

Sustaining Recovery: The Participant Prospective of a Collegiate Recovery Program

A Dissertation submitted  
to the Graduate School  
Valdosta State University

in partial fulfillment of requirements  
for the degree of

DOCTOR OF PUBLIC ADMINISTRATION

in Public Administration

in the Department of Political Science  
of the College of Humanities & Social Sciences

May 2022

Tanya N. Smith


Master of Public Safety Administration, Columbus State University  
Bachelor of Science Criminal Justice, Kennesaw State University

© Copyright 2022 Tanya N. Smith


All Rights Reserved


This dissertation, "Sustaining Recovery: The Participant Prospective of a Collegiate Recovery Program," by Tanya N. Smith, is approved by:

**Dissertation  
Committee  
Chair**

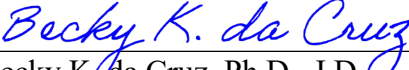
DocuSigned by:  
  
D1F7C63BD057496...  
Dorinda Dowis, DPA  
Professor of Criminal Justice

**Committee  
Members**

DocuSigned by:  
  
55AD9F26EE2F456...  
Marcy Hehnlly, Ph.D.  
Associate Professor of Criminal Justice

DocuSigned by:  
  
4962382F1FF149D...  
W. Todd Watson, DPA  
Adjunct Professor of Public Administration

**Associate Provost  
for Graduate  
Studies and  
Research**

  
Becky K. da Cruz, Ph.D., J.D.  
Professor of Criminal Justice

Defense Date March 2, 2022

## FAIR USE

This dissertation is protected by the Copyright Laws of the United States (Public Law 94553, revised in 1976). Consistent with fair use as defined in the Copyright Laws, brief quotations from this material are allowed with proper acknowledgement. Use of the material for financial gain without the author's expressed written permission is not allowed.

## DUPLICATION

I authorize the Head of Interlibrary Loan or the Head of Archives at the Odum Library at Valdosta State University to arrange for duplication of this dissertation for educational or scholarly purposes when so requested by a library user. The duplication shall be at the user's expense.

Signature \_\_\_\_\_



I refuse permission for this dissertation to be duplicated in whole or in part.

Signature \_\_\_\_\_

## Abstract

Substance use in America remains a public health crisis, especially given the ongoing opioid epidemic and an alarming spike in overdose related deaths. Institutions of higher education have a unique opportunity to provide realistic measures of sustained substance use disorder (SUD) recovery through collegiate recovery programs (CRP) that employ recovery-informed procedures to support and sustain sobriety. This quantitative study examines and provides an analysis of the impact of a CRP at a large Georgia university from the perspective of the recovering student while immersed in an abstinence-hostile environment, such as a college campus. The primary aim of this research is to use statistical analysis to establish how an inclusive support system can empower a person to sustain SUD recovery. Despite a small sample size, the study yields significant evidence to support CRPs even though the sample size makes it difficult to generalize the results to the general population. Based on findings from this and existing CRP research, the results illustrate how institutional and social support have a significant impact on a person in SUD recovery, which can assist in developing public and private holistic recovery programs.

*Keywords:* sustained recovery, substance use disorder, collegiate recovery program, support system

## Table of Contents

Chapter I: Introduction.....	1
Purpose of the Study.....	3
Statement of the Problem.....	4
Definitions.....	8
Background.....	9
Data Collection.....	13
Significance and Implications.....	14
Chapter II: Literature Review.....	16
Substance Use Disorder.....	16
Historical Epidemics.....	17
Substance Use in Colleges.....	19
Intervention.....	20
Treatment.....	23
Social Support.....	23
Relapse.....	25
Recovery.....	26
Directed Holistic Recovery Programming.....	27
Physician Health Program.....	27
Recovery Community Organization.....	30
Collegiate Recovery Program.....	31
Theoretical Prospective.....	34
General Systems Theory.....	34

Bioecological Systems Theory.....	35
Social Learning Theory.....	36
Brain Disease Model of Addiction.....	37
Relationship of Research to Literature and Theory.....	40
Chapter III: Methodology.....	43
Site of Study.....	43
Program Data.....	44
Hypotheses.....	45
Research Question 1.....	46
Research Question 2.....	46
Research Question 3.....	47
Research Design.....	49
Data Preparation.....	50
Data Collection.....	50
Strategy and Measurement.....	51
Research Questions 1 and 2.....	51
Research Question 3.....	51
Variable Construction.....	53
Independent Variable.....	53
Dependent Variables.....	53
Relapse Rate.....	54
Length of Time in Recovery.....	54
Academic Success.....	55

Ethical Considerations.....	56
Data Access and Maintenance.....	57
Chapter IV: Results.....	58
Descriptive Statistics.....	58
Hypotheses Testing.....	66
Research Questions 1 and 2.....	66
Research Question 3.....	69
Summary.....	71
Chapter V: Discussion.....	72
Relapse Rates.....	73
Program Data.....	73
Sustained Recovery.....	74
Program Data.....	75
Academic Success.....	76
Program Data.....	78
Significance.....	79
Limitations.....	82
Future Research.....	83
Recommendations.....	85
Public Policy.....	86
Education.....	87
Conclusion.....	88
References.....	90



Appendix A: Qualtrics Online Research Survey .....	103
Appendix B: IRB Exemption Approval.....	115
Appendix C: Informed Consent Statement .....	117

List of Tables

Table 1. CYAAR Enrollment Data..... 45

Table 2. Frequencies and Percentages of Demographic Characteristics..... 59

Table 3. Descriptive Statistics of the GPA Variables..... 61

Table 4. GPA and Membership Length..... 61

Table 5. Frequencies and Percentages on Participants’ Responses about the Effectiveness of Formal Treatments..... 62

Table 6. Frequencies and Percentages of Participants’ Responses on Difficulty to Recover in a College Environment..... 64

Table 7. Frequencies and Percentages of Relapse Triggers or Stressors..... 64

Table 8. Wilcoxon Signed-Rank Test Between the Number of Relapses..... 67

Table 9. Frequencies and Percentages of Importance of Elements of CYAAR Program in Sustaining Recovery..... 67

Table 10. Wilcoxon-Signed Rank Test between GPAs..... 69

Table 11. Frequencies and Percentages of Importance of Elements of CYAAR Program in Achieving Academic Success..... 70

## Acknowledgments

The journey through life is full of twists and turns and one never knows what is around the next bend. We do our best to be ready for whatever life throws at us, with age, education and experience helping us prepare. I thought I was prepared for anything until the death of my daughter, Taylor, after a short battle with drug addiction. I learned how little I knew about substance use disorders. Even though I had vast experience in criminal justice and public administration, my experience with those living with SUD was limited. In fact, I was completely ignorant. Taylor asked one of thing of me during her addiction battle, to understand. So began my journey to understand. Researching a collegiate recovery program afforded me a greater understanding of the impact of substance use disorder. Therefore, my first acknowledgement goes to Teresa, Jessica, Lindsay, and the entire team of the Kennesaw State University Center for Young Adult Addiction and Recovery Center. This dissertation would not have happened had you not opened your doors to allow me access to every aspect of the center and the amazing work that is being done within those walls. The CYAAR is changing lives. I am blessed to have had this opportunity.

For my committee members, Dr. Dowis, Dr. Hehnly, and Dr. Watson, I write a special note of gratitude. As both professors and mentors, each of you were instrumental in my academic success. I am honored to have you as committee members and to have your affirmation of this dissertation.

I would also like to acknowledge my friends and family who have supported me throughout this journey. Thankfully, I have an amazing family who has put up with moodiness, persistent need for quiet to study and write, and ensure I never give up. Mom, Gabrielle, Dean, and Shana, I am eternally grateful for all your love and support. To my grandson, London, you make my world brighter. Thank you for all the much-needed fun breaks.

Supportive friends made the past few years easier. Trudi, you are my hero, you keep me going, and believe in me when I do not believe in myself. You have my deepest gratitude for your incredible encouragement and friendship...“more than my luggage”. To Gary, I could not have asked for better classmate, commiserate, and friend. Thank you for the weekly check-ins, your help was priceless.

Finally, I have two special acknowledgments, Missy Owen and Sarah Mangold. Missy introduced me to the concept of recovery and Sarah is the embodiment of recovery. You both are beacons of hope and change, thank you for your light. Sarah, thank you for your open and candid conversations about addiction. You opened my eyes the first day I met you and I have been in awe of your strength and success since that day.

## Dedication

I dedicate this work to my beautiful daughters, Gabrielle and Taylor. Gabrielle, you are my rock, my strength, and my world. You bring me more joy than I could have imagined possible. Taylor, I was blessed to be your mother. Your love and light carried me so may this work honor your memory.

## Chapter I

### INTRODUCTION

#### **Sustaining Recovery: The Participant Perspective of a Collegiate Recovery Program**

According to the 2019 National Survey on Drug Use & Health, by the Substance Abuse and Mental Health Services Administration (a branch of the United States Department of Health and Human Services), 20.4 million people suffer with a substance use disorder (SUD) which is defined as the chronic abuse of alcohol, legal and/or illicit drugs, or both (Substance Abuse and Mental Health Services Administration [SAMHSA], 2020a). This same report cites an increase in illicit drug use among young adults aged 18 to 25 years old from 37.5% in 2015 to 39.1% in 2019 (SAMHSA, 2020a). Drug overdose findings published by the Centers for Disease Control (CDC) indicate that more than 70,000 persons lost their lives to an SUD in 2019, a 4.6% increase over 2018 (Ahmad et al., 2020). A more recent report cited that overdose deaths rose 29% in 2020, to an astounding 93,000 deaths (at the time of the report), which addiction experts state is a direct impact of the lockdowns and isolation caused by the Coronavirus (COVID-19) pandemic (Stobbe, 2021). To put this in a distinct perspective, the deaths attributed to drug overdose during the COVID-19 pandemic outnumber the deaths attributed to guns and motor vehicles combined (Rabin, 2021). Since premature and accidental death rates by drug overdose consistently exceed all other causes of death for the age group of 18-25 years old each year since 2014 (increasing by more than 16% each year), the negative

impacts of SUD are felt in every sector of society, including those of health, economic, social, and education (Centers for Disease Control [CDC], 2018).

As the abuse of legal and illegal substances by young adults continues to climb, there is a need for not only SUD treatment, but also a need for sustaining recovery after the treatment is completed. SAMHSA estimates that more than five million young adults aged 18 to 25 are in need of SUD treatment, yet only an estimated 578,000 (or 1.7 %) have actually received any type of treatment (SAMHSA, 2020b). One of the greatest challenges in SUD treatment that this author has witnessed is the influx of specialized service such as detoxification services and stabilization facilities, yet few resources for comprehensive aftercare, i.e., recovery planning. This creates a problem whereby the system fails to treat the whole person, which includes their biological composition, their psychological system, and their environmental conditions (Volkow, 2018). In other words, traditional SUD treatment fails to be holistic.

This research is an examination of the opportunity to go beyond traditional SUD treatment strategies and reveal evidence-based best practices for sustaining sobriety and recovery that ultimately could be replicated across public health communities. With no sign of the substance abuse epidemic slowing down in this country (SAMHSA, 2020b), it is imperative that every avenue of addiction treatment response be fully examined to establish a realistic drug control policy. While significant research has been conducted on the management of SUD, relatively little emphasis has been placed on the aftercare of traditional inpatient/outpatient treatment that sustains recovery (Adams, 2016; Volkow, 2018). As a result, this research will explore SUD aftercare, specifically holistic

aftercare, and how components found in holistic recovery programs can be utilized in all forms of treatment systems to cultivate sustainable recovery.

### **Purpose of the Study**

Given the above-mentioned data on SUD trends, why then, is there an abundance of research on addiction and addiction treatments, yet little in comparison on addiction recovery? In other words, the underlying problem of causation is adequately examined with modest focus on the remedy. Furthermore, numerous prevention campaigns aim to teach youth, especially those in high school and college, to refrain from using illegal drugs and/or misuse of legal substances, yet seemingly fail to plan for when the warnings are ignored. Granted, prevention is the best defense, however, statistical data demonstrates that the problem persists (SAMHSA, 2020b). Therefore, this research focuses on moving past addiction and into finding emancipation from addiction, i.e., sustained recovery. More specifically, the research examines how recovery programs such as collegiate recovery programs (CRP), recovery community organizations (RCO), and physician health programs (PHP) that are situated in abstinence-hostile environments, with little or no supervision/oversight and a high frequency of substance/alcohol use (Laudet et al., 2016), are achieving greater success in helping participants sustain sobriety than the traditional programs. The research is designed around the following questions to determine recovery programming effectiveness:

- What separates CRP, RCO, and PHP programs from traditional treatment programs?
- How do their relapse and recovery data compare?

- What component or components of CRPs, RCOs, and PHPs are responsible for their own independent success?

This study examines data collected from a CRP at a large Georgia public university to answer the research questions. Collegiate recovery programs are taking students with a history of SUD and navigating them through the inherently abstinence-hostile college environment soberly and safely. College environments are saturated with triggers, such as proximity to alcohol and/or drugs (Volkow, 2018), and thus possess valuable data on how all SUD treatment providers can improve relapse ratings and help patients achieve recovery.

### **Statement of the Problem**

The most recent examination of national data indicates the number of young adults, age 18 to 25 years old, that are identified with SUD is increasing every year (SAMHSA, 2020b). This age group represents a large cohort present on a college campus, such as Kennesaw State University (KSU) in Cobb County, Georgia where the average student age is 23 (Kennesaw State University [KSU], 2020). For this study, the term “college” represents institutions that identify as a university as well as those deemed a college. Inherently, colleges are environments where there is a prevalence of alcohol and drugs, making their campus a dangerous environment for a young adult who is identified with or recovering from SUD. In examining the drug use within the environment surrounding the KSU community, the data is equally concerning. Cobb County, Georgia, where KSU’s two campuses are located (Kennesaw and Marietta), is cited as having the second highest rate of drug overdoses in Georgia, with overdose being the second leading cause of premature death (Eldridge, 2019; Georgia Department of



Public Health, n.d). Specific data from the 2019 Georgia Department of Public Health report lists the following data: 1,490 drug overdose deaths in Georgia; 913 of those 1,490 are directly related to opioids; 75 of the opioid deaths occurred in Cobb County, and 56 of the Cobb County deaths occurred in the age group of 15-24 years old. To add perspective, drug-related deaths outnumber all other forms of premature death in the Cobb County community surrounding KSU (Cobb County Medical Examiner [CCME], 2021). For the purposes of this study, the CDC (1986) explains premature death as follows:

Mortality statistics are frequently used to quantitate the extent of public health problems and to determine the relative importance of the various causes of death. Since most deaths occur among persons in older age groups...Alternative measures have been proposed to reflect the mortality trends of younger age groups...premature mortality (n.p.).

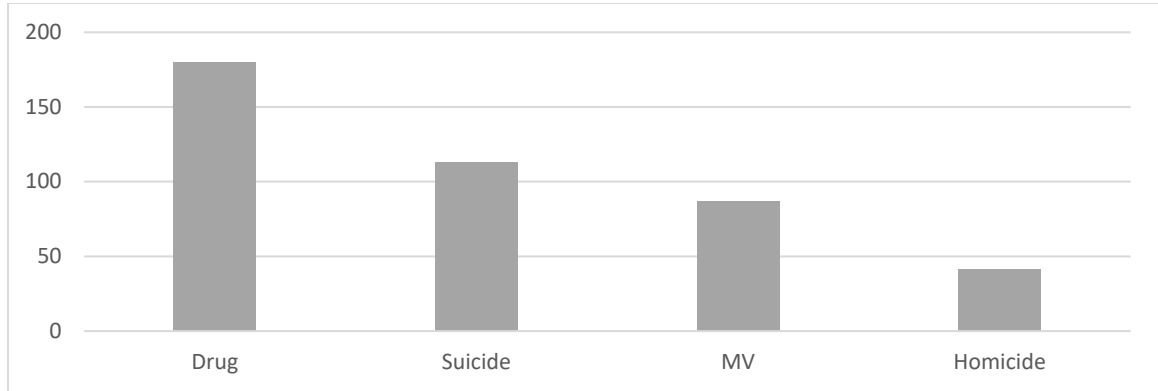
Some common forms of premature mortality are intentional injuries (e.g., suicide, homicide), unintentional injuries (e.g., drug overdose, accidents), and childhood disease (CDC, 1986).

Cobb County, Georgia employs a Medical Examiner (ME), a physician and forensic pathologist who specializes in death investigations and performance of autopsies to determine cause and manner of death (CCME, 2021). Therefore, the ME's office has jurisdiction over unattended (outside a physician care) or unnatural (accident, violence, unexplained) deaths that occur within the county's boundaries (CCME, 2021). In 2020, the Cobb County Medical Examiner ruled the manner of death in 373 cases as accidental, which includes drug and alcohol overdose, with 180 of those (49%) directly attributed to

drug overdose (CCME, 2021). As noted in Figure 1 below, drug overdose is a greater problem in Cobb County than suicide or motor vehicle safety as the county loses more people to overdose than any other form of premature mortality.

Figure 1

*Cobb County Premature Deaths, 2020*



*Note:* Bar graph represents the actual number of deaths attributed to the stated manner of death in 2020 as reported by the Cobb County Medical Examiner in 2021, MV = motor vehicle accidents.

The most recent data out of the Cobb County Medical Examiner’s Office signals deeper trouble, especially during the global, novel COVID-19 pandemic of 2020. The CCME 2021 Annual Report cites a substantial increase in overdose deaths, from 119 in 2019 to 180 in 2020 and “significantly elevated in comparison to the prior four years” (p. 31). As it relates to the shelter in place orders issued in response to the COVID-19 pandemic, the CCME found that “the number of drug related deaths was significantly higher than average” during this time (p. 54). This data coincides with recent research into the socioeconomic impact of COVID-19 on drug related deaths, which hit a record high of 96,000 in 2020 and more than 100,000 by the end of April 2021 (Ault, 2021; Rabin, 2021). Research into drug related deaths during COVID-19 restrictions indicates

the increased financial, employment, and isolation stressors induced by the pandemic led to worsening substance use and thus, higher death rates (Ault, 2021; Langmaid, 2021; Macmadu et al., 2021).

Examining death rates, such as those cited above, demonstrates that this is a serious and deadly epidemic. While a focus on prevention and treatment is ongoing at several national, state, and local levels (CDC, 2018; SAMHSA, 2020a), people are still dying prematurely. In the past few years, media attention of the opioid epidemic has shed light on substance use and seemingly raised awareness of the severity, so much so that finding a means to curb the epidemic has become a part of numerous political platforms. Unfortunately, raising awareness of the problem is not enough to stop the growing death rate. For that reason, this research concentrates on sustaining recovery as a solution to the SUD problem. The focus on studying recovery is similar to studying any other fatal disease; finding a cure and a way to prevent a death, and in the case of SUD, preventing an irrefutably avoidable death.

According to SAMHSA (n.d.), few young adults intentionally seek addiction treatment. For those who do seek and subsequently complete treatment, the road to a successful and healthy lifestyle is an even greater challenge to navigate. Oftentimes, they must navigate their sober journey alone after receiving only a few tools while in a tradition treatment program to help them along the way, such as a schedule to AA meetings in their area and a list of addiction counseling referrals (Adams, 2016). Combine this challenge with the possible triggers found in an abstinence-hostile college environment and the task for an SUD student to sustain recovery and sobriety is critically impacted.

The need to remain sober during a time when there is an equal need to fit in and find connectedness in one's social situation (Laudet et al., 2014), such as entry into a college environment, can lead to isolation, relapse, and eventual academic failure. Even though the information on substance use in colleges and universities is unpromising, research has shown that colleges who provide a peer-based support program for SUD students raises the individual's chance of success (Brown, et al., 2018). These peer-based programs, i.e., CRPs, facilitate social belonging while also providing a safe, sober support system that not only raises the student's chances of permanent recovery, but also of academic success (Brown, et al., 2018; Laudet et al., 2016).

### **Definitions**

**Abstinence-hostile.** This term refers to an environment not conducive for a person to practice self-enforced restraint from drug or alcohol use due to the rampant use, availability, and ease of access to these substances (Cleveland et al., 2007; Harris et al., 2007).

**Cohorts.** This term refers to a group of people having a statistical factor in common (Laudet et al., 2014).

**Emancipation.** This term refers to a final release from the disease, the achievement of being set free from the restraint of the disease (Brown, et al., 2018).

**Holistic support.** This term refers to a support system designed around the whole person, not just their substance use. This level of support considers their physical, mental, emotional, social, academic, and spiritual wellbeing (Adedoyin et al., 2014).

**Relapse.** This term refers to the return to drug or alcohol use after a period of remission (Menon & Kandasamy, 2018).

Remission. This term refers to a temporary recovery or lessening of the disease (Laudet et al., 2014).

Sustained recovery. This term refers to the continuing long term and/or permanent abstinence from substance use and an ongoing process of growth and reclaiming the self (Laudet, 2007).

Triggers. This term refers to the internal and/or external stimulus, such as distress, pain, anxiety, anger, and frustration, which cause a person in SUD remission/recovery to use substances again (Weis, 2010).

## **Background**

The college experience provides an exciting, albeit challenging, time for young adults. For most students, it is their first time away from the home of their parents, on their own, and navigating through the processes of building new competencies, relationships, and purpose. For some, the weight of forging this new independence and identity is taxing, making the temporary escape offered by drugs and alcohol too tempting to pass up. Some enter college already experienced in the use of drugs and alcohol. For others, the prevalence of alcohol and drugs on a college campus and the volume of alcohol and drug-fueled events, e.g., sporting events, tailgating and fraternity/sorority parties, can lead them on a path of frequent substance use, which can ultimately result in addiction. Regardless of the pathway, college students must navigate an environment that is inherently abstinence-hostile (Cleveland et al., 2007). Considering there are an estimated 12.3 million students under the age of 25 in colleges nationwide, the statistics surrounding the prevalence of SUD among young adults represents a valid

need for substance use to be addressed at colleges across the country (National Center for Education Statistics, 2018).

As mentioned, the predisposition for substance use among some young adults may already be present upon entering college as experimenting with drugs and alcohol may have been introduced earlier in life. Research and statistics for addiction begin defining cohorts at 12 years old, indicating alcohol and drug use is introduced well before a person reaches adulthood, solidifying the assumption that many college-bound youth may already be using drugs and alcohol well before entering the abstinent-hostile environment (SAMHSA, 2020b). The frequency of substance use at colleges presents an additional impediment for an already SUD identified young adult attempting to traverse higher education, especially one who is in remission or trying to sustain recovery from a SUD (Laudet et al., 2014).

The first year of remission is typically the most trying for persons with SUD. Relapse rates, cited around 85%, are among the highest during this time-period as the physiological and psychological cravings are still incredibly strong (National Institute on Drug Abuse [NIDA], 2019). Common triggers to SUD relapse are stress and exposure to friends and/or family using alcohol and/or drugs (Volkow, 2018), which creates temptations too difficult to avoid. When the stress of traditional college academic rigor is added to common SUD social triggers, especially in an environment conducive to alcohol and drug use, the challenge for a SUD identified young adult to remain in sobriety increases exponentially. The need for these students to avoid temptation and remain in remission can lead to isolation from the college community during a fundamental time of this person's life when "fitting in" is vital to their social and educational growth, thereby

increasing the risk of relapse (Laudet et al., 2014, p. 87). For that reason, furthering a student's abstinence by offering a safe and supportive environment is rudimentary in their recovery success.

Research indicates that clinical treatment without a complementary supportive environment is deficient in supplying long-term recovery (SAMHSA, 2020a). In an abstinence-hostile environment, providing a setting that offers the needed social belonging and a system of support to remain sober raises the student's chances of not only permanent recovery, but also of academic success. The relatively novel and evolving research into the continuum of care needed to sustain sobriety suggests the need for campus-based services to support SUD recovery (Beeson et al, 2017; Brown & Ashford, 2019). In one report about recovery efforts in education, the U.S. Department of Education noted that, "while academic institutions have been at the forefront of preventing substance use, the education system's role as part of the recovery and relapse prevention support system is still emerging" (Dickard et al., 2011, p. 10).

Students identified with a SUD are an isolated population in a college environment. Most colleges lack a safe place for these students, and most do not have the support system for SUDs as they do with other exclusive student groups (Laudet et al., 2014). However, higher education has a unique opportunity to address this chronic disease by exploiting the unique partnership of education and recovery through a collegiate recovery program (CRP). CRPs fill the gap between clinical treatment and sobriety by offering the essential social support need to sustain recovery, such as substance-free social activities, the opportunity to form healthy peer relationships, develop individually focused relapse prevention and coping skills, accountability, enjoy

increased social capital and institutional support (Laudet et al., 2016). Essentially, the CRP establishes a bi-directional relationship with the college and the SUD student where students who participate in the CRP can enjoy greater personal and academic success. Illustrative of this is a story found in KSU's Summer 2017 magazine that highlights how one student rose above stereotypical failures associated with SUD such as arrest, failed rehabilitation stints, homelessness, and academic failures, to find emancipation from the disease (Floekher, 2017). The student, who was referred to by his first name only, Danny, entered KSU newly sober and trying to build a better life and not only found a program that helped him find sustainable recovery, but also one that helped him overcome his past academic failures and graduate KSU summa cum laude in 2015 with a perfect 4.0 GPA (Floekher, 2017).

There are two traditional schools of thought on social support as it relates to SUD recovery: instrumental and affective (Kaskutas et al., 2002). The instrumental perspective addresses cognitive abilities such as information dissemination, skills training, and teaching coping mechanisms. The affective perspective focuses on the emotional well-being components of support such as connectedness and self-esteem building. While these perspectives address separate functions of recovery, both apply general and specific aid. General aid attends to commonplace activities such as financial support and assistance with living situations, i.e., aspects of daily life that when stable will support abstinence. Specific support focuses on the cravings associated with SUD, which is at their strongest during the first year of sobriety, by reinforcing abstinence while disavowing substance use behaviors (Beeson et al., 2017; Kaskutas et al., 2002). Regardless of the specific recovery program, those that encompass these two basic



support systems/perspectives within the individual's environment yield the most favorable results (U.S. Department of Health & Human Services [HHS], 2016). These two systems/perspectives are present in collegiate recovery programming where students can learn the skills needed to navigate the pressures and triggers present in a college environment while also enjoying the social and institutional support that satisfies their general and affective needs.

The collegiate recovery program (CRP) examined herein is the Kennesaw State University Center for Young Adult Addiction and Recovery (CYAAR) in Georgia. The CYAAR offers counseling services, academic advocacy, recovery-informed programming with accountability, and an integrated support system to KSU students in recovery. To gain admission to the CYAAR, a student must be enrolled or accepted to KSU, have at least 6 months of sobriety, successfully complete an entrance interview, and sign a commitment to abide by the program requirements consisting of weekly seminars, monthly meetings, community service, academic advisement, and 12-step participation (CYAAR, n.d.). The CYAAR accepts approximately 75 students per semester, some that are already enrolled in KSU and some that have specifically applied to KSU because there is a comprehensive support center for persons in recovery available (CYAAR, n.d.).

### **Data Collection**

To determine the overall effectiveness of a CRP, data on SUD experiences, recovery efforts, and collegiate recovery programming components were collected from members and the administrative staff at CYAAR. Data drawn from surveys, membership records, and structure of the CYAAR were analyzed to determine a correlation between

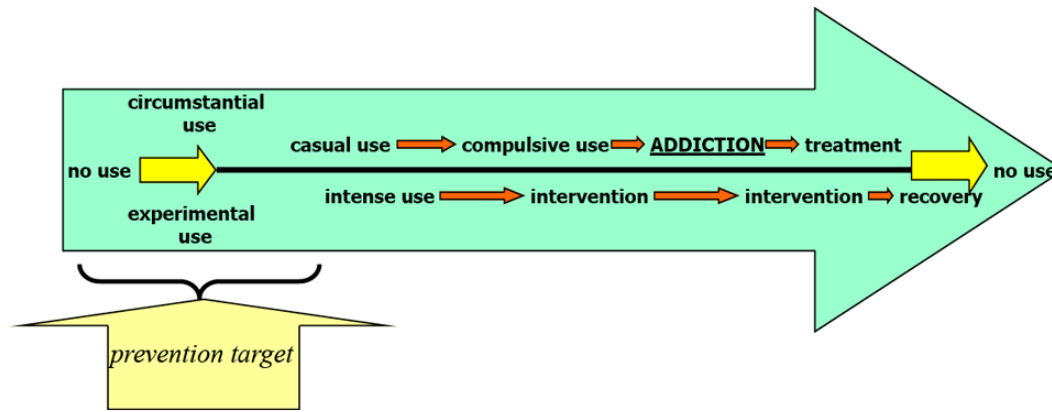
program components and maintaining recovery. By analyzing the CYAAR member's relapse incidents and academic standing prior to and after participation in the CYAAR, it is possible to conceptualize the influence of holistic support in SUD recovery (Brown et al., 2018).

### **Significance and Implications**

While there is increasing attention being paid to substance use recovery, most of the discussion still centers on prevention and response. On a SUD continuum, sustained recovery is located at the end of the continuum (the far right) and prevention, including measures of education and awareness, is at the beginning (located on the far left) (O'Driscoll, 2014). In between prevention and recovery on the continuum are the substance use event and successive treatment, which includes detoxification and stabilization. When treatment fails, i.e., an individual relapses, the continuum begins again, or as some describe as the cycle of abuse/addiction (O'Driscoll, 2014). There are several points along the continuum where there is an opportunity for intervention that could potentially break the cycle of addiction if the intervention is effective enough. For this study, that effective intervention is the support system found in a CRP. Figure 2 conceptualizes the SUD continuum to illustrate the bi-directional relationship of addiction elements, responses, and how one can become trapped in the cycle of SUD.

Figure 2

*Continuum of Addiction*



*Note:* “Some describe the continuum as a cycle... beginning with no use and ending with no use” (Keep Kids Drug Free Foundation, Inc, n.d.).

Unfortunately, a person may experience this continuum multiple times before ever achieving the goal on the far right, emancipatory recovery. The events along this continuum that appear to garner most of the attention from public officials, public health professionals, academia, and the media are awareness of the problem (e.g., all the attention toward the opioid epidemic), critical stabilization, and treatment for the condition (CDC, 2018; SAMHSA, 2020a). Although each of these factors is vital in understanding substance use, they are limited in understanding how to achieve recovery. The ultimate goal in the fight against the SUD epidemic is freedom from the disease, meaning a chance to live a healthy life for the individual battling addiction. For society, this goal means lower death rates and less money funneled into intervention efforts. Emancipation is what recovery is all about, a focus of this study, and why further study and understanding is warranted.

## Chapter II

### LITERATURE REVIEW

#### **Substance Use Disorder**

One notable advancement in public health is the redefining of addiction from a social affliction to a physiological chronic illness, paving the way for advances in effective treatment that focuses on sustained recovery. Addiction, or substance abuse disorder (SUD), is accepted as a chronic disease embodied by the uncontrollable obsession with alcohol and/or drugs regardless of the consequences and commonly combined with innate social and environmental factors affecting its growth (DuPont, McLellan, Carr, et al., 2009; DuPont, McLellan, White, et al., 2009; McLellan et al., 2000). Volkow et al. (2016) differentiates the term addiction, “synonymous with the classification of severe substance use disorder” (p. 364), from SUD, which could range from mild to severe. However, since this research is focused on recovery and not SUD or addiction, the term SUD will be used as an all-encompassing categorization. The evolution of SUD’s acceptance as a disease rather than an individual or willpower failure has led to the expansion of clinical treatment programs that include the concept of sustained recovery, thereby reducing the stigma oftentimes associated with rehabilitation and recovery. Moreover, these advancements promote social acceptance as it relates to treatment of a person with SUD, improving the effectiveness of their treatment (DuPont, McLellan, Carr, et al., 2009; DuPont, McLellan, White, et al., 2009; McLellan et al., 2000).

### *Historical Epidemics*

At the forefront of SUD discussions is the opioid epidemic raging in the United States for the past several years. Herzberg et al. (2016) argued the current opioid epidemic is not a new trend but the third in a series of deadly prescription drug abuse epidemics. According to Herzberg et al. (2016), the first epidemic involved a mixture of morphine, heroin, and cocaine, occurred late in the 19th century, and spawned the first anti-drug campaign, leading to legislation that converted heroin and cocaine into illegal substances. The second epidemic spanned a period of 50 years, from the 1920's to the 1970's, was marked by the abuse of barbiturates and amphetamines, and was notably less lethal and drew less media and government attention (Herzberg et al., 2016). Herzberg et al. (2016) argued that while all three epidemics garnered some degree of an awareness, intervention, and public health campaign, it is only a holistic harm reduction response that will impact substance abuse and the number of overdose deaths.

Prior to 1990, opioid analgesic prescriptions were guarded and rare, usually reserved for terminally ill patients requiring end of life pain relief. However, through an increased interest in non-terminal, chronic pain management and pharmaceutical companies' assertive marketing techniques, a new purpose for opioid analgesics emerged and prescription rates skyrocketed (Kennedy-Hendricks et al., 2016). An investigation by Miller and Gold (2015) examined the abundance of opioid prescribing practices and concluded that they did not constitute a legitimate pain management method but were indicative of a growing addiction epidemic. The study presented a staggering statistic: "the United States constitutes 4.6% of the world population; however, it consumes 80 % of the world's opioid supply and 99% of the world's hydrocodone supply", with no

substantial scientific research to suggest the US suffers from more pain than 80% of the world's inhabitants (Miller & Gold, 2015, p. 516). Furthermore, Kennedy-Hendricks et al. (2016) discovered, as indicated in their survey of 1010 physicians, two contributing factors in the current epidemic: patients obtaining prescriptions from multiple physicians and physicians are keeping patients on an extended opioid treatment regime without significant cause. Both studies, Miller and Gold (2015) and Kennedy-Hendricks et al. (2016), suggest ill-informed and misled physicians and inadvertent neglectful prescribing practices are the largest contributors to the current opioid addiction epidemic.

As the restriction on opioid prescribing has tightened, individuals turn to heroin to avoid withdraw symptoms and satisfy their cravings. Like legal opioid analgesics, heroin is a morphine derivative, so it provides the same opioid receptor binding benefits but with an exceptional euphoric quality (Harocopos et al., 2016). A prescription pain pill such as oxycodone or hydrocodone can cost as much as \$80.00 on the street, depending on the milligram dose of the pill, while heroin is a cheaper alternative at around \$10.00 for a 1/10-gram bag (Quinones, 2015, p. 209-211). An enlightening study out of New York, which consisted of in-depth interviews with 31 heroin users, who transitioned from opioid prescription medications within the past five years, exemplified this evolution (Harocopos et al., 2016). This research revealed that the average time of conversion from opioid prescription use to heroin was three years, however, nine participants revealed heroin use within one year of opioid analgesic abuse (Harocopos et al., 2016). Most of the participants (n=26) described increasing opioid analgesic dosage to intensify the euphoric effect prior to heroin initiation (Harocopos et al., 2016). Additionally, Harocopos et al. (2016) identified that research into SUD is challenging as the

participants are reluctant to contribute to research due to the shame, negative views, and stigma associated with substance use.

### ***Substance Use in Colleges***

According to the National Institute on Alcohol Abuse and Alcoholism (NIAAA), alcohol and substance use on college campuses are a substantial public health problem, especially since alcohol consumption – 53% of full-time college students use alcohol and 33% admitted to binge drinking – is viewed as a customary part of the higher education experience (National Institute on Alcohol Abuse and Alcoholism [NIAAA], 2021).

Although the research focuses on binge drinking during the college years, defined as more than five drinks in a row (Jones et al., 2001; NIAAA, 2021), equally concerning consequential issues have been identified. In addition to increasing the risk of SUD development in college students, alcohol abuse on college campuses is associated with death (1,519 students age 18-24), sexual assault (1 in 5 female college students), unsafe behaviors (696,000 reported being assaulted by another student while drinking), and academic problems (6 times more likely to do poorly on an assignment or test) (NIAAA, 2021). Moreover, research has found that those who engage in binge drinking are more likely to initiate the use of other legal and illegal substances (Guo et al., 2020; Jones et al., 2001; Wechsler et al., 1994).

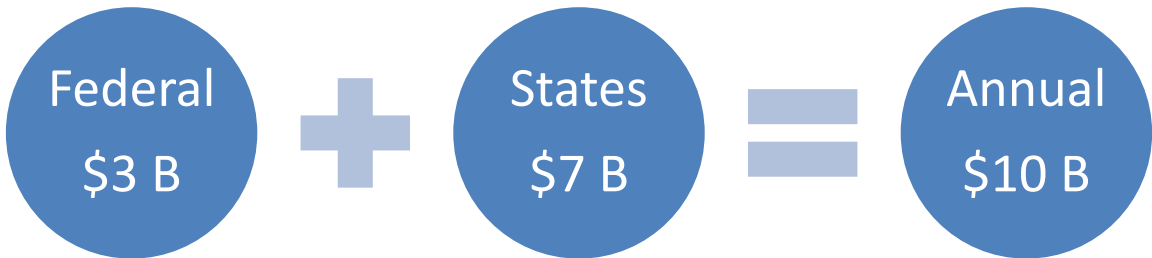
Ven (2011) investigated the social norms of college drinking and found that heavy drinking is perceived as providing positive benefits - connection, adventure, confidence. Essentially, the negative consequences of alcohol abuse, such as academic failures and personal crises, are excused as part of the normal college experience and not necessarily related to the alcohol use (Ven, 2011).

## Intervention

The “war on drugs” movement introduced in the 1970s focused government initiatives and resources on stopping the distribution of illegal drugs through tougher prison sentences, costing the United States more than one trillion dollars (Pearl, 2018). Figures 3 and 4 show the impact of current drug policies aimed at disrupting illegal drug use and distribution. Figure 3 shows the most current annual dollar amount spent by federal and state governments to maintain the current drug policies and Figure 4 offers a comparison of common drug intervention programs.

Figure 3

### *Annual Spending on Incarcerating Drug Offenders*



*Note:* Annually, the federal government spends approximately \$3 billion dollars and states spend another \$7 billion to incarcerate persons charged with drug offenses, including personal possession cases (Pearl, 2018).

In recent years, public sector leaders began to realize different strategies were needed to respond to the drug problem in America (Desilver, 2014). Despite the increased drug enforcement practices to identify drug suppliers and public money spent on incarcerating drug offenders, the drug problem in America continued to grow. Simply put, arrest was not working, evidenced by the growing substance use problem and incarceration rates (Pearl, 2018; SAMHSA 2020b).

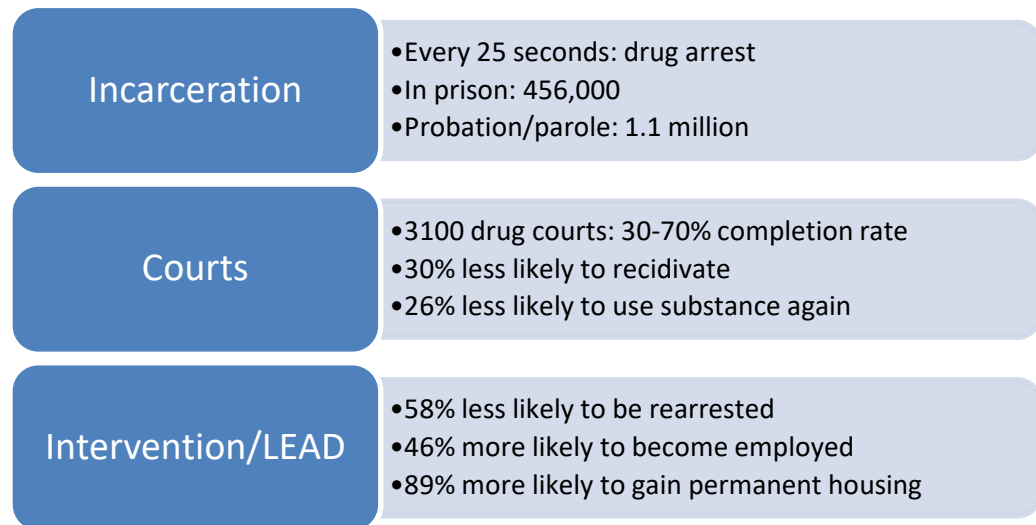


As the opioid epidemic exposed more weaknesses in the existing drug control responses, public sector leaders began developing innovative interventions (Satel, 2017). One intervention method was the drug court model, introduced in the 1980s, aimed at reducing recidivism by mandating low-level drug offenders to complete SUD treatment under strict monitoring by the court (Pearl, 2018). As noted in Figure 4, the completion rate is broad, ranging from 30% to 70%, and the likelihood to relapse or re-offend is approximately 70% (Pearl, 2018).

Another innovative intervention model begins when a police officer first encounters a drug offender. One such program is Seattle (WA) Police Department's Law Enforcement Assisted Diversion (LEAD), a diversion program aimed at reducing recidivism for low-level drug offenses which "allow officers to divert individuals to treatment or social services, rather [sic] making low-level drug arrests" (Pearl, 2018, p. 5; Wilson, 2018). LEAD and similar law enforcement originated programs yield slightly better results than the drug court model as approximately 40% of participants re-offend, 46% become gainfully employed, and 89% find stable housing (Pearl, 2018). An important feature of law enforcement diversion programs is the premise that arrest is not working, therefore the police must change their attitudes and tactics if progress is to be made (Wilson, 2018). These programs are driven by a harm reduction philosophy, incorporating partnerships between police, community leaders, and service providers to break the cycle of drug use and related criminal offenses (Schaible et al., 2021). Figure 4 provides a comparison of the intervention methods, including data and statistics describing each model.

Figure 4

*Comparison of Interventions for Drug Offenders*



*Note.* Current drug control policy and intervention efforts yield moderate results in disrupting the drug problem in the United States (Pearl, 2018).

With SUDs reclassified as a public health problem, public officials had to shift from a reactive approach to a proactive intervention approach (Satel, 2017). Prior research has indicated that prescription opioid analgesics were dispensed at alarming rates and significantly contributed to the growing mortality rate from unintentional poisoning, so intervention had to start at curbing prescriptions (Dart et al., 2015). Dart et al. (2015) examined the Researched Abuse, Diversion, and Addiction-Related Surveillance (RADARS) System for a period of 10 years and learned that an estimated 25 million people misuse opioids for non-medical issues, forcing federal agencies to enact procedures aimed at curtailing prescribing practices and limiting approved usage of opioids in pain management. Dart et al. conclusions suggest aggressive state and federal legislation, such as the prescription monitoring program, is advancing the goal of

suppressing the abuse of prescription pain medications by limiting how individuals obtain dangerous drugs (Dart et al., 2015).

### **Treatment**

Traditional SUD treatment generally consists of detoxification, then stabilization in the form of a 30 or 90-day inpatient or intensive outpatient care program, which is a regime of crisis intervention, counseling, and possibly the introduction of a medication-assisted treatment (MAT) (McLellan et al., 2000; SAMHSA, 2020a). Once the patient completes their individualized treatment program, the treating institution is no longer involved with that patient, meaning there is no continuing care from the attending physician and staff. While most institutions stress the importance of continuing care with some type of recovery program, such as Alcoholics Anonymous' 12-step meetings and follow up counseling, most patients are left to navigate their post-treatment care on their own with little more than a list of referrals and/or potential service providers (Adams, 2016; Adedoyin et al., 2014). For a patient who has failed to learn or master coping mechanisms, having to navigate these important steps for their continued sobriety on their own can induce enormous stress and anxiety, which can then result in a relapse.

### **Social Support**

The term “social support,” as used in the context of substance use and recovery, generally refers to an array of resources provided by an individual’s collective community network of friends, family, and peers. Social support, which includes behaviors such as providing information, affirmation, advice, tangible aid, and expressions of devotion, is not a new construct in the mental and physical health fields as

it is consistently associated with an increased overall physiological fitness and likewise, its absence associated with poor physiological well-being (HHS, 2016).

A psychological and/or biological affliction is not always treated in concert with the individual's social systems (Volkow, 2018). For example, in the context of SUD treatment, an individual usually undergoes detoxification and stabilization treatment alone, oftentimes secluded in residential treatment facilities, and finally seeks and attends ongoing counseling on their own and alone. The caveat is that the person has no support system through any of these crucial steps. They usually navigate each of these steps individually and alone. Novel thinking, as it relates to SUD treatment, has given way to a recovery field of science in which there is a growing body of research, albeit still limited, that focuses on evidence-based holistic SUD management that yields emancipation from the disease (Brown et al., 2018). A fundamental aspect associated with recovery sciences is a holistic treatment plan that includes and requires the participation of the individual's entire social system as an active part of their treatment and recovery process (Adams, 2016; Bassuk et al., 2016; Kaskutas et al., 2002). For the SUD patient, this means the fundamental treatment steps described above are traversed with a solid support system of that person's family and/or peers in tow throughout the entire treatment process.

Within this multidimensional construct of social support lies the premise of social networks, which are the organizational patterns of belonging that connect an individual to their social surroundings (DePue & Hagedorn, 2015). Adams (2016) describes this concept as the "social self" where the individual is not simply a biological being, but an "intersection" within a network of dynamic relationships (p. 88). By managing the individual as such, the treating practitioner and recovery program design can employ a

holistic approach by including the individual's network of connections, their dependence on each other, and their contribution to the distinct SUD treatment and recovery plans. Social networks, notably the members within, generate strength from their ubiquitous influence over the individual, particularly in the areas of group activities, conduct, and self-worth. The affected individual relies on partners within their social network for cognitive reasoning, coping mechanisms, relapse intervention, and support during both positive and negative experiences (Cleveland et al., 2007).

### **Relapse**

Efforts to reduce relapse rates has brought to light the need for ongoing supportive measures once the person has achieved SUD stabilization (Jason et al., 2021). Research on relapse rates state that within the first year of post-treatment, 60 to 80% of persons will relapse with the rate dropping to between 40 and 60% each subsequent year (Laudet et al., 2014). Conversely, research on relapse rates on cohorts who receive intense social support along with traditional recovery programming produce encouraging data. Programs that include social support indicate that the influence of social support in post-treatment environments is crucial to sustained abstinence, evidenced by relapse rates that are below 20%, when compared to the rates among those who receive only the traditional SUD treatment and follow-up care plans (McLellan et al., 2000; SAMHSA, 2020a; Vestal, 2017). Although effective and successful recovery programs have an expectation of relapse, it is the ongoing management of the support system that is key to getting the person back into recovery and assisting in their eventual freedom from addiction (Jones et al., 2021, Volkow et al., 2016).

## **Recovery**

“Recovery” is a process that begins once the addicted individual completes treatment for SUD. SAMHSA’s dedicated webpage on recovery offers a working definition of recovery as, “a process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential” (SAMHSA, n.d., Overview section). It also proposes four vital factors that support recovery: health – overcoming the disease; home – stable living situation; purpose – significant activities that foster financial and individual independence as a productive member of society; and community – “relationships and social networks that provide support, friendship, love, and hope” (SAMHSA, n.d., The Four Major Dimensions of Recovery section). An individual can successfully complete a treatment program yet fail during recovery due to the absence of even one of the four essential factors, thus sparking a relapse and beginning the cycle of abuse to treatment to recovery all over again. It is this cycle that holistic recovery programs, such as CRPs, are trying to permanently disrupt.

Despite the substance abuse attention garnered by the current opioid epidemic and society beginning to embrace addiction as a chronic disease as opposed to lack of moral character, the concept of recovery is still a relatively new movement that extends substance use treatment to a sustained lifestyle of abstinence free from relapse (Bassuck et al., 2016). Recovery is only achieved through a change in lifestyle, habits, social networks, and environment that allows an individual to move past addiction and transition to a sustainable healthy physical and social life. Research exposes the myth that a person can simply stop using substances once addicted (Volkow, 2018) and

suggests that it is only through coordination of treatment service, learned coping mechanisms, and a comprehensive social support system that one can sustain absolute recovery (Beeson et al., 2017; Cleveland et al., 2007). While there are a variety of recovery concepts, most include stages in a continuum of change that include abstinence, personal growth, service to others, and integrated support.

### ***Directed Holistic Recovery Programming***

**Physician Health Program.** One particularly successful recovery program that embodies the holistic principle and incorporates an intense support model was designed for physicians. The likelihood of a physician to engage in damaging behaviors is considerably low, 10-15% of all physicians licensed in the United States go through SUD at some point in their career (Baldisseri, 2007). However, the prevalence rate for prescription drug abuse is higher than those of any other cohort, approximately five times higher than the general public, making SUD the leading cause of impairment among physicians (DuPont, McLellan, Carr, et al., 2009; DuPont, McLellan, White, et al., 2009; Vestal, 2017). Like the college environment for a student, the medical field is an inherently abstinence-hostile environment for a physician as drugs are present in most medical environments and easily accessed by a medical professional. Research has failed to determine causes associated with SUD among physicians; however, there are indications that intense stress, easy access, and self-prescribing are the main pathways to addicted physicians (DuPont, McLellan, White, et al., 2009). For an addicted physician, the availability and ease of access to drugs creates a unique challenge of sustaining sobriety like that of an addicted student attending college.

Due to substantial consequences, many addicted physicians or colleagues who suspect another physician is suffering with SUD are hesitant to seek or offer help for the addiction, thus creating a barrier in identifying the problem (DuPont, McLellan, White, et al., 2009). The perceived risk in keeping the addiction private significantly outweighs the benefits of treatment that would require openly admitting the problem, especially when the physician believes he/she can self-treat without compromising their practice and/or licenses. One of the hallmarks of SUD is denial, seen more so among physicians than the general population due to their superior knowledge of biological functioning (DuPont, McLellan, Carr, et al., 2009). Regrettably, having limited experience or training in identifying and treating addiction disorders, and personality traits such as intellect, independence, and perseverance, allow physicians to create sophisticated reasoning and defenses for behaviors typically associated with SUD that further solidifies their denial that they have an SUD (DuPont, McLellan, Carr, et al., 2009).

The confidential nature of the medical community presents another barrier in treating addicted physicians. Many physicians experience deep shame and denial because they believe their superior medical knowledge affords them a higher level of immunity, i.e., they know better than to fall victim to substance abuse, therefore confidential treatment of their condition is of high importance (Vestal, 2017). As such, critical components of a Physician Health Program (PHP) include confidentiality clauses (e.g., many states protect physicians who willingly enroll and complete a PHP), intense personal support, and the avoidance of administrative punishment after completing an intense 5-year treatment program (DuPont, McLellan, White, et al., 2009).



After a physician is diagnosed with SUD and referred to a PHP, he/she undergoes expert residential or intensive outpatient treatment (depending on severity) followed by extended outpatient treatment in which social support is introduced and encouraged. Additional PHP components include frequent random drug screens, 12-step program attendance, and compliance monitoring for a minimum of five years (DuPont, McLellan, Carr, et al., 2009; DuPont, McLellan, White, et al., 2009). What sets this program even further apart from the traditional treatment measures is the expectation and unique management of relapses, an aspect mirrored in the program construction found in many CRPs.

The PHP program employs aggressive management techniques for relapses, requiring the physician to report relapses and be accountable to his/her support system, undergo re-evaluation and another round of intensive treatment (DuPont, McLellan, Carr, et al., 2009). If subsequent relapses occur, the physician is evaluated for possible undetected co-addictions or mental illness and treated accordingly during another session in the PHP program (DuPont, McLellan, Carr, et al., 2009). According to an article written by Christine Vestal (2017), there is research that argues that “these confidential programs have about an 80 percent success rate, far higher than the typical success rate of 50 percent for the general population” (n.p.). While the PHP is aggressive in its supervision of the participant, the basic components of supervision, accountability, peer support, relapse expectation and maintenance, and holistic treatment plans that encompass the individual’s entire environment and social systems are the same as CRPs. In order to achieve sustainable recovery from addiction, these components must be combined into one program (Vestal, 2017).

**Recovery Community Organization.** Relatively new to the landscape of SUD response are recovery community organizations (RCO). The definition of a RCO used by SAMHSA for grant-funding opportunities is a local non-profit organization that is governed by people in long-term recovery, engaged in recovery-focused activities and outreach programming, and provides peer-based recovery support services (SAMHSA, n.d.; Valentine et al., 2007). RCOs do not subscribe to one specific recovery philosophy or support a particular recovery pathway, but instead provide a variety of services by peer and community volunteers that meet the individual's needs based on where they are in their recovery journey (Jason et al., 2021). One such organization, The Zone in Marietta, is located in the geographic catchment area of KSU, Cobb County, Georgia, an area identified earlier in this research as a high-risk community based on drug overdose and death data.

The Zone was founded in 2016 by The Davis Direction Foundation, Inc. (DDF) and established itself as Cobb County, Georgia's first RCO. After DDF founder's, Michael and Missy Owen, lost their high school valedictorian and college presidential award recipient son, Davis Owen, to a heroin overdose following a lengthy battle with prescription pain pill abuse, they responded by establishing the DDF (Davis Direction Foundation [DDF], 2021). The DDF is a 501 (c)(3) non-profit corporation that serves the Cobb County, Georgia community as a harm reduction organization and opioid substance abuse resource center (DDF, 2021). The Zone is a clubhouse-styled facility that supports persons in long-term recovery by providing a safe and sober place to engage in fellowship, aid in continuing their sobriety, take advantage of community and state resources, and make healthy connections (DDF, 2021). This center is based off the

national RCO model, which focuses on peer-led services, community education, recovery-based outreach, and substance abuse disorder advocacy and serves more than 3,000 persons seeking freedom from SUD and sustained recovery (DDF, 2021).

RCOs mobilize community resources to “increase the prevalence and quality of long-term recovery from alcohol and other drug addiction” (Valentine et al., 2007, p. 1), thereby filling the gap of aftercare for someone who is in recent or long-term SUD recovery. RCOs provide diverse services, depending on the particular RCO, ranging from hosting recovery meetings (AA, NA, Celebrate Recovery) to hosting sober social activities. Regardless of the chosen programming, all RCOs employ core tactics to aid their members in sustaining recovery: peer support, fostering opportunities for recovering individuals, advocacy services, needs assessment, education, and awareness programming, obtaining public support and resources specific for recovery persons, public events, and supporting research (Valentine et al., 2007). Unfortunately, much like CRPs, RCOs are not found in every community. According to the Association of Recovery Community Organizations (2020), there are only 142 RCOs in the U.S.

**Collegiate Recovery Program.** Like the PHP and RCO, CRPs seek to bring a holistic recovery experience to a student suffering with or who is in remission from an SUD. The challenge is how to navigate this need in a traditionally abstinence-antagonistic environment. Many colleges have recognized the seriousness of the substance use prevalent on campuses and acknowledge the need for an approach that not only addresses prevention, but one that pursues sustained recovery for students already suffering from SUD, thus giving origin to the variety of CRPs currently housed on campuses nationwide (Harris et al., 2007).

CRPs use a recovery-informed approach, a unique marriage of education and recovery, to provide a venue for accessing opportunities designed to increase social capital and to change the student's trajectory. Collegiate recovery is a relatively new field of programming. Research indicates that there are thousands of higher education students who need an elevated level of support systems to sustain recovery in a decidedly abstinence-hostile environment as found on a college campus (DePue & Hagedorn, 2015; Reed et al., 2020). The environmental aspects found at colleges make recovery difficult, if not impossible, without the distinctive support system found in a CRP. However, out of the 5,300 colleges in the U.S., only 156 have some form of CRP (Association of Recovery in Higher Education [ARHE], n.d.). While each program is unique, ranging from peer-led meetings and community activities to a comprehensive brick-and-mortar center that employs student advisors and advocates, all incorporate the crucial aspect of peer support. This type of mutual aid from an individual with intimate knowledge of SUDs and successful recovery for themselves provides encouragement for sobriety, coping strategies, and interventions, if needed, within a shared environment during a crucial time in that individual's life (Bassuck et al., 2016).

The first CRP was founded at Brown University in Rhode Island in 1977, yet the first comprehensive CRP model, which set the standard for more than 150 colleges and universities nationwide to institute some form of collegiate recovery programming at their respective institution, was founded at Texas Tech University in 1986 (Reed et al., 2020). There are two basic forms of recovery settings on colleges: collegiate recovery communities (CRC) and collegiate recovery programs (CRP). While the two terms are often used interchangeably, there are notable differences between the two (Reed et al.,

2020). The term CRC describes groups of sober students who meet regularly to offer support under the guidance of a college administrator and/or staff member. The term CRP describes formal systems with dedicated space, staff, and oversight (Reed et al., 2020). For this research, the term CRP is used to describe and discuss the collegiate recovery movement and all respective curriculums.

Generally, admission to a CRP requires a minimum of six months of sobriety (some programs require longer, and some will waive this requirement based on need), acceptance to the sponsoring college, and a signed commitment to actively participate in program requirements (Beeson et al., 2017; Brown et al., 2018; Laudet et al., 2014). Program requirements also vary among CRPs. However, most encompass weekly meetings, peer support, institution support (registration assistance, financial aid, housing), and community engagement (Beeson et al., 2017; Brown et al., 2018). Like the PHP, CRPs have an expectation of relapse; thus, they have a management plan in place for this occurrence. As part of the signed commitment, students who relapse are required to report the episode to the program director and comply with the program's management plan, which can range from intensive inpatient treatment and/or campus-based or community-based outpatient treatment to increased and/or restrictive compliance monitoring, depending on the particular program rules (Beeson et al., 2017). Although research on CRPs is increasing, additional inquiry is warranted to develop best practices and pedagogy, bridge apparent contentious philosophies, and to completely evaluate the effectiveness of these programs.

## **Theoretical Prospective**

When most young adults identified with SUD would be forced to choose between education and sobriety, CRPs provide a venue of access to both. Recovery sciences applied in CRPs seek to understand the ways and means in which individuals recover from SUDs and then use that information in prevention, education, and treatment efforts (Brown & Ashford, 2019). The recovery-informed paradigm proposes that successful long-term recovery is a self-evident and fundamentally emancipatory process, a final release from the hold that the substance has on the individual (Brown & Ashford, 2019). The emancipatory process takes place on a continuum of change in which the individual experiences holistic support from the university, program administrators, family, and peers, i.e., an ecological support system that is vital in sustaining absolute recovery.

### ***General Systems Theory***

As research in recovery sciences is relatively new, an established and broad theoretical angle to guide this inquiry is the General Systems Theory, posited and authored by biologist Ludwig von Bertalanffy (von Bertalanffy, 1968). Essentially, von Bertalanffy (1968) proposed an interdisciplinary approach to understanding a problem, arguing that reducing a system to its exclusive included elements (for this research, the system of SUD) is limiting one's understanding of that problem. Instead, since the system is part of, and interacts with, the environment for which it endures, it can attain new properties through continuous development (von Bertalanffy, 1968). Therefore, the system's problem must be approached through a holistic understanding of the relationship between the system, its elements, and its environment (von Bertalanffy, 1968).

As it relates to SUD recovery sciences, the inclusion of a person's entire system, such as their home/work environment, relationships, and social network, in treating their SUD and assisting them in achieving recovery is paramount. Recovery science research mirrors von Bertalanffy's theory by arguing that a support system inclusive of institutional support, whether in a college, employment, public organization, or an individual's social network, is instrumental in the individual's recovery success (Brown & Ashford, 2019; Cleveland et al., 2007; DePue & Hagedorn, 2015). Much of the data surrounding relapse rates using traditional treatment plans where the individual endures fundamental elements alone (60-85%) versus relapse rates using CRPs and PHPs where the individual enjoys a support system during each phase (15% and below), seems to solidify this theoretical perspective on SUD recovery (ARHE, n.d.; Brown & Bohler, 2018).

### ***Bioecological Systems Theory***

A narrower application of a theoretical approach is Urie Bronfenbrenner's Bioecological Systems Theory, as it focuses on how a person is affected by systems in their environment (Bronfenbrenner, 1986). Bronfenbrenner (1986) divided an individual's environment into five systems: microsystem, mesosystem, exosystem, macrosystem, and the chronosystem, described as follows:

- The microsystem refers to an individual and their immediate surroundings (e.g., family, school, work).
- The mesosystem refers to the bi-directional relationship between the individual's microsystems (e.g., interactions between parents and school, family, and health services).

- The exosystem refers to the social network and surrounds the micro and mesosystems.
- The macrosystem refers to the culture that surrounds all the systems.
- The chronosystem refers to the environmental events and evolutions that occur throughout an individual's life.

Similar to von Bertalanffy's argument, Bronfenbrenner argued that in order to effectively treat a person, one must consider all their systems and the influence each system has over the person (Bronfenbrenner, 1986). Although Bronfenbrenner's work focused on child development, the theory has implications for all psychology and sociology study. The Bioecological Systems Theory approaches the individual holistically instead of unidirectional, arguing the interaction between the environments is explicitly or implicitly a vital mechanism in how that individual develops (Bronfenbrenner, 1986). An understanding of environmental influences is essential in devising effective, holistic SUD treatment.

CRPs embrace this bi-directional approach of including all a person's environmental systems in designing recovery-oriented programming that is supportive and sustainable, resulting in lower relapse rates among participants. People who participate in recovery programs that encompass a holistic approach, i.e., all-encompassing of a person's system, elements, relationships, and environment, are more likely to achieve a full recovery and emancipation from the disease (Brown & Ashford, 2019).

### ***Social Learning Theory***

To understand substance use, one must identify how a person's systems, e.g., social, environmental, psychological, influence their using behavior. Deviant or criminal



behavior, of which substance use can be part of and/or is often linked to, can be explained with R. L. Akers' theory of social learning (Akers et al. 1979). Akers' (1968) theory posits why and how deviant behavior is learned by building on Edwin Sutherland's differential association theory, which had been the most "notable for standing nearly alone as a general processual theory of criminal behavior" (p. 457). Sutherland's differential association theory argues that criminal behavior is learned through a person's relationship to someone with a history of criminal conduct (Matsueda, 2010). The social learning theory shifts from the differential association theory of understanding the processes by which one engages in deviant behavior to incorporating the impact of social interrelationships on a person's behavior, especially in adolescents (Akers et al., 1979; Akers et al., 1982). Akers et al. (1979) contends that differential association, i.e., interaction and/or association with a particular group, appears first and is followed by social learning, i.e., social definitions are introduced, imitating and modeling behavior occurs, and finally, behavior is positively or negatively reinforced. As an individual matures from childhood to adolescence, behavior is influenced less by family and more by the person's peers (Akers et al., 1979). Thus, a young person who associates with peers engaged in substance use activity are more likely to use substances than a person who does not associate with persons who engage in substance use (Norman & Ford, 2015).

### ***Brain Disease Model of Addiction***

Until recently, substance use disorder was viewed as a failure of morality (Avery et al., 2020; Kime 2018). In 2016, as the opioid epidemic captivated public attention, the U.S. Department of Health and Human Services (HHS) released a report titled *Facing*

*Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*, stating that SUD (i.e., addiction) is a medical condition and should be treated as such instead of a moral failing (U.S. Department of Health and Human Services [HHS], 2016). Even though the National Institute on Drug Abuse (NIDA) classified SUDs as a brain disease in the 1970s and the American Medical Association (AMA) declared alcoholism a disease in 1956 and “officially affirmed the brain disease model of addiction” (p. 305) in 1987, society stigmatized it as a moral failure. The 2016 U.S. Surgeon General’s report was a notable advancement in treating SUD as a public health crisis as opposed to a personal crisis (Avery et al., 2020). The report not only confirmed the brain disease model of addiction (BDMA), but also highlighted concerning data regarding adolescent substance use. BDMA postulates that SUDs numb the reward circuits and weaken the regions of the brain that control decision-making and self-control, creating a chronic condition characterized by repeated relapses (Avery et al., 2020; Volkow et al., 2016). Volkow et al. (2016) further explains BDMA by dividing SUD into three repetitive stages: binge and intoxication, withdrawal and negative affect, and craving and anticipation:

During intoxication, drug-induced activation of the brain’s reward regions is enhanced by conditioned cues in areas of increased sensitization. During withdrawal, the activation of brain regions involved in emotions results in negative mood and enhanced sensitivity to stress. During preoccupation, the decreased function of the prefrontal cortex leads to an inability to balance the strong desire for the drug with the will to abstain, which triggers relapse and reinitiates the cycle of addiction. The compromised neuro-circuitry reflects the

disruption of the dopamine and glutamate systems and the stress-control systems of the brain, which are affected by corticotropin-releasing factor and dynorphin. The behaviors during the three stages of addiction change as a person transitions from drug experimentation to addiction as a function of the progressive neuroadaptations that occur in the brain (p. 365).

Essentially, the BDMA provides an understanding into how SUDs disrupt vital biological processes, ultimately altering basic voluntary control that results in destructive behaviors. These scientific explanations afforded by the BDMA aid in fostering greater public health approaches to prevention campaigns, treatment, and public policy development (HHS, 2016).

*Principles of Drug Addiction Treatment* is an inclusive work of substance use research and practice authored by Dr. N. Volkow and released by the National Institute on Drug Abuse. For this research, it serves as a resource for evidence-based information regarding all aspects of SUD. Volkow (2018) states that:

Because drug abuse and addiction have so many dimensions and disrupt so many aspects of an individual's life, treatment is not simple. Effective treatment programs typically incorporate many components, each directed to a particular aspect of the illness and its consequences. Patients typically require long-term or repeated episodes of care to achieve the ultimate goal of sustained abstinence and recovery of their lives. Indeed, scientific research and clinical practice demonstrate the value of continuing care in treating addiction, with a variety of approaches having been tested and integrated in residential and community settings. (p. 3)

Each aspect of SUD is important, but effective treatment must consider the totality of the problem, i.e., treat the problem holistically (Volkow, 2018), and it must continue well beyond the initial treatment since SUD is a systematic illness. Volkow (2018) further explains how SUD changes brain function and can persist long after the person has stopped the drug use as follows:

Psychological stress (work, school, family problems), social cues (being around people using drugs/alcohol), and environmental cues (encountering streets, objects, or even smells associated with drug abuse) can trigger intense cravings without the individual even being consciously aware of the triggering event. (p. 6)

When considering how one becomes addicted, meaning they cannot control their use of the substance, the BDMA theory posits why it takes more than willpower to cease the substance use.

### **Relationship of Research to Literature and Theory**

The scientific and phenomenological studies provided within the literature review provide insight into the journey from addiction to recovery. Moreover, the addiction and recovery studies contributed various bodies of knowledge and theories by which the foundation of this research is built.

Beginning with the BDMA, one conceptualizes how an individual loses the ability to just say no and turn away from substance use. As the BDMA argues, SUD is a chronic disease caused by a range of factors within an individual's biological and environmental systems and characterized by persistent relapses (Avery et al., 2020). The research identifies the expectation of relapse, common triggers to relapse, and effective

management of relapses. Through scientific research, the BDMA allows SUD recovery to shift from a discussion of weak morality to one of a strategic public health-oriented treatment and on-going care (Volkow et al., 2016).

Through the lens of SUD recovery, the Bioecological Systems Theory, General Systems Theory, Social Learning Theory, and recovery-informed paradigm conceptualizes the fervent bi-directional connection between an individual and their environment and the importance of holistic support as conceptualized in recovery sciences (Beeson et al., 2017; Brown & Ashford, 2019; Pinder-Amaker & Bell, 2012). As posited in these theories, individuals are constantly influenced by their immediate and extended environments, part of which includes the social network that is responsible for the contact and exchanges of diverse factors within the overall environment (Akers et al., 1979). For one to receive the most effective treatment with the highest chance of successful emancipation, comprehensive treatment plans must consider the individual's social, biological, and behavioral structures. Furthermore, the research provides insight into why unidimensional or restricted interventions such as prison sentences and drug courts have been comparatively ineffective, allowing recidivism among low-level drug offenders to remain high.

By examining the phenomenon of recovery situated in abstinence-hostile surroundings, which is the purpose of this research, the impact of social support on sustained abstinence can be assessed, potentially adding to the extant literature in defense of the positive impact of treatment inclusive of supportive environmental systems. This is the point at which programs such as CRPs come into play. The college experience inherently includes relapse triggers, yet CRPs allow an individual to engage in the college

experience safely while maintaining the necessary and continuing care as outlined in the literature and stated by Volkow (2018). Research on college students in recovery, provided in their own voices, can identify social and environmental factors that have the most impact on sustaining recovery and allow them to thrive in otherwise abstinent-hostile conditions.

## Chapter III

### METHODOLOGY

This quantitative study was designed to gain a better understanding of sustainable SUD recovery from the perspective of members in the KSU collegiate recovery program, the CYAAR, who are in active recovery. To achieve this, an online survey was constructed and distributed to current and alumni members of the CYAAR. By utilizing the method of an online survey, the researcher was able to maximize the opportunity to expeditiously collect important variable data. This method was also effective in eliciting information from those who prefer the anonymity and convenience of a web-based survey. Specifically, the research was designed to determine the relationship, if any, between the program components of a CRP, sustained recovery, and the academic success of a student with a pre-existing SUD.

#### **Site of Study**

Founded in 2007, the CYAAR was designed to follow the collegiate recovery curriculum as outlined in a 2005 publication originating from Texas Tech University, a groundbreaking model in collegiate recovery programming (J. McDaniel, personal communication, August 11, 2021). The CYAAR program began in the spring semester of 2007 with the founder, Teresa Johnston, and three students who would hold recovery meetings in her office (J. McDaniel, personal communication, August 11, 2021). By 2009, the program had grown, a program manager was added to the staff, a partnership with the counseling center and student conduct offices to offer educational workshops

was formed, yet the challenge remained that few people knew the CYAAR existed (J. McDaniel, personal communication, August 11, 2021). However, in fall of 2016, the CYAAR experienced exponential growth as the program became part of KSU's first-year/freshman introduction curriculum (KSU 1101), which exposed the program to all KSU first year students (J. McDaniel, personal communication, August 11, 2021). From there, the CYAAR grew to where it is today, a brick-and-mortar center with staff, administration offices, classrooms, sustenance facilities, meeting rooms, and a center located on each of KSU's campuses (Kennesaw and Marietta).

The CYAAR provides recovery-informed programming with accountability and an integrated support system to their members. To gain admission to the CYAAR, a student must be enrolled or accepted to KSU, have at least six months of sobriety – a requirement that can be waived in exceptional circumstances, successfully complete an entrance interview, and sign a commitment to abide by the program requirements. The program requirements consist of weekly seminars, monthly meetings, community service, academic advisement, and recovery pathway participation (e.g., 12-step, AA), with the goal of providing members with the tools they need to sustain recovery throughout experiences that are stressors/triggers (KSU CYAAR, n.d.). The CYAAR accepts students with eating disorders, which, by definition, are addictions that require the same supportive measures as SUD addictions, but since this research is SUD based, only members who listed drug and/or alcohol SUDs were considered in this research.

### ***Program Data***

Since its inception in 2007, there have been 376 members of the CYAAR, with the majority of these since 2016 (J. McDaniel, personal communication, August 11,



2021). Some of these members went on to graduate from KSU (159), while others transferred out to other schools or left college life (J. McDaniel, personal communication, August 11, 2021). The majority of CYAAR members, 63%, transferred to KSU from another school because of KSU’s CYAAR (J. McDaniel, personal communication, August 11, 2021).

Table 1 provides a breakdown of the CYAAR’s enrollment data as of fall semester 2021.

**Table 1**

*CYAAR Enrollment Data*

Total graduates	159
Average member per semester	46.05
Fall 2021 membership	48
Average membership length (semesters)	4.78
Average intake GPA	2.78
Average graduation GPA	3.38
Relapse rate Year 2020-2021	9.57%

*Note:* Data provided by CYAAR, Jessica McDaniel, Interim Assistant Director, August

11, 2021

**Hypotheses**

Based on the existing SUD literature and the research questions, the following hypotheses were developed and applied to the research.

**Research question one (RQ1):** What is the extent of the relationship, if any, between collegiate recovery program enrollment tenure and relapse rate for students with a pre-existing SUD?

**Null hypothesis one (H<sub>01</sub>):** There is no relationship between collegiate recovery program enrollment tenure and relapse rate for students with a pre-existing SUD.

**Alternate hypothesis one (H<sub>1</sub>):** There is a positive relationship between collegiate recovery program enrollment tenure and relapse rate for students with a pre-existing SUD.

**Research question two (RQ2):** What is the extent of the relationship, if any, between collegiate recovery program enrollment tenure and length of time in recovery for students with a pre-existing SUD?

**Null hypothesis two (H<sub>02</sub>):** There is no relationship between collegiate recovery program enrollment tenure and length of time in recovery for students with a pre-existing SUD.

**Alternate hypothesis two (H<sub>2</sub>):** There is a positive relationship between collegiate recovery program enrollment tenure and length of time in recovery for students with a pre-existing SUD.

The first two hypotheses address how an addicted student sustains recovery in an abstinence-hostile environment and is based on the existing literature surrounding connectedness and recovery. As stated in the literature review, colleges are intrinsically social environments where the individual thrives when belonging to a group. DePue & Hagedorn (2015) argued that a person's social network has pervasive influence from which an individual identified with SUD draws strength. Likewise, Cleveland et al.

(2007) argued that persons identified with SUD rely on peer support for coping mechanisms, relapse intervention, and support, further solidifying the importance of social connectedness. By participating in a CRP, a SUD recovery student finds this connectedness in a setting of people who understand addiction and are better suited to help them to navigate recovery. CRPs employ peer mentor volunteers, who are persons in active recovery themselves, to lend much needed support to new and current members. CRPs include programming designed for members to enjoy the social aspects of college (mixers, events, parties, tailgating) within a safe and sober environment. If the findings in the aforementioned studies are applied to those in a college setting that offers a place for group dynamics while maintaining safety and sobriety, specifically a CRP, then members of a CRP should be able to achieve a successful and sustained recovery. Sustained recovery, discussed in the variable construction section, means there are no or incredibly low rates of relapse.

***Research question three (RQ3):*** What is the extent of the relationship, if any, between collegiate recovery program enrollment tenure and academic success for students with a pre-existing SUD?

**Null hypothesis three (H<sub>03</sub>):** There is no relationship between collegiate recovery program enrollment tenure and academic success for students with a pre-existing SUD.

**Alternate hypothesis three (H<sub>3</sub>):** There is a positive relationship between collegiate recovery program enrollment tenure and academic success for students with a pre-existing SUD.

The third hypothesis addresses the addicted student's academic success. Documented within the findings from both DuPont et al. (2009) studies, recovery programs that employ rigorous treatment and aftercare which includes elements of social support, compliance monitoring, recovery-based program attendance, and random screening over a considerable length of time enjoy a much higher rate of success than that of a traditional treatment program. Harris et al. (2007) and Bassuk et al. (2016) echoed these findings in studies conducted of similar programming at colleges where recovery programs were initiated.

Some CRPs use rigorous components necessary for sustaining recovery: compliance monitoring, accountability, attendance, as well as the continuing care Volkow (2018) noted as indispensable. For a person to comply with the program, they must attend their college classes as well as attend the designated CRP program meetings (KSU CYAAR, n.d.). The CYAAR employs their own academic advisors, provided by the institution, to aid the members in developing degree goals, determining sequence of courses, and navigating course registration and requirements. Additionally, CYAAR peer mentors help members who may be struggling academically develop good study practices. CYAAR members must be accountable to KSU and the CYAAR, meaning they must attend classes, complete required course work, and maintain KSU's required minimum GPA to continue enrollment in both the CYAAR and KSU.

The literature indicates that people who complete these rigorous programs thrive, experiencing long-term and even permanent recovery along with personal and professional successes. These types of programs, upon successful completion, teach and reinforce life skills beneficial in achieving all forms of success including accountability

and responsibility. Thus, standing members (i.e., fully enrolled in the program and in recovery longer than six months) of a CRP should have higher grade point averages (GPAs) than short-term members or the general population, which was one measure of academic success in this study. Additionally, standing members will have lower rates of relapse, a second measurement of their success.

### **Research Design**

In collaboration with the administration of the CYAAR, a survey (Appendix A) was drafted to capture the perspectives of the college environment and CRP programming from the lens of a student with a pre-existing SUD. Qualtrics, a web-based survey system, was utilized to record the participant's responses. At the beginning of the fall semester (August), current and alumni members of the KSU CYAAR were invited to participate in the online survey. CYAAR's interim assistant director distributed the invitation via their email addresses on file with the CYAAR. The survey included questions surrounding their SUD experiences, relapse, recovery length and experiences, and their academic standing (i.e., GPA, graduation) to measure the participant perspective. Additionally, aggregate data without identifiable demographic information (e.g., number of students who apply to KSU CYAAR each semester, number of students accepted, number of alumni members, number of active members, collective average GPA of participating students) was collected with permission from membership records at the CYAAR to establish programming, requirements, and volume of current and past membership. Since demographic information, i.e., gender and age, was not a factor in this research, as the research questions do not take into consideration how addiction and recovery impacts specific genders and/or age groups, it was not gathered as a part of the

data collection. Only data that was relevant to the specified variables was collected from the CYAAR population to prohibit the data being traced back to a single member.

### ***Data Preparation***

An online survey instrument was designed to collect several variables relevant to recovery and academic success of SUD students involved in the KSU CYAAR. These variables are type of SUD, length of SUD, number of relapses before, during, and after treatment and CYAAR participation, academic GPA before and after CYAAR participation, length of active recovery, and elements of the program that the member believes have been most beneficial to their success. The survey instrument was constructed to ensure anonymity, not asking for any identifying information such as name, age, or gender.

### ***Data Collection***

The survey instrument was distributed electronically by the CYAAR interim assistant director in early August 2021 and open for access for six weeks to allow all current and former members ample time to access and respond to the survey. A second invitation to participate in the survey was sent out in late September 2021 as an additional reminder and held open for another two weeks. Once the survey period was closed, the data was collected from the responses and transferred to a Microsoft Excel spreadsheet for organizational and analytical purposes, with columns for type of substance abuse, use habits prior to enrolling in the program, relapse rate, length of time in recovery, academic success, and years enrolled in the program. The files were grouped by variable within the Microsoft Excel program for a descriptive analysis that describes the program outcomes and makes inferences about the relationship between variables.

### *Strategy and Measurement*

Once all variable data was collected and grouped within the Microsoft Excel program, data was transferred to the IBM SPSS software for statistical analysis. Social science research requires the researcher to conduct descriptive statistical analyses and test whether data meets the assumptions of parametric testing (Creswell, 2012), which was accomplished via SPSS and reported in a discussion and tables in Chapter 4.

**Research Questions 1 and 2.** The inferential testing that was conducted for each of the first two research questions in this study was logistic regression analysis. The assumptions for logistic regression analysis are that data are free from multicollinearity and outliers (Pallant, 2016). Multicollinearity was assessed through the variance inflation factor by running a collinearity diagnostic (Pallant, 2016). The presence of outliers is assessed using scatterplots, where the absence of outliers is confirmed when data points fall within the 3.3 and -3.3 range (Pallant, 2016). Logistic regression allows researchers to evaluate how well a set of predictor variables predicts a categorical outcome variable (Pallant, 2016). The resulting model is then evaluated according to the ‘goodness of fit’ statistic, which indicates the weight, or importance, of each variable in the model (Pallant, 2016). For this study, the Forced Entry Method was used so that each variable was tested in one block at the same time. The reason for doing this is to control for the influences of other predictor variables in the model (Pallant, 2016). The Cox and Snell R square provides the percentage of variance explained by the predictor variables and the model’s accuracy in classifying cases (Pallant, 2016).

**Research Question 3.** The analysis that was used to assess the third research question is a paired samples *t*-test. This parametric test is used to compare mean

differences for a single sample at two measurement points (Pallant, 2016). For the current study, the two measurement points were (a) time of program enrollment and (b) present-day. The paired samples *t*-test enables comparison of students' GPAs at each measurement point, resulting in a determination of whether a meaningful change in GPA occurred between the time students enrolled in the program and the present day. An assumption of the paired samples *t*-test is normality in the distribution of the dependent variable (Pallant, 2016). This assumption is assessed using the Shapiro-Wilk test, which generates a Shapiro-Wilk statistic and a significance (*p*) value. If the *p*-value is less than .05, the null hypothesis, that the data are normally distributed, can be rejected, meaning that the data are not normally distributed. For data that are not normally distributed, the non-parametric Wilcoxon signed-rank test would be conducted, as this test is considered more robust to non-normally distributed data (Pallant, 2016).

Reliability was established through internal data control measures and standardized data analysis procedures. The CYAAR tracks several data sets for members: demographics (not included in this study), time in the program (entrance dates), time in recovery, GPA, relapse, and primary substance of abuse. Data was compared to CYAAR records to establish reliability. Additionally, participant GPA scores can demonstrate reliability as CYAAR accesses these scores directly from the Kennesaw State University (KSU) Office of the Registrar via their assigned academic advisor. Validity was further ensured by including the entire population of CYAAR members, past and present, as research cites the larger and more inclusive the population, the higher the level of validity. The representativeness of the sample was established by using data points from aggregate data.



### *Variable Construction*

#### **Independent variable – Collegiate Recovery Program Enrollment Tenure.**

The independent variable is the program membership/enrollment tenure. Social and institutional support begin once the student is accepted into the CYAAR program. As noted in the literature, the longer a person is exposed to comprehensive social support, their likelihood of sustaining long-term recovery and sobriety exponentially increases. For that reason, including membership length data is relevant for predicting the outcome variable. Since KSU is on the semester system beginning with the fall semester (August) and the CYAAR accepts members during various semesters, there is an expectation that some CYAAR members will have fewer than 2 years of tenure in the program. To accommodate this fluctuation in the research design, there are five levels of this independent variable. These levels were created to remain as consistent as possible for years of recovery, to be consistent with the CYAAR program measurement of semesters instead of years, and to factor the student's actual entrance into KSU and CYAAR. The levels of this variable were broken down as such: (a) one semester (b) two semesters; (c) three semesters; (d) four semesters; (e) five or more semesters.

#### **Dependent Variables – Relapse Rate, Length of Time in Recovery, and**

**Academic Success.** There were three dependent variables presented for measurement; relapse rate, length of time in recovery, and academic success, as identified by constructs found within the social support literature. KSU focuses on graduation, progression, and retention as measures for success. Likewise, the effectiveness of the collegiate recovery program was measured by similar variables that provide subjective evidence of success: (1) relapse rates (calculated as the total amount of time in the program divided by the

number of relapses), (2) length of time in recovery (defined as the amount of time since the most recent relapse), and (3) academic success as evidenced by the change in grade point average (GPA) from program enrollment to the day the participant takes the survey.

### ***Relapse Rate***

As stated in the hypothesis, a comprehensive supportive model, such as the one established in the CYAAR, is vital to sustain recovery. Since SUD is classified as a chronic disease, defining relapse in association with a chronic condition is required. The term “relapse” is defined as an occurrence of using a legal or illegal substance (alcohol, drugs) after a period of remission. Like the PHP model, the CYAAR has an expectation of relapse, not as an indicator of program failure but as part of the recovery process. Recognizing this expectation and the ability to adequately manage a relapse incident is a fundamental component of a recovery-informed paradigm, which is one of the pillars of a comprehensive collegiate recovery community. As this is a recognized expectation in recovery, especially within the first year of sobriety, the CYAAR includes a clause of mandatory self-reported relapse outlined in the membership agreement that a member-seeking student must sign before accepted into the program. This variable data was solicited from survey participants in questions that ask for self-reporting of relapses concurrent to corresponding program tenure and recovery time. In this study, the relapse rate will be the total amount of time in the program divided by the number of relapses.

### ***Length of Time in Recovery***

As cited in the literature, recovery begins after an individual stops using substances. Additionally, the longer the person sustains recovery, the greater their chances to achieve emancipation from the disease. The term “sustained recovery” is

defined as a significant period of time with no incidents of relapse, which is a standard measurement of sustained abstinence for SUD treatment providers and experts (Volkow, 2018). In this study, length of time in recovery was defined as the amount of time since the most recent relapse. Participants were asked to indicate their length of recovery and since the CYAAR requires at least 6 months of sobriety to enter the program, that number was the baseline and continue upwards to a threshold of 10 + years. For descriptive and statistical analysis, the responses were grouped into two-year increments: (a) less than 12 months (b) one to three years; (c) four to six years, (d) seven to nine years; and (e) ten or more years. Although there is considerable literature citing the first year of sobriety is the hardest to achieve, most research concludes that recovery is substantial around the six-month mark.

### *Academic Success*

In this study, academic success is operationalized as the change in GPA from the member's program enrollment to current, or the date of their survey participation. The CYAAR program database tracks current GPA scores of student members by semester and then calculates an average cumulative GPA for program participants, which will be the baseline GPA used for comparison in this study. The GPA was represented as a continuous variable. As previously noted, positive social support and influence yield a greater opportunity to thrive personally and academically, which can be shown through members maintaining above-average GPAs. For the purposes of this study, an above-average GPA is defined as one that is higher than the average admission GPA at KSU for first year student participants, which is currently a 3.38 GPA (Kennesaw State University, 2020).

## **Ethical Considerations**

There are always ethical considerations in research, especially when using human subjects to extract information about the study focus, even when the study is one that offers anonymity. This research does not collect any private, identifiable data from the participants. As such, an application for exemption from Institutional Review Board oversight was submitted to the Valdosta State University Institutional Review Board (VSU IRB) upon prospectus approval and was subsequently approved by VSU IRB (Appendix B). An informed consent statement (Appendix C) notifying the participants about the nature of the study, potential risks and benefits associated with participation, and that participation is voluntary and may be discontinued at any time was part of the online survey introduction as required by VSU IRB protocols. Due to the nature of this research, physical, social, psychological, and all other types of harm were kept to a minimum by vetting questions through the CYAAR administration prior to publishing the survey and then allowing participants to skip a question that may elicit discomfort.

Furthermore, the study adhered to the privacy and security requirements of the Health Insurance Portability and Accountability Act (HIPAA) and Family Educational Rights and Privacy Act (FERPA) requirements. The researcher did not directly access student/member records, either from KSU or the CYAAR, and no demographic data was collected for the study. CYAAR's interim assistant director provided all aggregated data discussed in the research to the researcher via a recorded interview and in subsequent email format to verify accuracy of the verbally reported data.

## **Data Access and Maintenance**

All collected data is saved on an encrypted external hard drive device, using a computer with anti-virus software. Access to both the external hard drive and the computer used to extract and save the data is limited to only the researcher via a password-protected computer and files. The external hard drive is stored in a locked file cabinet when not in use with access limited to only the researcher. There were no paper documents or personal identifying information collected for this research. Upon research completion, the secure encrypted external hard drive that holds the research data will be kept in a security lockbox with access limited to only the researcher and not redistributed for any reason. Data retention time is three years per federal regulation; therefore, all collected data will be retained for that period and then destroyed.

## Chapter IV

### RESULTS

The purpose of this quantitative study was to examine the elements of a Collegiate Recovery Program (CRP) to gain insight on the positive effects of these elements and which element has a greater impact on aiding individuals in sustaining recovery. The results reported in this chapter shall reflect the order of the research questions presented in methodology chapter.

#### **Descriptive Statistics**

Of the 48 current (fall semester) CYARR members, a total of 16 participants (33.3%) completed the questionnaire. There were seven junior participants (43.8%), four sophomore participants (25.0%), three senior participants (18.8%), and two freshman participants (12.5%). A majority of the participants attended another college or university prior to going to KSU ( $n = 14$ , 87.5%). For the number of colleges or universities attended prior to KSU, there were more participants who attended one college or university ( $n = 7$ , 43.8%) than participants who attended two colleges or more universities prior to KSU ( $n = 3$ , 18.8%). Eleven (68.8%) of the 16 participants left the previous institution because of substance use. A total of 12 (75%) participants knew about the Collegiate Recovery Center/CYAAR before they applied to KSU, and all of them responded that the CYAAR was the reason they attended KSU. Seven participants have been enrolled at KSU for five or more semesters (43.8%) while five participants have been at KSU for only one semester (31.3%). Six participants reported being active

with substance use disorder for 10 or more years (37.5%) while 10 participants responded that they have been in recovery for 1 to 3 years (62.5%). There were also 10 out of the 14 participants who participated in a formal or traditional substance use treatment for 2 to 4 times prior to entering the CYAAR (62.5%). Among the formal treatments, the participants participated in the 12-step or similar program ( $n = 9, 56.3\%$ ) and counseling ( $n = 8, 50\%$ ) the most.

**Table 2**

*Frequencies and Percentages of Demographic Characteristics (N = 16)*

		Frequency	Percent
Class Rank	Freshman	2	12.5
	Junior	7	43.8
	Senior	3	18.8
	Sophomore	4	25.0
	Total	16	100.0
Did you attend a college/university prior to coming to KSU?	No	2	12.5
	Yes	14	87.5
	Total	16	100.0
Number of Colleges/Universities attended prior to KSU	1.00	7	43.8
	2.00	3	18.8
	Total	10	62.5
	Missing System	6	37.5
Total	16	100.0	
Substance use play a role in your leaving that institution	Missing	2	12.5
	No	3	18.8
	Yes	11	68.8
	Total	16	100.0
Did you know about the Collegiate Recovery Center/CYAAR before you applied to KSU?	Missing	1	6.3
	No	3	18.8
	Yes	12	75.0
	Total	16	100.0
Is the Collegiate Recovery Center/CYAAR the reason you chose to attend KSU?	No	4	25.0
	Yes	12	75.0
	Total	16	100.0
	1 semester	5	31.3
	3 semesters	1	6.3

How long have you been a member of the Collegiate Recovery Center/CYAAR?	4 semesters	3	18.8
	5 or more semesters	7	43.8
	Total	16	100.0
How long were you active in your substance use disorder?	1-3 years	2	12.5
	10 or more years	6	37.5
	4-6 years	4	25.0
	7-9 years	4	25.0
	Total	16	100.0
How long have you been in recovery?	1-3 years	10	62.5
	4-6 years	2	12.5
	7-9 years	3	18.8
	Less than 12 months	1	6.3
	Total	16	100.0
Prior to entering the Collegiate Recovery Center/CYAAR how many times did you seek/participate in formal/traditional substance use treatment?	2-4 times	10	62.5
	More than 10 times	2	12.5
	None	2	12.5
	Once	2	12.5
	Total	16	100.0
Prior to entering the Collegiate Recovery Center/CYAAR, what formal treatment options did you participate in for your SUD? Select all that apply.	12 step or similar program	9	56.3
	Counseling	8	50.0
	Detoxification	6	37.5
	Detoxification, Counseling, 12 step or similar program	5	31.3
	Inpatient Rehabilitation	6	37.5
	Outpatient Rehabilitation	2	12.5
	Total	16	100.0

Participants were asked to provide their GPA prior to entering the CYAAR program, their current GPA, and the number of times they relapsed prior to entering the program. The descriptive statistics of the variables are presented in Table 3. As observed, the mean GPA of participants increased from 2.40 ( $SD = 1.01$ ) prior to entering the CYAAR program to 3.48 ( $SD = .33$ ) currently. There is a mean GPA growth of 1.08 ( $SD = 1.06$ ). The mean number of times of relapse was determined to be 6.07 ( $SD =$



12.72) prior to entering the CYAAR program while none of the participants relapsed after entering the program.

**Table 3**

*Descriptive Statistics of the GPA Variables*

	N	Minimum	Maximum	Mean	SD
What was your grade point average prior to entering the CYAAR program?	16	0.00	3.50	2.40	1.01
What is your current GPA?	16	3.00	4.00	3.48	0.33
GPA Growth	16	0.00	3.21	1.08	1.06
Prior to entering the Collegiate Recovery Center/CYAAR, how many times did you relapse?	15	0.00	50.00	6.07	12.72

Table 4 further breaks down individual responses to GPA prior to entry into the CYAAR, length of membership, and current GPA. As observed, the GPA of participants increases with length of membership. Of the participants who responded with only one semester of membership ( $n = 5, 31.25\%$ ), the average GPA prior to entry into the CYAAR was 2.84, and the average current GPA was 3.22, a 13.38% increase. Participants who responded with 5 or more semesters ( $n = 6, 37.5\%$ ), reported an average GPA of 1.69 upon entry (one participant did not report prior GPA and as such was assigned a value of zero) and a current GPA of 3.62, a 114.2% increase.

**Table 4**

*GPA and Membership Length*

Respondent	GPA Prior	Membership	GPA Current
1	2.8	1	3.0
2	1.9	4	3.9
3	3.0	1	3.2
4	3.0	4	3.25

5	3.2	5	3.8
6	.4	5	3.38
7	3.2	1	3.2
8	3.2	1	3.2
9	2.0	1	3.5
10	2.15	5	3.33
11	2.7	4	3.7
12	2.7	5	4.0
13	3.5	4	3.8
14	3.0	3	3.2
15	1.7	5	4.0
16	0	5	3.21

---

*Note:* Membership length reported as semesters

Table 5 presents the frequencies and percentages of participants' responses on the question: *In thinking of the formal treatment options, express your opinion as to the effectiveness of these treatments as stand-alone responses to substance use disorders.*

The formal treatment options included detoxification, outpatient rehabilitation, inpatient rehabilitation, counseling, 12-step or similar program, and Medically Assisted Treatment (MAT). Among these treatments, participants responded extremely effective to inpatient rehabilitation ( $n = 5$ , 31.3%), counseling ( $n = 6$ , 37.5%), and 12-step program ( $n = 10$ , 62.5%). However, there was 1 participant who responded that detoxification was not effective at all (6.3%) while four participants responded that MAT was not effective at all (25%).

**Table 5**

*Frequencies and Percentages on Participants' Responses about the Effectiveness of Formal Treatments*

---

		Frequency	Percent
Detoxification	Effective	5	31.3
	Neutral	6	37.5
	Not Effective at all	1	6.3

	Slightly effective	4	25.0
	Total	16	100.0
Outpatient Rehabilitation	Effective	8	50.0
	Neutral	4	25.0
	Slightly effective	4	25.0
	Total	16	100.0
Inpatient Rehabilitation	Effective	2	12.5
	Extremely effective	5	31.3
	Neutral	6	37.5
	Slightly effective	3	18.8
	Total	16	100.0
Counseling	Effective	5	31.3
	Extremely effective	6	37.5
	Neutral	1	6.3
	Slightly effective	4	25.0
	Total	16	100.0
12-step or similar program	Effective	5	31.3
	Extremely effective	10	62.5
	Neutral	1	6.3
	Total	16	100.0
Medically Assisted Treatment (MAT)	Effective	2	12.5
	Neutral	8	50.0
	Not Effective at all	4	25.0
	Slightly effective	2	12.5
	Total	16	100.0

---

There were more participants who responded that it was difficult to sustain recovery in a college environment for a person with SUD ( $n = 7, 43.8\%$ ). Among these participants, a majority identified academic pressures ( $n = 9, 56.3\%$ ), isolation ( $n = 8, 50\%$ ), and ease of access or availability of substances ( $n = 8, 50\%$ ) as factors that make the college environment difficult for a person with SUD.

**Table 6**

*Frequencies and Percentages of Participants' Responses on Difficulty to Recover in a College Environment*

		Frequency	Percent
In your opinion, is it difficult to sustain recovery in a college environment?	Maybe	4	25.0
	No	5	31.3
	Yes	7	43.8
	Total	16	100.0
What factors make a college environment difficult for a person with SUD?	Academic pressures	9	56.3
	Isolation	8	50.0
	Less structure/supervision	7	43.8
	Ease of access/availability of substances	8	50.0
	New freedoms	7	43.8
	Peer pressure	6	37.5
	Other/not listed	2	12.5
	Total	16	100.0

Participants were asked to respond to the question: *How likely are the elements of college environment listed below to be a relapse triggers/stressors?* The triggers or stressors included new freedoms, less structure/supervision, peer pressure, academic pressures, isolation, ease of access or availability of substances, and others. Among the triggers or stressors, more participants responded extremely likely to peer pressure ( $n = 5, 31.3\%$ ), academic pressures ( $n = 5, 31.3\%$ ), isolation ( $n = 5, 31.3\%$ ), and ease of access or availability of substances ( $n = 7, 43.8\%$ ).

**Table 7**

*Frequencies and Percentages of Relapse Triggers or Stressors*

		Frequency	Percent
New freedoms	Extremely likely	1	6.3
	Neutral	3	18.8

	Not likely	4	25.0
	Somewhat likely	3	18.8
	Very likely	5	31.3
	Total	16	100.0
Less structure/supervision	Extremely likely	1	6.3
	Neutral	3	18.8
	Not likely	4	25.0
	Somewhat likely	2	12.5
	Very likely	6	37.5
	Total	16	100.0
Peer pressure	Extremely likely	5	31.3
	Neutral	2	12.5
	Not likely	5	31.3
	Somewhat likely	2	12.5
	Very likely	2	12.5
	Total	16	100.0
Academic pressures	Extremely likely	5	31.3
	Neutral	1	6.3
	Not likely	2	12.5
	Somewhat likely	1	6.3
	Very likely	7	43.8
	Total	16	100.0
Isolation	Extremely likely	5	31.3
	Neutral	1	6.3
	Not likely	2	12.5
	Somewhat likely	2	12.5
	Very likely	6	37.5
	Total	16	100.0
Ease of access/availability of substances	Extremely likely	7	43.8
	Neutral	2	12.5
	Not likely	5	31.3
	Very likely	2	12.5
	Total	16	100.0
Other/not listed	Somewhat likely	3	18.8
	Extremely likely	1	6.3
	Neutral	6	37.5
	Not likely	5	31.3
	Very likely	1	6.3
	Total	16	100.0

---

## **Hypothesis Testing**

### ***Research Questions 1 and 2***

To address the research questions, comparisons were conducted on number of times of relapse and GPAs before and after entering the CYAAR program. Because there are only 16 participants in the study, the results cannot be generalized to the target population. In addition, no participant reported experiencing a relapse after entering the program. Therefore, the result suggests that there is a decrease in number of relapses after entering the program.

Non-parametric tests are used when the sample size is small such as in the case of this study (Meek et al., 2007). Wilcoxon Signed-Rank test is the non-parametric counterpart of the dependent samples t-test wherein the data from the same sample is compared at two collection points (Meek et al., 2007). Thus, the Wilcoxon Signed-Rank test was utilized in the analyses.

A nonparametric test was also conducted to determine whether the data were significantly different before and after entering the CYAAR program. The mean number of relapses before entering the CYAAR program was 6.067 ( $SD = 12.72$ ) while none of the participants had a relapse after entering the CYAAR program. Because none of the participants experienced a relapse, the relapse rate (RQ1) and length of time in recovery (RQ2) were constants. For this reason, a Wilcoxon signed-rank test was performed to determine whether there is a significant difference in ranks between participants' number of relapses before and after the CYAAR program. The result determined that there is a significant difference in mean ranks of the number of relapses before and after entering the CYAAR program.

**Table 8***Wilcoxon Signed-Rank Test Between the Number of Relapses*

	Mean	N	SD	SE Mean	Z	p
Before	6.0667	15	12.7193	3.28411	-3.074	0.002
After	0	15	0	0		

Because of the apparent success of the program, a further descriptive analysis was conducted to determine the elements of the program that helped students avoid relapse. Participants were also asked to respond to the item: *In thinking about your recovery status, rank the following elements of the Collegiate Recovery Center/CYAAR programming as to their importance in helping you sustain recovery.* The elements included peer support or mentoring, student programming, academic advising, institutional support, healthy peer relationships, accountability, campus outreach, student leadership, financial support, and campus sober events. The majority of the participants responded that all elements of the CYAAR program were very important. However, most participants responded that healthy peer relationships and accountability were very important ( $n = 15, 93.8\%$ ).

**Table 9**

*Frequencies and Percentages of Importance of Elements of CYAAR Program in Sustaining Recovery*

		Frequency	Percent
Peer Support or Mentoring	important	2	12.5
	very important	14	87.5
	Total	16	100.0
Student Programming	somewhat important	1	6.3
	neutral	1	6.3
	important	1	6.3

	very important	13	81.3
	Total	16	100.0
Academic Advising	not important	1	6.3
	neutral	1	6.3
	important	3	18.8
	very important	11	68.8
	Total	16	100.0
Institutional Support	somewhat important	2	12.5
	important	1	6.3
	very important	13	81.3
	Total	16	100.0
Healthy peer relationships	important	1	6.3
	very important	15	93.8
	Total	16	100.0
Accountability	important	1	6.3
	very important	15	93.8
	Total	16	100.0
Campus outreach	neutral	3	18.8
	important	3	18.8
	very important	10	62.5
	Total	16	100.0
Student leadership	neutral	2	12.5
	important	3	18.8
	very important	11	68.8
	Total	16	100.0
Financial support	not important	1	6.3
	somewhat important	1	6.3
	important	1	6.3
	very important	12	75.0
	Total	15	93.8
Missing	System	1	6.3
Total		16	100.0
Campus sober events	neutral	1	6.3
	important	4	25.0
	very important	11	68.8
	Total	16	100.0

---



### ***Research Question 3***

To address the third research question, the GPAs prior to entering the CYAAR program were compared to the current GPAs of participants. A Wilcoxon signed-rank test was also conducted to determine whether there is a significant difference in mean ranks between the GPAs. A nonparametric test was conducted because there are only 16 samples in the analysis; it was possible to assume that the dependent variable in the analysis would not be normally distributed. The result of the analysis is presented in Table 10. The result showed that there is a significant difference in mean ranks of the GPAs before and after entering the CYAAR program.

**Table 10**

*Wilcoxon-Signed Rank Test between GPAs*

	Mean	N	SD	SE Mean	Z	p
Before	2.4031	16	1.00904	0.25226	-3.299	0.001
After	3.4794	16	0.33398	0.08349		

To determine the elements of the program that helped students achieve academic success, participants were also asked to respond to the item: *In thinking about your current academic status, rank the following elements of the Collegiate Recovery Center/CYAAR programming as to their importance in helping you achieve academic success.* The elements included peer support or mentoring, student programming, academic advising, institutional support, healthy peer relationships, accountability, campus outreach, student leadership, financial support, and campus sober events. Participants responded that institutional support ( $n = 12, 75\%$ ), healthy peer relationships

( $n = 12$ , 75%), accountability ( $n = 10$ , 62.5%), financial support ( $n = 11$ , 68.8%), and campus sober events ( $n = 9$ , 56.3%) are very important to achieve academic success.

**Table 11**

*Frequencies and Percentages of Importance of Elements of CYAAR Program in Achieving Academic Success*

		Frequency	Percent
Peer Support or Mentoring	important	7	43.8
	very important	9	56.3
	Total	16	100.0
Student Programming	important	9	56.3
	very important	7	43.8
	Total	16	100.0
Academic Advising	important	7	43.8
	very important	9	56.3
	Total	16	100.0
Institutional Support	not important	1	6.3
	important	3	18.8
	very important	12	75.0
	Total	16	100.0
Healthy peer relationships	important	4	25.0
	very important	12	75.0
	Total	16	100.0
Accountability	important	6	37.5
	very important	10	62.5
	Total	16	100.0
Campus outreach	not important	1	6.3
	neutral	4	25.0
	important	5	31.3
	very important	6	37.5
	Total	16	100.0
Student leadership	not important	1	6.3
	somewhat important	1	6.3
	neutral	3	18.8
	important	4	25.0
	very important	7	43.8
	Total	16	100.0

Financial support	not important	1	6.3
	neutral	2	12.5
	important	2	12.5
	very important	11	68.8
	Total	16	100.0
Campus sober events	somewhat important	2	12.5
	neutral	2	12.5
	important	3	18.8
	very important	9	56.3
	Total	16	100.0

---

### Summary

The survey was distributed via email from the CYAAR administration to all current and alumni members of the CYAAR. No alumni members participated in the survey. A total of 16 participants as current members of the CYAAR responded to a survey questionnaire to examine the elements of a Collegiate Recovery Program (CRP) to gain insight on the positive effects of these elements and which element has a greater impact on aiding individuals in sustaining recovery. Due to the small sample size, Wilcoxon-Signed rank tests were conducted to determine whether there is a significant difference in mean ranks of the number of relapses before and after the CYAAR program and the GPAs before and after the CYAAR program. The results of the analyses determined that there is a significant difference in mean ranks of the number of relapses and GPAs before and after the CYAAR program.

## Chapter V

### DISCUSSION

Substance abuse is a societal problem that has been around for decades. And while substance use research is plentiful and advancing, research in how one can achieve emancipation is still lacking. The goal of this research was to answer what successful recovery looks like and how it is best achieved by examining a program situated in an inherently abstinence-hostile environment, one that proves difficult to achieve sustainable recovery, a college campus.

In summary of the preceding chapters, Chapter 1 discussed the background and extent of the problem as well as laying out the research questions and why this research is needed. Chapter 2 presented a historical context of the problem and the theoretical explanations for SUD were examined, as well as set forth the relationship of the literature to the study. Furthermore, the development of collegiate recovery programs was described, including a description of key CRP studies. In Chapter 3, a detailed description of the study site, research methodology, and hypotheses were provided. Chapter 4 delivered the results of the study survey and justifications for hypothesis testing methods, including tables that charted the results and frequencies of survey responses. Finally, this chapter, Chapter 5, presents a detailed analysis of the study results, implications of the study, the need for future research, and final arguments.

## **Relapse Rates**

Although relapse is an expected factor of SUD, it is also a measurement by which sustained recovery can be quantified. The length of time between relapses provides an individual with a higher probability of achieving final emancipation from SUD. As such, when evaluating a CRP for success, one must assess the member's relapse rates. Relapse rates in a CRP are particularly important given the level of triggers and temptations (e.g., academic, and financial stress, abundance of alcohol and other drugs) present in a college environment. Research question one sought to investigate the relationship, if any, between the CRP and relapse rates, and as such the null hypothesis  $H_0$ , *There is no relationship between collegiate recovery program enrollment tenure and relapse rate for students with a pre-existing SUD?*, was presented.

## ***Program Data***

Of the survey respondents, 37.5% reported an active SUD for 10 or more years, 68.8% had to leave a previous college due to their SUD, and 62.5% sought SUD treatment 2 to 4 times before achieving recovery for more than six months as required for membership. The data demonstrates how challenging it is for individuals affected by SUD to not only remain sober, but also remain sober while attending an institute of higher education. Although none of the participants recorded a relapse since being in the program, CYAAR program data cites a 9.57% relapse rate for the academic year of 2020-2021 and an overall program relapse rate average (since inception of the CYAAR) as 5-6% (J. McDaniel, personal communication, August 11, 2021). The small sample size means the results cannot be generalized to the target population, however, the results of the survey and the data gathered from the CYAAR program data suggests there is a

decrease in relapses after joining the CYAAR. In Table 8, the results of the Wilcoxon Signed-Rank Test for relapse rates were presented, which indicated there is median difference between pre-entry to the CRP (mean rank of 6.06) and post-entry (mean rank of 0) to the CRP,  $Z = -3.074$ ,  $p = 0.002$ , which is significant. The results of Wilcoxon Signed-Ranks Test reject the null hypothesis and assume there is a positive relationship between membership in a CRP and relapse rates for students with a pre-existing SUD.

### **Sustained Recovery**

Sustaining recovery is the ultimate goal in treating SUD. Recovery plans may vary greatly because they are individualized to the person who is managing SUD recovery. The literature argues a recovery plan is most successful when a person feels connected and enjoys ongoing support from those who make up their social environment. Moreover, the personalized nature of recovery planning makes it difficult to measure success beyond a period of remission. As reported in Chapter 2, most SUD patients relapse within the first year after receiving stabilizing treatment, so sustained recovery is quantified at a minimum of six months, but generally cited as occurring at a year point. Naturally, the longer a person remains sober, the greater the chance of achieving liberation from their SUD. For most, the challenge of sustaining recovery is mitigating the triggers that provoke a relapse. For a college student, this means navigating an environment with reasonably easy access to legal and illegal substances and a social scene where many of the events include drugs and/or alcohol. In addition to evaluating relapse rates among SUD recovering college students, this study examined the student's length of recovery time to measure the effectiveness of the CRP in helping members sustain sobriety. Research question two sought to investigate the relationship, if any,

between CRP tenure and time in recovery, and as such, the second null hypothesis,  $H_{02}$ , *There is no relationship between collegiate recovery program enrollment tenure and length of time in recovery for students with a pre-existing SUD?*, was presented.

### ***Program Data***

Of the survey participants, 43.8% responded that it was difficult to sustain recovery while living within a college environment, citing isolation (50%) and ease of access to substances (50%) as considerable factors in the challenge to remain sober. When asked specifically about triggers to relapse, 31.3% of survey participants responded that isolation was extremely likely to trigger a relapse, 31.3% stated that academic pressures were extremely likely to trigger a relapse, and 43.8% responded that ease of access as extremely likely to trigger a relapse.

Only one participant has been in recovery less than 12 months. The majority of participants ( $n = 10$ , 62.5%) have been in recovery for 1-3 years, and the remaining participants, ( $n = 5$ , 31.25%), have been in recovery for more than four years. To illustrate the struggle to sustain recovery prior to entering the CYAAR program, 68.75% of participants ( $n = 11$ ) responded they had relapsed 0-4 times, 12.5% ( $n = 2$ ) responded they had relapsed 5-10 times, and 18.75% ( $n = 3$ ) responded that they had relapsed more than 10 times prior to entering the program.

Since no survey participants reported relapses during their CYAAR program tenure, meaning all (100%) reported sustained recovery, an analysis into specific program elements that facilitated sustained recovery was conducted. In Table 9, the results of the descriptive analysis for sustained recovery and CYAAR program elements were presented. The specific recovery informed elements which make up the CYARR

program are peer support/mentoring, student programming, academic advising, institutional support, healthy peer relationships, accountability, campus outreach, student leadership, financial support, and campus sober events. Of the listed elements, the results indicated the two most significant program elements were peer relationships and accountability, both cited as very important by 93.8% of the participants. As noted in the previous paragraphs, the sample size of this study is too small to statistically detect the effect of any and/or all of the CYAAR program elements on sustaining recovery.

Failing to reject the null hypothesis suggests that the study sample did not offer sufficient evidence to determine that a positive effect exists. Statically speaking, the study results fail to reject the null hypothesis,  $H_02$ . Nonetheless, that lack of statistical evidence does not prove that a positive effect does not exist, as seen in descriptive analysis presented in Chapter 4, the absence of relapses, and the results of  $H_01$ , which determined there is a positive relationship between membership in a CRP and relapse rates for students with a pre-existing SUD.

### **Academic Success**

Social capital is an intangible trait that is rooted in a positive social environment and connection, inclusive of the values and standards that inspires a person to attain higher goals and strongly influences a student's overall development (Acar, 2011). As noted in the literature, SUD oftentimes leaves a person feeling alone and shamed, further intensified by feeling stigmatized by society as one who is impoverished, has low moral character and no willpower, and must be a deviant. Essentially, these beliefs can strip a person's social capital. When asked what one word would capture the reason a CRP is successful, CYAAR Interim Director J. McDaniel stated "connection", i.e., connection is



the opposite of addiction (J. McDaniel, personal communication, August 11, 2021).

When a person identified with SUD feels supported and connected, they are empowered to achieve not only the goal of sustained recovery, but also the goal of personal and professional success. In other words, their social capital is restored, and they are more confident in their ability to confront social and institutional demands outside of the college environment (Acar, 2011).

At a college, academic success is measured by GPAs. The higher the GPA, the greater the success a student enjoys, e.g., Dean's and President's lists, scholarships, graduating with honors. As cited in the literature, a student identified with SUD is more likely to perform poorly in academics, thereby negatively impacting their GPA. If the student fails to obtain adequate treatment and support, the academic failures could lead to dropping out of school and failing to graduate, thus creating a domino effect of breakdown in other personal and professional endeavors. CRPs seek to mitigate these consequences by offering the student healthy relationships, connection, and support.

CYAAR members are held accountable for attending classes, completing coursework, and maintaining the minimum GPA to remain enrolled at KSU. Therefore, to measure the academic success of a CRP in a college environment, this study used CYAAR member's GPAs. Research question three sought to investigate the relationship, if any, between CRP tenure and academic success, measured by GPA scores, and as such, the third null hypothesis,  $H_03$ , *There is no relationship between collegiate recovery program enrollment tenure and academic success for students with a pre-existing SUD?*, was presented.

### ***Program Data***

In addition to the previously mentioned triggers, 56.3% of study participants cited academic pressures as a challenging factor to remain sober in a college environment. Most of the participants (87.5%) attended a college prior to enrolling at KSU, 50% attended at least one college prior to KSU and 37.5% attended two or more. Of these study participants, 68.8% stated their SUD played a role in leaving their previous college. Moreover, 80% of study participants were familiar with the CYAAR prior to attending KSU, and 75% stated the reason they applied to KSU was to become a member of the CYAAR. Results of the survey indicated the mean GPA of members prior to entering the CYAAR was 2.40 and increased to 3.48 after one or more semesters of membership, a 45% increase, and 37.5% of participants enjoy a GPA of 3.7 or higher.

Even though due to the small sample size the results of statistical analysis cannot be generalized to the sample population, valuable data was retrieved from the survey responses. Study participants identified five significant elements of a CRP: healthy peer relationships, accountability, institutional support, financial support, element campus sober events. Peer relationships and institutional support ranked the highest, with 75% of the participants finding these two elements very important. The remaining three elements were more equally ranked with approximately 62% of the participants ranking the element as very important to a student's success.

In Table 10, the results of the Wilcoxon Signed-Rank Test for program tenure and GPAs were presented, which indicated there is median difference between pre-entry to the CRP (mean rank of 2.403) and post-entry (mean rank of 3.479) to the CRP,  $Z = -3.299$ ,  $p = 0.001$ , which is significant. The results of Wilcoxon Signed-Ranks Test reject

the null hypothesis and assume there is a positive relationship between CRP program tenure and GPAs for students with a pre-existing SUD.

### **Significance**

College campuses are environments rich in triggers for someone identified with SUD. A student may feel isolated because they are far away from family and lifelong friends. A student may feel extreme pressure because they do not have the familial financial means to pay tuition so they must work while attending college. A student may feel extreme stress in meeting academic standards to maintain a grant, scholarship, or other institutional program for which they are enrolled, such as honor programs. A student may experience a personal crisis and not know where to go to get needed help. Add in the new freedoms, lack of parental supervision, and ease of access and availability as presented in the literature, a student in SUD recovery can face insurmountable obstacles to remaining sober.

Over the past two years, the coronavirus (COVID-19) pandemic unintentionally brought attention to the mental and emotional dangers associated with reduced human interaction, isolation, and anxiety, especially in populations already at risk, such as young adults (Panchal et al., 2021). Panchal et al. (2021) cited a 41% increase in persons reporting anxiety and depression symptoms and a 12% increase in alcohol and/or substance use attributed to social restrictions imposed because of COVID-19. This study took place while many COVID-19 restrictions were still in place and similarly, CRP participants (31.3%) noted isolation as a trigger for SUD relapse.

The implications of how devastating isolation can be for a person with a SUD was highlighted during the first year of the COVID-19 pandemic when shelter in place orders

were issued and businesses, which included addiction treatment facilities, were ordered to shut down. In 2020, overdose deaths reached an all-time high of more than 93,000, a 29.16% increase over the previous record of 72,000 and the most significant increase since 2016 (Stobbe, 2021). Research cited in the Stobbe (2021) article argued that there was no data to suggest an increase in people turning to substance use to deal with the COVID-19 social impacts, but that those already struggling with addiction issues were relapsing under the pressures of isolation, job loss, and the absence of receiving necessary treatment.

Additionally, the CCME noted a “phenomenon” in the number of deaths for 2020, explaining that deaths accepted by the ME generally stay “unremarkable” (p. 50), meaning the numbers stay steady from year to year. When the death rate increases in any given year, the ME looks for the cause of the shift. For example, in 2017, the rise in death rates was directly attributed to the substance use epidemic (CCME, 2021). In 2020, there was an increase of 254 deaths in Cobb, which one would expect to be attributed to the COVID-19 pandemic (CCME, 2021). Yet, out of those 254 deaths, only 13 were COVID-19 exclusive deaths and the remaining deaths were attributed to events outside the “virus itself”, specifically, how the “events of the pandemic could medically, epidemiologically, and socially be affecting the rates” (CCME, 2021, p. 51). As the data were compared to prior years, the CCME found that drug related deaths increased during the pandemic quarantine orders and the rates began to decline once the shelter orders were lifted (CCME, 2021). The Cobb data seemed to coincide with the literature and news stories regarding the social and isolation impact on people identified with SUD,

suggesting the isolation and stress as a result of COVID-19 measures led to relapses which, in turn, led to an increase in SUD related deaths.

In Chapter 1, this study presented the argument that CRPs could be models for public addiction treatment centers. As noted in the literature, there are very few public recovery centers, ones that can be enjoyed by those that do not belong to a special population such as a college or physician group. Cobb County, Georgia is fortunate enough to be one of the few communities with a RCO, The Zone, which is owned and operated by the non-profit organization, the DDF. The Zone is a 21,000 square foot RCO facility that is open 365 days a year offering services such as recovery support, advocacy service, prevention and education outreach, and harm reduction provisions (similar to amenities found in a CRP) to more than 5,000 persons every month (DDF, 2021). The benefits provided by the RCO are equal to the ones afforded to members of the CPR. For example, Sarah, a longtime member of The Zone, struggled with a SUD for more than 16 years before finding a recovery program that worked (DDF, 2021). Beginning with prescriptions found in her parent's medicine cabinet and graduating to the intravenous use of heroin, Sarah used substances to escape the pain and isolation that she had felt since adolescence (DDF, 2021). Sarah learned about The Zone while incarcerated in the Cobb County Adult Detention Center for a drug possession charge and began visiting the center as soon as she was released (DDF, 2021). Since joining The Zone in 2016, Sarah has found sustainable recovery, personal purpose, and professional success which she ascribes directly to the institutional and peer support she found at The Zone (DDF, 2021).

Unfortunately, there is no data for relapse rates within the public RCO that can be used for comparison with CRPs. Like those of a PHP, relapse rates with CRPs are

exceptionally low, below 15%. For the CYAAR, the relapse rates are even lower, overall program rates of 5 to 6%. The academic year of 2020-2021 saw higher relapse rates, quoted as 9.57%, which seemingly correlates with the information presented on the impact of COVID-19 on persons with pre-existing SUD. Even with the higher relapse rates during the COVID-19 pandemic, the CYAAR's program rates were still well below what was highlighted as exceptional in the literature. Out in the general public, data shows the opposite and the overdose deaths in Cobb County, Georgia and around the nation rose exponentially, meaning those in SUD recovery were relapsing and dying.

### **Limitations**

As noted in Chapter 4, the primary limitation of this study was the small sample size. Because SUD is often stigmatized with shame and low moral character, getting a person identified with SUD, even one in recovery, to open up and honestly discuss their experiences may prove difficult (Earnshaw, 2020, Harocopos & Allen, 2015). Similar to qualitative medical and psychiatric studies of rare or targeted conditions with small sample sizes, this study was aimed at eliciting specific data relevant to sustaining recovery in an abstinent-hostile setting from the population living within the environment (Harocopos & Allen, 2015). Participants were asked directed questions relating to their opinions on the abstinent-hostile environment of a college campus and how the elements of the CYAAR impacted their sustained recovery and academic success while entrenched in that environment, thus lending confidence that the observed outcome was directly related to the research variables.

Regarding the internal and external validity of the study, the external validity more than the internal validity is a limitation. The population of the CYAAR varies from

each semester. Some semesters may have fewer members than others due to graduations and transfers; however, the average continuous membership is approximately 46 students per semester (J. McDaniel, personal communication, August 11, 2021). While pragmatic considerations may threaten the validity of a study, because this programming is rare (less than 3% of U.S colleges employ a CRP), the findings of study offer novel and potentially beneficial information from the perspective of one that is most affected by a CRP. Again, since the sample size is small relative to sample size sufficiency in empirical research, the study results could not be generalized to the universal population of persons in recovery.

Finally, this research was inherently physiological and behavioral based. While persons identified with SUD may have similar experiences, every person's story is personal and may have a different meaning to them. The study could not control for every possible lifestyle factor, thereby limiting the participant's story to the identified similar conditions shared with peers while participating in the same CRP program.

### **Future research**

Although this study had its limitation in sample size, vital information was gained that can be applied to future research. For example, this study revealed the importance of connection for a current student/member's success in sustained recovery and academics, but what about alumni members? Further research into those that have graduated from the program and college and are now out in the world could identify if they achieved emancipation and are thriving because of their membership in a CRP. Likewise, further research into alumni members could identify if they successfully replicated a support and social connection system that has aided in sustaining sobriety.

The CRP seeks to not only offer the student support and connection, but also to develop life skills that allow members to cope with triggers and thrive in any environment. In essence, the CRP aides in restoring the person's social capital. A further study of CRP graduates could identify if social capital restoration occurred, thereby validating the CRP's lasting influence on a person identified with SUD. With this validation, successful models inclusive of the support system found in CRPs and PHPs can be replicated for establishment in traditional community rehabilitation programs.

Comparison studies in a variety of college settings could advance understanding of addiction, recovery, and the benefits of CRPs. By comparing CRP students and students who engaging in drinking and substance use but do not identify with SUD, especially at a variety of small to large colleges, could produce valuable data surrounding attitudes and misinterpretations of social drinking and/or drug use at college campuses and the potential to lead to a SUD. A study of the CRP student versus non-CRP but substance using student could generate valuable data about their overall college experiences, both social and academic, with an analysis of their similarities and differences to understand the impact of drinking and drug use. A comparison study of students participating in a variety of CRPs, i.e., colleges with a varying degree of intuitional involvement in the program, could yield further validation of the institutionally sanctioned CRP's significance and need on all college campuses. A comprehensive qualitative study with a diverse group of CRP members, one that would capture shared experiences as well as their personal stories, could also prove valuable in understanding the many pathways to SUD so that more effective preventative measure could be developed.



## **Recommendations**

While there is increasing attention being paid to substance use recovery, most of the discussion still centers on prevention and response. On the SUD continuum, recovery is located at the end (or on the far right), perhaps signaling the end of the road. The continuum begins with education and awareness focused on prevention, followed by substance use event, detoxification, stabilization, and treatment which, when it fails (relapse), begins the continuum again. Unfortunately, as evidenced by the literature, a person may experience this cycle multiple times before ever achieving the goal at the end of the continuum, emancipatory recovery. Even though the far left of the continuum is the ultimate aspiration, the events along this continuum that appear to capture most of the attention from public officials, public health professionals, academia, and the media are awareness of the problem (e.g., all the attention toward the opioid epidemic), critical stabilization, and treatment for the condition (CDC, 2018; SAMHSA, 2020a). Each of these events are vital in understanding substance use, yet they are limited in understanding how to achieve recovery. The objective in the fight against the SUD epidemic is how to stop it, find a cure, and find freedom from the disease. When freedom from the disease is reached, society will see a decrease in premature death rates and benefit from the reduced public spending on drug intervention methods. The goal of this study was to understand how one sustains recovery/achieves emancipation from a SUD, which yielded a recommendation for further studies rooted in recovery informed sciences.

## ***Public Policy***

Why should public administrators be concerned with SUD recovery efforts? With SUD comes the potential for a person to develop a criminal history as evidenced by the aforementioned data. Recovery programming such as CRPs, PHPs, and RCOs, attempt to intervene with the addicted individual, restore social capital and treat the whole person. These holistic measures aid the individual in finding emancipation from the disease (Brown & Ashford, 2019), which ultimately benefits public institutions and society in reduced public spending to house and treat afflicted persons. As cited in the literature review, programs that take a holistic approach to SUD treatment enjoy success rates of 85% and higher, much greater than the traditional SUD programs which focus on stabilization and a 12-step type program for aftercare.

Persons with SUD cannot be treated effectively without understanding the impact of all the factors involved in abuse and addiction and likewise, recovery cannot be sustained until an individual has been effectively treated. Research cited in this study has established the reciprocal relationship between SUD treatment and comprehensive support, i.e., persons are negatively and positively influenced by their social network which can lead to substance use and abuse. This same social network can be used to treat SUD and aid a person in achieving recovery by exploiting the connectedness and establishing a positive support system. With no sign of the substance abuse epidemic slowing down (CDC, 2018; SAMHSA, 2020b), it is imperative that every avenue to addiction and every treatment response must be fully examined in order to establish a realistic drug-control policy. Perhaps redirecting public dollars to develop holistic public programs that help people recover from SUD can save public dollars now being funneled

into prisons systems, law enforcement intervention programs, court systems, and public health systems, which is estimated to be around \$740 billion (about \$2,300 per person in the U.S.) dollars annually (Ryan & Rosa, 2020). Data from studies of effective recovery programs such as CRPs and PHPs could be used to transform existing public intervention models, e.g., drug courts, into more relevant and successful programs. With this transformation, more of the general public would be exposed to the same programming that has proven successful for the specialized populations that embody the CRP and PHP.

### ***Education***

Since higher education is vulnerable as an inherently abstinence-hostile environment, it not only makes a conducive environment to study factors that trigger SUD, but also to evaluate countermeasures for those same triggers. Realistic measures must be secured to avoid threats, which are already practiced through drug and alcohol prevention programming, and in targeting the afflicted population on college campuses and offering them a safe space to sustain a healthy lifestyle and achieve success. Most colleges engage in some form of alcohol awareness/education campaigns for entering first-year/freshman students, but fewer than 150 colleges out of the more than 5,000 across the U.S. have some form of CRP for their students (ARHE, n.d). Furthermore, CRP curriculum is varied and non-standardized across colleges, ranging from informal student gatherings to formal structured programming housed within a designated part of the college, whether that be a brick and mortar building or set of office spaces in an administration building (ARHE, n.d.). More effective prevention programming based on the knowledge gained from actual experts, i.e., those who have lived with SUD, and not

only an implementation of a CRP, but also a development of a standardized model, is recommend for educational institutions.

And why wait for a young adult to get the education and indispensable resources until they are entrenched in an abstinent-hostile environment? Studies conducted by SAMHSA start with adolescent cohorts, beginning at age 12. As such, recovery informed programming should mirror empirical data and be made available for persons with a SUD at all stages of life and any age. Through further examination of successful programs, strategies for sustaining sobriety and recovery can be identified and utilized in a formal program structure for replication across all academic communities – middle school, high school, alternative schools, and technical institutions.

### **Conclusion**

The implications of this study are simple, SUD treatment must be continuous and rooted in recovery informed methods. There is no better source of information than those who have lived the experience, navigated the challenges, and learned how to maintain sobriety despite the challenges. Currently, the public relies on medical or psychological experts to design recovery models. For some medical and/or social problems, this may be the best method, but not for SUD recovery. This study exposes that the actual experts on recovery are the students living it every day and from them, researchers, academics, and the deemed experts can learn the best evidence-based practices.

It is not enough to conduct standard alcohol and drug education and awareness, one that relies on telling the student to be responsible and make good decisions. The literature provided evidence that this is an ineffective tool, yet it is still being utilized at colleges. Students are often overwhelmed by the demands of college life and the benefits

of substance abuse are too compelling to ignore or simply refuse. To ignore this evidence is to not only devalue the starting point of the problem for some students, but to also undermine the struggles of the student with a pre-existing SUD. From those students who have accomplished remaining sober in this hostile environment, much can be learned. CPRs provide a strong social atmosphere of students who have successfully navigated sobriety that are awe-inspiring examples to a student seeking a fulfilling college experience without the use of alcohol or drugs. Likewise, this population holds a wealth of information for SUD research.

Finally, in addition to valuable SUD research material, what this study has shown is that there can be much to learn about community connections from this stigmatized population hidden in society's shadows. A goal in the criminal justice system is rehabilitation of the offender and acclimation back into society post penance. If connection is this powerful in healing a person with SUD, think of what that same instrument could do in other social problems. Programming that includes peer connection and institutional support could be developed and implemented in multitude of social systems, such as pre-trial diversion programs, juvenile offender programs, drug courts, and other youth directed programs. The programming could not only serve as an intervention tool when an adolescent or young adult is headed down the wrong path, but also to assist them in learning vital social and coping skills.

## REFERENCES

- Acar, E. (2011). Effects of social capital on academic success: A narrative synthesis. *Educational Research and Reviews, 6*(6), 456-561.
- Adams, P. J. (2016). Switching to a social approach to addiction: Implications for theory and practice. *International Journal of Mental Health and Addiction, 14*(1), 86-94. <https://doi.org/10.1007/s11469-015-9588-4>
- Adedoyin, C., Burns, N., Jackson, H. M., & Franklin, S. (2014). Revisiting holistic interventions in substance abuse treatment. *Journal of Human Behavior in the Social Environment, 24*(5), 538–546.  
<https://doi.org/10.1080/10911359.2014.914718>
- Ahmad, F. B., Rossen, L. M., & Sutton, P. (2020). *Provisional drug overdose counts*. Centers for Disease Control and Prevention. National Center for Health Statistics.  
<https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>
- Akers, R. L. (1968). Problems in the sociology of deviance: Social definitions and behavior. *Social Forces, 46*(4), 455–465. <https://doi.org/10.2307/2575380>
- Akers, R. L., Eklund-Olson, S., Stafford, M. C., & Strickland, D. E. (1982). Social learning and deviant behavior. *American Sociological Review, 47*, 162–173.
- Akers, R. L., Krohn, M. D., Lanza-Kaduce, L., & Radosevich, M. (1979). Social learning and deviant behavior: A specific test of a general theory. *American Sociological Review, 44*(4), 636–655.

- Association of Recovery Community Organizations. (2020, February 8). *The association of recovery community organizations*. Faces & Voices of Recovery.  
<https://facesandvoicesofrecovery.org/arco/>
- Association of Recovery in Higher Education. (n.d.). *Programs*.  
<https://collegiaterecovery.org/>
- Ault, A. (2021, August 13). 'Deeper dive' into opioid overdose deaths during COVID pandemic. Medscape. <https://www.medscape.com/viewarticle/957847>
- Avery, J. J., Avery, J. D., Mouallem, J., Demner, A. R., & Cooper, J. (2020). Physicians' and attorneys' beliefs and attitudes related to the brain disease model of addiction. *The American Journal on Addictions*, 29(4), 305–312.  
<https://doi.org/10.1111/ajad.13023>
- Baldisseri, M. R. (2007). Impaired healthcare professional. *Critical Care Medicine*, 35(2), 106-116. doi: 10.1097/01.CCM.0000252918.87746.96.
- Bassuk, E. L., Hanson, J., Greene, R. N., Richard, M., & Laudet, A. (2016). Peer-delivered recovery support services for addictions in the United States: A systematic review. *Journal of Substance Abuse Treatment*, 63, 1-9.  
<https://doi:10.1016/j.jsat.2016.01.003>
- Beeson, E. T., Whitney, J. M., & Peterson, H. M. (2017). The development of a collegiate recovery program: Applying social cognitive theory within a social ecological framework. *American Journal of Health Education*, 48(4), 226-239.  
<https://doi:10.1080/19325037.2017.1317304>

- Brown, A. M., Ashford, R. D., Heller, A. T., Whitney, J., & Kimball, T. (2018). Collegiate recovery students and programs: Literature review from 1988-2017. *Journal of Recovery Science, 1*(1), 1-11. <https://doi:10.31886/jos.11.2018.8>
- Brown, A. M., & Ashford, R. D. (2019). Recovery-informed theory: Situating the subjective in the science of substance use disorder recovery. *Journal of Recovery Science, 1*(3), 1-15. <https://doi.org/10.31886/jors.13.2019.38>
- Brown, A. M., & Bohler, R. (2018). Achieving a 15% relapse rate: A review of collegiate recovery and physician health programs. *Alcoholism Treatment Quarterly, 37*(1), 109-122.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology, 22*(6), 723–742.
- Center for Young Adult Addiction and Recovery. (n.d.). *CYAAR in the news*. <https://cyaar.kennesaw.edu/news.php>
- Center for Young Adult Addiction and Recovery. (n.d.) *Collegiate Recovery Program*. [https://cyaar.kennesaw.edu/collegiate\\_recovery\\_program.php](https://cyaar.kennesaw.edu/collegiate_recovery_program.php)
- Centers for Disease Control and Prevention. (1986). *Premature mortality in the United States: Public health issues in the use of years of potential life lost*. <https://www.cdc.gov/mmwr/preview/mmwrhtml/00001773.htm>
- Centers for Disease Control and Prevention. (2018). *Provisional counts of drug overdose deaths*. <https://www.cdc.gov/drugoverdose/data/analysis.html>
- Cleveland, H. H., Harris, K. S., Baker, A. K., Herbert, R., & Dean, L. R. (2007). Characteristics of a collegiate recovery community: Maintaining recovery in an



- abstinence-hostile environment. *Journal of Substance Abuse Treatment*, 33, 13-23. <https://doi:10.1016/j.jsat.2006.11.005>
- Cobb County Medical Examiner. (2021). *2020 Annual report*.  
<https://www.cobbcounty.org/medical-examiner/annual-reports>
- Creswell, J. W. (2012). *Educational research: planning, conducting, and evaluating quantitative and qualitative research* (Fourth edition.). Pearson
- Dart, R. C., Parrino, M. W., Cicero, T. J., Surratt, H. L., Severtson, S. G., Bucher-Bartelson, B., & Green, J. L. (2015). Trends in opioid analgesic abuse and mortality in the United States. *The New England Journal of Medicine*, 372(3), 241.
- Davis Direction Foundation, Incorporated. (2021, March 23). *Recovery zone*.  
<https://issuu.com/davisdirection/docs/recovery-zone-magazine-3-23-2021-single>
- DePue, M. K., & Hagedorn, W. B. (2015). Facilitating college students' recovery through the use of collegiate recovery programs. *Journal of College Counseling*, 18(1), 66-81. <https://doi.org/10.1002/j.2161-1882.2015.00069.x>
- Desilver, D. (2014, April 2). Feds may be rethinking the drug war, but states have been leading the way. *Pew Research Center*. <https://www.pewresearch.org/fact-tank/2014/04/02/feds-may-be-rethinking-the-drug-war-but-states-have-been-leading-the-way/>
- Dickard, N., Downs, T., & Cavanaugh, D. (2011). *Recovery/Relapse prevention in educational settings for youth with substance use & co-occurring mental health disorders: Report from fall 2010 consultative sessions*. U.S. Department of Education. <https://www2.ed.gov/about/offices/list/osdfs/recoveryrpt.pdf>

- DuPont, R. L., McLellan, A. T., Carr, G., Gendel, M., & Skipper, G. E. (2009). How are addicted physicians treated? A national survey of physician health programs. *Journal of Substance Abuse Treatment, 37*(1), 1-7.  
doi:10.1016/j.jsat.2009.03.010.
- DuPont, R. L., McLellan, A. T., White, W. L., Merlo, L. J., & Gold, M. S. (2009). Setting the standard for recovery: Physicians' health programs. *Journal of Substance Abuse Treatment, 36*(2), 159–171. <https://doi.org/10.1016/j.jsat.2008.01.004>
- Earnshaw, V. A. (2020). Stigma and substance use disorders: A clinical, research, and advocacy Agenda. *American Psychologist, 75*(9), 1300–1311.  
<https://doi.org/10.1037/amp0000744>
- Eldridge, E. (2019, July 11). Overdoses 2nd leading cause of death in Cobb County last year. *Georgia Public Broadcasting*.  
<https://www.gpb.org/news/2019/07/11/overdoses-2nd-leading-cause-of-death-in-cobb-county-last-year>
- Floekher, P. (2017). Saving lives: It takes a community to fight the opioid epidemic. *Kennesaw State University Summer 2017*.  
<https://editiondigital.net/publication/?i=426938&ver=html5&p=18>
- Georgia Department of Public Health. (n.d.). *2019 Opioid overdose surveillance preliminary report*. <https://dph.georgia.gov/epidemiology/drug-surveillance-unit>
- Guo, Y., Ward, R. M., & Speed, S. (2020). Alcohol-related social norms predict more than alcohol use: Examining the relation between social norms and substance use. *Journal of Substance Use, 25*(3), 258–263.  
<https://doi.org/10.1080/14659891.2019.1675791>

- Harocopos, A., Allen, B., & Paone, D. (2016). Circumstances and contexts of heroin initiation following non-medical opioid analgesic use in New York City. *International Journal of Drug Policy*, 28, 106.  
<https://doi.org/10.1016/j.drugpo.2015.12.021>.
- Harocopos, A., & Allen, B. (2015). Routes into opioid analgesic misuse: Emergent typologies of initiation. *Journal of Drug Issues*, 45(4), 385-395.  
<https://doi:10.1177/0022042615604345>.
- Harris, K. S., Baker, A. K., Kimball, T. G., & Shumway, S. T. (2007). Achieving systems-based sustained recovery: A comprehensive model for collegiate recovery communities. *Journal of Groups in Addiction & Recovery*, 2(2-4), 220-237. <https://doi:10.1080/15560350802080951>
- Herzberg, D., Guarino, H., Mateu-Gelabert, P., & Bennett, A. S. (2016). Recurring epidemics of pharmaceutical drug abuse in America: Time for an all-drug strategy. *American Journal of Public Health*, 106(3), 408-410.  
[doi:10.2105/AJPH.2015.302982](https://doi:10.2105/AJPH.2015.302982)
- Jason, L. A., Salomon-Amend, M., Guerrero, M., Bobak, T., O'Brien, J., & Soto-Nevarez, A. (2021). The Emergence, role, and impact of recovery support services. *Alcohol Research : Current Reviews*, 41(1), 04.  
<https://doi.org/10.35946/arcr.v41.1.04>
- Jones, S. E., Oeltmann, J., Wilson, T. W., Brener, N. D., & Hill, C. V. (2001). Binge drinking among undergraduate college students in the United States: Implications for other substance use. *Journal of American College Health*, 50(1), 33. <https://doi.org/10.1080/07448480109595709>

- Kaskutas L. A., Bond J., & Humphreys, K. (2002). Social networks as mediators of the effect of alcoholics anonymous. *Addiction, (Abingdon, England)*, 97(7), 891–900. doi: 10.1046/j.1360-0443.2002.00118.x.
- Keep Kids Drug Free Foundation, Inc. (n.d.). *The continuum of addiction*.  
<http://www.kkdf.org/index.cfm?p=continuum>
- Kennedy-Hendricks, A., McGinty, E. E., Webster, D. W., Barry, C. L., Busch, S. H., Bachhuber, M. A., Niederdeppe, J., Gollust, S. E., & Fiellin, D. A. (2016). Primary care physicians’ perspectives on the prescription opioid epidemic. *Drug and Alcohol Dependence*, 165, 61–70.  
<https://doi.org/10.1016/j.drugalcdep.2016.05.010>
- Kennesaw State University. (2020). *2018-2019 Kennesaw State University fact book*.  
<https://ir.kennesaw.edu/publications/fact-book.php>
- Kime, K. G. (2018). Interpretive phenomenological analysis of the spiritual characteristics of recovery experiences in the context of the brain disease model of addiction. *Pastoral Psychology*, 67(4), 357–372.  
<https://doi.org/10.1007/s11089-018-0816-2>
- Langmaid, V. (2021, October 13). *US reaches record high of more than 96,000 drug overdose deaths in a 12-month period, CDC data show*. CNN.  
<https://www.cnn.com/2021/10/13/health/overdose-deaths-march-2021/index.html>
- Laudet, A. B. (2007). What does recovery mean to you? Lessons from the recovery experience for research and practice. *Journal of Substance Abuse Treatment*, 33(3), 243–256. <https://doi.org/10.1016/j.jsat.2007.04.014>

- Laudet, A., Harris, K., Kimball, T., Winters, K. C., & Moberg, D. P. (2014). Collegiate recovery communities programs: What do we know and what do we need to know?. *Journal of Social Work Practice in the Addictions, 14*(1), 84-100.  
<https://doi:10.1080/1533256X.2014.872015>
- Laudet, A., Harris, K., Kimball, T., Winters, K. C., & Moberg, D. P. (2016). In college and in recovery: Reasons for joining a collegiate recovery program. *Journal of American College Health, 64*(3), 238-246.  
<http://dx.doi.org/10.1080/07448481.2015.1117464>
- Macmadu, A., Batthala, S., Correia Gabel, A. M., Rosenberg, M., Ganguly, R., Yedinak, J. L., Hallowell, B. D., Scagos, R. P., Samuels, E. A., Cerdá, M., Paull, K., & Marshall, B. D. L. (2021). Comparison of characteristics of deaths from drug overdose before vs during the COVID-19 pandemic in Rhode Island. *JAMA Network Open, 4*(9), e2125538.  
<https://doi.org/10.1001/jamanetworkopen.2021.25538>
- Matsueda, R. L. (2010). *Sutherland, Edwin H.: Differential association theory and differential social organization* (Vol. 2). Sage Publications, Inc.
- Meek, G. E., Ozgur, C., & Dunning, K. (2007) Comparison of the t vs. Wilcoxon signed-rank test for Likert scale data and small Samples. *Journal of Modern Applied Statistical Methods, 6*(1), 91-106.
- McLellan, A.T., Lewis, D.C., O'Brien, C.P., & Kleber, H.D. (2000). Drug dependence, a chronic medical illness: Implications for treatment, insurance, and outcomes evaluation. *JAMA, 284*(13), 1689-1695. doi: 10.1001/jama.284.13.1689.

- Menon, J., & Kandasamy, A. (2018). Relapse prevention. *Indian Journal of Psychiatry, 60*, S473–S478.
- Miller, N. S., & Gold, M. S. (2015). Prescription opioids and addiction. *Psychiatric Annals, 45*(10), 516-521. <https://doi.org/10.3928/00485713-20151001-07>
- National Center for Education Statistics. (2018). *Digest of education statistics*. [Data File]. [https://nces.ed.gov/programs/digest/d18/tables/dt18\\_303.40.asp](https://nces.ed.gov/programs/digest/d18/tables/dt18_303.40.asp)
- National Institute on Alcohol Abuse and Alcoholism. (2021). *College drinking*. <https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/college-drinking>
- National Institute on Drug Abuse. (2019). *Cues give clues in relapse prevention*. <https://www.drugabuse.gov/news-events/science-highlight/cues-give-clues-in-relapse-prevention>
- Norman, L. B., & Ford, J. A. (2015). Adolescent ecstasy use: A test of social bonds and social learning theory. *Deviant Behavior, 36*(7), 527–538. <https://doi.org/10.1080/01639625.2014.944072>
- O’Driscoll, C. (2014). *Addiction: A guide to understanding its nature and essence*. Nova Science Publishers, Inc.
- Pallant, J. (2016). *SPSS survival manual: A step by step guide to data analysis using SPSS for Windows* (3rd ed.). Open University Press.
- Panchal, N., Kamal, R., Cox, C., & Garfield, R. (2021, February 10). *The implications of COVID-19 for mental health and substance use*. Kaiser Family Foundation (KFF). <https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/>

- Pearl, B. (2018, June 27). Ending the war on drugs: By the numbers. *Center for American Progress*. <https://www.americanprogress.org/issues/criminal-justice/reports/2018/06/27/452819/ending-war-drugs-numbers/>
- Pinder-Amaker, S., & Bell, C. (2012). A bioecological systems approach for navigating the college mental health crisis. *Harvard Review of Psychiatry*, 20(4), 174–188. <https://doi.org/10.3109/10673229.2012.712842>
- Quinones, S. (2015). *Dreamland: The true tale of America's opiate epidemic* [eBook edition]. Bloomsbury Press. <https://www.amazon.com/hz/mycd/digital-console/contentlist/booksAll/dateDsc/Dreamland:%20The%20True%20Tale%20of%20America's%20Opiate%20Epidemic>
- Rabin, R. C. (2021, November 17). As the pandemic spread, Americans died of drug overdoses in record numbers. *The New York Times*. <https://www.nytimes.com/2021/11/17/world/as-the-pandemic-spread-americans-died-of-drug-overdoses-in-record-numbers.html>
- Reed, B. J., Almaguer-Botero, A. P., Grizzell, S., & Watts, J. (2020). Collegiate recovery programs: Helping college students in recovery succeed. *Rehabilitation Research, Policy, and Education*, 34(2), 58-72. <https://doi.org/10.1891/RE-19-07>
- Ryan, J. L., & Rosa, V. R. (2020). Healthcare cost associations of patients who use illicit drugs in Florida: A retrospective analysis. *Substance Abuse Treatment, Prevention, and Policy*, 15(1), 73. <https://doi.org/10.1186/s13011-020-00313-2>
- Satel, S. (2017). Treating opioid addiction. *National Review*, 69(4), 26–29.

- Schaible, L., Gant, L., & Ames, S. (2021). The impact of police attitudes towards offenders on law-enforcement assisted diversion decisions. *Police Quarterly*, 24(2), 205–232.
- Stobbe, M. (2021, July 14). US overdose deaths hit record 93,000 in pandemic last year. *U.S. News & World Report*. <https://www.usnews.com/news/health-news/articles/2021-07-14/us-overdose-deaths-hit-record-93-000-in-pandemic-last-year>
- Substance Abuse and Mental Health Services Administration. (n.d.). *Recovery and recovery support*. <https://www.samhsa.gov/find-help/recovery>
- Substance Abuse and Mental Health Services Administration. (2020a). *National Survey of Substance Abuse Treatment Services, (N-SSATS): 2019, data on substance abuse facilities*. <https://www.samhsa.gov/data/report/national-survey-substance-abuse-treatment-services-n-ssats-2019-data-substance-abuse>
- Substance Abuse and Mental Health Services Administration. (2020b). *Key substance use and mental health indicators in the United States: Results from the 2019 National Survey on Drug Use and Health*. <https://www.samhsa.gov/data/report/2019-nsduh-annual-national-report>
- U.S. Department of Health and Human Services. (2016). *Facing addiction in America: The Surgeon General's report on alcohol, drugs, and health*. <https://addiction.surgeongeneral.gov/>
- Valentine, P., White, W., & Taylor, P. (2007). The Recovery community organization: toward a definition and description. *Faces & Voices of Recovery*.



<https://facesandvoicesofrecovery.org/blog/resource/the-recovery-community-organization-toward-a-working-definition-and-description/>

Ven, T. V. (2011). *Getting wasted: Why college students drink too much and party so hard*. New York University Press.

Vestal, C. (2017, November 6). For addicted doctors, confidential treatment that works. *PEW*. <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2017/11/06/for-addicted-doctors-confidential-treatment-that-works>

Volkow, N. D., Koob, G. F., & McLellan, T. A. (2016). Neurobiologic advances from the brain disease model of addiction. *The New England Journal of Medicine*, 374(4), 363.

Volkow, N. D. (2018). *Principles of drug addiction treatment: A research-based guide (3<sup>rd</sup> ed.)*. National Institute on Drug Abuse.  
[https://www.drugabuse.gov/sites/default/files/podat\\_1.pdf](https://www.drugabuse.gov/sites/default/files/podat_1.pdf)

von Bertalanffy, L. (1968). *General systems theory: Foundations, development, applications*. [eBook edition]. New York, NY: George Braziller.  
[https://www.amazon.com/dp/B00PCQC1FE?ref=KC\\_GS\\_GB\\_US](https://www.amazon.com/dp/B00PCQC1FE?ref=KC_GS_GB_US)

Wechsler, H., Davenport, A., Dowdall, G., Moeykens, B., & Castillo, S. (1994). Health and behavioral consequences of binge drinking in college: A National survey of students at 140 campuses. *JAMA: Journal of the American Medical Association*, 272(21), 1672–1677. <https://doi.org/10.1001/jama.272.21.1672>

Weis, M. (2010). Integrated and holistic treatment approach to PTSD and SUD: A synergy. *Journal of Addictions & Offender Counseling*, 31(1), 25–37.

<https://doi.org/10.1002/j.2161-1874.2010.tb00064.x>

Wilson, T. M. (2018). LEAD the way: Using local communities as legal laboratories to combat drug addiction. *Journal of Legal Medicine*, 38(1), 163–176.

<https://doi.org/10.1080/01947648.2018.1438017>

APPENDIX A:

Qualtrics Online Research Survey



VALDOSTA STATE  
UNIVERSITY

You are being asked to participate in a survey research project entitled “***Sustaining Recovery: The Participant Perspective of a Collegiate Recovery Program***,” which is being conducted by Tanya Smith, a student, at Valdosta State University. The purpose of the study is to collect data on substance use disorder recovery and use this data to determine the pathways to successful sustained recovery, specifically targeting a collegiate recovery program. The purpose of this current study is to fill a knowledge gap in substance use recovery research by examining individual experiences of those who have endured a substance use disorder and found sustainable recovery. You will receive no direct benefits from participating in this research study. However, your responses may help us learn more about determining effective pathways to successful sustained recovery. There are no foreseeable risks involved in participating in this study other than those encountered in day-to-day life. Participation should take approximately 15-30 minutes to complete. This survey is anonymous. No one, including the researcher, will be able to associate your responses with your identity. Your participation is voluntary. You may choose not to take the survey, to stop responding at any time, or to skip any questions that you do not want to answer. Participants must be at least 18 years of age to participate in this study. Your completion of the survey serves as your voluntary agreement to participate in this research project and your certification that you are 18 or older. You may print a copy of this statement for your records.

Questions regarding the purpose or procedures of the research should be directed to Tanya Smith at [tanysmith@valdosta.edu](mailto:tanysmith@valdosta.edu). This study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations, application number IRB-04181-2021. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or [irb@valdosta.edu](mailto:irb@valdosta.edu).

---

What is your current class rank?

- Freshman
  - Sophomore
  - Junior
  - Senior
  - Graduate school
  - Graduated/Alumni
- 

Did you attend a college/university prior to coming to KSU?

- Yes
  - No
- 

If you answered yes to the previous question, how many colleges/universities did you attend prior to KSU?

---

If you attended a college/university prior to KSU, did substance use play a role in your leaving that institution?

- Yes  
 No

---

Did you know about the Collegiate Recovery Center/CYAAR before you applied to KSU?

- Yes  
 No

---

Is the Collegiate Recovery Center/CYAAR the reason you chose to attend KSU?

- Yes  
 No

---

What was your grade point average prior to entering the CYAAR program? Enter the value (e.g. 3.2) below.

---

How long have you been a member of the Collegiate Recovery Center/CYAAR?

- 1 semester
  - 2 semesters
  - 3 semesters
  - 4 semesters
  - 5 or more semesters
- 

What is your current GPA? Enter the value (e.g. 3.2) below.

---

How long were you active in your substance use disorder?

- Less than 12 months
  - 1-3 years
  - 4-6 years
  - 7-9 years
  - 10 or more years
- 

How long have you been in recovery?

- Less than 12 months
  - 1-3 years
  - 4-6 years
  - 7-9 years
  - 10 or more years
-

Prior to entering the Collegiate Recovery Center/CYAAR how many times did you seek/participate in formal/traditional substance use treatment?

- None
  - Once
  - 2-4 times
  - 5-7 times
  - 8-10 times
  - More than 10 times
- 

Prior to entering the Collegiate Recovery Center/CYAAR, what formal treatment options did you participate in for your SUD? Select all that apply.

- Detoxification
  - Outpatient Rehabilitation
  - Inpatient Rehabilitation
  - Counseling
  - 12 step or similar program
  - Medically Assisted Treatment (MAT) (examples: methadone, suboxone, vivitrol)
  - None
- 

Prior to entering the Collegiate Recovery Center/CYAAR, how many times did you relapse? Enter the number of times (e.g. 2) in the value box below.



---

In thinking of the formal treatment options, express your opinion as to the effectiveness of these treatments as stand-alone responses to substance use disorders.

	Not Effective at all	Slightly effective	Neutral	Effective	Extremely effective
Detoxification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outpatient Rehabilitation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inpatient Rehabilitation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12 step or similar program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Medically Assisted Treatment (MAT) (examples: methadone, suboxone, vivitrol)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

In your opinion, is it difficult to sustain recovery in a college environment?

- Yes
- Maybe
- No

If you answered yes to the previous question, what factors make a college environment difficult for a person with SUD? Check all that apply.

- New freedoms
  - Less structure/supervision
  - Peer pressure
  - Academic pressures (examples: grades/GPA, testing, deadlines)
  - Isolation
  - Ease of access/availability of substances
  - Other/not listed
- 

How likely are the elements of college environment listed below to be a relapse triggers/stressors?

	Not likely	Somewhat likely	Neutral	Very likely	Extremely likely
New freedoms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Less structure/supervision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Peer pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic pressures (examples: grades/GPA, testing, deadlines)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Isolation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ease of access/availability of substances	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other/not listed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

In your opinion, are the triggers/stressors different in a college environment than in general society?

- Yes
  - Maybe
  - No
- 

In your opinion, are there limited social experiences for a person in recovery in a college/university environment?

- Yes
  - Maybe
  - No
- 

In thinking about your **recovery status**, rank the following elements of the Collegiate Recovery Center/CYAAR programming as to their importance in helping you **sustain recovery**.

	Not important	Somewhat important	Neutral	Important	Very important
Peer support/mentoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student programming	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic advising	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Institutional					

	Not important	Somewhat important	Neutral	Important	Very important
support (examples: out of state tuition waiver, priority registration)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Healthy peer relationships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accountability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Campus outreach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student leadership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial support (e.g. scholarships)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Campus sober events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In your opinion, which of the following Collegiate Recovery Center/CYAAR programming features is vital for a person with SUD to **sustain recovery** in a campus/university environment? Select one.

- Peer support/mentoring
- Student programming
- Academic advising
- Institutional support (examples: out of state tuition waiver, priority registration)
- Healthy peer relationships
- Accountability
- Campus outreach
- Student leadership
- Financial support (e.g. scholarships)
- Campus sober events

---

In thinking about your current **academic status**, rank the following elements of the Collegiate Recovery Center/CYAAR programming as to their importance in helping you achieve **academic success**.

	Not important	Somewhat important	Neutral	Important	Very important
Peer support/mentoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student programming	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic advising	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Institutional support (examples: out of state tuition waiver, priority registration)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Healthy peer relationships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accountability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Campus outreach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student leadership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial support (e.g. scholarships)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Campus sober events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

In your opinion, which of the following Collegiate Recovery Center/CYAAR programming features is vital for a person with SUD to achieve **academic success** in a campus/university environment? Select one.

- Peer support/mentoring
  - Student programming
  - Academic advising
  - Institutional support (examples: out of state tuition waiver, priority registration)
  - Healthy peer relationships
  - Accountability
  - Campus outreach
  - Student leadership
  - Financial support (e.g. scholarships)
  - Campus sober events
- 

Since entering the Collegiate Recovery Center/CYAAR, have you relapsed? If yes, enter the number of times (e.g. 2) in the value box below.



APPENDIX B:

IRB Exemption Approval



**Institutional Review Board (IRB)  
For the Protection of Human Research Participants**

**PROTOCOL EXEMPTION REPORT**

---

**Protocol Number:** 04181-2021

**Responsible Researcher(s):** Tanya Smith

**Supervising Faculty:** Dr. Dorinda Dowis

**Project Title:** *Sustaining Recovery: The Participant Perspective of a Collegiate Recovery Program.*

---

**INSTITUTIONAL REVIEW BOARD DETERMINATION:**

This research protocol is **Exempt** from Institutional Review Board (IRB) oversight under Exemption **Category 2**. Your research study may begin immediately. If the nature of the research project changes such that exemption criteria may no longer apply, please consult with the IRB Administrator ([irb@valdosta.edu](mailto:irb@valdosta.edu)) before continuing your research.

---

**ADDITIONAL COMMENTS:**

- *Upon completion of this research study all collected data must be securely maintained (locked file cabinet, password protected computer, etc.) and accessible only by the researcher for a minimum of 3 years. At the end of the required time, collected data must be permanently destroyed.*
- *Exempt protocol guideline permit the recording of interviews provided the recording is used to create an accurate transcript. Once the official transcript is created the recording must be permanently deleted from all devices.*
- *The research statement must be read aloud at the start of the interview session. Participant understanding and their willingness to participate confirmed by the researcher.*

*If this box is checked, please submit any documents you revise to the IRB Administrator at [irb@valdosta.edu](mailto:irb@valdosta.edu) to ensure an updated record of your exemption.*



APPENDIX C:

Informed Consent Statement

## APPENDIX C

### Informed Consent Statement

You are being asked to participate in an interview as part of a research study entitled “*Sustaining Recovery: The Participant Perspective of a Collegiate Recovery Program*”, which is being conducted by Tanya Smith, a student at Valdosta State University. The purpose of the study is to fill a knowledge gap in substance use recovery research by examining individual experiences from those who have endured a substance use disorder and found sustainable recovery. You will receive no direct benefits from participating in this research study. However, your responses may help us learn more about determining effective pathways to successful sustained recovery. There are no foreseeable risks involved in participating in this study other than those encountered in day-to-day life. Participation should take approximately one hour. The interviews will be audio and/or video recorded in order to accurately capture your concerns, opinions, and ideas. Once the recordings have been transcribed, the recordings will be destroyed. No one, including the researcher, will be able to associate your responses with your identity. Your participation is voluntary. You may choose not to participate, to stop responding at any time, or to skip any questions that you do not want to answer. You must be at least 18 years of age to participate in this study. Your participation in the interview will serve as your voluntary agreement to participate in this research project and your certification that you are 18 years of age or older.

Questions regarding the purpose or procedures of the research should be directed to Tanya Smith at [tanysmith@valdosta.edu](mailto:tanysmith@valdosta.edu). This study has been exempted from Institutional Review Board (IRB) review in accordance with Federal regulations. The IRB, a university committee established by Federal law, is responsible for protecting the rights and welfare of research participants. If you have concerns or questions about your rights as a research participant, you may contact the IRB Administrator at 229-253-2947 or [irb@valdosta.edu](mailto:irb@valdosta.edu).