system are clearly defined and authority generally passes from administration to teachers, while students follow their educational and behavioral mandates. The explicit, or overt, task of a university system is to facilitate learning for the student population but socialization, the major implicit, or covert, task

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of an academic institution, also affects all individuals within this complex system; research

suggests substance abuse, and its associated negative outcomes, is the largest barrier to

purposeful socialization within an academic institution (Harkins & Roth, 2007).

Socialization and Substance Abuse

From an EST perspective, human development is the amalgamation of psychological and

sociological factors and, as was previously discussed, SUDs are the result of both individual and

environmental risk factors (Harkins & Roth, 2007). Although an individual's microsystem can

include biological factors, the application of Ecological Systems Theory to assessing an

academic institution's needs regarding recovery maintenance services mostly surrounds the

socialization found within that microsystem and the influences of larger system levels within the

university (Bogg & Finn, 2008). Research suggests if maladaptive behaviors within an academic

institution, such as substance abuse or relapse, are to be effectively addressed the entire system

should be involved; additionally, the implementation of services for a marginalized student

population, such as students in recovery from a SUD, should be comprehensively embraced by,

not only those students, but also the institution as a whole (Harkins & Roth, 2007; Laitman et al.,

2014).

Influence of boundaries. Although the collegiate environment, and the subsystems found

within this larger system, are open in that individuals are constantly entering and leaving the

system, boundaries are established with regard to: authority, resource management, and

information delivery. While addressing substance abuse recovery in the collegiate environment,

management of these boundaries within an academic institution is achieved through cooperation

by all individuals within the system who hold authority. When coupled with the consistent

involvement of recovering students through the planning and implementation process of

Collegiate Recovery Programs (CRPs), many academic institutions who solicit support from their administrative authority successfully meet the needs of both the institution and the individual students (Harkins & Roth, 2007; TTU, 2005).

Feedback loops. Complex systems respond and adapt over time through the use of feedback loops, or situations in which the system receives additional input from existing output (Randle et al., 2015). For example, the return to substance abuse by a recovering college student may be in response to peer-influences or stigma associated with abstinence encountered within the academic environment. Additionally, research suggests individual behavior is influenced and changed in response to new environmental circumstances, such as commencing higher education, and that these periods of uncertainty can be associated with abusing substances to cope (Randle et al., 2015).

Connectedness and resiliency. In a complex system, connectedness refers to the extent in which relationships exist between different components within the system; research suggests, a system's resiliency, or ability to remain stable over time, is a direct result of those relationships (Randle et al., 2014). Although, resiliency is considered neither a positive or negative component to a complex system, when the system becomes stuck in a "rigidity trap" behavior patterns become persistent.

With regard to the manifestation of individual SUDs, this phenomena is characterized by the inability to respond to changing circumstances or modify the relationship with addictive substances despite negative outcomes (Barnett et al., 2013). However, the principles of resiliency and connectedness can also be applied to a complex system and its readiness to change their culture relative to public health concerns, such as a university's ability to modify service provision to accommodate marginalized student populations. Research suggests many

institutions of higher education are stuck in a rigidity trap in that they solely address substance abuse from a prevention and intervention perspective; assessing the resiliency and connectedness of the university system overall in relation to its attitude surrounding substance abuse, assists in determining the readiness of the institution to include on-campus services for students in recovery maintenance (Watson, 2014).

Substance Abuse Relapse

Research suggests most individuals who attain recovery from a SUD will experience, at least, one return to substance abuse and that relapse is a process perpetuated by "predispositions, immediate precipitants, and related consequences" (Witkiewitz & Marlatt, 2007, p. 726). Through his research on substance abuse relapse, G. Allan Marlatt (1979) classified risk factors perpetuating relapse into two categories: intrapersonal and interpersonal determinants. Intrapersonal determinants include those risk factors within the individual, such as coping with negative emotional states, while interpersonal determinants are relapse risk factors surrounding interactions and experiences derived from external sources (Witkiewitz & Marlatt, 2007).

Additionally, Shiffman (1989) argued the occurrence of external relapse triggers in combination with previous background related to substance abuse assists in the identification of individuals who are currently is the process of relapsing. Research suggests academic institutions with CRPs have low relapse rates of program participants; by creating a safe, on-campus environment where recovering students can seek support, institution's which offer these programs aid in identifying students who are struggling and may be close to reengaging in substance abuse. Concurrently, CRPs also assist the university community in understanding college substance abuse recovery, which may increase knowledge about this marginalized student population and decrease the associated stigma (Laudet et al., 2014).

Using the adaptive cycle proposed by Holling in 1973, individuals who exhibit symptomology consistent with a SUD are in the "conservation phase" because their addictive behaviors are maintained regardless of the resulting negative consequences in many life areas. When individuals find sufficient reasoning to cease abusing substances they move into the "release phase" of the adaptive cycle; this phase is characterized by using resources previously occupied by substance abuse to build new behavioral patterns and is considered to be a volatile period in the recovery process (Randle et al., 2007). Through the implementation of CRPs, academic institutions support newly recovering college students in the positive expenditure of these recently discovered individual resources and concurrently provide an inclusive community for this student population.

Summarizing Ecological Systems Theory (EST)

The principles found within EST assist in exploring the influence multiple systems have on an individual college student's behavior in general and as it relates to substance abuse relapse. The specific characteristics found within the complex university social system aid in, not only the primary institutional goal of student academic success, but also provide an environment in which students learn both positive and negative socialization skills. From an EST perspective, the process of substance abuse relapse can be seen as the result of multiple systemic influences found within the individual student and through their external environment (Witkiewitz & Marlatt, 2007). Additionally, the concepts of connectedness and resiliency found within EST can be applied to, not only individual college student behavior, but also entire university systems.

Although the principles of EST are used to discuss the impact all system levels have on substance abuse recovery in the collegiate environment, including the individual student as a system, they do not comprehensively discuss levels of motivation of an individual or a system to

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change. By concurrently applying the theories presented in the Transtheoretical Model, as they pertain to substance abuse recovery and the process of relapse, both external and internal motivating factors can be examined and quantified.

Transtheoretical Model (TTM)

The Transtheoretical Model (TTM) assesses an individual's level of motivation to change an identified maladaptive behavior, such as substance abuse. Originally this model exclusively examined internal motivation for change and did not take into account the environmental factors influencing the progression of substance abuse recovery; however, DiClemente (2005), an originator of the TTM, discusses the broad effect of an individual's surroundings in the change process stating, "all of the risk and protective factors, the barriers and facilitators of change are part of this [environmental] context" (p. 8). Additionally, the principles of TTM can be used to determine an academic institution's level of readiness to change by assessing the system holistically.

Stages of Change (SOC)

As was previously stated, the TTM classifies an individual's level of motivation to change a maladaptive behavior into five categories: precontemplation, contemplation, preparation, action, and maintenance. Although these Stages of Change (SOC) can pertain to changing any chronic, negative behavior, they will be solely discussed in their application to substance abuse (DiClemente, 2005). The first two stages surround individuals who are not concerned with changing their substance use or who are considering the behavior change but have not begun planning their path to abstinence; in contrast, individuals in the preparation SOC have committed to creating a plan, often with the assistance of an addictions professional, to cease using substances within the next month (Prochaska, DiClemente, & Norcross, 1992). Although college

students with motivation to change commensurate with these first SOC may already be engaged in on-campus substance abuse prevention and intervention programs, it is unlikely these students would access CRP services unless they needed resources.

Individuals in the action stage have ceased using substances and have remained abstinent for one day to six months; research suggests this stage in the change process is the most overt and requires considerable commitment from the recovering individual (DiClemente, 2005). Even though some CRPs require extended lengths of abstinence to receive campus-based recovery maintenance services, college students in the action SOC are consider to be "in recovery from substance abuse" and are thus eligible for services at institutions without admission requirements relating to this variable. The final stage, maintenance, involves the integration of substance abuse abstinence and recovery maintenance activities into the individual's habitual lifestyle (Prochaska et al., 1992). With regard to recovery in the collegiate environment, research suggests students in the maintenance stage are likely to access CRP services because they perceive the many risk factors to their recovery posed by academia (Laitman et al., 2014).

Research suggests the TTM model is cyclical, and not linear, in nature because individuals may return to previously completed SOC throughout their recovery process (Prochaska et al., 1992). Even with the assistance of CRPs, students who enter the action or maintenance SOC are likely to experience, at least, one return to substance use, or relapse, during their recovery process. Although relapses are the norm and not the exception in substance abuse recovery, research suggests individuals recycling through the SOC process potentially have the ability to learn from their mistakes and change their behavior accordingly (Prochaska et al., 1992). Through the additional consideration of cognitive process impacting substance abuse recovery

provided by the TTM of Intentional Behavior, relapse can also be viewed as a process, and not a singular event.

Transtheoretical Model of Intentional Behavior

Since its inception, the TTM has been modified several times and now includes DiClemente's (2005) Transtheoretical Model of Intentional Behavior. This theory suggests "that life's contextual processes can inhibit movement through the change process", thus this amended version of the original theory takes into account the cognitive processes of recovering individuals as they progress through the SOC (Kazemi, Wagenfeld, Van Horn, Levine, & Dmochowski, 2011, p. 195).

Using the principles of this theory, researchers at the University of North Carolina at Charlotte conducted a study evaluating the positive correlation of impulsivity and readiness to change substance abusing behavior in the collegiate environment. Research suggests impulsivity is an intrapersonal characteristic of many individuals with a SUD and has also been linked to relapse in recovering individuals (Kazemi et al., 2011). The participants were evaluated in a group setting using three assessment measures, including the Brief Readiness to Change Scale Questionnaire (BRCQ) (Rollnick, Heather, Gold, & Hall, 1992), which has proven validity when used with college student populations; through their cross-sectional analysis of 248 undergraduate students, these researchers suggest students who were less impulsive were more likely to be ready to change their substance abusing behavior (Kazemi et al., 2011).

As was previously stated, relapse triggers, those situations which entice a recovering individual to reengage in substance use, are highly prevalent in the collegiate environment and can also be linked to impulsivity. When coupled with the impulsive nature attributed to college students who abuse(d) substances, whether or not they are in recovery from their disorder, these

triggers often lead to relapse; research suggests recovering students who relapse while enrolled in college are more likely to leave an academic institution either voluntarily or due to their behavioral conduct and/or academic performance (Bell et al., 2009). Although research additionally suggests the inability to compare relapse rates for recovering students utilizing CRP services to those of students not receiving services, many institutions with currently implemented programs report lower relapse rates of their participants than national averages for young adults overall (Laudet et al., 2014). CRPs offer recovering students a safe, supportive on-campus environment where they can find refuge, while concurrently receiving interpersonal support from other students in recovery who may be experiencing or have experienced the same relapse triggers (Cleveland et al., 2007). Due to relapse being a process and not a singular event, CRPs additionally assist in the identification of recovering students who exhibit symptomology associated with relapse progression, including an increase in impulsive behavior (Kazemi et al., 2011; Cleveland et al., 2007).

Summary

Through the concurrent application of both the EST and the TTM, substance abuse in the collegiate environment can comprehensively be examined. By addressing the impact of multiple system levels on recovering students, including the individual student as a system, the principles of EST can assist an academic institution in the identification of negative environmental factors affecting substance abuse recovery. The Transtheoretical Model of Intentional Behavior theory examine the cognitive processes associated with substance abuse recovery, as well as the phenomena of relapse as a process; when coupled with the environmental risk factors posed by the collegiate environment, the assessment of intrapersonal characteristics aids in examining the recovering student holistically. The SOC concept provided by the TTM categorizes substance

abuse recovery into motivational stages and can be applied to an individual student's recovery

process or an institution's motivation to change the system overall. Additionally, aspects of

current standardized assessment tools using the SOC to measure level of motivation, can be used

in determining an academic institution's readiness to change their campus environment to

include CRP services.

CHAPTER IV: METHODOLOGY

Introduction

In an effort to determine the concerns of recovering students at Colorado State University (CSU), a needs assessment will be conducted. Research suggests needs assessments are evidence-based survey tools used to gain information about a target population and inform future action (Berkowitz & Nagy, 2015). This needs assessment will be conducted using key informant interviews of CSU students who self-identify as being in recovery maintenance from a Substance Use Disorder (SUD). By using a semi-structured interview process, these narratives will provide qualitative data on the needs of this student population and will aid in the creation of the projected Collegiate Recovery Program (CRP) at CSU.

This chapter will outline the features of qualitative data collection, as well as the benefits and detriments of this type of research. Characteristics of needs assessments, key informant interviews, and Interpretative Phenomenological Analysis (IPA) are discussed, followed by the specific context for this needs assessment, to include: setting and timeline, sampling technique, inclusion and exclusion criteria, and avenues for recruiting participation. Finally, the procedure for the key informant interviews is described, in detail, as well as where to locate copies of applicable documents in this paper.

Features of Qualitative Data Collection

Whether qualitative or quantitative in nature, research uses a systematic approach to gathering information. Quantitative data collection involves the manipulation of certain variables to determine the causality of a phenomena; in contrast, qualitative data focuses on how individuals view their reality and takes situational context into account (Hancock et al., 2009).

Benefits of Qualitative Methodologies

By accounting for differing perspectives and using personal experiences, qualitative research describes data which is not numerically quantifiable by using a research process that is systematic, yet flexible and which focuses on interpretations rather than the cause and effect principles commensurate with quantitative data collection (Hancock et al., 2009).

Research suggests qualitative data assists in explaining social phenomena and that the flexibility found within qualitative data collection is especially helpful in gathering information on sensitive health or social care topics, including substance abuse; in this context, qualitative research investigates, not only experiences and views of the participants, but also may be used to explore possible program implementation (Hancock et al., 2009).

Addressing Criticisms of Qualitative Methodologies

Even though key informant interviews and other methodologies are widely used to collect qualitative data, criticism exists which suggests these research approaches lack consistency because there is no set of criteria for judging the quality of the data collected (Hammersley, 2007). Research suggests the definition of "criteria" utilized to evaluate the quality of the data collected can vary greatly. In many studies these criterion are based on an observable checklist, which accounts for judging the quality of the research methodology related to the procedural aspects of the data collection process (Hammersley, 2007). However, according to respected researchers such as Smith and Deemer (2000), these criterion can also be "a list of considerations, never fully explicit,…a list that can serve no more than a reminder and that is always open to revision in the process of being used" (Hammersly, 2007, p. 288). This means the criterion will only be meaningful in a particular context and may be what is possible and appropriate in qualitative research methodology (Hammersly, 2007).

Although qualitative research was widely used from the late nineteenth century to the late twentieth century, in the 1970's these approaches were criticized based on the more accepted scientific methodology concretely evaluating research quality (Ritchie & Lewis, 2003). Of particular concern to qualitative researchers was: the elimination of contextual variables, the disregard for the meaning of the subjects' behavior, and the large influence of hypothesis testing found within this methodological evaluation process (Ritchie & Lewis, 2003). Through addressing these limitations, qualitative research became a more legitimate methodology and began being used to conduct studies related to fields which previously relied solely on controlled quantitative experimentation (Ritchie & Lewis, 2003).

Epistemological research. Epistemological research is centered on "the ways of knowing and learning about the social world" and strives to find the basis for that knowledge; using this theory, research addresses two main issues found within qualitative research design (Ritchie & Lewis, 2003). First, the interactive relationship between the participants and the researcher may influence the study; the concept of "empathic neutrality" found within epistemological theory recognizes the researcher cannot be free of bias and/or influence and must make their assumptions evident in the data analysis (Thompson, 2015). Another concern of qualitative research surrounds the concept of finding "truth" within a study. In studies related to natural sciences, truth is constructed by evaluating the congruence of observations of the natural realm to an independent certainty already established through evidence-based research (Thompson, 2015). However, research suggests that in qualitative research evaluating the social environment, "truth" must be gained through a consensus of participants; if several subjects provide identical information, "then it can be considered true as a representation of socially constructed reality" (Ritchie & Lewis, 2003, p. 14).

Interpretative Phenomenological Analysis (IPA)

Many traditional research methodologies have influenced qualitative inquiry, including phenomenology. Grounded in sociological disciplines, phenomenology studies how individuals make sense of their environment and discovers underlying meanings within conversations (Ritchie & Lewis, 2003).

Interpretative Phenomenological Analysis (IPA) specifically evaluates subjective experiences and social cognitions of participants. This qualitative research design has an idiographic focus in that it attempts to understand how individuals make sense of their experiences and environment, which may provide insight into a given phenomena; the focus is on experiences, perceptions, and schemas and requires participant self-reflection (Brocki &Wearden, 2006; Hancock et al., 2009). Concurrently, IPA takes into consideration the impact of the researcher's interpretation of the data collected; because subjective situations are being evaluated, this design involves reciprocity between the researcher and the participants to gain a comprehensive insider perspective (Hancock et al., 2009).

By acknowledging research as a dynamic process, IPA accounts for the researcher's influence on both the data collection and subsequent analysis; this process is phenomenological in nature because the participants' reports of their subjective experiences are the primary focus, but it also accounts for the researcher's significance throughout the investigation (Brocki & Wearden, 2006). Research suggests IPA is specifically relevant for mental health concerns because this research design addresses the importance of understanding an individual's perceptions and interpretations about their experiences; this not only gives researchers more comprehensive data but also negates the pathological implications of collecting quantitative data to determine the predictability of an (mental) illness (Brock & Wearden, 2006).

Addressing researcher bias. As was previously stated, Interpretative Phenomenological Analysis is partially based on the researcher's interpretation of the data collected and is most effectively conducted when that individual is knowledgeable about the population being studied (Hancock et al., 2009). The researcher conducting this study has professional experience working in the field of substance use disorders (SUD) and specifically working with students at Colorado State University (CSU); concurrently, this researcher also has personal experience attending this academic institution while abusing substances and also being a college student in recovery from a SUD. She is knowledgeable about the SUD intervention and prevention programs provided within the CSU system and is involved in the creation of a Collegiate Recovery Program (CRP) on this institution's campus.

To reduce the possible researcher bias within this needs assessment, the aforementioned Director of CSU Specialty Counseling Services, Dr. Lisa Miller, will be consulted, as needed, through the process of interpreting the collected data and will be involved in using the conclusions gained from this needs assessment to implement a CRP on campus at CSU. Researcher bias will be further reduced by the manner in which CSU students in recovery from a SUD or are currently abstaining from psychoactive substance use are recruited to participate in the focus groups. As was previously discussed, the researcher will not control which students fitting these criteria participate in the key informant interviews and multiple avenues of soliciting participation will be used.

Characteristics of a Needs Assessment

Needs assessments are used to find unmet needs or gaps in service provision for a target population; they are used to help make decisions regarding the planning and development of programs which positively impact that population (Royse & Badger, 2015). In needs assessment

surveys, a need refers to a specific insufficiency affecting a particular group; they can provide

information on challenges faced by the target population, as well as determine gaps in service

provision and the potential impact of new program implementation (Berkowitz & Nagy, 2015).

Parameters for needs assessments vary greatly based on available resources and time; by

first creating a purpose for the survey, researchers are better able to remain focused and gain the

most pertinent information (Royse & Badger, 2015). In conjunction with defining the overall

purpose of the assessment, researchers also must determine the level of the assessment (national,

statewide, community, etc.) and which stakeholders or collaborators to include; budget, time

allotment for the project, and available resources should also be considered when planning a

needs assessment (Royse & Badger, 2015). Research suggests needs assessments provide

pertinent information in a multitude of situations, to include: when a group is just beginning,

when there is doubt as to what the needs are, and when outside funding or support is needed

(Berkowitz & Nagy, 2015). By evaluating existing information, researchers can determine

whether new information will be gained from the survey and may assist in the creation of the

assessment tool.

Furthermore, needs assessments vary greatly with regard to methodology and data collection;

some surveys are designed to collect quantitative data from a large number of participants, while

others focus on the collection of qualitative data pertaining to smaller groups. Impressionistic

approaches to needs assessments use key informants to gain qualitative data surrounding the

needs of a target group; although often subjective in nature, many impressionistic approaches,

such as focus groups, provide useful information from small groups (Berkowitz & Nagy, 2015).

Semi-Structured Interviews

Research suggests semi-structured interviews can be used to obtain information on topics that are hard to observe and/or are sensitive in nature; additionally, these interviews can be used "to ascertain perspectives and experiences from people on a topic, particularly when these are people who might otherwise be marginalized" (Cohen & Crabtree, 2006a, para. 3). They are reasonably easy to organize and conduct while producing qualitative data quickly (United States Center for Disease Control [CDC], 2008).

By creating the questions prior to conducting the semi-structured interview, researchers have the ability to control the progression of the session, but the use of a semi-structured interview format gives participants the freedom to express other thoughts and concerns related to the topic being researched (Cohen & Crabtree, 2006b). Although subjective in nature, research suggests semi-structured interviews can provide qualitative data that is both reliable and comparable by providing clear guidelines for the researcher and a standardized interview outline for multiple interviews (Cohen & Crabtree, 2006b).

Key Informant Interviews

As was previously stated, qualitative data on the challenges and needs of recovering students at CSU will be gathered using key informant interviews. Research suggests key informant interviews are effective in gaining specific information about a community and that the findings can be used for programmatic planning and implementation (State of Oklahoma, n.d.). To assess the needs of this specific CSU student population, these interviews will be conducted with students who self-identify as being in recovery from a Substance Use Disorder; by collecting first hand data from members of the population being studied, and for whom Collegiate

Recovery Program (CRP) services would be offered, this study will provide qualitative data to plan and implement this supportive resource on this institution's campus.

Benefits of Key Informant Interviews

Research suggests many benefits in utilizing key informant interviews to collect qualitative data. Primarily, these interviews provide in-depth information about a certain topic through the perspective of a community member or an expert working with this population and allow for the exploration of issues not previously anticipated during the planning process (United States Agency of Interpersonal Development [USAID], 1992). Easily conducted and with low attributed costs, key informant interviews solicit the clarification of ideas and information previously attributed to the population being studied (State of Oklahoma, n.d.).

Disadvantages of Key Informant Interviews

Although there are many advantages in using key informant interviews to obtain qualitative data, research also suggests several disadvantages to this data collection method. As with many qualitative methodologies, key informant interviews may be influenced by the participant's own biases and impressions; additionally, the researcher's relationship with the participant may further effect the information obtained (State of Oklahoma, n.d.). Data collected through key informant interviews may be difficult to organize and, at times quantify, to draw inferences and themes from the information; research additionally suggests possible difficulty in proving the validity of findings derived from interviews such as this (USAID, 1992).

<div align="center">

Specific Context for This Needs Assessment

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As was previously stated, this needs assessment will be conducted to obtain qualitative data on Colorado State University students who self-identify as being in recovery from substance abuse The aim of this research is to: evaluate characteristics of this CSU student population;

identify challenges to both academic and social success; and determine their specific needs in this collegiate environment. The qualitative data gained from this needs assessment will be used to assist in the planning and implementation of a Collegiate Recovery Program (CRP) which will provide on-campus support to recovering students at CSU. Already in the beginning stages of development, this program has support from key stakeholders within the CSU institution, including the director of Specialty Counseling Services, Dr. Lisa Miller; additionally, a small group of interested recovering CSU students have regularly convened to begin soliciting interest from the student community and to begin planning this student-driven program.

Setting and Timeline

This study will be conducted at Colorado State University (CSU) using a specific sampling of its student population in recovery from a SUD. CSU is a traditional, four-year institution located one hour north of Denver, Colorado in the city of Fort Collins, a predominantly white community with a population of approximately 160,000 (City of Fort Collins, 2015). As was previously stated, CSU reports a student population of nearly 30,000 students, with over 86 percent receiving their education through on-campus instruction and the specific demographics of the institution may be found in the "Current Intervention and Prevention Programs at Colorado State University" (Colorado State University [CSU], 2014). These key informant interviews will be conducted in a neutral, confidential location on the CSU campus during the first two months of the Spring 2016 semester.

Sampling Technique

Due to the sensitive nature of the information being solicited by this very specific subset of the CSU student population, as well as the inability to ascertain the exact number of students fitting this demographic within that population, nonprobability sampling will be used (Neuman,

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2011). Although research suggests nonprobability, or convenience, sampling may offer inadequate quantitative data to draw inferences about a total population, with regard to qualitative data collection, research also suggests this can be a legitimate sampling technique if the goal of the study is exploratory research (Neuman, 2011).

Purposive sampling.   Purposive sampling, also known as judgement sampling, is ideal for hidden populations, such as individuals in recovery from a SUD, because it selects specific individuals fitting the criteria for participation; often these participants are identified and recruited by providers delivering services to the population. This type of sampling is rarely used to gather information about an overall population, but can be applied to studies analyzing content to find themes among hard to reach, often marginalized populations (Neuman, 2011).

Reputational Sampling. Similar to purposive sampling, reputational sampling involves the recruitment of research participants through a referral process; based on marginalized populations often being interconnected, in reputational sampling participants identify additional individuals within the population to contact about possible involvement in the study (Neuman, 2011). Although this can be achieved through direct contact by the researcher, often reputational sampling also involves the propagating of information to the population through word-of-mouth or flyer distribution.

Recruiting Participants

Recruitment for participation in this needs assessment will be solicited through both the CSU system and the recovering community within the City of Fort Collins through the use of a recruitment flyer; a copy of this flyer can be found in "Appendix A" of this document.

Recruitment flyer. The recruitment flyer for this research study provides a brief description of the purpose of the study and who is eligible to participate. Both the time commitment and the

compensation for participation are included on the flyer, as well as the email address of the researcher. Interested individuals are asked to contact the researcher via email to partake in the telephone screening for eligibility.

On-campus recruitment. The majority of the advertising campaign for these key informant interviews will be conducted through a variety of on-campus means. Through emailing the recruitment flyer to service providers within the CSU Health Network, and more specifically the Drugs, Alcohol, and You (DAY) Program, students currently or formerly engaged with on-campus resources who self-identify as being in recovery from a SUD will be provided with the recruitment flyer. Additionally, this flyer will be posted in the lobby of the DAY Program office, as well as communal locations within the CSU Health Network.

Recruitment in Substance-Free Housing. CSU currently offers Substance-Free Housing within its on-campus housing system; although many students choosing this residence hall option do not self-identify as being in recovery from a SUD, the recruitment flyer will be posted throughout public areas within these residence hall floors. The aim is to target students in recovery from a SUD who may be newly attending an academic institution; this not only assists the fledgling recovering student in finding a sense of community within the vast university system, but may ensure the sustainment of the proposed CRP at CSU by locating recovering underclassmen.

Recruitment in community Twelve-Step Facilitated Groups (TFGs). Although CSU has previously hosted an Alcoholics Anonymous (AA) meeting on campus, recovering CSU students currently rely on Twelve-Step Facilitated Group (TFG) meetings held within the Fort Collins community. Many TFGs use an announcement board to propagate information pertaining to

recovery; the recruitment flyer will be posted on these announcement boards and meetings at which CSU students frequently attend will be specifically targeted.

Inclusion Criteria

As was previously stated, participants for this study will be CSU students who self-identify as being in recovery from a Substance Use Disorder (SUD). Interested individuals will engage in a five-minute telephone screening with the researcher to determine their eligibility to participate in the study; this screening instrument is discussed in detail later in this paper. To partake in the study individuals must be enrolled in, at least, one resident tuition class on the Fort Collins campus of Colorado State University. As well as affirming the self-identification of SUD recovery, participation eligibility is additionally based on the individual's previous engagement in treatment for that SUD; this includes, but is not limited to: residential treatment, outpatient treatment, and/or steady engagement in a self-help group.

Exclusion Criteria

In conjunction with the aforementioned inclusion criteria for participation in this research study, individuals must also be over the age of 18. Research suggests approximately 20 million students enrolled in colleges and universities nationwide in the Fall 2015 semester; additionally, research suggests the number of traditional college-age student (18 to 24 years old) has significantly risen over the past ten years (United States Department of Education, 2015).

Time Commitment for Participation

The estimated time commitment for participating in this study is less than one hour. As was previously stated, interested individuals will engage in a five minute telephone screening to determine their eligibility. Following this screening, students fitting the inclusion criteria will be

scheduled for the key informant interview; the actual interview will take approximately 45 minutes and will include obtaining consent for participation prior to engaging in the dialogue.

Anticipated Level of Participation Risk

The United States Department of Health and Human Service (HHS) defines participation risk as "the possibility of injury, including physical, psychological, or social injury, as a consequence of participation as a subject in any research, development, or related activity…which increases the ordinary risks of daily life" (Colorado State University [CSU], 2015). Based on this definition, the anticipated risk associated with participating in this study is minimal and is limited to psychological well-being. This minimal risk involves divulging potentially sensitive information about: the Substance Use Disorder (SUD), their experiences as recovering college students, and their needs as part of this student population at CSU; additionally, although the university will not be apprised of the student's participation in this study, specific measures will be taken to mitigate and address any associated stigma.

Mitigating stigma. As was previously stated, research suggests college students in recovery from a SUD are subjected to the stigma associated with not using psychoactive substances while attending an academic institution (Laitman et al., 2014). To mitigate any stigma associated with participating in the key informant interview, recruitment will be conducted in a manner consistent with preserving student confidentiality. Although advertising will be propagated throughout campus and the TFG community, it will be the responsibility of the interested student to contact the researcher through email. Additionally, students will be apprised of how the researcher (and involved CSU faculty) will preserve their identity in: the securing of data and digital recordings, the analysis of the data obtained, the findings presented in this paper, and any

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subsequent action taken as a result of these findings (e.g., the implementation of a Collegiate Recovery Program (CRP) at CSU).

Intervention for Distressed Participants

To minimize risk and protect the welfare of participants, the aforementioned consent letter will discuss the voluntary nature of the study, as well as their ability to stop the interview at any point if they are uncomfortable in continuing. If any adverse or unexpected outcomes that could be potentially harmful to the participant occur, the interview will immediately be stopped and the supervising CSU faculty member, Dr. Louise Quijano, will be contacted via phone. Through a collaborative discussion, the researcher and supervising faculty member will make immediate referrals to the appropriate on-campus resources; this may include, but is not limited to: the CSU Health Network, CSU Student Case Management, and/or the campus-based, 24-hour mental health crisis hotline.

Compensation for Participation

According to the Committee for Protection of Research Subjects, compensation for study participation should be commensurate with the time and effort the participant is required to commit; additionally, the compensation should be minimal enough not to skew responses or coerce the individual into participation (Committee for the Protection of Human Subjects [CPHS], 2015). Due to the minimal time commitment and the marginal risk posed by participating in this study, students who partake in the key informant interview will be given a ten dollar gift card to the café located throughout the campus at CSU. Participants will be apprised of the compensation for participation prior to taking part in the interview; however, the actual gift card will be presented following the interview.

Procedural Guidelines

The following section will provide a progressive outline for the research study and will discuss, in-depth, the tasks for each participant, as well as the associated documentations.

Telephone Screening

As was previously stated, recruitment for participation in this study will be achieved through the use of a flyer; interested individuals will contact the researcher via the email address provided on this flyer. Following this communication, the individual will engage in an approximately five-minute telephone screening to determine their congruence with the aforementioned three inclusion criteria. A copy of this telephone screening instrument can be found in "Appendix B" of this paper.

Illuminating Collegiate Recovery Programs (CRPs)

Following this telephone screening, suitable individuals will be scheduled for the on-campus, key informant interview and will be emailed a document containing information about Collegiate Recovery Programs (CRPs); this document is entitled "What is a Collegiate Recovery Program (CRP)?" and was created by the researcher. With the aim of providing general information about CRPs, this document includes information about: the nationwide history of CRPs, services offered by currently executed programs, research-based essential components of successful CRPs, key programmatic differences, and some of the largest challenges posed in the implementation process. Participants will additionally be emailed the written "Key Informant Interview Schedule" to commence considering their responses to the nine questions asked during the interview; this Interview Schedule is comprehensively discussed later in this paper.

Participants will be asked to read this document prior to engaging in the key informant interview to answer questions about their possible engagement in this program at CSU during the

interview. A copy of this informational document can be found in "Appendix C" in this document.

Interview Procedure

At a predetermined time and location, the key informant interview will be conducted to gather qualitative data from a participant pool of CSU students in recovery from a Substance Use Disorder (SUD) to assess their needs and determine overarching traits.

Letter of consent. Upon arrival, the participant will be given a "Letter of Informed Consent" outlining the purpose of the study, as well as their rights as human research subjects. This letter also discusses how the participants' confidentiality will be maintained with regard to both the recording and any identifying information obtained. Although the participant's: age, academic level, ethnicity, and gender will be obtained during the key informant, this demographic information will be concealed using a matching in the subsequent research paper. After reading the "Letter of Informed Consent", the participant will be asked to verbally affirm they both understand and agree with the terms dictated by this document; this affirmation will be digitally recorded and saved along with the interview recording. A copy of this document is included in this paper and is entitled "Appendix D".

Digital recording. The key informant interviews will be recorded using a digital recording. These recordings will immediately be downloaded to a secure server through the CSU School of Social Work and only the researcher and the supervising faculty member will have access; this information will be stored for the three-year time period required by the Internal Review Board and then will be permanently destroyed.

Interview schedule. After obtaining verbal consent to participate in the key informant interview, the participant will be asked a series of nine questions about being a CSU student in

recovery maintenance from a Substance Use Disorder (SUD). Due to the ambiguity and individuality of the term recovery, as it relates to substance abuse, the first question asks participants to describe what being in recovery from a SUD means to them; they will then be asked what activities, if any, they regularly engage in related to their SUD.

The third and fourth questions in the Key Informant Interview Schedule encompass the personal challenges the participant has faced as a recovering CSU student and their analysis of the greatest needs for recovering students at this academic institution. Participants are then asked about their association with other CSU students in recovery and how they met these likeminded individuals.

The final grouping of questions revolve around the CRP being planned at CSU and also involves the information in the "What is a Collegiate Recovery Program (CRP)?" previously emailed to the participant. Based on the information provided, the participant is asked what resources would be most important in a campus-based recovery program and if they would attend sponsored sober events and/or on-campus self-help meetings. Finally, participants are asked if they have ever participated in any CSU on-campus SUD prevention or intervention programs; they are not asked to elaborate on their answer or to share which program(s) they attended.

As was previously stated, the key informant interview will be concluded with four demographic questions requesting the participant's: age, current academic level, ethnicity, and gender. At the end of the interview, participants will be thanked for their time and be given a ten dollar gift card to compensate for their time commitment. A copy of the interview schedule can be found in "Appendix E" of this paper.

Summary

As was previously stated, this needs assessment is being conducted to ascertain the characteristics and needs of CSU students in recovery maintenance from a SUD and/or are currently abstaining from psychoactive substance use. Key informant interviews will be conducted with students meeting the inclusion criteria to gain the most candid and complete information from individual participants. The specific context for the needs assessment included in this paper serves as a guideline in conducting this study and assists the researcher in collecting comprehensive data pertaining to this subset of the CSU student population.

Additionally, the detailed description of the key informant interview procedure, as well as the inclusion of pertinent supplementary documents, provides a comprehensive representation of the foreseen outline for data collection. With the aim of gathering qualitative data on patterns found in the attributes and needs of students in recovery maintenance from a SUD, the analysis of this data will provide further insight into this subpopulation and additional information to continue the process of implementing a CRP at CSU.

CHAPTER V: ANALYSIS

Introduction

As was previously stated, Interpretative Phenomenological Analysis (IPA) specifically investigates the subjective experiences and social cognitions pertaining to a given phenomenon. For the purpose of this study, that phenomena is recovery maintenance from a Substance Use Disorder (SUD) in the collegiate environment of Colorado State University (CSU); the research participants were recruited, telephonically screened, and interviewed regarding their experiences as recovering students. The aim of the key informant interviews was to ascertain, not only the needs of recovering students, but also investigate the challenges posed by this collegiate environment.

This section will outline the specifics of these recovering CSU student key informant interviews including both the recruitment procedure and the demographic composition of the research participant pool. The quadripartite IPA process is used to extract themes from the collected interview transcriptions; those themes are itemized by the perpetuating interview question and then additionally discovered themes are discussed. Although the confidentiality of the research participants is maintained throughout this document by referring to the participants solely by alphabetic letter and the lack of using gender specific pronouns, specific participant quotes are used throughout this section; the initial use of a random matching code, later discussed, additionally protects the anonymity of the participants.

Key Informant Interview Specifics

Recruitment

Multiple methods of distributing the "Recovering Student Recruitment Flyer", found in Appendix F of this document, were used in an effort to find Colorado State University (CSU)

students identifying as being in recovery maintenance from a Substance Use Disorder (SUD). This included but was not limited to: several email distributions to all CSU Health Network providers; email distribution to all recovering students identified in the development of the Collegiate Recovery Community (CRC); posting the flyer in common areas of the Substance-Free floors found within the CSU residence hall system; and announcing the research study at Twelve-Step Facilitated Groups (TFGs) within the Fort Collins Community.

The aforementioned recruitment methods yielded four students, each of whom was individually screened for participation in this study. As was previously stated, the three inclusion criteria for this study were: enrollment in one resident tuition class on the Fort Collins campus of CSU, affirming the self-identification of recovery from a SUD, and previous engagement in treatment for that SUD. Each of the students was individually scheduled for, and participated in, a fifteen to twenty minute key informant interview in a secure and confidential on-campus location.

Demographic Composition

A total of four recovering CSU students met the inclusion criteria for study participation and subsequently consented to engage in the key informant interviews. The American College Personnel Association's (ACPA) *Standards for Demographic Questions* suggests research participants may view questions regarding their personal and/or social identities as marginalizing; this phenomena may be exacerbated by listing possible answers to these demographic questions (Moody, Obear, Gasser, Cheah, & Fechter, 2013). In an effort to mitigate this possibility, participants were requested to verbally provide answers to four open-ended demographic questions related to their: ethnicity, gender identity, academic level at CSU, and age. Regarding ethnicity, three participants identified as solely Caucasian, while one participant

reported both Native American and Caucasian ethnicities. Three participants identified with a male gender identity, whereas one identified as being of the female gender. In conjunction with the aforementioned demographic classifications, two students reported being at the academic level of senior, one reported being a junior, and one as being a sophomore at CSU.

Ages of research participants in this study ranged from 23 to 35 years old, which categorizes three out of the four participants as non-traditional aged college students. Other than age, the National Center for Educational Statistics (NCES) specifies additional demographic characteristics to categorize this college student subpopulation (e.g. background and/or level of employment); however, the NCES also reports the defining trait of non-traditional college students is being 24 years of age or older (United States Department of Education [USDE], n.d.).

Attempting additional recruitment. After conducting these four key informant interviews, data collected suggested the needs and challenges of recovering traditional-aged CSU students, and those living on campus, may be different from those of non-traditional students living off campus. In an effort to locate another traditional-aged recovering CSU student, additional recruitment was performed. Previous participants were contacted via phone; individual emails were sent to multiple CSU Drugs, Alcohol, & You (DAY) and other CSU Health Network providers; the Director of Residence Life at CSU was contacted via email; and a community provider was contacted via phone. Although many contacted stated they knew or were providing services to traditional-aged recovering students and would forward the Recovering Student Recruitment Flyer, this second recruitment campaign yielded no additional research participants.

Consenting to Participate

Each of the four participants were given and asked to read the "Letter of Informed Consent" (found in Appendix D of this document), as well as an informational document outlining aspects

of Collegiate Recovery Communities (CRCs). These conversations were digitally recorded and, prior to commencing with the interview, participants were requested to verbally consent to study participation.

De-identification of Participants

Using a simple A through D alphabetic coding system, each participant was initially assigned an uppercase letter, based on the order in which the interviews were conducted; for example: the first participant was labelled "Subject A". It should be noted that the participants were aware of their initial assignment. Using an anonymous, online random letter generator, this four-digit list was reconfigured at random and participants were reassigned an alphabetic character with which to report research findings in this document. Only the researcher, and possibly the associated faculty advisor, will have access to this matching code.

Interview Questions

The Key Informant Interview consisted of nine open-ended questions, including specific questions about the needs and challenges of CSU students in recovery maintenance from a SUD. Although the researcher rarely deviated from these nine interview questions, based on the information provided during the interview, the participants were requested to provide additional information about their personal experiences. For example, Subject B reported recently transferring to CSU and thus was asked to speak about their experience as a recovering college student at that previous institution. In addition to sub-questions generated through the individual interview process, when asked to describe what activities the participants engage in relating to their recovery, their responses generated another question about healthy personal habits.

Data Analysis

Utilizing Interpretative Phenomenological Analysis (IPA)

As was previously stated, Interpretative Phenomenological Analysis (IPA) specifically evaluates the subjective experiences and social cognitions of research participants, while simultaneously considering the researcher's interpretation of the qualitative data collected (Brocki & Wearden, 2006). By recognizing the dynamic nature of qualitative data collection, IPA engages the researcher in analytic processing to draw conclusions based on the participant's responses and subsequently draw thematic inferences about the phenomena being researched (Smith., Jarman, & Osborn,1999). Based on the number of participants from whom data is being collected, research suggests two ways to conduct IPA; for the purposes of analyzing data produced from a small number of participants, such as during this study, Smith et al. (1999) propose an idiographic, case-study approach.

Outlining Interpretative Phenomenological Analysis. Employing the analysis proposed by Jonathan Smith, a qualitative researcher credited with creating IPA, data collected from the research participants in this study was systematically analyzed to decipher overarching themes within the interview transcriptions. Prior to commencing data analysis, each interview was transcribed verbatim in separate documents; line numbers were added to assist in the analysis and the document was horizontally oriented to create two additional columns on each page.

Preliminary analysis. Smith et al. (1999) suggest completing the process of IPA with a single interview before proceeding to subsequent interviews. During this first stage of data analysis, the primary aim is to: summarize the participants' statements, document any generated associations or connections, and any other initial interpretations. Research suggests the importance of reading the transcriptions multiple times throughout the preliminary analysis to

gain a comprehensive account of the participants' articulations (Smith et al., 1999). The audio recordings of each key informant interview was scrutinized several times to identify any specific tonal or cadence data which might provide further insight into these participants' cognitions and experiences.

The data gathered through this preliminary analysis was recorded in the first of the aforementioned columns, with line numbers corresponding to the applicable data in the actual transcription; at this stage the document was printed and all subsequent analysis was conducted in handwritten form. Although the four key informant interviews were identically analyzed, the entire IPA process was conducted with each transcription before proceeding to the next.

Secondary analysis. During the secondary analysis, the second column is used to "document emerging theme [and] using key words to capture the essential quality of what you are finding in the text" (Smith et al., 1999, p. 221). These key words will assist the researcher in creating a Central Themes List during the fourth phase of data analysis; however, at this stage in the IPA process, research suggests these key words are not necessarily definitive and solely enable the researcher to document their cognitions about the concepts being discussed by the participant (Smith et al., 1999); this Master Central Themes List is described in detail later in this section and a copy of this list can be found in "Appendix F" of this document. As the researcher engages in this secondary IPA, some of their interpretations will inevitably connect to reflections on previous sections of the transcription. The transcription in its entirety is to be considered "potential data" and "no attempt is made to omit or select a particular passages for special attention" (Smith et al., 1999, p. 222).

Tertiary analysis. As a separate document, the researcher lists emerging themes from the interview transcription and identifies connections between these themes. During this section data

analysis, the first aim is to cluster similar themes together and create "superordinate concepts" which coordinate multiple concepts identified in the previous analyses (Smith et al., 1999). Smith et al., 1999 suggest IPA requires the researcher to have extensive interaction with the transcriptions and, as theme clusters emerge, they suggest reviewing the original interview transcriptions to ensure continued connection to what the participant actually verbalized.

The secondary aim of tertiary IPA is, not only for the researcher to comprehend what the participant is expressing, but also for them to engage in critical thinking to create a methodical interpretation of the concepts extracted from the participants' responses (Smith et al., 1999). The tertiary data analysis process is individually conducted on each transcription to identify emerging central themes and subsequently the data is amalgamated to create the Central Themes List.

Quaternary analysis: Central Themes List. The Central Themes List is a coherently arranged table of central themes, identified through former data analysis, which most strongly correlate to the participant's cognitions and articulations. Concurrently, previously extracted themes which are not continuously validated by actual data and/or do not correlate well with "the structure of themes and sub-themes" are removed (Smith et al., 1999, p. 223). During this phase of data analysis, the central themes found within each key informant interview were merged and itemized as headings for the Central Themes List. The alphabetic code for each participant was listed under these headings and the corresponding line numbers from the transcript, referring to the central theme heading, were recorded. This process not only assists the researcher in detecting direct quotes from participants to support these central themes, but also contributes to mitigating researcher bias in that theme selection is one of impartiality (Smith et al., 1999).

Research suggests some of these central themes will closely relate to the questions posed during the research interview, while others may be generated from the participants'

verbalizations of tangential cognitions perpetuated by those questions (Smith et al., 1999). As a cyclical, quadripartite process, IPA compels the researcher to repeatedly engage with the transcriptions to distinguish additional central themes and/or abandon previously identified themes which no longer pertain to the collected data.

Continuing Analysis with other cases. Smith et al. (1999) suggests two approaches to analyze successive interviews. The first strategy searches for additional instances of the Central Themes discovered during analysis of the original interview, while concurrently evaluating the subsequent transcriptions for additional themes. The second strategy commences the identical quadripartite process with each transcription; the Central Themes found in each interview are then assembled into a Master Central Themes List. For the purpose of this study, each interview transcription was individually assessed using the IPA process.

Summarization of Data Analysis

The Central Themes List, created as a result of Interpretative Phenomenological Analysis (IPA), may serve as a foundation to verbally report findings in a research document; however, research suggests qualitative data reporting has vast flexibility and the written account may also be a representation of the researcher's attempt to clarify responses produced during the interview process (Smith et.al, 1999). In an effort to verbally present the analysis of data collected during this study, the central themes will be presented in two approaches. First, the data for all participants will be presented chronologically based on the organization of questions from the Recovering Student Interview Schedule; then additionally discovered Central Themes, not associated with a specific interview question, will be presented by theme.

Recognized Central Themes assembled by interview question. To logically present the Central Themes found within this research, the topics are first grouped by interview question.

The aim is to, not only communicate the research participants' cognitions, but to also link the theme to the instigating interview question.

Please describe what being in recovery from a Substance Use Disorder (SUD) means to you? Participants were asked to give their personal definition of recovery maintenance from a Substance Use Disorder (SUD) and Subject B commenced their dialogue with a personal definition of substance abuse. They stated:

> It means that you used a substance to the point that it caused a problem in your life…some kind of mind-altering substance, that you had enough of a problem with, that it was kind of messing up your life, enough that you needed to stop.

Living differently. The Central Theme found within this interview question was labelled "Living Differently" and encompassed many of the participants' emphasis on SUD recovery being based on conducting life completely different than when they were abusing substances. Subject A stated, "It [recovery] means that I have a chance to live a different way of life and a way of living differently than I was used to living when I was using."

In an effort to alleviate their own negative connotations surrounding the term "recovery", one participant chooses to differ with their semantic interpretation of SUD recovery; they declared, "I say I reinvented myself…I'm becoming somebody new here; I'm developing a better person than I was before." Another participant discussed the concept of living daily life comfortably without using substances and the self-made ultimatum of never being persuaded to use alcohol; the participant insinuated both of these cognitions were contrary to their previously held core ideals when abusing substances.

In what activities, if any, do you regularly engage in related to your recovery? The second Central Theme was originally presented during Subject B's dialogue related to the previous question; this theme surrounds each participant's discussion of activities and behaviors they

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engage in related to their recovery; they stated, "You're doing something to try to not use substances anymore."

Recovery related activities and behaviors. This theme encompasses the participants partaking in traditional recovery related activities, such as attending Alcoholics Anonymous (AA) or other Twelve-Step Facilitated Group (TFG) meeting, as well as personal habits participants practice on a regular basis to aid in their process of recovery maintenance.

All participants discussed the positive impact of AA and/or other TGFs. Some participants reported current attendance at these group meetings, while others discussed specifically using this recovery tool in "early sobriety". In using this terminology, the participants were referring to a nonspecific inaugural timeframe for their recovery; however, research suggests this phrase denotes the period between one month and one year of sobriety (McLellan, 2012). One participant discussed their continued attendance at four or five AA meetings a week regardless of being in recovery for an extended period of time. Another participant with extended sobriety stated, "Sometimes I go to meetings, Alcoholics Anonymous or NA [Narcotics Anonymous] meetings."

In conjunction with the participants' reports of engagement in TFGs produced by this interview question, participants also discussed their regular commitment to healthy personal habits and furthering their personal growth. This sub-theme entitled "Healthy Personal Habits", found under the central theme of "Recovery Related Activities and Behaviors", was an unforeseen additional grouping based on the participants' articulations regarding their pursuit of both physical and mental wellbeing. One participant listed these positive daily habits by stating, "It's kind of all the little things in my life that I do that are healthy; eating right, getting enough sleep, taking care of myself emotionally, not being too hard on myself."

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Along with reading books related to substance abuse (recovery), and an emphasis on regular physical exercise, many participants discussed their continual attention to spiritual development. Participant A reported, "I try to exercise, not just my body, but my mind as well; whether it's meditation, or going to church, or something like that." While answering this interview question, multiple participants additionally mentioned both the treatment of and involvement with their families. One participant stated, "Personally I feel that it's important for me to be involved with my family; that's part of my recovery…being present for them and being able to show up in time of need, or not in need, and just being there."

In your experience, what are the great needs for recovering students at CSU? The participants' dialogues regarding this question presented one Central Theme based on their emphasis on the need of recovering students to interact with likeminded peers. Additionally, one participant discussed the importance of acknowledging the phenomena of recovery maintenance from a SUD in the collegiate environment.

Interaction with sober students in recovery. Many participants spoke about the challenges of maintaining their recovery and consistent abstinence from psychoactive substances in a collegiate environment. In conjunction with the central theme of isolation the participants discussed the importance of interacting with other recovering CSU students. A way in which the participants, and the aforementioned research, suggests CRPs may provoke (social) interaction with other recovering students is through hosting sober activities or events (Cleveland et al., 2007). Participant B stated, "The greatest need would probably be a way for people to meet other sober students." This participant continued verbalizing the benefits of recovering peer interaction by saying, "There's a way to help people to know it's okay to not drink in college, and you can

still have fun, and you can still make friends, and have a good life." The central themes of sober

activities and isolation will be discussed in further detail later in this document.

Receiving acknowledgement. Although not considered a Central Theme, due to only being

expressed by one participant, the importance of university administrators acknowledging both

increasing trend of individuals within academia abusing psychoactive substances and the number

of students who identify as being in recovery maintenance on their campuses was noted.

Participant C stated, "I think there needs to be an acknowledgement more so because…it's not

that easy being sober, especially on campus, in a college town." This participant continued to list

many resources provided by currently implemented CRCs, such as substance-free housing and

on-campus TFG meetings, but asserted, "Those are all great too, but I think for those things to

happen that it [SUD recovery in the collegiate environment] needs to be addressed."

Please describe challenges, if any, you have faced as a recovering CSU student. The

participants discussed challenges in maintaining their sobriety around peers who are actively

drinking alcohol; this heading was entitled "Environmental Influences".

Environmental influences. Each participant expressed their emotions and cognitions about

the influence of high alcohol consumption, and other psychoactive substance use, in the

collegiate environment. Participant C stated, "Its [drinking] going to happen all around

me…somebody's out getting drunk and partying." Additionally, many participants verbalized the

difficulty of reengaging in higher education after a sabbatical, often prompted by the negative

outcomes of substance abuse, with a different mindset and their efforts to change their academic

behaviors. Another participant reported, "Not necessarily staying sober or clean have been the

challenges when coming to CSU, but the challenges of still learning to live life differently, and

still learning how to be a student; [for example] learning to accept help from advisors."

During the conversation related to the environmental influences to use psychoactive substances in the academic environment, one participant discussed the concept of normative alcohol use and experimentation with psychoactive substances of those individuals attending institutions of higher education and/or are of traditional college age (18 to 23 years old). Although this participant indicated overhearing other students' discussions related to their substance use and "partying" triggered thoughts related to drinking alcohol, they stated, "It doesn't bother me to hear that; it doesn't make me want to go drink…because, to me, that's part of life, that's something [psychoactive substances] that people need to experiment with."

In conjunction with the influences found within the collegiate environment to use psychoactive substances, one participant discussed the impact of the drinking culture within the Fort Collins community; a drinking culture refers to the customs and social attitudes associated with consuming alcohol within a specific social system. Participant D expressed, "You know, it's Fort Collins; people love the breweries, or wineries, or cideries" (cider mills which produce alcoholic beverages constructed using various fruits); this participant also expressed the difficulty of spending time with people who are actively drinking in these environments.

Do you regularly associate with other CSU students in recovery? If so, how did you meet these students? The participants' answers to this interview question varied greatly; however, many participants reported meeting other CSU students in recovery maintenance from a SUD in the process of attempting to implement the CRC and/or community TFG meetings. One participant stated, "I met some CSU students through the CSU Health Network; there's a program being started, a Campus Recovery Community." This participant also discussed the importance of surrounding themselves with "likeminded individuals"; "A lot of people I know

are in recovery, who I have stayed friends with…because when I came back to school, I didn't have all of those connections like I had."

Participant A also discussed the concept of reaching out to other students when they recognize that individual is in recovery from, or actively engaging in, a SUD; they reported usually meeting recovering CSU students in classes or in TFG meetings. "When I hear someone that's at CSU, even in my class, I try to connect with them." This participant also conversed about sharing their general experiences related to recovery with these students; "It's just being aware of your surroundings, and listening, and sharing your experience in a general way so that people… understand that I have the same group, am in the same boat as they are." The previously discussed Central Theme of isolation also pertains to this subject in that research suggests the effectiveness of mutual peer support in collegiate recovery; this is thought to be especially true to those students in early recovery and those commencing, or returning to higher education (Laudet et al., 2014).

Based on the information provided about the Collegiate Recovery Community (CRC), and any previous knowledge, what resources do you think would be most important and why? Although many potential supportive recovery resources were briefly mentioned, both substance-free housing and a safe, specified on-campus location for the Collegiate Recovery Community were emphasized by multiple participants.

Substance-Free Housing. When presented with this question, participants overwhelmingly discussed the need for Substance-Free housing for recovering students both on and off campus. They verbalized both their own experiences living with individuals who are actively drinking and/or using other psychoactive substances, as well as hypothesized about the difficulty of residing on-campus in SUD recovery. One participant reported, "Substance-Free housing would

be fantastic. I do know that both of my roommates drink…we have a handle [half-gallon] of Captain Morgan [hard liquor] on top of the fridge, and there's beer in the fridge, so it makes it really hard." They continued by discussing their consistent internal determination to not drink alcohol but also stated, "It slowly whittles you down, constantly being around alcohol, so that's kind of tough."

Additionally, multiple participants alluded to the current complications posed by "Living Substance Free Communities" found within the residence hall system at CSU. Participant A stated, "I think that substance-free housing, on campus and off campus would be great, but I don't know if it could just generally be for people who want be clean [not using alcohol and/or other psychoactive substances], not because their parents want them to have substance-free housing." The "Living Substance Free Communities" at CSU convey these specified floors within two residence halls on campus are for students with a lifestyle that does not include: alcohol, drugs, or tobacco; however, the participants verbalized a general consensus that these designated "sober" living spaces are mostly filled with students compelled to reside there and does not house many recovering students (Colorado State University [CSU], 2016). The participants also expressed potential logistical complications with restricting substance-free housing to students identifying as being in recovery from a SUD; Participant A continued, "But I don't really know if you could do that. I don't know what the logistics of that."

Safe, specified, on-campus location. In conjunction with substance-free housing, another Central Theme found within this interview question surrounded many of the participants expressing the need for a safe, on-campus location for recovering students at CSU; this theme was entitled "Safe, Specified, On-campus Location."

Participant B stated:

> As far as what I would want the Collegiate Recovery Group [Community] to provide for me and for other people is basically a place to meet and confidentiality...I think the most important thing is that we can just meet and build relationship with other sober students.

The Central Theme of "Recovering Peer Interaction and Support" will be discussed later in this document.

The need for a safe space on CSU's campus specified for recovering students was a prevalent theme throughout the key informant interviews and was expressed by multiple participants while answering this question. One participant stated, "I think that it's probably most important for me to have a safe place, not just your living space…that safe space, that breathing space; you can go in and people understand the chaos that happens." This participant also suggested modeling the on-campus site for the Collegiate Recovery Community after the student resource offices offered by CSU's Student Diversity Programs and Services. Although this participant specifically referenced the Adult Learners and Veterans Services (ALVS) office, CSU currently provides eight such on-campus offices working with a multitude of specified student populations. Some offices are considered cultural centers and are specified for students identifying within a particular ethnicity, gender, or sexual orientation, while another supports students who are disabled (or differently abled) in some capacity. In discussing Participant A continued, "It [the ALVS office] is specified for them, and other students can go in there, but it's directed for them; I feel like it's helpful to have that space, that safe space, that breathing space."

Responses to this question generated a sub-question surrounding the participants' thoughts on a specific location to accommodate a CRC office; overwhelmingly, the participants expressed the need for this office to be located on campus, and be accessible, while attempting to maintain the recovering students' anonymity. One participant stated, "I'm pretty open about my sobriety

and being in recovery, so for me I would be fine with it being on campus…I think it's important

for it to be available, but in a safe space." Another reported, "On campus would probably be

better, would probably be easier, because you're really trying to maximize the number of people

you want to get, as long as they're people who want to be sober." Participant A further discussed

the necessity of this on-campus location being selected with the input of recovering CSU

students; they stated, "I think that [the CRC on-campus location] would be something that would

be up to the decision of the students, where they feel like it should be."

    Receiving acknowledgement once more. As was previously stated, the necessity of

acknowledging students in recovery maintenance from a SUD by university administrators is not

considered a Central Theme within this data because it was verbalized by a single participant.

However, this participant chose to continue the discussion of acknowledgement from their earlier

dialogue; they expressed, "I think there needs to be more acknowledgement from the top down."

Once more, the Central Theme of "Recovering Peer Interaction and Support" will be discussed,

in greater detail later in this document.

    Deficiency in the identification of specified recovery resources. As was previously stated,

participants were provided with a document entitled "What is a Collegiate Recovery Program

(CRP/CRC)?" which included a list of resources provided by currently implemented CRCs

nationwide. A copy of this can be found in "Appendix C" of this document. The researcher

assumed this would stimulate a discussion about specific resources they foresaw as being most

important to offer recovering CSU students; nevertheless, this proved to be a small portion of the

participants' answers to this interview question. Although many participants identified

substance-free housing and sober activities, discussed in the next section of this document, as

being important supportive recovery resources, only one participant briefly mention other

possible supportive resources; these included: educational sessions on addiction recovery, referral to community treatment services, and professional staff knowledgeable in SUD recovery and collegiate student affairs. However, this participant also emphasized the concept of CRCs being founded in peer-based support in stating, "I think that's good, to have professional staff available; then again, it could be student-based as well."

If available, would you attend sober activities sponsored by a Collegiate Recovery Community (CRC)? Why or why not? Comprehensively, these four recovering CSU students verbally affirmed their desire and willingness to attend sober events (sponsored by a CRC); this Central Theme was entitled "Encouraging Sober Activities."

Encouraging sober activities. With regard to the negative impact of not participating in activities while enrolled in higher education, Participant A stated, "You can't shy away from doing activities; it's impossible. You'll be miserable and you'll hate being a student at CSU." They continued by explaining, "Alcohol and drugs are everywhere…It's important to show people that you can navigate through those challenges and you can have fun without drinking or using." In addition to forecasting many positive attributes of sober activities, such as building relationships with other recovering students, participants also discussed the mutually supportive aspect of these seemingly leisure-based activities. Another participant explained, "It's good to get together with people who are like you…you all have this same common principle; that you're sober and you're students and you're just looking for some fun."

Would you attend an on-campus self-help [TFG] meeting, like AA or NA? Why or why not? In hypothesizing whether or not they would attend an on-campus Twelve-Step Facilitated Group (TFG) meeting, the participants' responses varied greatly. Some participants definitively affirmed they would attend such a meeting, while others reported they would attend on a

probationary basis depending on their school schedule and/or if they could support other sober students; most participants alluded to the chaotic class schedules often found in higher education, as well as the lack of transportation for (on-campus) students. In conjunction with discussing their endorsement of an on-campus TFG, one participant articulated their astonishment that the CSU campus did not already host such a meeting. They asserted, "I'm kind of surprised they don't already have one." Although former recovering CSU students report an Alcoholics Anonymous meeting was once conducted on this institution's campus, this supportive resource has not existed for more than 15 years.

One participant considered there to be sufficient TFG meetings within the Fort Collins community but also reported, "If it fit into my schedule while I'm on campus…it could potentially be convenient." Another participant, who conversely stated they unquestionably would attend an on-campus meeting also stated, "I think that you can have a space on campus and people can be respectful of your sobriety and other people's confidentiality."

The Central Theme found within this interview question was titled "Mutual Support" and describes the participants' articulations of the need for mutual support in SUD recovery. As one of the main ideals encompassed by TFGs, mutual support is also the foundational principle of Alcoholics Anonymous (AA), the foremost established self-help group. The *AA Preamble* explicates, "Alcoholics Anonymous is a fellowship of men and women who share their experience, strength, and hope with each other that they may solve their common problem and help others to recover from alcoholism" (Alcoholics Anonymous World Services [AAWS], 2013). Although Participant B reported they would probably not attend an on-campus TFG meeting, they also stated, "If there are cool people there, or that are struggling…If there's somebody that I feel like I could talk to and help, I would go."

Have you ever participated in any CSU on-campus Substance Use Disorder (SUD)

prevention/intervention program?

Half of the participants reported attending one of the, previously discussed, on-campus SUD

prevention and/or intervention programs at CSU. One participant, who reported attending Taking

Steps, a one-time educational session surrounding alcohol use in higher education, briefly

discussed the experience and sarcastically declared, "That was fun, yea." With the lack of

information provided, and the participant's cynicism when discussing the topic, the researcher

hypothesizes this individual does not favorably view the program. This could be due to the

mandated nature of these SUD prevention/intervention programs or the participant's lack of

internal motivation to change their behavior regarding psychoactive substance use at the time of

attendance.

Conversely, another participant encouragingly discussed their long-term engagement in

Back-On-TRAC (Treatment, Responsibility, and Accountability on Campus), also known by the

acronym BOT, CSU's most comprehensive and extensive SUD treatment program. They

reported, "It [BOT] was a really good experience; good to meet other people who had

experiences like me." This participant also discussed, in generalities, their experience being

suspended from CSU for noncompliance in the BOT program, as well as the change in their

attitude when returning to the BOT program and the academic institution. "It really wasn't a

challenge this time for me like it was [before]; it was just something I was doing…I kind of just

flowed with it."

Additionally recognized Central Themes. Concurrently with the Central Themes

categorized by interview question, five additional overarching themes were extracted from the

participants' verbalizations. These themes are catalogued by Central Theme, and are not

associated with a specified interview question, due to these topics being mentioned throughout the conversations.

Feelings of isolation. With regard to subsisting in the collegiate environment, each of the four recovering students verbalized feeling some amount of isolation at CSU. Participant B stated, "I feel very much like I'm the only person that doesn't drink and definitely the only person that doesn't smoke pot in the state." They continued discussing the high prevalence of psychoactive substance use by saying, "I think a lot of [recovering] students are, not only around other students that are drinking and smoking weed, are non-addicts, but they're also living with people who are doing that [using substances]; they probably have people in their family do that." Other participants discussed the necessity of staying more academically focused on not dwelling on the substance use of their peers; one participant stated, "I had to do my own thing and stay focused, rather than, 'I wonder how much fun I could be having at that party on Saturday night."

Throughout the interviews, multiple participants alluded to, or directly spoke about, the resulting stigma surrounding being in recovery from a SUD within a closed system that inherently lends itself to high alcohol and other psychoactive substance use; however, they additionally spoke of challenges to sobriety in the academic environment being similar to those posed by society in general. One recovering student speculated, "I don't know if that [the stigma] has anything to do with the school. I think that's just being in a society that is very indulgent and it's weird if you're not indulgent; it's weird if you don't do the thing that other people do."

Importance of safety. Many participants emphasized the concept of keeping themselves safe in their recovery. Participant C stated, "I've made different identifications with who I am and what I do to keep myself safe. And that's exactly it, I protect myself in a safe environment."

In conjunction with the aforementioned Central Theme of housing the Collegiate Recovery Community in a safe location on campus, the participants also discussed protecting themselves from outside influences to return to psychoactive substance abuse. One participant discussed their desire to have a safe place on campus where recovering students could retreat when feeling overwhelmed by the academic environment. They stated, "I think that if I were coming to CSU newly sober, newly clean, it would be important for me to be able to find…a safe place for me, if I was struggling, to go to; where it's a non-judgement-based place."

Additionally, many participants discussed the positive impact previously hosted sober activities by the fledgling CRC at CSU have been, and would continue to be, a safe environment where recovering students could meet, socialize and find peer support. Participant B expressed, "I would definitely [attend sober activities] and I already have; I really strongly believe in things like that…I think that's just something that needs to exist more in the world, not just in college."

***Influence of Twelve-Step Facilitated Groups*.** Although the positive impact of TFGs was previously discussed with regard to activities the participants engage in related to their recovery, each participant discussed the positive influence of Twelve-Step Facilitated Groups (TFGs) in their recovery process. One participant stated they did not necessarily need anything from a CRC because, "I guess I get my [recovery] needs met from AA." Simultaneously while attending a SUD treatment program, Participant C discussed their experience with TGFs in early sobriety by stating, "I did go to a lot of Alcoholics Anonymous meetings, and other [TGFs], when I first got sober and I was in treatment and that was amazing; that was a good experience." Participant C continued discussing the sustained positive impact of TFGs on their SUD recovery; they reported, "That's [TFGs] helped me a lot about what I wanted to do with my life and how I wanted to change and the changes I wanted to make."

Participant B reported that, although they no longer attend TFGs, most of their friends are individuals they previously met attending these meetings. "Most of my friends are people I met in AA…I guess since that's the first major thing that changed when I got sober, was who I was hanging out with." Additionally, multiple participants reported meeting other recovering CSU students at Alcoholics Anonymous meetings; one participant stated, "I know a few people that were CSU students and I met them while they were CSU students, but I was not…I met them through AA."

Potential Differences for Traditional-Aged Students. As was previously stated, three of the four participants were considered to be non-traditional college students in that they are over the age of 24; each of these three participants directly discussed, and/or alluded to, the potential difference in the needs and challenges of traditional-aged students. When conversing about the greatest needs for recovering students in the collegiate environment, Participant A stated, "Maybe because I'm a non-traditional student, they [greatest needs] may be different for me." Another participant, who recently transferred to CSU from community college speculated, "I don't know what it's going to be like here, but at [community college] I was quite a bit older than a lot of people." This participant then spoke about the challenges of interacting with younger students who are the experimental phase of psychoactive substance use.

Although none of the participants reported attempting sobriety while residing on campus, one alluded to the potential additional challenges to SUD recovery maintenance posed by living within the residence hall system. They expressed, "I haven't really faced any challenges. I guess because I'm a non-traditional student. I'm not living in the dorms; I'm not really around that scene at all."

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Impact of CRC Planning Efforts. Many participants encouragingly spoke about their interactions with other recovering CSU students as the result of planning and attempting to implement aspects of a CRC at CSU. With varying levels of involvement, these students discussed the positive impact of attending sober activities and meeting other recovering CSU students. When discussing their desire to partake in the CRC planning process, one participant reports, "That was a good opportunity for me, so I took it and said, 'Hey. I'd like to get to know some more sober people." Another participant discussed the impact of both TFGs and the campus-based initiative in meeting other recovering CSU students; they reported, "We were attending the CRC there for a while, so I knew a couple people there."

Summary

Through the use of Interpretative Phenomenological Analysis (IPA), four key informant interviews were examined to ascertain interconnected Central Themes. Each interview transcription was thoroughly dissected using the quadripartite analysis process and subsequently a Central Themes List was created; the themes were recorded along with corresponding verbatim phrases from the interview transcriptions to validate the recognized topics. Due to the subjective nature of the qualitative IPA process exact line numbers from the interview transcriptions are included in the Master Central Themes List, found in Appendix F of this document.

The themes found the interviews were initially grouped by interview question and then five additional categories, which could not be linked with a specific question, were added. This section discussed the details of the key informant interviews, including recruitment strategy and demographic composition of participants. The process of IPA was comprehensively discoursed and the researcher's specific analysis process is discussed; each discovered Central Theme is

described and quoted material from the interview transcriptions is presented to pragmatically endorse these predominant categories.

The following section will discuss the Central Themes, and other data extracted from the IPA process, as they relate to the reviewed current literature and the previously described theoretical foundations for this research. Implications for the continued planning and implementation of the Collegiate Recovery Community (CRC) are reported, as well as propositions for future research.

CHAPTER VI: CONCLUSIONS AND IMPLICATIONS

Needs Assessment Conclusions

The primary purpose of this study was to gather qualitative data on the challenges and needs of CSU students who self-identify as being in recovery from a SUD. The interviewing of four CSU students within this specific student demographic provided information related to these topics, as well as other issues pertaining to recovery in the collegiate environment. The carefully selected key informant interview questions assessed each topic on an individual student level; subsequently, the participants' responses were assembled and Central Themes were extricated using Interpretative Phenomenological Analysis (IPA). (The Master Central Themes List can be found in "Appendix F" of this document.) The following conclusions, based on this needs assessment, are designed to provide insight into the cognitions of recovering CSU students and may assist the CSU institution in the further planning and implementation of a Collegiate Recovery Community (CRC). Although many topics have been previously discussed in this chapter as they relate to current literature, the following discourse solely examines information reported by the recovering CSU students on their perceived challenges and needs of this student population.

Connections to Current Literature

The qualitative data collected, and subsequent examination through the use of IPA, provided information on characteristics specifically pertaining to CSU students in recovery maintenance from a SUD. Research suggests recovering college students are a "hidden population" and that calculating precise numbers, as well as identifying individuals for research participation, may be difficult (Bell et al., 2009). Although multiple recruitment methods were used to locate participants within the CSU community, finding recovering students proved to be challenging

and thus supported claims reported by the current literature. Research also suggests purposive sampling and reputational sampling are most effective when researching concealed populations; this study further supports these assertions in that participants were ultimately recruited through both the interconnections within the recovering CSU student population, as well faculty found within the Specialty Counseling Services office on campus (Neuman, 2011).

Characteristics

Current literature suggested recovering college students reported both former poly-substance abuse, as well as high incidents of relapse into psychoactive substance abuse (Laudet et al., 2014; Steiker et al., 2014). Although the key informant interviews did not investigate prior substance abuse, recovering CSU students reported poly-substance abuse, as well as previously relapsing in to substance abusing behavior during their recovery process. Research additionally suggested a large social stigma associated with SUD recovery among college students; this claim strongly correlated with the verbalizations of recovering students interviewed in this study (Laudet et al., 2014; Cleveland et al., 2007). While discussing their experiences as recovering CSU students, each participant discussed the stigma experienced as a result of being sober in this collegiate environment. Participants discussed the necessity of associating with other recovering students and finding mutual support in a "safe space" on campus; this need for socialization further connects to the current literature which identifies Collegiate Recovery Programs (CRPs) as the means by which academic institutions are meeting this need (Steiker et al, 2014; Bell et al., 2009).

Challenges in Collegiate Environment

Overwhelmingly the two largest challenges recovering CSU students confronted in the academic milieu are isolation and environmental influences.

Isolation. The challenge of isolation was discussed primarily as it related to peer use and abuse of psychoactive substances. As was previously stated, research suggests substance use peaks during transitional adulthood (18-25 years old) and, although most college students do not meet the criteria for a SUD, research additionally suggests nearly 60 percent of college students report being current drinkers, as well as approximately 22 percent reporting illicit substance use (MacKillop et al., 2013; SAMHSA, 2014a).

Based on this study, and current literature, the resulting minority of abstinent college students may cope with feelings of both isolation and social stigma (Bell et al., 2009). For example, one recovering student felt like the only person who didn't consume alcohol and/or marijuana, not only at CSU, but in the State of Colorado; this student also discussed the necessity of substantiating their previous substance abuse and thus their choice to remain abstinent. However, this study also suggests many recovering students acknowledge and normalize the investigational atmosphere associated with psychoactive substance use in college; specifically, this study suggests many recovering college students choose not to judge their same-aged, or younger, peers who may be misusing or abusing substances.

Based on the (potential) social stigma encountered in the collegiate setting, recovering college students emphasized the necessity of having an on-campus location where they did not feel judged by peers or faculty. Additionally, these students hypothesized this campus-based location would serve as a catalyst for interaction with other recovering college students, thus mitigating both the isolation and stigma associated with recovery in college; this locale may further serve as a refuge from the environmental influences and triggers within the academic environment.

Environmental influences. This study, and current literature suggests, recovering students are consistently confronted with collegiate environmental influences which may perpetuate a relapse into psychoactive substance abuse (Zamboanga et al., 2009). Although these may vary by academic institution, this study, and current literature, also suggest recovering students are influenced by the substance using behavior of their peers and also by the institution's overall culture surrounding alcohol and/or drug use (Bell et al., 2009).

With the aim of investigating challenges faced by CSU students in recovery maintenance from a SUD, this study gathered data on specific environmental influences found within this academic institution. This study may suggest recovering students consider there to be little recognition of, or understanding about, this minority student population. For example, the necessity of acknowledging this recovering student population at CSU "from the top down" was discussed and a previous lack of support from multiple levels within this institutional system was inferred. This study additionally suggests recovering students at CSU are surprised by the absence of a Twelve-Step Facilitated Group (TFG) meeting on campus and report they would conceivably attend a meeting hosted at the institution.

Although recovering students report multiple collegiate environmental influences, this study also suggests recovering college students may view these influences as very similar to those found within their daily lives. Overwhelmingly, recovering students reported being at an increased risk for relapse when surrounded by other who are engaging in substance misusing behavior. This study suggests recovering college students possess differing levels of comfortability with the substance using behavior of others. While some recovering students reported often "going out" with people who were consuming alcohol, others reported spending

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the majority of their time with other recovering individuals; the situation of socializing with individuals using other licit or illicit substances was not discussed.

Based on qualitative data gathered during this study, recovering college students also reported being influenced by the community in which the academic institution is located. In conjunction with the environmental influences posed by the academic setting, this study suggests the supportive view of psychoactive substance use, and more specifically alcohol and marijuana use, found within the Fort Collins community may encourage recovering students to return to maladaptive substance use.

Challenges and Needs

When discussing challenges to SUD recovery posed by the collegiate environment, participants discussed the comprehensive task of succeeding in college. Each CSU student reported differing primary challenges, but many discussed balancing their recovery maintenance activities with other responsibilities, which included commitment to scholastic endeavors. These reports correspond with current literature which suggests recovering college students may struggle to meet both academic obligations while concurrently engaging in recovery maintenance activities, such as attending TFG meetings (Bell et al., 2009). Research on currently implemented CRPs throughout the nation suggested these campus-based supportive resources may assist in addressing this challenge and multiple participants in this study hypothesized a CRP at CSU would provide students with convenient resources (Laudet et al., 2014).

Although none of the study participants currently live in the residence hall system on campus, they each reported living within this environment would be extremely challenging and emphasized a need for substance-free housing on campus. Current literature suggests residence halls are linked to heavy incidents of alcohol abuse and, as a result, many academic institutions

now provide on-campus substance-free housing (Laitman et al., 2014). As was previously stated, CSU currently designates specific floors within their residence hall system as "Living Substance Free Communities" and study participants openly discussed the potential major shortcoming of this situation. Nearly all CSU students living within these communities do not identify as being in recovery from a SUD and many are mandated to live there by their authority figures. When requested to discuss the greatest needs for CSU students in recovery maintenance from a SUD, the participants overwhelmingly discussed the need for Substance-Free housing designated for abstinent and/or recovering students who are voluntarily committed to living within this environment. In addition to services provided through a designated campus-based locale, current literature suggested academic institutions with established, continuing CRPs often provide on-campus housing for their recovering student population, which affords this minority student population an additional place of respite with the collegiate environment (Laitman et al., 2014).

In addition to substance-free housing, recovering CSU students reported the need for a social recovery network and would attend sober leisure activities offered by a CRP; this was most often coupled with a discussion of their cognitions related to the stigma and isolation they personally associate with SUD recovery in this collegiate environment. Research of current literature suggested recovering college students overwhelmingly describe both the lack of a social recovery network and the absence of leisure activities as significant challenges faced while attending an academic institution (Laudet et al., 2014). Additionally, recovering college students often confront social stigmas associated with their SUD recovery and/or abstaining for psychoactive substance use, including alcohol; research suggests this may be due to the overall misunderstanding of this phenomena by both peers and collegiate faculty (Bell et al., 2009).

Essential Components of CRP

As was previously stated, CSU has commenced the planning process of implementing a CRP; this needs assessment was designed, in part, to determine which components of previously executed CRPs recovering students at this academic institution expressed as being of importance. A current literature review surrounding services provided by CRPs nationwide, and the recovering college student they assist, was conducted to inform research. Conversely, recovering CSU students interviewed for this study have yet to be involved with a CRP and solely hypothesized about effective components based on their personal experiences and information provided about other campus-based recovery maintenance programs; nevertheless, many essential components designated in the literature review corresponded with meeting needs identified by the recovering CSU students and the potential supportive resources they discussed.

Mutual support. Research suggested CRPs are founded in interpersonal, peer-to-peer support and this mutual encouragement serves as a catalyst for recovering college students to thrive in the academic environment, as well as increasing and retaining the enrollment of individuals within this population (Smock et al., 2011). The concept of mutual support was verbalized by most of the recovering CSU students. This often related to combating the participants' experiences with isolation on campus or their desire to support other recovering CSU students who may, or may not, be struggling with the convergence of the collegiate environment and their recovery from a SUD.

Campus-based location. Many recovering CSU students discussed the importance of a safe, secure campus-based location specifically designed for students within this minority student population. Although minimal discussion existed regarding maintaining student confidentiality, the participants preferred an accessible place on campus. They additionally stressed the

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importance of having a protected locale on-campus where recovering CSU students could retreat and gain support from others who understand their experiences firsthand. This strongly correlates with current literature, which suggests CRPs are most effective in supporting students and providing resources when they are on campus (Laudet et al., 2014; TTU, 2005). Research further suggests campus-based programs are also more successful in offering accessible sober leisure activities, as well as on-campus TFG meetings and other programmatically sponsored events (Laudet et al., 2014); these resources will be further discussed later in this chapter.

Funding and support. The research participants discussed the necessity of institutional funding to further the execution of a sustainable CRP. In previous academic semesters monetary funds were available through the CSU Health Network for the small group of recovering CSU students who conducted weekly CRP planning meetings; typically these funds were used to buy food for those in attendance and was also used to sponsor two sober activities during the Fall 2015 semester. Although participants previously involved in these planning meetings acknowledged the helpfulness of this funding, they also reported the need for greater institutional funding to implement and maintain a CRP. Current literature suggests the success of a collegiate program is largely based on the investment, financial and otherwise, of their host institution and that this support varies greatly among existing CRPs; research also suggests this financial support may include, but is not limited to, actual financial subsidy and/or the donation of on-campus space for the recovery center (Laudet et al., 2014).

In conjunction with funding, current literature suggests successful CRPs are supported by key personnel within an academic institution (Laudet et al., 2014). The CRP planning process at CSU commenced four years ago and has continuously been supported by staff members within the Specialty Counseling Services office; throughout this planning process many recovering

CSU students have also been involved with various levels of participation. Although not considered a Central Theme within the IPA analysis, one CSU student consistently verbalized the need for acknowledgement of the many students who identify as being in recovery maintenance from a SUD at this institution. This recovering student strongly emphasized a lack of recognition of this minority CSU student population and discussed the need for "more acknowledgement from the top down". They additionally stated, "These are students who are struggling. This is a big portion of people that could be organized and [offered] the chance to help each other."

Recovery Maintenance Resources

With the aim of supporting recovering college students both academically and socially, current literature suggests CRP provide a conglomeration of resources which assist this minority student population to thrive in the academic setting; recovering CSU students were also specifically asked to discuss resources they considered of importance to include in a CRP at this institution (Bell et al., 2009). The following discourse involves resources discussed within the current literature, as well as the recovering CSU students.

Campus-based TFG meeting. Research suggests that, although CRPs are not directly associated with TFGs, many collegiate programs emphasize principles found within these groups, such as mutual support, and may also host TFG meetings at their campus-based location (Steiker et al., 2014). Additionally, research suggest involvement in TFGs is one of the greatest predictors of, not only maintaining abstinence, but also longevity in recovery (Cleveland et al., 2007). When inquiring about potential campus-based TFG meetings, some recovering CSU students hypothesized they would probably attend an on-campus meeting; however, all participants stated they would unquestionably attend to support other recovering students.

Regardless of current involvement with TGFs, each participant also discussed the positive impact of TFGs on their early recovery and many reported continuous involvement as part of their recovery maintenance program.

Sober activities. Recovering CSU students were specifically asked about their desire, or lack thereof, to attend sober activities sponsored by a CRP. While some participants discussed previously attending small events sponsored by the CSU planning group, such as a sober event sponsored by a program established at a neighboring university, each recovering student reported that they would conclusively attend sober CRP events. Current literature suggests sober leisure activities serve as a catalyst for recovering students to socialize and may also involve supporting this minority college population when attending university events where large amounts of alcohol are consumed (Watson et al., 2014).

Substance-Free Housing. Many recovering CSU students discussed the burden of dwelling with individuals who actively drink and hypothesized living in the residence hall system on-campus would provide additional environmental challenges. These students overwhelmingly reported considering the provision of substance-free housing by the projected CRP at this institution to be of high importance. Correspondingly, current literature suggests one of the largest challenges recovering students face in the academic setting is their living environment; research additionally suggests CRPs which offer substance-free housing are able to more comprehensively support their recovering student population (Watson et al., 2014).

In conjunction with many of the Central Themes extracted from the interview transcriptions corresponding to current literature, the expressed cognitions of the participants also closely relate to principles found with Ecological Systems Theory (EST); this theory was fully discoursed in "Chapter Three" of this document.

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Theoretical Associations

The findings of this study strongly correlated with ideologies found within the previously presented theoretical framework of Ecological Systems Theory (EST). Recovering CSU students greatly emphasized the challenge of isolation and the need to interact with likeminded individuals. Using the principles of EST and viewing the university as a complex social system, the implementation of a CRP creates a subsystem within that academic institution designed to support the recovering student population (Laudet et al., 2014). EST additionally theorizes the overall health of a microsystem, for example academic institution, is based on the attributes and interactions of the individuals within that system. Based on this assumption research suggests chronic maladaptive behaviors, such as substance abuse (relapse), should be addressed throughout the entire system. However, this principle can also be applied to the acknowledgement of a minority student population within this institution at all system levels. Research suggests institutional support is a vital component of successful CRP implementation; as one recovering CSU student stated, "I think there needs to be more acknowledgement from the top down." (Laudet et al., 2014). Although reports from CSU faculty and former student participants suggest this institution provides an effective range of SUD prevention and intervention programs, CSU has yet to provide services to students in recovery maintenance.

The isolation and associated stigma recovering CSU students reported while attending this institution may also be clarified using principles of EST. This theory proposes both connectedness and resiliency are related to the overall health of the microsystem, in this case the academic institution, as well as the individuals within this system (Randle et al., 2014). When discussing SUD recovery in the collegiate environment, connectedness refers to, not only the

interconnection of recovering students, but also the ability of that minority population to connect with the institution they attend.

Recovering CSU students discussed the isolation experienced as a result of heavy environmental influences to use psychoactive substances in this academic setting and the overall social stigma associated with an abstinence lifestyle. They also discussed the need for recovering CSU students to enjoy their collegiate experience and engage in safe university associated activities. As one participant reported, "You can't shy away from doing activities; it's impossible. You'll be miserable and you'll hate being a student at CSU." Another CSU student discussed the need for newly recovering students to gain mutual support and discover "you can still have fun, make friends, and have a good life" not using substances while attending college.

The concept of resiliency found in EST is considered neither a positive or negative attribute of a complex system and refers to that system's ability to remain stable over time; however, when a system becomes stuck in a "rigidity trap" it is unable to respond to changing circumstances despite negative outcomes (Barnett et al., 2013). When discussing an academic institution's level of readiness to change their culture relative to changing public health concerns, such as adding supportive resources for the increasing numbers of recovering college students, the concept of resiliency may demonstrate a lack of ability to holistically support their entire student population. The recovering CSU students interviewed for this study reported, not only a lack of acknowledgement at this institution, but also articulated a large necessity and great desire for on-campus supportive recovery maintenance resources.

Methodological Associations

This study provides a compelling argument for the use of Interpretative Phenomenological Analysis (IPA) when analyzing smaller amounts of qualitative data with a potentially hidden

population. However, to use this data analysis process effectively the researcher must possess a vast familiarity, or be considered part of, the population being studied; due to this important aspect of the IPA process, and as with most qualitative examination, careful consideration must be made to mitigate researcher bias throughout the analysis (Hancock et al., 2009).

Research criticizes qualitative data analysis because there is no set of criteria for judging the quality of the data collected and that the findings are applicable only within a specific context (Hammersly, 2007). Although IPA does not provide a set criteria for judging the quality of gathered data, the standardized quadripartite IPA process sensibly dissects interview transcriptions and assists the researcher in extracting central themes. The data collected through this study was examined using this process, previously described in "Chapter 5," with consistent attention to the actual verbalizations of the participants; this not only reduced researcher bias, but also increased the validity of themes discovered in the transcriptions.

Research suggests the resulting central themes extracted from the primarily analyzed transcription may be used in the subsequent analysis or the entire process may be used separately with each transcription (Smith et al., 1999). To reduce bias and independently examine each interview for central themes, the researcher chose to conduct the process comprehensively with each interview. Subsequently, the "Central Themes List," developed from the individual analysis of each interview transcription, was compiled and specific line numbers from each transcription relating to that theme were recorded; the resulting "Central Themes List" for this study can be found in "Appendix F" of this document.

The IPA process, and consequent central themes, were easily discoursed in the data analysis chapter and provided a comprehensive examination into characteristics pertaining to college students in recovery maintenance from a SUD. With the aim of specifically evaluating

recovering CSU students, these central themes assisted in clarifying the challenges to recovery posed by this collegiate environment, as well as the needs of this minority population at this institution.

Limitations

Research suggests qualitative data analysis may be successfully conducted with a small number of participants; this study solely interpreted the cognitions of four students in recovery maintenance from a SUD at Colorado State University and the implications may not be applicable to other academic institutions (Hancock et al., 2009). Recovering, traditional-aged (18-24 years of age) students, and/or those residing on campus, were repeatedly sought out; however, the participant pool for this study consisted primarily of students 24 years of age or older and did not include students living within the residence hall system. Although one participant reported transferring from a community college, and two reported commencing their SUD recovery while enrolled at CSU, none of the students interviewed transitioned directly from high school to higher education while in recovery.

With regard to demographics, the participant pool consisted of three students who categorically identified as ethnically Caucasian and one student who reported a female gender identity. The ethnic composition of this participant pool is consistent with the data provided by CSU on the general student population. Concurrently, the gender discrepancy may be due, in part, to the suggestion of current literature that male college students are more likely to experience negative outcomes as a result of substance abuse and thus may enter SUD recovery earlier than their female peers (Barnett et al., 2014). However, the demographic data may be considered when applying this research to institutions with a great variance in ethnic or gender composition to this institution.

CSU is a large, traditional, midwestern university located in a community commended for its exportation of sophisticated malted alcoholic beverages and a sizeable culture surrounding alcohol consumption; furthermore, this university is located in the State of Colorado which legalized marijuana in 2012, with the passing of Colorado Amendment 64. Although these environmental influences may not directly influence the data provided, they would be considerations when relating this data to other institutions.

Implications for Social Work

The *National Association of Social Worker's* [NASW] *Code of Ethics* (2008) describes the primary mission of this profession "is to enhance human well-being" while assisting people, often within marginalized populations, meet their basic needs and gain personal empowerment; social workers also aim to focus on the environmental influences which "create, contribute to, and address problems in living" (Preamble section, para. 1). This needs assessment was created to investigate the challenges recovering CSU students confront in this collegiate environment and the specific needs of this minority student population; additionally, this study attempted to ascertain the level of readiness for this institution to implement supportive recovery maintenance resources. This assessment solely focused on the cognitions of actual recovering CSU students and did not further investigate the opinions of other potential key informants; however, recovering CSU students comprehensively articulated their tremendous level of readiness for this institution to offer supportive recovery resources and the implementation of a CRP at this institution.

The NASW also states social workers "promote social justice and social change" while concurrently being culturally humble and mitigating social injustice; through a conglomeration of social service provisions, social workers attempt to empower individuals and "promote the

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responsiveness of organizations, communities, and other social institutions to individuals' need and social problems" (NASW, 2008, Preamble section, para. 2). Information provided in the review of current literature has been used to assist in validating the phenomena of substance abuse in the collegiate environment. The data provided by the recovering CSU students brought insight into the experiences and cognitions of the hidden CSU population and is forecasted to be used to corroborate the need for supportive SUD recovery maintenance resources at this institution.

Implications for Further Research and Planning

This needs assessment was primarily conducted to ascertain the challenges to SUD recovery posed by the CSU environment and discover the specific needs of this minority student population at this institution. Additionally, this study was designed to assist in the determination of CSU's readiness to implement supportive resources for students in recovery maintenance by investigating the willingness of students within this population to use the forecasted CRP.

To further investigate this institution's willingness to execute and sustain a program supporting recovering students, this needs assessment could be supplemented with an examination of the cognitions of other interested parties; this may include, but is not limited to: university administration, CSU faculty, Residence Hall staff, collegiate athletics, and/or staff involved with the CSU Health Network directly serving this student population. This study could additionally be conducted solely with recovering students directly entering CSU from high school and/or living on campus. Although recruitment was conducted in the "Living Substance-Free Communities" of the residence hall system, this did not result in engaging participants; it is suggested that recruiting from this extremely hidden subgroup of recovering CSU students may require differing sampling techniques and direct conversations to enlist participation.

Addressing Stigma

Although research suggests over 450 CSU students are seeking treatment for a SUD and/or are in recovery, recruitment for this study solely yielded four participants; each student reported differing levels of previous involvement in the CRP planning process at this institution (TTU, 2005). This study suggests stigma associated with SUD recovery in the collegiate environment may prevent these students from, not only responding to requests for research participation, but also reaching out to gain academic or recovery maintenance support. This study additionally suggests recovering college students attending academic institution without CRP services may continue to hide within the student population and resist enduring the stigma associated with SUD recovery.

As was previously stated, this needs assessment was conducted, in part, to determine the supportive resources provision recovering CSU students desire in a CRP. The data provided from this needs assessment could be used in the planning, execution, and sustainment of a CRP at this institution. This study suggests, the arduous process of attempting to modify service provision of an academic institution to include resources for students in recovery maintenance from a SUD may prove challenging; however, recovering CSU students are holding out hope for future generations. "That's the hope. That I would want those resources in place for my family, for my son. If he were to come to CSU and be in recovery, I would hope that resources were here for him."

The number of college students who identify as being in recovery from a SUD is rapidly increasing. These students chronically abused (multiple) psychoactive substances and survived the vast negative consequences as a result of that abuse; they also made a conscious decision to change everything about their lives by committing to a life of recovery. By choosing to attend an

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academic institution, which is now strongly associated with psychoactive substance misuse, these recovering students potentially endanger their recovery on a daily basis to receive higher education. The Association in Recovery in Higher Education (ARHE) (2015) currently reports over 100 Collegiate Recovery Programs (CRP) currently provide supportive resources to their students and between two and five Collegiate Recovery Programs (CRP) are implemented annually; this association additionally reports 200 academic institutions, including CSU, are in the planning stages of program creation. The ultimate aspiration is for CSU to become part of the many academic institutions dedicated to comprehensively addressing the problem of substance abuse through the acknowledgement and support of those students who have survived the ordeal and lived to tell the tale.

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UNITING RECOVERY & EDUCATION

Are You a CSU Student in Recovery from a Substance Use Disorder?

Do You Want Your Voice Heard?

Research Interviews are Being Conducted to…

- **Identify <u>Challenges</u> Recovering Students Face in the Collegiate Environment**
- **Assess the <u>Needs</u> of this CSU Student Population**
- **Discover Possible <u>On-Campus</u> Academic and <u>Recovery Maintenance</u> Resources**

➢ One-on-One, Anonymous Interview
➢ Flexible Scheduling: **1 Hour Session**
➢ Compensation for Participation
    ($10 Gift Card)

<u>Contact:</u> Kelsey Worfler, MSW Candidate
Kworfler@gmail.com

APPENDIX B: TELEPHONE SCREENING INSTRUMENT

Telephone Screening Instrument Script

Date of Screening: _____

Screening Number: _____

    First of all, I wanted to thank you for expressing interest in participating in this study. These interviews will help me to better understand the challenges and needs of CSU students in recovery from a Substance Use Disorder and will help CSU in the planning and implementation of on-campus, supportive resources for recovering students.

    This telephone screening will take approximately five minutes and will determine your eligibility to participate in this study. Your participation in this screening is voluntary and you may stop the process at any time. CSU will not know about your participation in this screening or the subsequent study and your identity will be substituted using a matching code, such as "Participant A".

    If you do meet the eligibility criteria and are chosen to participate you will be contacted via phone and/or email to schedule the 30 minute interview. Do you have any questions? Would you like to continue?

1. Are you currently enrolled in at least one resident tuition (on-campus, face-to-face) class on the Fort Collins campus of Colorado State University? ☐ YES ☐ NO
    - If no, stop interview by saying: Thank you again for your willingness to engage in this screening process with me. Because you answered "No" to the previous screening question, you do not meet the eligibility criteria for participation in this study. Do you have any questions?

2. Do you self-identify as being in recovery from a Substance Use Disorder?
    ☐ YES ☐ NO
    - If no, stop interview by saying: Thank you again for your willingness to engage in this screening process with me. Because you answered "No" to the previous screening question, you do not meet the eligibility criteria for participation in this study. Do you have any questions?

    Have you previously engaged in treatment for a Substance Use Disorder? This can include, but is not limited to: residential treatment, outpatient treatment, regular engagement in a self-help group? ☐ YES ☐ NO
    - If no, stop interview by saying: Thank you again for your willingness to engage in this screening process with me. Because you answered "No" to the previous screening question, you do not meet the eligibility criteria for participation in this study. Do you have any questions?

    If the individual being screened answers "Yes" to all three screening questions, an invitation to formally participate in the study will be extended. If the participant agrees, an appointment to conduct the key informant interview will be scheduled. (The consent form will be reviewed prior to the interview being conducted.)

What is a Collegiate Recovery Program (CRP/CRC)?

Kelsey R. Worfler, MSW Candidate, Colorado State University

A Collegiate Recovery Program (CRP) is a supportive environment within a university or college campus which reinforces abstinence from addictive substances and behaviors. They are designed to combine addiction (recovery) education with support services to ensure recovering students are cared for holistically (Association of Recovery in Higher Education [AHRE], 2015).

The already challenging transition to the university environment poses additional risks for recovering students, occurring due to a lack of supportive collegiate recovery services. Without support services, many recovering students face numerous risks to their physical, mental, emotional, social wellbeing in academia; CRCs are designed to address these specific challenges and needs (Texas Technical University [TTU], 2005).

History:

Although the implementation of services for college students in recovery from substance abuse began at Brown University in 1977, Texas Technical University (the institution credited with formalizing CRC services) created a standardized curriculum with which other institutions can create their own communities; this curriculum is entitled *Making an Opportunity for Your Campus: A Comprehensive Curriculum* (Smock et al., 2011; TTU, 2005). **Based on their estimation process and the current enrollment at CSU of approximately 30,000 students, over 1,600 students meet the criteria for a severe substance abuse disorder (SUD) and over 400 CSU students are currently seeking help for that disorder** (TTU, 2005).

Current National Implementation:

Currently over 35 institutions nationwide have formalized CRCs/CRPs; a nationwide list of universities with CRCs can be found at **http://collegiaterecovery.org/programs/** as well as links to many of the individual collegiate programs. The University of Colorado at Boulder is the only institution within Colorado with a CRC, but both Colorado State University and the University of Denver are in the planning process of implementing services (ARHE, 2015).

A List of Services Offered by Current CRCs:
- Substance-free housing on and/or off campus
- On-campus mutual support groups and/or self-help meetings (AA/NA/etc.)
- Educational sessions on addiction and recovery
- Safe on-campus location for students to socialize and seek support
- Sober/substance-free events both on and off campus
- Opportunities to attend university events with other abstinent students
- Academic support and study groups
- Service and leadership development opportunities

- Professional staff knowledgeable in addictions and student affairs
- Referrals to treatment programs and providers, if necessary

A List of Services Offered by Current Long Established CRCs:
- Seminar classes on addiction and/or recovery for university credit
- Research institutions and regularly conducted studies alcohol use and recovery
- Scholarship opportunities
- Programs for other addictive behaviors, such as eating disorders

Essential Components of a CRC:
- **Student Focused and Driven!!**
- On-campus location
- Funding: University, community, private, fee-for-service, or a combination

Key Differences in Current CRCs:
- Application process
- Sobriety requirements
- Self-help meeting attendance requirement
- Free versus fee-based services
  - Funding sources: Treatment providers, university subsidized, private donors, etc.
- Monitored sobriety requirements
- Treatment requirements (for students who relapse on substances)

Biggest Challenges in the Implementation of a CRC (TTU, 2005)**:**
- **From Institutional Administration:**
  - Recovering students are a liability, not an asset
  - Funding and space may be limited
  - Gaining investment for a program serving a small, but underserved, student population
  - CRCs may be seen as a threat by other on-campus counseling/treatment services

- **From the Community At-Large:**
  - Community treatment programs, sober living facilities, and 12-step communities may view CRCs as a replication of already provided services

- **From Within the Recovery Community:**
  - Conflict in philosophical underpinnings; 12-step versus other approaches to recovery
  - Lack of recovering student representation in off-campus recovery communities
  - Differing motivations for abstinence/recovery (Ex: treatment, incarceration, mandated versus voluntary)
  - Differing definitions of substance abuse recovery/sobriety/abstinence

APPENDIX D: LETTER OF INFORMED CONSENT

Dear Participant:

    My name is Kelsey Worfler and I am a Master of Social Work student here at Colorado State University (CSU). I am conducting a study to better understand the <u>challenges and needs</u> of CSU students in recovery from a Substance Use Disorder. The information gained from this study will help CSU in the planning and implementation of on-campus, supportive resources for recovering students.

    In the interview, you will discuss challenges to your recovery posed by the collegiate environment, as well as your specific needs as a recovering student at CSU. The interview will be recorded and will take approximately half an hour. Your first name, age, and academic level (e.g., freshman) will be the only identifying information written down and only I and the supervising faculty member, Dr. Louise Quijano (CSU School of Social Work) will have access to this information. Solely Dr. Quijano and I will have access to the digital recordings, which will be saved on a secure server, and this information will be completely erased after three years. Your identity will be confidential in the subsequent research paper by using a matching code to replace your name (e.g., Participant A). CSU **will not** know about your participation in this study. Your participation is voluntary and you may stop the interview at any point in time. If you choose to participate, you will be given a $10 gift card for your time.

    There is a small risk in participating. The questions I will ask may make you uneasy; if you are uncomfortable answering certain questions during the interview, you may skip the question and continue the interview, if you so choose. If you do feel distressed, the researcher is trained to assist you accessing campus resources that can help.

    I will protect you as a participant in various ways. I will never ask you to write or state your name, your Social Security Number, your CSU Student Identification Number, or any other identifying information during the interview.

    If you have any questions regarding this study you may call the Principal Investigator, Kelsey Worfler, at (303) 564-0459 or Kworfler@gmail.com. If you have any questions about your rights as a volunteer participant in this study, you may contact Louise Quijano at (970) 491-7448. Thank you.

Sincerely,

Kelsey R. Worfler, MSW Candidate
Principal Researcher
Colorado State University
School of Social Work

Student Interview Schedule
Colorado State University: Spring 2016

   I.   Please describe what being in recovery from a Substance Use Disorder means to you.

  II.   In what activities, if any, do you regularly engage in related to your recovery?

 III.   In your experience, what are the greatest needs for recovering students at CSU? (Ex: sober activities, substance-free housing, on-campus self-help meetings, etc.)

  IV.   Please describe challenges, if any, you have faced as a recovering CSU student.
       a. If housing is one of these challenges, please elaborate as to why.

   V.   Do you regularly associate with other CSU student in recovery?
       a. If so, how did you meet these students?

  VI.   Based on the information provided about Collegiate Recovery Communities, what resources do you think would be most important and why?

 VII.   If available, would you attend sober activities sponsored by a Collegiate Recovery Community? Why or why not?

VIII.   Would you attend an on-campus self-help meeting? Why or why not?

  IX.   Have you ever participated in any CSU on-campus Substance Use Disorder prevention/intervention program?

Demographic Questions:

   a. What is your age?

   b. What is your current academic level as CSU? (E.g., Junior)

   c. Please specify your ethnicity.

   d. What is your gender identity?

APPENDIX F: MASTER CENTRAL THEMES LISTS

Central Themes Table Categorized by Interview Question

Q1. Definition of Recovery from a Substance Use Disorder

➢ **Living Differently**

- Subject A: 10-12; 16-18
- Subject C: 12-15; 18-19; 22-23; 26-29
- Subject D: 8-10; 12-13

Q2. Recovery Related Activities

➢ **Recovery Related Activities and Behaviors**

- Subject A: 22-23; 25-29
- Subject B: 32-33
- Subject C: 33-40
- Subject D: 21-24

❖ **Healthy Personal Habits** (Sub-Theme)

- Subject A: 33-36; 39-43; 44-47
- Subject B: 50-53; 55-57
- Subject D: 28-33; 35-36

Q3. Greatest Needs for Recovering CSU Students

➢ **Interaction with Other Student in Recovery**

- Subject A: 69-71
- Subject B: 66-71; 83-86
- Subject D: 43-46

Q4. Challenges Faced as Recovering CSU Student

➢ **Environmental Influences**

- Subject A: 96-98; 100-104; 106-107;
- Subject B: 107-108; 118-121
- Subject C: 103-110; 112-114
- Subject D: 66-68; 70-73

Q5. Regular Association with Other Recovering CSU Students

➢ No Central Themes were specifically interpreted in the transcripts related to this question; please see the scripted discourse found on pages ___ of this document for further analysis on responses related to this interview question.

Q6. Supportive Resources for the Prospective Collegiate Recovery Community (CRC)

➢ **Substance-Free Housing**

- Subject A: 148-154
- Subject C: 171-173; 179-181
- Subject D: 98-102; 104-107

➢ **Safe, Specified, On-Campus Location**

- Subject A: 157-159; 160-165; 167-168; 195-107; 200-206
- Subject B: 148-149; 157; 162-163; 170-173

Q7. Sober Activities

➢ **Encouraging Sober Activities**

- Subject A: 213-214; 217-219; 222-225; 226-229
- Subject B: 178-179; 183-185
- Subject C: **Q6:** 182-185; 187-190 & **Q7:** 196-198
- Subject D: **Q6:** 108-111 & **Q7:** 120-124

Q8. On-Campus Twelve-Step Facilitated Group (TFG)

➢ **Mutual Support**

- Subject A: 191-192; 193-194; 199-200
- Subject B: 236-240; 244-246; 250-253
- Subject C: 206-210
- Subject D: 135-136; 138; 141-143

Q9. Participation in CSU on-campus SUD Prevention/Intervention Programs

➢ No Central Themes were specifically interpreted in the transcripts related to this question; please see the scripted discourse found on pages ___ of this document for further analysis on responses related to this interview question.

Additional Central Themes Categorized by Topic

- **T1. Feelings of Isolation and Associated Stigma**

  - Subject A: 71-73; 92-94
  - Subject B: 69-76; 77-81; 110-110-113
  - Subject C: 103-105; 110-111; 126-131
  - Subject D: 69-71; 79-81

- **T2. Importance of Safety**

  - Subject A: 75-77; 160-161; 165-168; 203
  - Subject C: 43-45; 179-181
  - Subject D: 122-124

- **T3. Positive Influence of Twelve-Step Facilitated Groups (TFGs)**

  - Subject A: 22-23
  - Subject B: 11-12; 32-33; 133-135
  - Subject C: 33-40
  - Subject D: 21-22; 47-48; 84-85; 92-93

- **T4. Potential Differences in Needs/Challenges for Traditional-Aged Students**

  - Subject A: 65-66
  - Subject B: 110-114; 119-122
  - Subject D: 62-64

- **T5. Constructive Impact of CRC Planning Efforts at CSU Thus Far**

  - Subject B: 64-65; 130-132
  - Subject C: 139-144
  - Subject D: 78-81