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# Emotional Intelligence and Substance Abuse in College Students

# A dissertation submitted in partial fulfillment of the degree of Doctor of Education in Higher Education Administration

By

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#### **Abstract**

In this study, the relationship between Emotional Intelligence (EI) and substance abuse was examined. Limited research has been conducted to examine the role of EI as a contributing factor in a college student's propensity to engage in substance abuse related behaviors. This study utilized correlation analyses to explore the relationship between the constructs of EI and substance abuse among a college student sample (N = 105). EI encompasses a subscale of abilities (perception of emotions, managing emotions in the self, social skills or managing others' emotions, and utilizing emotions) that were measured in undergraduate college students who completed the Schutte Self Report Emotional Intelligence Test, and The Simple Screening Instrument for Substance Abuse Self-Administered Form. Based on the EI construct, 6 research questions were generated. The study utilized Descriptive Statistics, an Independent Samples T-Test, a Pearson Product-Moment Coefficient of correlation (Pearson r), and Analysis of Variance to evaluate differences that existed between groups and the relationship between the variables of Emotional Intelligence and Substance Abuse. The results demonstrated a statistically significant relationship existed between the EI subscale of managing emotions in the self and substance abuse at the -.215 level. This study adds to the existing knowledge of the role of EI as a predictor of risky substance use.

# Acknowledgments

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# **Dedication**

This dissertation is dedicated first and foremost to my loving, supportive, and overall amazing husband, Tyler. He has been my never ending source encouragement and motivation to push forward and finish not only this degree but all my personal, professional, and educational pursuits. It is for this that I extend my most sincere thank you. I also dedicate this to my three amazing children Stella, Hattie, and Benjamin. You have been my eternal source of motivation to complete this degree. Especially, too my two amazing daughters, may you grow to become strong, independent, beautiful, women of intellect. May you know that someday you too can achieve any goal you set your mind to. Finally, to my mother, for having high expectations for me academically, and challenging me to reach for the stars. For being my best friend, my sounding board, and voice of reason. Without each of your love and support this dream would never have come to a reality.

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# CHAPTER I INTRODUCTION

#### **Context of the Problem**

Substance abuse and misuse is a prevalent problem that most all higher education institutions face. Research evaluating patterns of alcohol consumption during young adulthood has shown that that drinking alcohol and the abuse of other substances increases rapidly and peaks during ages 18-24. The prevalence of heavy alcohol consumption and substance abuse dependence also peaks at this same time (Dawson, Grant, Stinson & Chou 2004; Naimi, Brewer, Mokdad, Denny, Serdula, Marks, 2003). A substantial number of individuals in this age group are enrolled in college. Many of these college students abuse alcohol and drugs at high levels and experience many adverse consequences. Research indicates that college students abuse substances at a rate higher than their non-matriculating peers. Substantial research has focused on directly comparing substance abuse levels in college students with their non-college counterparts in an attempt to determine what factors are associated with the college experience that might be escalating student abuse of substances (Dawson, Grant, Stinson & Chou 2004; Substance Abuse and Mental Health Services Administration, 2010; Quinn, & Fromme, 2011). Substance abuse in college has been shown to have substantial and detrimental effects on student experiential factors such as academic performance, social adjustment, peer and familial relationships, and housing. (DeBerard, Spielmans, & Julka, 2004; Engs, Diebold, Hansen, 1996; Presley, Meilman, & Cashin, 1996). The patterns of substance abuse typically associated with adverse consequences are strongly related to college-specific environmental factors, such as the presence of a Greek Life systems, intercollegiate athletics, and residential living (Presley, Meilman, & Leichliter, 2002).

College students' Emotional Intelligence may have a significant impact on their ability to successfully navigate the college environment, especially during a particularly stressful and tumultuous time in a young adult's life such as college (Brackett, Mayer, & Warner, 2004; Kerr, Johnson, Gans, & Krumrine, 2004). A person's behavior is rarely a result of a single factor and behavioral patterns such as substance abuse are likely to differ by each individual. Researchers have investigated a multitude of correlates of this behavior extensively. Emotional Intelligence is one possible correlating factor contributing to college students' use and/or abuse of addictive substances (Brackett, Mayer, & Warner, 2004; Claros, 2010; Dulko, 2007; Ghee & Johnson, 2008; Kashdan, Ferssizidis, Collins, & Muraven, 2010; Kun & Demetrovics, 2010; Peterson, Malouff, & Thorsteinson, 2011).

# **Purpose of the Study**

The purpose for conducting this study was to explore the relationship between Emotional Intelligence and substance abuse in college students who have engaged in alcohol or drug related violations who were subject to university disciplinary action. Previous research indicated that a relationship exists between underage drinking, binge drinking, illicit drug use, and alcohol and drug addictions to low Emotional Intelligence (Brackett, Mayer, & Warner, 2004; Claros, 2010; Dulko, 2007; Ghee & Johnson, 2008; Kashdan, Ferssizidis, Collins, & Muraven, 2010; Kun & Demetrovics, 2010; Peterson, Malouff, & Thorsteinson, 2011). This study attempted to determine if Emotional Intelligence is a correlate of alcohol and drug related problems in a college student population.

#### **Statement of Research Questions**

The following research questions guided this study:

1. What was the demographic profile of the student participants in this study?

- 2. To what extent was there a relationship between emotional Intelligence and Substance Abuse in undergraduate college students?
- 3. To what extent was there a relationship between emotional Intelligence Subscale Perceptions of Emotion and Substance Abuse in undergraduate college students?
- 4. To what extent was there a relationship between emotional Intelligence Subscale

  Managing Own Emotions and Substance Abuse in undergraduate college students?
- 5. To what extent was there a relationship between emotional Intelligence Subscale Managing Others' Emotions and Substance Abuse in undergraduate college students?
- 6. To what extent was there a relationship between emotional Intelligence Subscale
  Utilization of Emotion and Substance Abuse in undergraduate college students?

#### **Definition of Terms**

Substance Abuse Definitions

The World Health Organization defines substance abuse as the "harmful or hazardous use of psychoactive substances including alcohol and illicit drugs" (Substance Abuse, n.d). The overindulgence in an addictive substance, especially alcohol or drugs, can lead to dependence. Dependency disorders can have severe and negative impacts on an individual and may lead to harmful consequences, increased tolerance, and possibly a physical withdrawal state when the substance is no longer accessible to the user (Substance Abuse, n.d). The American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders also known as the DSM defines Substance Abuse as a "maladaptive pattern of substance use leading to clinically significant impairment or distress" (American Psychiatric Association, 1994). According to the DSM-1994, Substance Abuse must be manifested by one or more of the following within a 12-month period:

- Recurrent substance use resulting in a failure to fulfill major role obligations at work,
   school, or home
- Recurrent substance use in situations in which it is physically hazardous
- Recurrent substance-related legal problems
- Continued substance use despite persistent or recurrent social or interpersonal problems
   caused or exacerbated by the effects of the substance

# Dependency Disorders are defined as:

"a cluster of behavioral, cognitive, and physiological phenomena that develop after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state" (Substance Abuse, n.d).

The DSM-1994 defines Substance Dependence as "A maladaptive pattern of substance use leading to clinically significant impairment or distress is manifested by three or more of the following, occurring at any time in the same 12-month period":

- Tolerance, as defined by either of the following: A need for markedly increased amounts
  of the substance to achieve intoxication or desired effect or a markedly diminished effect
  with continued use of the same amount of the substance
- Withdrawal, as manifested by either of the following: The characteristic withdrawal syndrome for the substance or taking the same (or a closely related) substance to relieve or avoid withdrawal symptoms
- Taking the substance often in larger amounts or over a longer period than was intended
- Having a persistent desire or unsuccessful efforts to cut down or control substance use

Substance abuse may be further defined as binge drinking, substance/alcohol use disorder, alcohol abuse, illicit drug use/abuse, or substance misuse or a slight variation of one of these terms. These terms are defined as follows:

- Binge drinking is a pattern of drinking that brings blood alcohol concentration (BAC)
   levels to 0.08 g/dL. This typically occurs after 4 drinks for women and 5 drinks for
   men—in about 2 hours (Drinking Levels Defined, n.d.);
- Alcohol abuse is a pattern of drinking that results in harm to one's health, interpersonal relationships, or ability to work. Manifestations of alcohol abuse include the following: failure to fulfill major responsibilities at work, school, or home; drinking in dangerous situations, such as drinking while driving or operating machinery; legal problems related to alcohol, such as being arrested for drinking while driving or for physically hurting someone while drunk; continued drinking despite ongoing relationship problems that are caused or worsened by drinking; long-term alcohol abuse can turn into alcohol dependence ("Alcohol Use Disorder", 2013).
- Illicit drug use/abuse is the use of an illegal or controlled substance in violation of the law. Illicit drug use becomes abusive when a problematic pattern of use of an intoxicating substance leading to clinically significant impairment or distress, as manifested by at least two of eleven predefined symptoms related to substance abuse as defined by the DSM-V ("Substance Related and Addictive Disorders", 2013).
- Substance/alcohol use disorder or dependency disorder as defined by the DSM-V as
  possessing two to three of eleven predefined symptoms related to substance abuse ("The
  Science of Drug Abuse and Addiction", 2014).

# Emotional Intelligence Definitions

Emotional Intelligence or "EI" is defined as a person's "ability to recognize and understand emotions in yourself and others, and your ability to use this awareness to manage your behaviors and relationships" (Bradberry & Greaves, 2009, p. 17). Emotional Intelligence accounts for the variance in human behavior and functioning that cannot be explained by an individual's cognitive abilities. When an individual is faced with an intense emotional experience the more dominant emotions take over, and the individual can no longer rationally consider the situation. Previous generations thought intelligence was based on one kind of intelligence, aptitude, which was measured based on the Intelligence Quotient (IQ). Substantial research has shown that there are two kinds of intelligence that are of equal importance for both personal and professional success: Cognitive Intelligence and Emotional Intelligence. (Gardner, 1983; as cited in Goleman, 1995). Significant research has been conducted to support that emotions play a primary role in thinking and behaviors. As such, a variety of models regarding Emotional Intelligence have been created to provide theoretical constructs for its explanation, and is a relatively new theoretical construct that provides a framework to explain how an individual's emotional state impacts social functioning (Mayer, Salovey, & Caruso, 2008).

# **Assumptions**

The primary assumption of the study is that students who report low levels of Emotional Intelligence will be more susceptible to engaging in substance abuse behaviors while enrolled in college.

#### **Limitations of the Study**

Both assessments used to measure participants' Emotional Intelligence and substance abuse levels have been shown in research to be reliable and valid. Despite this, as with any

correlational study, the research is only designed to show relationships between variables and cannot definitively indicate causality. Therefore, while the outcome of the data may appear valid, there are limitations to the usability and transferability of the outcome of this research. Some additional limitations of the research method are that both measures are self-report measures, which mean that it is the responsibility of the participant to respond with truthfulness. There is no accurate way to verify if the participants' responses are actually reflective of behaviors.

## Significance of the Study

There is significant research to indicate that college students are at a high risk for substance dependency (Dawson, Grant, Stinson & Chou 2004; Substance Abuse and Mental Health Services Administration, 2010; Quinn, & Fromme, 2011). This provides strong support for institutions to take extenuating steps to both measure and address substance abuse on their campuses. There is additional strong support to indicate that risky substance use behavior is severely detrimental to the college experience, both personally and academically (DeBerard, Spielmans, & Julka, 2004; Engs, Diebold, Hansen, 1996; Presley, Meilman, & Cashin, 1996). In an era where colleges and universities are under increased pressure to focus attention on retention and persistence, colleges and universities should expend additional resources and focus on prevention and educational opportunities surrounding substance abuse. Institutions would also benefit from funneling resources into treatment programs, substance education for known offenders, and bystander intervention programs to increase peer accountability.

The impact of Emotional Intelligence during a student's college experience can be significant. The trends in research indicate that in many cases Emotional Intelligence correlates to alcohol and drug use and/or abuse (Brackett, Mayer, & Warner, 2004; Claros, 2010; Dulko, 2007; Ghee & Johnson, 2008; Kashdan, Ferssizidis, Collins, & Muraven, 2010; Kun &

Demetrovics, 2010; Peterson, Malouff, & Thorsteinson, 2011). However, there is not a substantial body of literature regarding research conducted that evaluates alcohol and substance use/abuse specifically within the college student population based on their Emotional Intelligence. Substance abuse and the misuse of alcohol and drugs by college students on a college campus can cause a great deal of negative impact on student success and retention. As such, the research generated from this study will contribute to the limited body of literature that exists regarding the topic of Emotional Intelligence and substance abuse in college.

## Theoretical/Conceptual Framework of the Study

Substance Abuse Theoretical Framework

Although substance abuse is highly prevalent in emerging adulthood, college students engage in heavy alcohol use more than their non-matriculating peers, often due to peer influence (Dawson, Grant, Stinson & Chou 2004; Substance Abuse and Mental Health Services Administration, 2010; Quinn, & Fromme, 2011). An estimated 20.3 million adults aged 18 or older in 2013 had a past year substance use disorder, which translates to 8.5 percent of adults (Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality, 2014). Research indicates that roughly 38% of college students meet criteria for either alcohol abuse (31.6%) or alcohol dependence (6.3%) according to the DSM-IV (Knight, Wechsler, Kuo, Seibring, Weitzman, & Schuckit, 2002). Binge drinking, a pattern of drinking that brings the blood alcohol content (BAC) to a level of .08 or higher, is found at alarmingly higher rates in college students. Binge drinking poses significant safety risks to the health and safety of individuals. Additionally, college students have higher binge drinking rates than their non-college peers (College Drinking, 2013). This is due, in part, to the "College Effect" (O'Malley & Johnston, 2002). "The College Effect" is demonstrated by a typical

statistical pattern. This pattern shows students drinking rates and alcohol use generally rises the summer before a student enters college, and then increases substantially after arriving on campus (O'Malley & Johnston, 2002; & Yang, Rogers, Haubenstock, Lyons, Gerners, Leitch, & Estoff, 2014).

College for traditional students age 18-24 is a time of emerging adulthood (Arnett, 2005). There are several predominant features of this timeframe that significantly increase college student's decision making as it relates to substance use and abuse. This includes identity exploration, instability, self-focus, and feeling in-between. The exploratory nature of emerging adulthood leads to frequent risky behavior such as substance abuse (Arnett, 2005).

Freshmen in their first six weeks of college are in an especially vulnerable time, specifically for substance abuse related behaviors such as heavy/binge drinking, because of the social pressures associated with the start of the academic year (College Drinking, 2013). Many of these social pressures are associated with certain specific college environmental factors such as Greek systems, prominent athletic programs, and living arrangements (College Drinking, 2013). Research has shown that alcohol consumption is highest among students who reside in fraternity and sorority houses, and is at its lowest for commuter students who reside with relatives (College Drinking, 2013).

This "College Effect" and substance abuse in college have been part of the American college experience since the 18<sup>th</sup> century. The collegiate subculture of alcohol use is documented as early as the 1700's where drinking was part of the social experience of the wealthy elite while they attended college. The party culture in college continued throughout American history as demonstrated through the cultures of clubs and social organizations, specifically at prestigious Ivy League institutions. These institutions set the national standard with the stereotype such as;

the typical college man "drank, gambled, went to church, and was a rabid supporter of university athletics" (Vander Ven, 2011, p.9).

Women joined the "party" in the mid-nineteenth century when the first women's college was established in 1839. During this time numerous private women's colleges emerged.

Additionally, public state run colleges and universities began admitting women and it took only a short while for women to begin engaging in the already well-established drinking culture (Vander Ven, 2011, p.12).

The impact of peer influence on substance abuse is described exceptionally well in the book, *Getting Wasted* (2011), by Thomas Vander Ven. In the book, Vander Ven presented longitudinal research that was collected regarding alcohol use in college. This research specifically focused on the impact of the social processes through a sociological lens (Vander Ven, 2011, p. x). The primary research question in the book *Getting Wasted* was, "Why do university students continue to consume large amounts of alcohol when so many bad things can and do emerge as a result" (Vander Ven, 2011, p. xi).

Vander Ven reported that one possible reason college students engage in substance abuse in college is that being bad is fun. Throughout the study students reported, "Collective drinking is an adventure. A night of drinking can become a matrix of unpredictable events...those events provide the groundwork for future war stories" (Vander Ven, 2011, p. 6). The results of Vander Ven's research demonstrated that users of alcohol experience a reduction in anxiety, an increase in sociability, made the user more talkative, and is a general stress reliever (Vander Ven, 2011, p. 6). These factors coupled with the sociological construct of the college experience create an environment where consuming alcohol is a collective social process and a collaborative effort (Vander Ven, 2011, p. 8).

#### EI Theoretical Framework

Emotional Intelligence has been a topic of significant discussion for over 25 years, since it was introduced as an ability model by Salovey and Mayer (1990). It was later popularized by Daniel Goleman in 1995. Emotional Intelligence is defined as the ability to perceive emotions accurately, to utilize emotions, to understand emotions, and to regulate emotions with the purpose of assisting and guiding thinking and action (Mayer & Salovey, 1997). Three of the most well-known models are outlined below.

Peter Salovey and John Mayer (1990), are often credited with coining the term "Emotional Intelligence." Their original definition, proposed in 1990, stated that Emotional Intelligence is the ability to monitor the emotions of one's self and others, to discriminate between those emotions, and to use emotional information to guide one's behavior and cognitions (Salovey & Mayer, 1990, Mayer & Salovey, 1997). They identified three branches of Emotional Intelligence: appraisal and expression of emotion, regulation of emotions, and utilization of emotions. Mayer and Salovey developed the Multifactor Emotional Intelligence Scale (MEIS) to assess individuals' abilities in these areas. The Mayer and Salovey Emotional Intelligence Ability Model was updated in 2008 and it included four branches: perceiving emotions (in faces, reflected in landscapes and designs), using emotions to make thinking more effective (comparing emotions to stimuli and identifying emotions to best facilitate a type of thinking), understanding emotions (when to increase/decrease intensity, identifying how emotions evolve and blend to form more complex emotions), and managing emotions (how to maintain and change feelings in a given situational, how to manage others emotions in a situation to reach a desired outcome).

Reuven Bar-On proposed a version of Emotional Intelligence as "an array of non-

cognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures" (Bar-On, 2006). Bar-On's assessment instrument, the Emotional Quotient-Inventory (EQ-I), reflects a non-cognitive definition of Emotional Intelligence and poses questions that explore an individual's behavioral characteristics and the perceptions of one's self. The *Bar-On Emotional Social Intelligence Model* (2006) has five components: Intrapersonal (awareness of one's own emotions and capacity to express one's emotions); Interpersonal (maintaining relationships and recognizing emotions in others); Stress Management (tolerate stress and control impulses); Adaptability (solve problems and be flexible with change); Mood (general happiness and optimism).

In 1995 Daniel Goleman described a functional view of Emotional Intelligence which explained that each individual possesses two minds, the emotional and the rational (Goleman, 1995). He stated that the benefits of Emotional Intelligence are to motivate individuals, assist with impulse control and regulation of mood, and allow individuals to persist in situations in which they encounter barriers to success (Goleman, 1995). Goleman created the *Goleman Emotional Intelligence Personality Model* which has five constructs: Social Awareness, Self-Awareness, Self-Regulation, Self-Motivation and Social Skills (Goleman, 1995).

#### CHAPTER II

#### REVIEW OF RELEVANT LITERATURE

#### **Material Collection Procedures**

This comprehensive review of literature was conducted utilizing the University of Arkansas electronic library holdings. To find relevant literature a search of the Ebsco Databases collections of Scholarly Journals utilizing the terms of Emotional Intelligence, Alcohol, Alcohol Use/Misuse, Substance Abuse, College Students, Drug Use/Abuse, and Drinking were used. A Google Scholar search was also conducted utilizing the same terms. Several very relevant sources were found searching the ProQuest Dissertations and Theses online volumes utilizing the search terms of Emotional Intelligence, Substance Abuse, and College Students. Additionally, multiple sources were found by reviewing highly relevant articles and their cited references.

#### **Substance Abuse**

Substance Abuse in College

There are several documented predictors of substance abuse among college students, including includes age, gender, ethnicity, and housing choice. Regarding age, in a large national survey by Chan, Neighbors, Gilson, Larimer, and Marlatt (2007), the results showed that alcohol consumption varied significantly across all age groups. More specifically, this study showed an increase in consumption between ages 18-21 and decreased consumption between ages 21-65. The researchers reported that peak drinking per occasion happened between ages 18 and 29, with a slight increase from ages 21 to 25. The study also showed that there is a significant decrease in consumption beginning at age 30. Regarding gender, in a large study with approximately 70,000

college students conducted by Perkin, Haines, and Rice (2005), it is indicated that gender is the second largest and most powerful predictor of an individual's drinking. Specifically, in all aspects of the study, men reported higher drinking quantity and frequency than their female counterparts (Perkins et al, 2005). Regarding ethnicity as a predictive factor, Caetano and Kaskutas (1995) shows that Caucasian males experience the highest rates of binge drinking and heavy episodic drinking. Hispanics fall next, and then African Americans experience the lowest rates. Regarding housing choice, Arnett (2005) stated that housing location is significantly related to substance use and abuse. In this study it is noted that as individuals move away from their parent's residence and onto a college campus (residence hall facility or similar), an off campus apartment, or into Greek housing substance abuse rates are reflective of the specific location. The highest rates are noted in Greek organization housing and lowest on campus in a residence hall. Off campus housing also has high rates of drinking but those rates are below those for Greek housing (Arnett, 2005). Men living in fraternity houses have the highest rate of frequent drinking, higher volume consumption per occasion, and more consequences associated with alcohol use (Marlatt, Baer, Kivlaha, Dimeff, Larimer, & Quigley, 1998).

Alcohol Consumption and Binge Drinking in College

Underage drinking in college is a significant issue that can result in dramatic consequences for the academic, social, and personal lives of students on college campuses across America. College students have historically seen the dangerous consumption of alcohol and other substances as a rite of passage that has become an integral part of the college experience.

While many students come to college with pre-established history of alcohol use, the college environment seems to further exacerbate problems associated with alcohol use. Research conducted by the National Institute on Alcohol Abuse and Alcoholism indicates that more than

80% of college students drink alcohol, and approximately half report binge drinking in the past 2 weeks (College Drinking, 2013).

According to a survey conducted by Johnston, O'Malley, Bachman, and Schulenberg (2008), college students engage in binge drinking activities at a rate of 41% as compared to 34% for non-college peers. The researchers reported that college student binge drinking rates have not changed significantly since 1993. It was also noted that college-bound high school seniors partook in less heavy drinking activities compared to their non-college bound peers, yet collegebound individuals catch up and exceed non-college bound individuals once in college. College students engaging in binge drinking activities more frequently on the weekend and less on a daily basis than their non-college peers (Johnston et al, 2008). Additionally, the National Survey on Drug Use and Health reported, "among full-time college students in 2013, 59.4% were current drinkers, 39.0% were binge drinkers, and 12.7% were heavy drinkers. Among those not enrolled full time in college, these rates were 50.6, 33.4, and 9.3%, respectively." (Substance Abuse and Mental Health Services Administration, 2013, p. 40). Male full-time college students were more likely than female students to engage in binge drinking (44.8 vs. 33.9%) as well as heavy drinkers (16.5 vs.9.3%) (Substance Abuse and Mental Health Services Administration, OAS, 2013, p. 40). The rates for current alcohol use were similar for males and females who were full-time college students (60.8 and 58.2%, respectively) (Substance Abuse and Mental Health Services Administration, OAS, 2013, p. 40).

Everfi, a national company that provides educational modules on the topics of substance abuse and sexual assault, among other things, to colleges and universities has collected a large amount of data regarding college students and their alcohol use through assessments conducted as part of the educational modules. According to the 2013-2014 national data collected by Everfi,

college students across the nation reported the following as reasons to why they drink: To Celebrate (57%), to have a good time (57%), to be more outgoing (36%), to feel connected with people (31%), and to feel happy (31%) (Yang, L. et al, 2014).

The Everfi data was strikingly similar to the outcome of the study reported by Vander Ven in the book *Wasted*. Vander Ven posed the question in his research, "why do students drink?" He reported the following responses, "Reasons to drink and the forms, styles, and methods of consumption are all part of a complex, dynamic, social process" (Vander Ven, 2011, p. 24). Liz, a 20-year-old sophomore reported "college itself is the occasion to drink" (Vander Ven, 2011, p. 24). Other students in *Wasted* reported rationales such as: because it's Thursday, because it's Friday, because it's game day, because school is out, because it's my birthday, and sometimes for no reason at all. (Vander Ven, 2011, p. 50-51). This demonstrated that it is likely not simply an occasion that results in student drinking, but rather an experience with sociological connotations. Peer pressure often played a significant role in a student's rationale for intoxication. Vander Ven reported that with the participants sampled during spontaneous drinking episodes' peer pressure was often a factor. Participants reported positive experiences with peers while being intoxicated; specifically, the feeling of love and affection for a peer was a significant emotional reward (Vander Ven, 2011, p. 51).

The collective intoxication of a large group transforms social relations resulting in lowered inhibitions and a broadened array of behaviors. Students reported the feeling of being carefree; they took social risks, and had a decrease in judgmental behavior. Vander Ven reported that students engaged in behaviors such as singing and dancing, brief nudity, explicit language, laughing, and being flirtatious (Vander Ven, 2011, p. 63).

Even students who choose not to engage in alcohol use are subject to effects of college

drinking. These students witnessed the negative effects of substance abuse on their peers. These negative consequences ranged from the minor such as negative academic consequences, to the severe, such as injury, sexual assault, and even death. According to Everfi, students reported the following reasons as an individual may choose not to drink alcohol: They are driving (72%), they don't have to drink to have a good time (59%), I have other things to do (61%), I don't want to spend money (56%) and, I don't like to lose control (51%) (Yang, Rogers, Haubenstock, Lyons, Gerners, Leitch, & Estoff, 2014).

## Illicit Drug Use

The use of controlled substance by students in college is on the rise. Since the early 1990's, college student use of Marijuana has more than doubled. This may be attributed, in some areas, to state and/or local laws regarding the use and possession of marijuana for either medical or personal use. The use of drugs such cocaine and heroin is up 52% in college students since the 1990's as well (Substance Abuse and Mental Health Services Administration, OAS 2013).

The greatest epidemic in college student drug abuse is of prescription medication such as opioids, stimulants, benzodiazepines, tranquilizers, etc. The use of these substances has grown exponentially on college campuses. Student use of prescription pain killer medication has risen 343% since 1993, stimulant use such as ADHD medication has risen 93%, and sedative use has risen 225% (Substance Abuse and Mental Health Services Administration, OAS, 2013). This dramatic increase should be a priority for colleges and universities as the consequences of the misuse of such substances are quite great. An individual dies every 19 minutes from a drug overdose, and prescription medications now kill more Americans than heroin and cocaine combined. (A Rising Epidemic on College Campuses: Prescription Drug Abuse, 2014).

Another important concern for college campuses is student use of synthetic substances.

These substances go by a variety of nicknames such as 25-I, Spice, K2, Molly, bath salts etc. These substances are created in a lab to mirror the effects of naturally occurring substances like marijuana or lysergic acid (LSD), but the side effects can be incredibly dangerous. The side effects include nausea and vomiting, seizures, hallucinations, brain trauma, and death. These substances are sold at relatively inexpensive prices and many individuals believe they are purchasing a genuine drug, not a synthetic, subsequently unaware of the risks. These substances began arriving on the college campuses around 2009 and since then there have been numerous reported deaths and hundreds of reported calls to poison control centers (Synthetic Drugs Pose Great Risk to College Students, n.d).

The Substance Abuse and Mental Health Services Administration National Survey on Drug Use and Health for 2013 reported that the rate of current illicit drug use was 22.3% among full-time college students. This was similar although slightly lower than the rate among similarly aged non-college peers (23.0%) (Substance Abuse and Mental Health Services Administration, OAS, 2013, p. 27). Additionally, this study indicates that about one quarter of male full-time college students were current drug users (26.0%). This rate was somewhat higher than the rate of current illicit drug use among female full-time college students (19.2%). Similarly, 23.6% of male full-time college students aged 18 to 22 were current marijuana users compared with 16.6% of female full-time college students (Substance Abuse and Mental Health Services Administration, OAS, 2013, p. 27).

Substance Abuse's Impact on the College Experience

Colleges and universities have an obligation to evaluate and address substance abuse on their campuses, both for the health and safety of their students, and also as a risk management obligation. A significant amount of research has been conducted to evaluate the consequences of

substance abuse on a student's success and engagement in college.

Students who engage in substance abuse such as binge drinking and drug use demonstrated lower overall grade point averages than their peers. These same college students who use and abuse addictive substances while in college were less engaged academically, and some failed to persist (DeBerard, Scott, Spielmans, & Julka, 2004). In self-reported studies, a quarter of college students reported having academic consequences because of drinking. This includes missing class, falling behind, doing poorly, and receiving lower overall grades (Engs, 1996; Presley, Meilman, & Cashin, 1996). Students who are struggling with transitional factors such as academics and engagement, and are often unable to manage and/or successfully address their emotions, may be prone to self-medication utilizing alcohol and drugs (Brackett, Mayer, & Warner, 2004).

In Vander Ven's study, students who engaged in substance abuse reported multiple regretful and negative experiences such as missing class, tests, quizzes, alcohol related illness, and arrests prior to learning how to make responsible decisions regarding alcohol use. According to several studies, 20-30% of all college students have reported negative academic consequences associated with alcohol use such as missing class and receiving lower overall grades because of drinking (Vander Ven, 2011; Wechsler, Lee, & Kuo, 2002).

In addition to academic consequences, substance use may have other significant consequences that can negatively impact the college experience. Incurring alcohol related injuries are one significant consequence. Alcohol related injuries, deaths, and other consequences are common in all age groups. However, accidents involving vehicles are the leading cause of death for individuals under the age of 25 (College Drinking, 2013).

According to Yi, Chen, and Williams (2006), there were 4,666 alcohol-related traffic fatalities for individuals age 16-24 in 2005. Additionally, approximately 1,825 traditional aged college students die each year from alcohol related injuries. Each year approximately half a million traditional aged college students incur injuries while under the influence of alcohol (College Drinking, 2013). Driving a vehicle while under the influence of alcohol is another dangerous activity college a student may engage in. An estimated 3,360,000 students drive each year while under the influence of alcohol (Hingson, Zha, & Wheitzman, 2009). These rates are substantially higher than drunk driving rates for their non-college peers (College Drinking, 2013).

Alcohol use in college is also strongly associated with violent behavior such as physical assault. Each year, approximately 696,000 traditional-aged college students are physically assaulted by a student who has been drinking (College Drinking, 2013). More than 500,000 college students age 18-24 experienced unintentional injuries as a result of the influence of alcohol (Hingson, Heeren, Winter, & Wechsler, 2005), and more than 150,000 have had alcohol related health problems (Hingson, Heeren, Zakocs, Kopstein, & Wechsler, 2002).

According to the 2013-2014 national data compiled by Everfi, college students across the nation reported the following negative consequences that were experienced as a result of alcohol consumption: missed class, performed poorly on an assignment or quiz, got behind in class (30%), had a hangover (45%), blacked out (34%), drove after 4-5 or more drinks (7%), rode with a driver who was drinking (10%), was taken advantage of sexually (12%), and took advantage of someone sexually (8%).

Estimated is that a quarter of all women in the United States have experienced some form of sexual assault (Abbey, Zawacki, Buck, Clinton, & McAuslan, n.d.) and between 20-25% of college women may be a victim of a completed or attempted rape. Sexual assault on college campuses is prevalent and the use and misuse of alcohol is the number one factor associated with sexual assault on college campuses (Abbey, 2002). Based on a study conducted by Abbey in 2002 almost 100,000 students were victims of alcohol related sexual assault or date rape. In addition to sexual assault, almost ½ million students engaged in unsafe sex or had unprotected sex, and 100,000 reported that they were too intoxicated to know if they consented to having sex (Abbey, Zawacki, Buck, Clinton, & McAuslan, n.d). Women from colleges with medium and high binge-drinking rates have a 1.5 times higher chances of being raped while intoxicated than those institutions with low binge-drinking rates (College Drinking, 2013). Not all sexual assaults involve women as the victims, although this is the most common occurrence.

Addressing the Substance Abuse Problem in College

Substance abuse among college students is and has been a topic of substantial concern to practitioners and administrators in the field of higher education due to the substantial impact that substance abuse can have on individual students, the campus community, as well as college and university administrators. In an effort to address substance related problems, colleges and universities have established numerous programmatic responses, hired specially trained staff, and mandated treatment to address substance abuse issues on college campuses. Despite colleges and universities continued focus on addressing the substance abuse problem, current research has failed to show any kind of decrease in substance abuse on college and universities campuses (Wasting the best and the brightest: Substance abuse at america's colleges and universities, 2007).

Some of the typical factors that impacted institutional data regarding substance abuse such as alcohol and drug related policy violations included: Changes to alcohol policies, changes in enforcement protocol regarding alcohol or drug policies, shifts in composition of first year cohorts, and consistency in the timing of data collection.

The Amethyst Initiative is one way that colleges have attempted, albeit unsuccessfully, to address the college drinking issue. The Amethyst Initiative was a major campaign signed by 136 college presidents who were in favor of lowering the drinking age to 18. This campaign's goal was to reduce problems associated with the college culture of binge drinking. The Amethyst initiative invited colleges to engage in a healthy discussion about how to encourage responsible drinking among college students. The idea behind the effectiveness of the initiative was grounded in research that indicated students engaged in risky alcohol use under the age of 21 because of the age restriction. The initiative used examples from other cultures with drinking ages below 21 that do not experience any of the same significant issues regarding alcohol abuse in college aged students that American colleges and universities experience (About Amethyst, n.d.). The Amethyst Initiative was introduced around 2009, but ultimately resulted in no major changes due to significant pushback from groups like Mothers Against Drunk Driving (MADD), American Medical Association (AMA), National Transportation Safety Board (NTSB), etc. (Vander Ven, 2011, p. 5).

Another preventive factor involves the continuing influence of parents. Research has shown that students who choose not to drink often did so because their parents discussed alcohol use and its adverse consequences with them (College Drinking, 2013). A trend specifically in the field of Student Affairs is creating offices and/or units specially designed to communicate with parents and families. The engagement of parents and families in a student's college experience

can have significant implications such as an increase in a students' knowledge and awareness regarding campus resources, more clearly defined learning goals, feel more connected to the institution, and be empowered to make responsible decisions (Savage, M., n.d.).

In recent years, colleges and universities have adopted medical amnesty policies, sometimes known as Good Samaritan policies, in an effort to increase reporting from students regarding alcohol related injury and illness. Through policies such as these, colleges and universities encouraged students to assist peers who may be at risk due to alcohol consumption. Amnesty and Good Samaritan policies are not designed to be a release from all consequences associated with policy violations, as most students are required to engage in some kind of education program in lieu of participating in the full disciplinary process and having a disciplinary record maintained (Hoover, 2007).

In a study conducted by Lewis and Marchell (2006) to evaluate the success and impact of amnesty programs on college campuses, results showed inconclusive evidence regarding risk-reduction. Research showed significant increase in the number of students who received educational treatment as a result of an approved amnesty matter, but no significant increase in the number of students who reported calling for assistance.

Many institutions have vacillated on whether an amnesty policy was a good fit for their college or university. Some positive elements in the creation of an amnesty polices are the increased awareness on campus regarding issues associated with binge drinking and educating students on supporting peers in alcohol crisis. Some negatives associated with amnesty policies are that they conflicted with current policies and procedures, students perceived the policy as a "get out of jail free card," and that they jeopardized campus safety and/or security staff's ability to respond appropriately to alcohol emergencies (Hoover, 2007).

## **Emotional Intelligence**

Emotional Intelligence and Substance Abuse

The relationship between substance abuse and Emotional Intelligence is a well-researched area, although the topic still remains under-researched when specifically considering college student populations. Research has shown a consistent and strong correlation between underage drinking, binge drinking, illicit drug use, and alcohol and drug addictions to low Emotional Intelligence (Brackett, Mayer, & Warner, 2004; Claros, 2010; Dulko, 2007; Ghee & Johnson, 2008; Kashdan, Ferssizidis, Collins, & Muraven, 2010; Kun & Demetrovics, 2010; Peterson, Malouff, & Thorsteinson, 2011). Thus, Emotional Intelligence is a possible explanatory factor as it pertains to college students' use and/or abuse of addictive substances. Students who reported low levels of Emotional Intelligence, specifically in areas such as self-management and self-awareness, have been more likely to be susceptible to peer pressure, the misuse of substances, to over consume, and to make unsafe choices about substance usage.

Alcohol and drug use and abuse are a consistent concern and issue in the field of higher education. Students who have struggled with transitional factors and were unable to manage and/or successfully address their emotions have been prone to self-medicate utilizing alcohol and drugs. Brackett, Mayer, and Warner's (2004) quantitative correlational study reported that males with lower Emotional Intelligence demonstrated significantly more involvement in illegal drug use and binge drinking, and reported a strong correlation for all participants (both male and female) with low Emotional Intelligence (Brackett, Mayer, & Warner, 2004).

Dulko (2007) studied the associations between Emotional Intelligence and college student binge drinking, specifically if a student's Emotional Intelligence can predict binge drinking and its consequences. The results of this study showed that there was no difference in

Emotional Intelligence between binge drinkers and non-binge drinkers, but that students who scored high in the specific Emotional Intelligence category of Interpersonal Relationships reported experiencing a decreased amount of binge drinking consequences.

In addition to the misuse of alcohol, the impact that Emotional Intelligence has on a college student's susceptibility to peer pressure, or resilience to the college alcohol culture, is an area of great concern. Ghee and Johnson (2008) researched the impact of Emotional Intelligence on alcohol use and peer norms. Specifically, Ghee and Johnson surveyed 248 undergraduate students in a general psychology course using the Campus Survey of Alcohol and Other Drug Norms and the Emotional Intelligence Scale (EIS, Schuette et al., 1998). The researchers hypothesized that:

students who perceived high levels of alcohol consumption as the normative behavior for their peer reference group were more likely to self-report higher levels of their own alcohol use...EI [Emotional Intelligence] would moderate the relationship between college students' alcohol use and perceived alcohol peer norms (Ghee & Johnson, 2008, p. 78).

The results of this study found that EI was not directly associated with the study's alcohol-use variables; however, those participants with higher Emotional Intelligence self-reported drinking significantly fewer drinks at parties and drank less than their perceptions of their peer's alcohol use (Ghee & Johnson, 2008).

Emotional Intelligence and its relationship to alcohol and substance abuse in the general population is a well-documented research area. There were several noteworthy studies that show strong relationships between EI and substance use and abuse. Kashdan, Ferssizidis, Collins, and Muraven (2010) evaluated the impact of Emotional Differentiation on self-medication using alcohol in underage drinkers. Kashdan et al. (2010) hypothesized that individuals with higher Emotional Intelligence, specifically those who can articulate their emotions well, would be less likely to self-medicate utilizing alcohol. Results showed that those individuals, who experienced

intense negative emotions, consumed less alcohol if they were better at describing their emotions. Kun and Demetrovics (2010) conducted a systematic review of literature addressing the topic of Emotional Intelligence and addiction and identified 51 relevant articles and analyzed the combination of results. Kun and Demetrovics (2010) found lower Emotional Intelligence is associated with more intensive alcohol, illicit drug, and tobacco usage, specifically with the Emotional Intelligence categories "decoding and differentiation of emotions", and "regulation of emotions" (Kun & Demetrovics, 2010, p. 1131).

There have been several recent studies that have specifically evaluated the impact of Emotional Intelligence on alcohol consumption in college student populations. Monaci, Scacchi, Posa, and Trentin (2013) assessed the moderating effect of Emotional Intelligence on peer pressure and alcohol consumption among college students. A sample of 198 university students were surveyed regarding EI, personality characteristics, and drinking habits. Results indicated that males displayed lower EI than females and also subsequently reported greater use and abuse of alcohol. Additional results of further analysis showed that all participants' emotions as a variable were a strong predictor for episodic alcohol abuse. Tomczak (2010) conducted a study using a quantitative multiple regression model where the impact of EI on substance abuse and delinquency in college students was evaluated. Results showed that EI was strongly correlated with both substance and delinquency. Finally, Davlyatov (2013) surveyed 390 university students' alcohol use and EI using a quantitative cross-sectional model, and results showed an inverse relationship between EI and alcohol use.

Emotional Intelligence and Transitional Factors

Brackett, Mayer, and Warner (2004) explored Emotional Intelligence and its Relation to Everyday Behavior in college students. Utilizing the College Student Life Space Scale (CSLSS)

(Paunonen & Ashton, 2001 as cited in Bracket et al., 2004) and correlating college student's responses to the CSLSS with the student's Emotional Intelligence. The CSLSS divided "Life Space" into the following three content areas; healthy vs. unhealthy behavior, general leisure and academic activities, and interpersonal relations, then analyzed the relation between these categories (and their subcategories) to Emotional Intelligence. The primary motivation of the researchers was to see if students with low EI behaved differently than high EI students on a daily basis. Results showed a strong statistically significant correlation between low EI and negative behaviors in a majority of the Life Space content areas and subcategories.

Kerr, Johnson, Gans, and Krumrine (2004) assessed incoming college students' transition and adjustment in their first year of study and the contribution of alexithymia (the inability to describe one's own feelings), stress, and psychological symptoms to that college adjustment to determine which, if any, predicted first semester adjustment. The results supported the researcher's hypothesis indicating a strong link between alexithymia and college student development. Specifically, college students who had the ability to talk about the emotions they experienced during the freshman transition had a more successful transitional experience than those who did not. These results suggested that "interventions aimed at encouraging awareness and discussion of emotions may improve academic and emotional well-being for students making the transition to college" (Kerr et al., 2004, p. 593).

Emotional Intelligence and Interpersonal Relations

Creating and maintaining successful relationships with family, friends, roommates, etc. including social interactions and conflict resolution are extremely important components in the college transition, and ones that may cause a great deal of stress and anxiety for many students. Brackett et al. (2004) found a strong correlation between high Emotional Intelligence and

making and maintaining positive relationships with new friends both in men and women, although more strongly with men. Johnson, Gans, Kerr, and LaValle (2010) assessed first-time college students to evaluate the hypothesis that "one's ability to manage emotion moderates the relationship between family environment and college adjustment" (p. 607). The results indicated that the way an individual views one's whole family environment during the emerging adulthood years is linked to adjustment during the college transition. Additionally, emotional coping skills were a predictor for college adjustment. Lopez (2004) also addressed the connection between emotional reactions and abilities and the quality of interpersonal interaction through a threepronged study, the first two of which were relevant. Study one was a study of social interaction involving college students. Lopez found that individuals scoring high on the managing emotions scale reported higher levels of satisfaction with their everyday interactions with opposite-sex individuals than their counterparts. They also perceived themselves to be more successful in impression management in social interactions with individuals of the opposite sex. Study two involved college students from a residential college. Lopez evaluated the ability to manage emotions and found it was related to college student's self-reports and peer evaluation regarding "interpersonal sensitivity and pro-social tendencies" (p. 4). Study three evaluated the impact of Emotional Intelligence on stress tolerance and leadership potential in clerical employees in a finance department at a fortune 400 company, a portion of the study was not relevant to this review of literature.

Emotional Intelligence and Decision Making, Risk Taking, and Deviant Behavior

A small portion of college students engage in behaviors such as fights, gambling, mischief, destructiveness/damages property, manufacturing/sale of controlled substances, sexual assault, and other self-destructive or poor decisions. While this population of students is small,

the behavior of the few impact many and may significantly jeopardize their ability to be successful in college.

Brackett, Mayer, and Warners' (2004) study evaluating Life Space in college students.

Utilized the College Student Life Space Scale (CSLSS) (Paunonen & Ashton, 2001; as cited in Bracket et al., 2004) and correlating college student's responses to the CSLSS with the student's Emotional Intelligence. Based on CSLSS content areas, Bracket et al (2004) showed that low Emotional Intelligence correlated strongly with deviant behavior, especially in men. Asperg (2013) evaluated the relationship between hostility and anger in college students as it related to their Emotional Intelligence, specifically in the area of Emotional Regulation through a study where participants self-reported their feelings of hostility and anger. The results found that internalizing problems was common among college students and had been linked consistently to deficits in Emotion Regulation (ER). Additionally, hostility and anger was an important feature of internalizing problems. The results also indicated that although college students' Emotional Regulation abilities corresponded with internalizing symptoms of hostility and anger, it often resulted in symptoms of depression and social anxiety. Those students who demonstrated deficits in Emotional Regulation and were also prone to depression and social anxiety.

Rivers, S. E., Brackett, M. A., Omori, M., Sickler, C., Bertoli, M. C., & Salovey, P. (2013) compared Emotional Intelligence and self-esteem, to engagement in risk-taking behaviors among undergraduates in a study using a structural equation model. The results revealed that Emotional Intelligence, but not self-esteem, correlated significantly to risky behaviors such as Substance Abuse, Adjustment Issues, and Aggressive Behavior. Specifically, the results showed a strong inverse relationship with aggressive behavior such as overt aggression, verbal aggression, stealing, and conflict between friends and family.

Emotional Intelligence and College Persistence

Research has shown substantial connections between EI and college success. College students who have the ability to talk about the emotions they are experiencing during the freshman transition have a more successful freshman transition, than those who do not (Kerr et al., 2004). Kerr et al. (2004) suggested "interventions aimed at encouraging awareness and discussion of emotions may improve academic and emotional well-being for students making the transition to college" (Kerr et al., 2004, p. 593). Rivers et al. (2013) utilized the College Student Life Space Scale (CSLSS) and the MSCEIT Emotional Intelligence Test to evaluate risk-taking behaviors among undergraduates. The study found a strong inverse relationship between Emotional Intelligence and adjustment problems in college. Specifically, the study evaluated the areas of unhealthy lifestyles, promiscuity, and delinquency, which were classified as Adjustment Problems.

# **Chapter Summary**

In summary, the relationship between substance abuse and Emotional Intelligence in the general population is well researched. Emotional Intelligence and its relations to other college student experiential factors is also well-researched area. Despite this, there is very limited research that exists pertaining to college student populations and the relationship between substance abuse and Emotional Intelligence. Additionally, research has shown a disparity between substance abuse in college aged students and their not matriculating peers (Dawson, Grant, Stinson, & Chou 2004; Substance Abuse and Mental Health Services Administration, 2010; Quinn, & Fromme, 2011). As such the difference between these two populations indicates that additional research regarding the relationship between Emotional Intelligence and substance abuse is much needed.

#### CHAPTER III

### **METHODS**

#### Introduction

The purpose for this study was to explore the relationship between Emotional Intelligence and substance abuse in college students who have engaged in alcohol or drug related violations that were subject to university disciplinary action. This study attempted to determine if Emotional Intelligence was correlative of alcohol and drug related problems in a college student population. This chapter will address the research design, the profile of the participants, the data collection and analysis procedures, and the research instruments that were utilized.

# **Research Design**

This study investigated if a relationship existed between Emotional Intelligence and Substance Abuse in undergraduate college students at a Large Public Land Grant Institution in the Southeast United States with an estimated enrollment of 26,000 students. According to the Carnegie Foundation for the Advancement of Teaching's Classification of Institutions of Higher Education (2010) this institution is classified as a "very high research university".

This study utilized an explanatory, non-experimental, Cross Sectional Research design to evaluate the relationship between Emotional Intelligence and substance abuse in college students. This study utilized cross-sectional survey data collected at one point in time during the Spring 2016 semester.

Cross Sectional surveys collect data at one point in time (Creswell, 2008). Cross Sectional survey designs can be used to examine attitudes, beliefs, opinions and practices. They can also be used to compare two or more groups. (Creswell, 2008 p. 390-391). A correlational research design explains how two or more variables relate to each other. While correlational

research demonstrates whether a relationship exists between variables, it does not prove causation between those variables (Creswell, 2008; Johnson, 2001).

## **Participants**

Participants for this study were undergraduate students at Large Public Research
Institution Large Public Land Grant Institution in the Southeastern United States with an
estimated enrollment of 26,000 students. All participants were involved in a reported instance of
alcohol and/or drug related violations of university policy over the course of one calendar year.

All reports regarding alcohol and drug violations are received by the conduct office and may
have been referred from sources such as housing, local law enforcement, faculty, staff, peers, etc.

The sample included any student who had an allegation of misconduct relating to alcohol or
drugs and subsequently had a case generated in their name and did not take into consideration the
outcome. The entire population of students in the sample were given the opportunity to
participate in the study, which was approximately 1400 students. Participants were obtained
through a data query of the database that houses conduct related student records and was
conducted by the conduct office at the university.

### **Procedure**

### Data Collection

In January 2016 all students who were involved in a violation of the universities alcohol and/or drug policy during the 2015 academic year were sent a web link that explains the study and provides the participants the opportunity to participate in the study and take both a self-report substance abuse assessment as well as an Emotional Intelligence assessment. The surveys were administered to approximately 1400 students with an anticipated response rate of approximately 100 participants. The researcher sent two follow-up notifications to all

participants. The survey package Qualtrics was used to administer the surveys, and students had the opportunity to choose to opt out of receiving future survey messages from the researcher via Qualtrics.

Participants were ensured that their identity would be completely protected and all results would be reported anonymously in the results of the study. This study was approved by the Institutional Review Board (IRB).

### Measures

### Substance Abuse

The Simple Screening Instrument for Substance Abuse Self-Administered Form (SSI-SA; Winters & Zenilman, 1994) was originally designed as a broad instrument to identify symptoms of substance abuse issues. The SSI-SA is a government-supported document in the public domain that may be used without charge or permission. It is a 16-item scale, with 14 items that are scored. The scores range from 0 to 14 and a score of 4 or greater is the established cut-off point for warranting a referral for a full assessment. The SSI-SA asks participants to respond to questions in regards to experiences that have occurred in the last 6 months with primarily yes or no questions such as "Have you used alcohol or other drugs? (Such as wine, beer, hard liquor, pot, coke, heroin, or other opioids, uppers, downers, hallucinogens, or inhalants)" (Winters & Zenilman, 1994, p.12), although one question asks for participants to check one or more of the options listed under the question, "Have you had any health problems? For example, have you: had blackouts or other periods of memory loss, Injured your head after drinking or using drugs, etc.." (Winters & Zenilman, 1994, p.12). After responding to the questions the items are scored and assigned a Degree of Risk for Substance Abuse with a score of 0-1 being None to Low, 2-3 being Minimal, and 4 or More being Moderate to High.

The SSI-SA is a widely used measure and its reliability and validity has been thoroughly investigated. In a study conducted by Peters et al. in 2000, the SSI-SA was found to be effective in identifying substance-dependency in subjects. In Peters et al. study conducted in 2000, researchers used a sample of 400 inmates and administered eight different substance abuse screening instruments and found the SSI-SA to be one of the highest in overall accuracy. Specifically, it was reported that the SSI-SA demonstrated high sensitivity (92.6% for alcohol or drug dependence disorder, 87.0% for alcohol or drug abuse or dependence disorder) and excellent test-retest reliability (.97). (APPENDIX A)

# **Emotional Intelligence**

The Schutte Self Report Emotional Intelligence Test (SSEIT) is a self-report measure of Emotional Intelligence containing 33 items with a five point likert type scale ranging from 1) strongly agree to 5) strongly disagree response options. The SSEIT measure was developed by Schutte, Malouff, and Bhullar (2009) in 1998 to quantify Emotional Intelligence levels by evaluating an individual's ability to recognize and understand the emotions of others and to measure the capacity to manage those emotions. Scores range from 33 to 165, with higher scores indicating more emotional Intelligence characteristics (Schutte et al., 2009). The SSEIT measures four facets of Emotional Intelligence based on the Mayer and Salovey Emotional Intelligence Ability Model. The most commonly used subscales for the SSEIT are derived from the 33-item Assessing Emotions Scale and are broke down into four subscales: perception of emotions, managing emotions in the self, social skills or managing others emotions, and utilizing emotions. The items comprising the subscales are as follows: Perception of Emotion (items 5, 9, 15, 18, 19, 22, 25, 29, 32, 33), Managing Own Emotions (items 2, 3, 10, 12, 14, 21, 23, 28, 31), Managing Others Emotions (items 1, 4, 11, 13, 16, 24, 26, 30), and Utilization of Emotion

(items 6, 7, 8, 17, 20, 27) (Petrides and Furnham, 2000, Ciarrochi et al., 2001, and Saklofske et al., 2003). All 33 items are included in one of these four subscales. The SSEIT instrument has been used frequently to measure Emotional Intelligence and is shown to have a high reliability and validity with a test retest reliability of .87 and a predictive validity of r(63) + .32 p < 0.01. Research also reports an internal consistency with Cronbach's alpha of .87 (Schutte, Malouff, Hall, Haggerty, Cooper, Golden, & Dornheim, 1997). (APPENDIX B)

## **Data Analysis**

The study investigated six research questions (1) What was the profile of the student participants in this study? (2) To what extent was there a relationship between Emotional Intelligence and Substance Abuse in undergraduate college students? (3) To what extent was there a relationship between Emotional Intelligence Subscale Perceptions of Emotion and Substance Abuse in undergraduate college students? (4) To what extent was there a relationship between Emotional Intelligence Subscale Managing Own Emotions and substance abuse in undergraduate college students? (5) To what extent was there a relationship between Emotional Intelligence Subscale Managing Others' Emotions and substance abuse in undergraduate college students? (6) To what extent was there a relationship between Emotional Intelligence Subscale Utilization of Emotion and substance abuse in undergraduate college students?

To explore the relationship between Emotional intelligence and Substance abuse, the study utilized The Statistical Package for Social Sciences (SPSS) to conduct Descriptive Statistics, an Independent Samples T-Test, a Pearson Product-Moment Coefficient of correlation (Pearson r), and Analysis of Variance. The t-test was used to compare differences between two independent groups (in this case gender; male and female) on a dependent variable. An ANOVA test is often used in research to compare individual scores on the dependent variables based on

that where a t-test can only test one independent variable at a time, an ANOVA can test more than two categorical levels and to compare individuals' scores on the dependent variables according to the groups or categories they belong to for the independent variable. A Pearson r correlation test is used when data for both variables are expressed using quantitative scores and is either interval or ratio data. Pearson r relates one independent variable with one dependent variable when both are treated as continuous variables (Creswell, 2008).

To address research question one (1) What was the profile of the student participants in this study? Descriptive Statistics, and Analysis of Variance, and an Independent Samples T-Test were run. The survey asked all participants to respond a question regarding their gender with response options; male, female, or no response. The survey also asked participants to respond with their student classification/class standing with response options; freshman, sophomore, junior, senior, and other. To identify the profile of the participants and address research question one the researcher evaluated group means for the variables gender and classification. The researcher conducted descriptive statistics regarding the overall scores of the entire sample from the substance abuse assessment measure, The Simple Screening Instrument of Substance Abuse Self-Administered Form (SSI-SA) and descriptive statistics for (SSI-SA) scores in response groups; men, women, and class standing. The researcher conducted descriptive statistics for the overall scores in the entire sample for the Emotional Intelligence assessment, Schutte Self-Report Emotional Intelligence Test (SSEIT), and descriptive statistics for the overall scores on the SSEIT in response groups; men, women, and class standing. The researcher conducted descriptive statistics for each subscale area of the SSEIT for the response groups; men, women, and class standing. The researcher conducted an Analysis of Variance to determine if significant

differences existed between scores on the SSEIT and SSI-SA by classification. If statistically significant differences were found a post hoc analysis was conducted using a Turkey Pair Wise Comparison. The researcher conducted an Independent Sample T-Test to identify significant differences between the men and women groups between scores on the SSEIT and SSI-SA.

To address questions (2, 3, 4, 5, & 6), (2) Was there a relationship between emotional Intelligence and substance abuse in undergraduate college students, and (3,4, 5, & 6) Was there a relationship between emotional Intelligence Subscales (Perception of Emotion, Managing Own Emotions, Managing Others' Emotions, and Utilization of Emotion) and substance abuse in undergraduate college students? A Pearson *r* correlation test was conducted to quantify the degree to which the two variables were related.

# **Chapter Summary**

The SSI-SA and SSEIT instruments were used to gather data on participant students who engaged in alcohol or drug related violations at the university during the Spring 2016 semester. The researcher conducted descriptive statistics, a T-Test, an ANOVA tests, and a Pearson r correlation test on the data collected. SPSS, a data analysis program commonly used in social sciences research was used to assist in analysis.

#### CHAPTER IV

#### **FINDINGS**

#### Introduction

This chapter provides an overview of the study along with the results of the data collection and analysis. This study utilized an explanatory, non-experimental, Cross Sectional Research design to evaluate the relationship between emotional Intelligence and substance abuse in college students. This study utilized cross-sectional survey data collected at one point in time during the Spring 2016 semester.

# **Summary of the Study**

The purpose for conducting the study was to explore the relationship between Emotional Intelligence and substance abuse in college students who engaged in alcohol or drug related violations that were subject to university disciplinary action. This study attempted to determine if Emotional Intelligence was predictive of alcohol and drug related problems in a college student population.

This study investigated if a relationship existed between Emotional Intelligence and substance abuse in undergraduate college students. Participants for this study are undergraduate students at Large Public Research Institution. These participants engaged in alcohol and/or drug related violations of university policy over the course of the 2015 calendar year. The entire population of policy offenders were given the opportunity to participate in the study, which consisted of exactly 1411 students who were identified as traditional undergraduate students at the time of their conduct violation. Participants were obtained through the conduct office at the university. Individual who were identified utilizing an anonymous sample collected from the electronic records maintained by the conduct office.

#### **Data Collection Results**

A total of 1411 surveys were distributed to university students who engaged in conduct violation during the course of one calendar year. The research distributed the survey electronically on three separate occasions during the Spring 2016. This included the initial survey request and two follow-up reminders. Fink, 2009 encourages timely and respectful reminders which promotes adequate return rates on surveys. On January 19, 2016 the survey was disseminated for the first time. It was sent to 1411 students 87 of whom started the survey and 54 surveys were completed. A reminder message and survey was sent out on January 25, 2016 and 45 students started the survey and 24 completed it. A final reminder notification message was sent out January 27, 2016 and 3 surveys were started and 2 were completed. The survey closed on February 1, 2016.

# **Data Analysis**

# Research Question 1

To address research question one (1) What was the profile of the student participants in this study? Descriptive Statistics, and Analysis of Variance, and an Independent Samples T-Test were run. The survey asked all participants to respond a question regarding their gender with response options; male, female, or no response. The survey also asked participants to respond with their student classification/class standing with response options freshman, sophomore, junior, senior, and other. There were 139 survey respondents and 105 completed all assessments and student demographic questions to create usable data. As such the researcher conducted analysis on only the data collected from the 105 completed assessments.

To identify the profile of the participants and address research question one the researcher evaluated group means for the variables Gender and Classification. As shown in table

1, the majority of participants were male (n=63 60%), the remainder of participants responded they were female (n=41, 39%), or no response (n=1,1%). As shown in table 2, regarding classification, 26% reported to be freshmen (n=28), 39% reported to be sophomores (n=41), 21% reported to be juniors (n=23), 10.5% reported to be seniors (n=11), and 1.9% reported to be other (n=2).

Table 1. Group Means for Variable Gender

	Frequency	Percent
Men	63	60%
Women	41	39%
No Response	1	1%
Total	105	100%

Table 2. Group Means for Variable Classification

	Frequency	Percent
Freshman	28	26%
Sophomore	41	39%
Junior	23	21.9%
Senior	11	10.5%
Other	2	1.9%
Total	105	100%

The researcher conducted descriptive statistics including means and standard deviations regarding the overall scores of the entire sample from the substance abuse assessment measure, The Simple Screening Instrument of substance abuse Self-Administered Form (SSI-SA), and the Emotional Intelligence Measure, Schutte Self-Report Emotional Intelligence Test (SSEIT) As shown in table 3 and table 4, the overall sample mean for the SSI-SA fell into the category of having a moderate to high risk for substance abuse (x:5.46, s²:3.16). According to the SSI-SA scoring manual "it is expected that people with a substance abuse problem will probably score 4 or more on the screening instrument" (SSI-SA; Winters & Zenilman, 1994). The overall sample

mean for the SSEIT was 124.23 with a standard deviation of 12.03. "Scores can range from 33 to 165 with higher scores indicating more characteristics of emotional intelligence (Schutte, Malouff, & Bhullar, 2009)."

As shown in Table 3 and Table 4, the researcher conducted descriptive statistics for SSI-SA overall scores in response groups; men, women, and class standing. The men had higher overall scores on the SSI-SA than women, although both fell into the category of having a moderate to high risk for substance abuse (men: x = 5.67,  $x^2 = 3.32$ , women: x = 5.20,  $x^2 = 2.93$ ). Regarding class standing, seniors had the highest scores on the SSI-SA followed by juniors, sophomores, and finally freshmen. All categories demonstrated a moderate to high risk for substance abuse (Freshmen: x = 4.21,  $x^2 = 2.44$ , sophomores: x = 5.32,  $x^2 = 3.29$ , juniors: x = 6.00,  $x^2 = 2.55$ , seniors: x = 8.09,  $x^2 = 4.15$ ).

As shown in Table 3 and Table 4, the researcher conducted descriptive statistics for SSEIT scores in response groups; men, women, and class standing. The men had lower overall scores on the SSEIT than women (men: x=122.59,  $s^2=3.32$ , women: x=126.63,  $s^2=11.928$ ). Regarding class standing, juniors had the lowest score followed by freshmen, sophomores, and finally seniors. (Freshmen: x=123.00,  $s^2=9.69$ , sophomores: x=125.12,  $s^2=14.10$ , juniors: x=121.70,  $x^2=9.56$ , seniors: x=128.00,  $x^2=14.27$ ).

As shown in Table 3, the researcher conducted descriptive statistics on each of the four sub-scales of the SSEIT for the response groups under class standing. As shown in Table 4, the researcher conducted descriptive statistics on each of the four sub-scales of the SSEIT for the response groups men and women. The four sub-scales are: perception of emotions (sub-scales P) with a maximum score of 50, managing emotions in the self (sub-scales M) with a maximum score of 45, social skills or managing others emotions (sub-scales O) with a maximum score of

40, and utilizing emotions (sub-scales U) with a maximum score of 30.

As shown in Table 3, regarding classification, juniors had the lowest scores in all subscale areas (M, O, & U) with the exception of sub-scale P, perception of emotions where freshmen had the lowest reported scores. (Sub-scale P- Freshmen: x=35.79,  $s^2=4.50$ , sophomores: x=37.22,  $s^2=5.81$ , juniors: x=36.65,  $s^2=4.11$ , seniors: x=39.00,  $s^2=4.83$ ; Sub-scale M- Freshmen: x=35.21,  $s^2=3.52$ , sophomores: x=34.63,  $s^2=5.59$ , juniors: x=33.70,  $s^2=3.83$ , seniors: x=35.73,  $x^2=5.58$ ; Sub-scale O- Freshmen: x=29.57,  $x^2=3.06$ , sophomores: x=30.00,  $x^2=4.00$ , juniors: x=29.13,  $x^2=2.94$ , seniors: x=30.27,  $x^2=3.319$ ; Sub-Scale U- Freshmen: x=22.43,  $x^2=2.39$ , sophomores: x=23.27,  $x^2=3.05$ , juniors: x=22.22,  $x^2=2.02$ , seniors: x=23.00,  $x^2=1.41$ ).

Table 3.

Descriptive Statistics for Group Means by Classification and Assessment Score Results on the SSEIT and the SSI-SA

		SSEIT					
		Overall	SSEIT	SSEIT	SSEIT	SSEIT	SSI-SA
Classification:		Score	Subscale P	Subscale M	Subscale O	Subscale U	Total
Freshmen	Mean	123.00	35.79	35.21	29.57	22.43	4.21
	N	28	28	28	28	28	28
	Std. Deviation	9.695	4.500	3.521	3.060	2.395	2.440
Sophomore	Mean	125.12	37.22	34.63	30.00	23.27	5.32
1	N	41	41	41	41	41	41
	Std. Deviation	14.107	5.816	5.594	4.000	3.058	3.297
Junior	Mean	121.70	36.65	33.70	29.13	22.22	6.00
	N	23	23	23	23	23	23
	Std. Deviation	9.565	4.119	3.831	2.943	2.022	2.558
Senior	Mean	128.00	39.00	35.73	30.27	23.00	8.09
	N	11	11	11	11	11	11
	Std. Deviation	14.276	4.837	5.587	3.319	3.578	4.158
Other	Mean	131.50	41.00	35.00	32.50	23.00	5.00
	N	2	2	2	2	2	2
	Std. Deviation	4.950	.000	8.485	2.121	1.414	.000
Total	Mean	124.23	36.97	34.70	29.77	22.78	5.46
	N	105	105	105	105	105	105
	Std. Deviation	12.033	5.028	4.739	3.437	2.721	3.162

As shown in table 4, regarding all subscales on the SSEIT (P, M, O, & U), the men had lower overall scores than women (Sub-scale P men: x=36.32,  $s^2=4.91$ , women: x=37.98,  $s^2=5.15$ ; Sub-scale M men: x=34.56,  $s^2=4.82$ , women: x=34.83,  $s^2=4.66$ ; Sub-scale O men: x=29.27,  $s^2=3.53$ , women: x=30.54,  $s^2=3.22$ ; Sub-scale U men: x=22.44,  $s^2=2.75$ , women: x=23.29,  $s^2=2.648$ ).

Table 4.

Descriptive Statistics for Group Means by Gender and Assessment Score Results on the SSEIT and the SSI-SA

		SSEIT					
		Overall	SSEIT	SSEIT	SSEIT	SSEIT	SSI-SA
Gender		Score	Subscale P	Subscale M	Subscale O	Subscale U	total
Men	Mean	122.59	36.32	34.56	29.27	22.44	5.67
	N	63	63	63	63	63	63
	Std. Deviation	12.006	4.918	4.825	3.530	2.758	3.321
Women	Mean	126.63	37.98	34.83	30.54	23.29	5.20
	N	41	41	41	41	41	41
	Std. Deviation	11.928	5.150	4.669	3.226	2.648	2.934
No Response	Mean	129.00	37.00	39.00	30.00	23.00	3.00
	N	1	1	1	1	1	1
	Std. Deviation						
Total	Mean	124.23	36.97	34.70	29.77	22.78	5.46
	N	105	105	105	105	105	105
	Std. Deviation	12.033	5.028	4.739	3.437	2.721	3.162

The researcher conducted an Analysis of Variance to determine if significant differences existed between response group means based on classification (freshmen, sophomore, junior, senior) for the variable Emotional Intelligence, Schutte Self-Report Emotional Intelligence Test (SSEIT) and the variable Substance abuse, the Simple Screening Instrument of Substance Abuse

Self-Administered Form (SSI-SA). As shown in Table 5 there were no statistically significant differences between group means for Emotional Intelligence and Classification as determined by a one-way ANOVA. As shown in table 5, the results indicated that a statistically significant difference existed between group means for substance abuse and classification (p=.005). Due to statistically significant differences being found a post hoc analysis was conducted using a Tukey Pair Wise Comparison, shown in Table 6. The comparison showed that the group means for substance abuse were statistically significant between the freshman group means and the senior group means, and the sophomore group means and the senior group means.

Table 5.

One-way Analysis of Variance (ANOVA) results for Classification and Emotional Intelligence and Substance Abuse

		Sum of Squares	df	Mean Square	F	p
EI Overall Score Between Groups		376.954	3	125.651	.855	.467
	Within Groups	14549.260	99	146.962		
	Total	14926.214	102			
Subscale P	Between Groups	88.869	3	29.623	1.170	.325
	Within Groups	2506.956	99	25.323		
	Total	2595.825	102			
Subscale M	Between Groups	42.392	3	14.131	.630	.597
	Within Groups	2221.278	99	22.437		
	Total	2263.670	102			
Subscale O	Between Groups	15.187	3	5.062	.420	.739
	Within Groups	1193.648	99	12.057		
	Total	1208.835	102			
Subscale U	Between Groups	21.045	3	7.015	.930	.429
	Within Groups	746.819	99	7.544		
	Total	767.864	102			
SA total	Between Groups	127.130	3	42.377	4.598	.005
	Within Groups	912.501	99	9.217		
	Total	1039.631	102			

Note: p = 0.05. N = 105.

Table 6.

Tukey Pair Wise Post Hoc Analysis for Dependent Variable Substance Abuse

			Mean			95% Cor Interval	nfidence
	(I)	(J)	Difference	Std.		Lower	
	Classification	:Classification:	(I-J)	Error	Sig.	Bound	Upper Bound
Tukey HSD	1	2	-1.103	.744	.452	-3.05	.84
1102		3	-1.786	.854	.163	-4.02	.45
		4	-3.877*	1.080	.003	-6.70	-1.05
	2	1	1.103	.744	.452	84	3.05
		3	683	.791	.824	-2.75	1.38
		4	-2.774*	1.031	.041	-5.47	08
	3	1	1.786	.854	.163	45	4.02
		2	.683	.791	.824	-1.38	2.75
		4	-2.091	1.113	.244	-5.00	.82
	4	1	3.877*	1.080	.003	1.05	6.70
		2	2.774*	1.031	.041	.08	5.47
		3	2.091	1.113	.244	82	5.00

<sup>\*</sup> The mean difference is significant at the 0.05 level.

The researcher conducted descriptive statistics (table 7) for each the overall score and subscales of the SSEIT and overall scores on the SSI-SA for the gender response group means (men and women). The researcher conducted an Independent Sample T-Test to identify significant differences between groups. The result as shown in Table 8 indicate that no significant difference exists between gender in any category (less than .05).

Table 7.

Descriptive Statistics for Overall Score and Subscales of the SSEIT and SSI-SA Total by Gender

	Gender	N	Mean	Std. Deviation	Std. Error Mean
EI Overall Score	Men	63	122.59	12.006	1.513
	Women	41	126.63	11.928	1.863
Subscale P	Men	63	36.32	4.918	.620
	Women	41	37.98	5.150	.804
Subscale M	Men	63	34.56	4.825	.608
	Women	41	34.83	4.669	.729
Subscale O	Men	63	29.27	3.530	.445
	Women	41	30.54	3.226	.504
Subscale U	Men	63	22.44	2.758	.347
	Women	41	23.29	2.648	.414
SA total	Men	63	5.67	3.321	.418
	Women	41	5.20	2.934	.458

Table 8. *Independent Samples Test* 

Levene's Test for Equality

of Variances t-test for Equality of Means

		or variances t test for Equality of Means					95% Con	fidence		
							Mean		Interval o	
						Sig (2-		Std. Error		
		F	p	t	df	tailed)	e	Differenc		Upper
EI Overall Score	Equal variances assumed	.019	.892	-1.684	102	.095	-4.047	2.403	-8.813	.720
	Equal variances no assumed	t		-1.686	86.011	.095	-4.047	2.400	-8.817	.724
Subscale P	Equal variances assumed	.252	.617	-1.649	102	.102	-1.658	1.005	-3.652	.336
	Equal variances no assumed	t		-1.633	82.760	.106	-1.658	1.015	-3.678	.361
Subscale M	I Equal variances assumed	.046	.831	286	102	.775	274	.956	-2.170	1.623
	Equal variances no assumed	t		288	87.627	.774	274	.949	-2.160	1.613
Subscale O	Equal variances assumed	.644	.424	-1.849	102	.067	-1.267	.685	-2.625	.092
	Equal variances no assumed	t		-1.885	90.984	.063	-1.267	.672	-2.602	.068
Subscale U	Equal variances assumed	.103	.749	-1.557	102	.123	848	.545	-1.929	.232
	Equal variances no assumed	t		-1.570	88.085	.120	848	.540	-1.922	.225
SA total	Equal variances assumed	.595	.442	.740	102	.461	.472	.637	792	1.735
	Equal variances no assumed	t		.760	92.861	.449	.472	.621	761	1.704

Note: p = 0.05. N = 105.

## Research Question 2

To address research question two, to what extent is there a relationship between Emotional Intelligence and substance abuse in undergraduate college students, the researcher conducted a Pearson r correlation test to quantify the degree to which two variables are related. The result as shown in Table 9 indicate that the strength of the relationship between Emotional Intelligence and substance abuse was a very weak negative linear relationship (r = -.117). Thus, the Emotional Intelligence overall score (SSEIT) was not statistically significantly correlated with substance abuse (SSI-SA).

## Research Question 3

To address research question three, to what extent is there a relationship between emotional Intelligence Subscale Perceptions of Emotion (Subscale P) and substance abuse in undergraduate college students, the researcher conducted a Pearson r correlation test to quantify the degree to which two variables are related. The result as shown in Table 9 indicate that the strength of the relationship between Emotional Intelligence subscale P and substance abuse was a very weak negative linear relationship (r = -.040). Thus, the Emotional Intelligence subscale P (SSEIT) was not statistically significantly correlated with substance abuse (SSI-SA).

## Research Question 4

To address research question four, to what extent is there a relationship between emotional Intelligence Subscale Managing Own Emotions (Subscale M) and substance abuse in undergraduate college students, the researcher conducted a Pearson r correlation test to quantify the degree to which two variables are related. The result as shown in Table 9 indicate that the strength of the relationship between Emotional Intelligence subscale M and substance abuse was a moderate negative linear relationship (r = -.215). Thus, the Emotional Intelligence subscale M

score (SSEIT) was statistically significantly correlated with substance abuse (SSI-SA) indicating that when scores increase on the SSI-SA, scores in Emotional Intelligence Subscale M decrease.

\*Research Question 5\*\*

To address research question five, to what extent is there a relationship between Emotional Intelligence Subscale Managing Others' Emotions (Subscale O) and substance abuse in undergraduate college students, the researcher conducted a Pearson r correlation test to quantify the degree to which two variables are related. The result as shown in Table 9 indicate that the strength of the relationship between Emotional Intelligence subscale O and substance abuse was a very weak negative linear relationship (r = -.082). Thus, the Emotional Intelligence overall score (SSEIT) was not statistically significantly correlated with substance abuse (SSI-SA).

# Research Question 6

To what extent is there a relationship between Emotional Intelligence Subscale Utilization of Emotion (Subscale U) and substance abuse in undergraduate college students, the researcher conducted a Pearson r correlation test to quantify the degree to which two variables are related. The result as shown in Table 9 indicate that the strength of the relationship between Emotional Intelligence subscale U and substance abuse was a very weak positive linear relationship (r = .033). Thus, the Emotional Intelligence subscale U score (SSEIT) was not statistically significantly correlated with substance abuse (SSI-SA).

Table 9.

Pearson r Correlation Between Substance Abuse (SA) and Emotional Intelligence (EI)

			Subscale	Subscale	Subscale	Subscale
-		EI Overall Score	P	M	O	U
SA total	r	117	040	215*	082	.033
	(2-tailed)	.233	.683	.028	.404	.738
	N	105	105	105	105	105

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

# **Chapter Summary**

This chapter provided an overview of the study along with the results of the data collection and analysis, which evaluated the relationship between Emotional Intelligence and substance abuse in college students and investigated the following six research questions (1) What is the profile of the student participants in this study? (2) To what extent is there a relationship between Emotional Intelligence and substance abuse in undergraduate college students? (3) To what extent is there a relationship between Emotional Intelligence Subscale Perceptions of Emotion and substance abuse in undergraduate college students? (4) To what extent is there a relationship between Emotional Intelligence Subscale Managing Own Emotions and substance abuse in undergraduate college students? (5) To what extent is there a relationship between Emotional Intelligence Subscale Managing Others' Emotions and substance abuse in undergraduate college students? (6) To what extent is there a relationship between Emotional Intelligence Subscale Utilization of Emotion and substance abuse in undergraduate college students? The results demonstrated that a statistically significant relationship that existed between EI subscale M, managing emotions in the self, and substance abuse at the -.215 level, all other categories demonstrated no statistically significant relationships.

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed).

#### CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

This chapter includes the research questions and conclusions, recommendations for research and practice, limitations and delimitations of the study, as well as a discussion of the findings in light of theoretical knowledge. Suggestions for higher education policy and programing are made with theoretical support serving as guidance.

The purpose for conducting the study was to explore the relationship between Emotional Intelligence and substance abuse in college students who had engaged in alcohol or drug related violations and were subject to university disciplinary action. Previous research indicated that a relationship exists between underage drinking, binge drinking, illicit drug use, and alcohol and drug addictions to low Emotional Intelligence (Brackett, Mayer, & Warner, 2004; Claros, 2010; Dulko, 2007; Ghee & Johnson, 2008; Kashdan, Ferssizidis, Collins, & Muraven, 2010; Kun & Demetrovics, 2010; Peterson, Malouff, & Thorsteinson, 2011). Although substance abuse is highly prevalent in emerging adulthood, college students engage in heavy alcohol use more than their non-matriculating peers, often due to peer influence (Dawson, Grant, Stinson & Chou 2004; Substance Abuse and Mental Health Services Administration, 2010; Quinn, & Fromme, 2011). This is due, in part, to what has been called the "College Effect" (O'Malley & Johnston, 2002). "The College Effect" is demonstrated by a typical statistical pattern that shows students drinking rates and alcohol use generally rises the summer before a student enters college, and then increases substantially after arriving on campus (O'Malley & Johnston, 2002; & Yang et. al., 2014).). As such, there is significant research to indicate that college students are at a high risk

for substance dependency (Dawson, Grant, Stinson & Chou 2004; Substance Abuse and Mental Health Services Administration, 2010; Quinn, & Fromme, 2011).

The impact of Emotional Intelligence during a student's college experience is significant. Trends in research have indicated that in many cases Emotional Intelligence, has been correlated to alcohol and drug use and/or abuse (Brackett, Mayer, & Warner, 2004; Claros, 2010; Dulko, 2007; Ghee & Johnson, 2008; Kashdan, Ferssizidis, Collins, & Muraven, 2010; Kun & Demetrovics, 2010; Peterson, Malouff, & Thorsteinson, 2011). However, there was not a substantial body of literature regarding research conducted that evaluates alcohol and substance use/abuse specifically within the college student population based on their Emotional Intelligence.

This study attempted to determine if Emotional Intelligence is a correlate of alcohol and drug related problems in a college student population at a large, public, land grant institution. The sample consisted of undergraduate students who were involved in a disciplinary matter at the university involving alcohol or drugs. Participants responded to two demographic questions and then were administered two assessments. They were administered The Simple Screening Instrument for Substance Abuse Self-Administered Form (SSI-SA; Winters & Zenilman, 1994) to identify symptoms of substance abuse issues, and the Schutte Self Report Emotional Intelligence Test (SSEIT), a self-report measure of Emotional Intelligence that evaluated the individual's ability to recognize and understand the emotions of others and to measure the capacity to manage those emotions. The study had 105 participants who completed all measures.

#### Conclusions

Research Question 1

Research question one asked: What was the demographic profile of the student

participants in this study. To answer this question, the researcher conducted Descriptive

Statistics, an Analysis of Variance, and an Independent Samples T-Test utilizing the

demographic data collected regarding the gender and class standing of the sample in addition to
the results on the substance abuse measure (SSI-SA) and the Emotional Intelligence measure

(SSEIT). Below are the conclusions drawn from research question one.

The results indicated that the profile of the participants regarding the variable Gender consisted of a majority of males. Regarding classification, the largest responding group identified themselves as sophomores and the smallest responding group reported to be seniors. The profile of the sample regarding the results on the assessments for substance abuse indicated that average score on the assessment was in the category of moderate to high risk for substance abuse indicating that the sample as a whole on average experienced a substance abuse problem.

Specifically, the scoring guide states that, "it is expected that people with a substance abuse problem will probably score 4 or more on the screening instrument" (SSI-SA; Winters & Zenilman, 1994). While both men and women reported scores in the range of moderate to high risk for substance abuse, the scores for men were higher than women.

The substance abuse scores based on class standing indicated that all categories were in the range of moderate to high risk for substance abuse, but scores increased significantly each year with the lowest being freshman and the highest being senior. The researcher conducted an Analysis of Variance to determine if the difference between the class standing groups were significant. The results of the ANOVA indicated that a statistically significant difference existed between group means for substance abuse and classification (p=.005). Due to statistically significant differences being found a post hoc analysis was conducted using a Tukey Pair Wise Comparison. The comparison showed that the group means for substance abuse were statistically

significant between the freshman group means and the senior group means, and the sophomore group means and the senior group means with the senior group means being highest.

Regarding Emotional Intelligence, the overall sample mean was 124.23. "Scores can range from 33 to 165 with higher scores indicating more characteristics of emotional intelligence (Schutte, Malouff, & Bhullar, 2009)." The researcher conducted descriptive statistics for Emotional Intelligence scores in response groups; men, women, and class standing. The men had lower overall Emotional Intelligence scores as compared to women. Regarding class standing, juniors had the lowest score followed by freshmen, sophomores, and finally seniors.

The researcher conducted descriptive statistics on each of the four sub-scales of the Emotional Intelligence. These sub-scales are: The four sub-scales are; perception of emotions (sub-scales P) with a maximum score of 50, managing emotions in the self (sub-scales M) with a maximum score of 45, social skills or managing others emotions (sub-scales O) with a maximum score of 40, and utilizing emotions (sub-scales U) with a maximum score of 30. Regarding gender, in all subscales of Emotional Intelligence the men had lower overall scores than women. Regarding class standing, the researcher conducted descriptive statistics on each of the four subscales, juniors had the lowest scores in all sub-scale areas (M, O, & U) with the exception of subscale P, perception of emotions where freshmen had the lowest reported scores. The researcher conducted an Analysis of Variance to determine if significant differences existed between response group means based on classification (freshmen, sophomore, junior, senior) for the variable Emotional Intelligence, and found that there were no statistically significant differences between group means for Emotional Intelligence and Classification as determined by a one-way ANOVA.

The researcher conducted descriptive statistics for each the overall scores and subscales

of Emotional Intelligence and overall scores for substance Abuse for the gender response group means (men and women). The researcher conducted an Independent Sample T-Test to identify significant differences between groups. The result indicated that no significant difference existed between gender in any category.

## Research Question 2

Regarding research question two, to what extent is there a relationship between Emotional Intelligence and substance abuse in undergraduate college students, the researcher utilized a Pearson r correlation test to quantify the degree to which Emotional Intelligence and Substance abuse were related. The results indicated that the strength of the relationship between Emotional Intelligence and substance abuse was a very weak negative linear relationship and thus, determined to not be statistically significantly correlated with substance abuse. Thus the researcher concluded that a statistically significant relationship between Emotional Intelligence and substance abuse did not exist.

## Research Question 3

Regarding research question three, to what extent is there a relationship between Emotional Intelligence Subscale Perceptions of Emotion (Subscale P) and substance abuse in undergraduate college students, the researcher utilized a Pearson r correlation test to quantify the degree to which Emotional Intelligence and substance abuse were related. The results indicated that the strength of the relationship between Emotional Intelligence subscale P and substance abuse was a very weak negative linear relationship and thus, the Emotional Intelligence subscale P was determined to not be statistically significantly correlated with substance abuse. Thus the researcher concluded that a statistically significant relationship did not exist between Emotional Intelligence Subscale Perceptions of Emotion (Subscale P) and substance abuse in undergraduate

college students.

# Research Question 4

Regarding research question four, to what extent is there a relationship between Emotional Intelligence Subscale Managing Own Emotions (Subscale M) and substance abuse in undergraduate college students, the researcher conducted a Pearson r correlation test to quantify the degree to which Emotional Intelligence and substance abuse were related. The results indicated that the strength of the relationship between Emotional Intelligence subscale M and substance abuse was a moderate negative linear relationship and thus, the Emotional Intelligence subscale M score was statistically significantly correlated with substance abuse indicating that when substance abuse levels increased the individual's ability to manage one's own emotions decreased. Thus the researcher concluded that a statistically significant relationship did exist between Emotional Intelligence Subscale Perceptions of Emotion (Subscale M) and substance abuse in undergraduate college students.

# Research Question 5

Regarding research question five, to what extent is there a relationship between Emotional Intelligence Subscale Managing Others' Emotions (Subscale O) and substance abuse in undergraduate college students, the researcher conducted a Pearson r correlation test to quantify the degree to which two variables were related. The result indicated that the strength of the relationship between Emotional Intelligence subscale O and substance abuse was a very weak negative linear relationship and thus, the Emotional Intelligence overall score was determined to not be statistically significantly correlated with substance abuse. Thus the researcher concluded that a statistically significant relationship did not exist between Emotional Intelligence Subscale Perceptions of Emotion (Subscale O) and substance abuse in

undergraduate college students.

# Research Question 6

Regarding research question six, to what extent is there a relationship between Emotional Intelligence Subscale Utilization of Emotion (subscale U) and substance abuse in undergraduate college students, the researcher conducted a Pearson r correlation test to quantify the degree to which two variables were related. The result indicated that the strength of the relationship between Emotional Intelligence Subscale U and substance abuse was a very weak positive linear relationship and thus, the Emotional Intelligence subscale U score was determined to not be statistically significantly correlated with substance abuse. Thus the researcher concluded that a statistically significant relationship did not exist between Emotional Intelligence Subscale Perceptions of Emotion (Subscale U) and substance abuse in undergraduate college students.

#### Recommendations

### For Research

It is recommended that further studies be conducted to increase the body of knowledge and literature regarding the association of alcohol, marijuana and other illicit drugs as it relates to Emotional Intelligence. Qualitative studies can offer an alternative view point regarding the issue of Emotional Intelligence and substance abuse. Future research should emphasize the role of managing one's own emotions given the correlation found in this study between Emotional Intelligence subscore M and substance abuse.

Emotional Intelligence definitions vary in the literature. Some are considered ability based models (Salovey & Mayer, 1990), while others consider Emotional Intelligence a skill set (Bar-On, 2000). This study utilized a self-report measure of Emotional Intelligence developed by Schutte et al. (1998) designed to measure the ability model of Emotional Intelligence based on

the Mayer and Salovey Emotional Intelligence Ability Model. Additionally, further studies should consider the use of different Emotional Intelligence assessment instruments to consider the varying constructs and theories of Emotional Intelligence.

This study utilized the Simple Screening Instrument for substance abuse Self-Administered Form (SSI-SA; Winters & Zenilman, 1994) which was originally designed as a broad instrument to identify symptoms of substance abuse issues using a 16-item scale, with 14 items that are scored. Further studies are recommended utilizing differing substance abuse assessment measures administered by licensed mental health practitioners that could reveal differing degrees of substance abuse.

The student profile data of gender and class standing collected in this study was limiting. Future studies are recommended with demographic assessment measures designed to collect data regarding factors such as the socioeconomic status, mental health status, or family history of substance use.

The population sampled in this study were students at a university with disciplinary history relating to substance use. Further studies would benefit from expanding the population to sample broader student populations including both those with and without a disciplinary issue.

### For Practice

University staff, faculty, and paraprofessionals are in an ideal position to assist college students in understanding one's own emotions. This assistance can aid students positively and productively in their journey to adulthood in the college setting. The college setting is one where substance abuse is prevalent. Research indicates that substance abuse rates are higher in the college setting than within the comparative non-matriculating population (Dawson, Grant, Stinson & Chou 2004; Substance Abuse and Mental Health Services Administration, 2010;

Quinn, & Fromme, 2011). Therefore, the need to intervene at the earliest point in a student's college career is essential. The importance of this is especially demonstrated in this study given the significant increases in substance abuse between students in their freshman year and their senior year.

There are strategies for aiding individuals in improving Emotional Intelligence.

Goleman's (1995) original literature indicates that Emotional Intelligence can be taught. In his book he offers a step by step guide to educational interventions related to the improvement of Emotional Intelligence. Practical applications utilizing these strategies may be immensely helpful in improving emotional intelligence in college student populations. Additionally, university sponsored activities that support a harm reduction can be developed and implemented to foster safety and guard against harmful substance use. Additionally, colleges that utilize large scale student contact models such as orientation and freshman 101 type classes can design formal and informal training programs, workshops, seminars, and peer-to-peer mentoring that include activities relating emotional intelligence components such as self-awareness, empathy, healthy communication and expression of emotion, and conflict resolution skills.

Institutions would also immensely benefit from having strategic processes for responding to student disciplinary matters that involve substance abuse. Prompt assessment of substance abuse, and implementation of successful substance abuse education and harm reduction programs paired with Emotional Intelligence building interventions may deter students from engaging in future substance abuse related behavior. University health professionals including mental health professionals should be paying special attention to the identification of substance abuse related behaviors and have protocol in place to referral for students to successful programming. Institutions greatly benefit from partnerships with the students. Student lead

initiatives with the goal of promoting a college-wide drug-free environment are recommended. Involving parents and guardians in education and support for substance abuse related offenses provides opportunities for partnerships between the institution and one of its most important stakeholders. Parents play a key role in accountability for students and aid significantly in creating an environment that fosters student success.

### Limitations

The sample consisted of only individuals with a history of substance abuse. Thus, the lack of diversity of substance use and experience can have an impact on the outcome; specifically; one would expect a sample such as this to have a higher risk for substance abuse as opposed to a sample with a mixture of students.

Although the population of interest for this study was the college students, much of the existing literature related to risk behaviors of substance use pertains to adolescents in general. The population that participated in this study encompassed full time undergraduate students who may or may not be of traditional age, this factor is unknown. This impacts the possible comparability of this study to others of similar nature.

The population sample is relatively small, at 105 participants, and it is restricted to college students at a pre-selected institution which is known to be a Large Public Land Grant Institution in the Southeast with an estimated enrollment of 26,000 students. According to the Carnegie Foundation for the Advancement of Teaching's Classification of Institutions of Higher Education (2010) this institution is classified as a "very high research university". This restriction poses limitations to the generalizability of the findings of this study to other cohorts, including similar populations at other colleges or universities.

Both measures used to assess participants Emotional Intelligence and substance abusers have been shown in research to be reliable and valid. Despite this, as with any correlational study, the research is only designed to show relationships between variables and cannot definitively indicate causality. Therefore, while the relationships between substance abuse and Emotional Intelligence subscale M, managing own emotions, data may appear valid there are limitations to the usability and transferability of the outcome of this research.

Due to the role of researcher at the institution where this study was conducted there is a possibility of non-response bias. The population sampled was students involved in student disciplinary matters at the institutions, and the researcher is a staff member in the student conduct office. As such students may have chosen not to participate due a perceived concern for the implications of their participation and or responses to the survey questions.

Some additional limitations of the research method are that both measures are self-report measures, which mean that it is the responsibility of the participant to respond with truthfulness. There is no accurate way to verify if the participants' responses are actually reflective of behaviors.

### **Discussion**

Based on the findings of this study, it appears there is no relationship between Emotional Intelligence and substance abuse with the exception of one sub-scale. The research was inconsistent with prior research in that there was not a statistically different relationship between the mean overall scores for substance abuse and Emotional Intelligence as a whole. However, a statistically significant difference was found to exist between substance abuse and Emotional Intelligence sub-score, managing one's own emotions. This relationship is consistent with previous research utilizing similar measures (Claros, 2010).

The findings in the review of literature indicate that research has shown a consistent and strong correlation between underage drinking, binge drinking, illicit drug use, and alcohol and drug addictions to low Emotional intelligence (Brackett, Mayer, & Warner, 2004; Claros, 2010; Dulko, 2007; Ghee & Johnson, 2008; Kashdan, Ferssizidis, Collins, & Muraven, 2010; Kun & Demetrovics, 2010; Peterson, Malouff, & Thorsteinson, 2011). Thus, Emotional Intelligence is a possible explanatory factor as it pertains to college students' use and/or abuse of addictive substances. Students who reported low levels of Emotional Intelligence, specifically in areas such as self-management and self-awareness, have been more likely to be susceptible to peer pressure, the misuse of substances, to over consume, and to make unsafe choices about substance usage.

The results of this study indicated that college students who have been involved in university disciplinary matters on average report moderate to high levels of substance abuse. This was an expected outcome due to the fact that these students had demonstrated behavior involving alcohol and drugs that resulted in disciplinary involvement from the university.

Men report higher levels of substance abuse than women all thought this difference is not statistically significant it was also expected. The research regarding this is very consistent and indicates that gender is the second largest and most powerful predictor of an individual's substance use (Perkins et al, 2005). Additionally, men on average make up a larger percentage of students who are reported to have violated alcohol and drug policies at the institution where this study took place. This remained true in the sample and a larger percentage of men participated in the study than women. In all previous studies utilizing the SSEIT measure, men reported lower Emotional Intelligence Scores than women. That was consistent in this study as well.

An unexpected and surprising outcome in this study related to substance abuse and class standing. At the institution where the study was conducted freshmen are involved in the highest number of alcohol and drug related violations annually, as such it was interesting to find that seniors reported statistically significant higher levels of substance abuse than their fellow underclassmen. This is inconsistent with prior research and literature, which indicated substance abuse peaks between the ages of 18-21 and then rapidly decreases (Chan, Neighbors, Gilson, Larimer, & Marlatt, 2007). While this study did not assess age, most traditionally aged seniors are 21 or older.

The largest response group that participated in the study were sophomores. This is inconsistent with the make of the population, specifically the majority of students who engage in alcohol and drug related disciplinary matters are freshmen. This outcome is possibly due in part to the fact that the study was conducted in January and consisted of students who engaged in substance related issues of the course of a one-year time frame. Thus these students may have been a freshman at the time of their violation, but were sophomores at the time of the study.

The average score for Emotional Intelligence for the participants in this study was 124.23. The Emotional Intelligence measure utilized, the SSEIT, has a score range beginning at 33 with a maximum being 165. The higher scores indicated increased more characteristics of Emotional Intelligence (Schutte, Malouff, & Bhullar, 2009). In other studies, that have been conducted on college students using the SSEIT measure average scores range from 117 to 127, as such the average score for this population was very similar to the range reported in previous studies (Schutte, Malouff, & Bhullar, 2009).

## **Chapter Summary**

The research generated from this study will contribute to the limited body of literature

that exists regarding the topic of Emotional Intelligence and substance abuse. This study indicated that college students who have been involved in university disciplinary matters on average report moderate to high levels of substance abuse. Men report higher levels of substance abuse than women all thought this difference is not statistically significant. Additionally, seniors report statistically significantly higher levels of substance abuse than their fellow underclassmen. The research was inconsistent with prior research, in that there was not a statistically different relationship between substance abuse and Emotional Intelligence scores as a whole, but a statistically significant difference did exist between substance abuse and Emotional Intelligence subscore, managing one's own emotions. This provides strong support for institutions to take extenuating steps to both measure and address substance abuse on their campus. There is additional strong support to indicate that risky substance use behavior is severely detrimental to the college experience, both personally and academically (DeBerard, Spielmans, & Julka, 2004; Engs, Diebold, Hansen, 1996; Presley, Meilman, & Cashin, 1996). In an era where colleges and universities are under increased pressure to focus attention on retention and persistence, colleges and universities should expend additional resources and focus on prevention and educational opportunities surrounding substance abuse. Institutions would also benefit from funneling resources into treatment programs, substance education for known offenders, and bystander intervention programs to increase peer accountability.

#### CHAPTER VI

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CHAPTER VII
APPENDICES
APPENDIX A
Simple Screening Instrument for Substance Abuse Self-Administered Form
Directions: The questions that follow are about your use of alcohol and other drugs. Mark the
response that best fits for you. Answer the questions in terms of your experiences in the past 6
months.
During the last 6 months
1. Have you used alcohol or other drugs? (Such as wine, beer, hard liquor, pot, coke, heroin or
other opioids, uppers, downers, hallucinogens, or inhalants)
Yes No
2. Have you felt that you use too much alcohol or other drugs?
Yes No
3. Have you tried to cut down or quit drinking or using alcohol or other drugs?
Yes No
4. Have you gone to anyone for help because of your drinking or drug use? (Such as Alcoholics
Anonymous, Narcotics Anonymous, Cocaine Anonymous, counselors, or a treatment program.)
Yes No
5. Have you had any health problems? For example, have you:
Had blackouts or other periods of memory loss?
Injured your head after drinking or using drugs?

Had convulsions, delirium tremens ("DTs")?
Had hepatitis or other liver problems?
Felt sick, shaky, or depressed when you stopped?
Felt "coke bugs" or a crawling feeling under the skin after you stopped using drugs?
Been injured after drinking or using?
Used needles to shoot drugs?
6. Has drinking or other drug use caused problems between you and your family or friends?
Yes No
7. Has your drinking or other drug use caused problems at school or at work?
Yes No
8. Have you been arrested or had other legal problems? (Such as bouncing bad checks, driving
while intoxicated, theft, or drug possession.)
Yes No
9. Have you lost your temper or gotten into arguments or fights while drinking or using other
drugs?
Yes No
10. Are you needing to drink or use drugs more and more to get the effect you want?
Yes No
11. Do you spend a lot of time thinking about or trying to get alcohol or other drugs?
Yes No

12. When drinking or using drugs, are you more likely to do something you wouldn't normally		
do, such as break rules, break the law, sell things that are important to you, or have unprotected		
sex with someone?		
Yes No		
13. Do you feel bad or guilty about your drinking or drug use?		
Yes No		
The next questions are about your lifetime experiences.		
14. Have you ever had a drinking or other drug problem?		
Yes No		
15. Have any of your family members ever had a drinking or drug problem?		
Yes No		
16. Do you feel that you have a drinking or drug problem now?		
Yes No		

## APPENDIX B

## The Schutte Self Report Emotional Intelligence Test (SSEIT)

Instructions: Indicate the extent to which each item applies to you using the following scale:

- 1 = strongly disagree 2 = disagree 3 = neither disagree nor agree 4 = agree 5 = strongly agree
- 1. I know when to speak about my personal problems to others
- 2. When I am faced with obstacles, I remember times I faced similar obstacles and overcame them
- 3. I expect that I will do well on most things I try
- 4. Other people find it easy to confide in me
- 5. I find it hard to understand the non-verbal messages of other people\*
- 6. Some of the major events of my life have led me to re-evaluate what is important and not important
- 7. When my mood changes, I see new possibilities
- 8. Emotions are one of the things that make my life worth living
- 9. I am aware of my emotions as I experience them
- 10. I expect good things to happen
- 11. I like to share my emotions with others
- 12. When I experience a positive emotion, I know how to make it last
- 13. I arrange events others enjoy
- 14. I seek out activities that make me happy
- 15. I am aware of the non-verbal messages I send to others
- 16. I present myself in a way that makes a good impression on others
- 17. When I am in a positive mood, solving problems is easy for me

- 18. By looking at their facial expressions, I recognize the emotions people are experiencing
- 19. I know why my emotions change
- 20. When I am in a positive mood, I am able to come up with new ideas
- 21. I have control over my emotions
- 22. I easily recognize my emotions as I experience them
- 23. I motivate myself by imagining a good outcome to tasks I take on
- 24. I compliment others when they have done something well
- 25. I am aware of the non-verbal messages other people send
- 26. When another person tells me about an important event in his or her life, I almost feel as though I have experienced this event myself
- 27. When I feel a change in emotions, I tend to come up with new ideas
- 28. When I am faced with a challenge, I give up because I believe I will fail\*
- 29. I know what other people are feeling just by looking at them
- 30. I help other people feel better when they are down
- 31. I use good moods to help myself keep trying in the face of obstacles
- 32. I can tell how people are feeling by listening to the tone of their voice
- 33. It is difficult for me to understand why people feel the way they do

# APPENDIX C

# Demographic Survey

Classification:

Freshman Sophmore Junior Senior Other

Gender:

Male Female Other

APPENDIX D

Consent Form

Title: Emotional Intelligence and Substance Abuse in College Students

Principal Researcher: Ms. Rachel Eikenberry, College of Education and Health Professions,

University of Arkansas

**Faculty Advisor:** Dr. Michael Miller, College of Education and Health Professions, University

of Arkansas

WHAT YOU SHOULD KNOW ABOUT THE RESEARCH STUDY

**Description/Purpose:** The purpose for conducting this study will be to explore the relationship between emotional intelligence and substance abuse in college students who have engaged in

alcohol or drug related violations that were subject to university disciplinary action.

**Risks and Benefits:** The risk to the participant includes the possibility of distress or harm related

to breach of confidentiality or invasion of privacy and may be greater than what is typically

encountered in everyday life. To mitigate this risk, the data for this research is being collected

anonymously. No identifying information regarding participants is being collected and

researchers will not have access to any personal identifying information regarding the

participants after taking the survey. The outcome of the assessments will not be connected in any

way to any individual's identity. The benefits are a contribution to the research on substance

abuse and emotional intelligence in college student populations.

**Participation:** Participation in this study is voluntary. You have the right to decline participation

in the study or withdraw participation at any time without penalty. It is anticipated that there will

be approximately 100 participants, the study will take place during the months of January and

February 2016 and your involvement will include the completion of two online assessments and

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will take approximately 15 minutes.

Confidentiality: The assessment data is being collected anonymously. This means that no participants identifying information will be connected to the outcome of the assessments. The outcome of the assessments is affiliated with the University of Arkansas and are subject to release pursuant to the Freedom of Information Act in Arkansas.

**Compensation:** There is no compensation for participation in this study.

Results and Questions Regarding the Study: You have the right to request feedback about the results of the study or pose questions although, the researchers will not be able to provide you your personal outcomes due to the data being collected anonymously. You may contact the Principal Researcher, Rachel Eikenberry, or the Faculty Advisor, Dr. Michael Miller. You may also contact the University of Arkansas Research Compliance Office at 479-575-2208 or <a href="mailto:irb@uark.edu">irb@uark.edu</a>.

I have read the above statement and understand the purpose of the study, my rights as a participant regarding confidentiality and compensation. I have been able to ask questions, express concerns for clarification and have a clear understanding of my participation in this study including the potential benefits and risks. I understand that participation is voluntary and that no rights have been waived by agreeing to this consent form.

By marking the box below, I am providing my consent via electronic signature.

## APPENDIX E

## IRB Approval



Office of Research Compliance Institutional Review Board

December 16, 2015

MEMORANDUM	
TO:	Rachel Eikenberry Michael Miller
FROM:	Ro Windwalker IRB Coordinator
RE:	New Protocol Approval
IRB Protocol #:	15-12-390
Protocol Title:	Emotional Intelligence and Substance Abuse in College Students
Review Type:	□ EXPEDITED □ FULL IRB
Approved Project Period:	Start Date: 12/16/2015 Expiration Date: 12/15/2016
·	

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

This protocol has been approved for 1,400 participants. If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or irb@uark.edu.

## APPENDIX F

# Student Sample Approval



Office of the Vice Provost for Student Affairs/Dean of Students

November 12, 2015

To Whom It May Concern:

I, Monica Holland, Associate Dean of Students, approve for Rachel Eikenberry, to access the email addresses in a population sample of all students who have incurred a conduct violation during the 2015 calendar year, involving alcohol or drugs. The purpose of Ms. Eikenberry's use of this information is to disseminate an assessment for the use in her dissertation study, pending the approval of University of Arkansas Institutional Review Board.

If you have questions or concerns, please feel free to contact me at your convenience.

Sincerely

Monica Holland, Ph.D.

#### APPENDIX G

## Permission to Use the SSEIT

## **Rachel Eileen Eikenberry**

From: Nicola Schutte <nschutte@une.edu.au>
Sent: Tuesday, November 10, 2015 4:29 PM

To: Rachel Eileen Eikenberry

Subject: RE: SSEIT

Attachments: Assessing Emotions Scale Chapter published manuscript version.pdf

You are welcome to use the scale for your research. Please find attached the manuscript copy of a published chapter that contains the scale and background information.

Kind regards, Nicola Schutte

From: Rachel Eileen Eikenberry [mailto:reikenbe@uark.edu]

Sent: Wednesday, 11 November 2015 6:19 AM

To: Nicola Schutte Subject: SSEIT

#### Dr. Schutte,

I am a doctoral candidate in Higher Education Administration at the University of Arkansas and currently am in the process of writing my dissertation. I am conducting a student on the relationship between Emotional Intelligence and Substance Abuse in college students. I am looking for a low cost or free EI measure to use in my study. I have done a substantial amount of research on EI and there is very few surveys available for low to no cost that are also reliable and valid measures. Another element of your measure is that it is a short form, unlike several other measures that have over 100 questions. I would like to get more information about the use of your measure for my research. I appreciate your consideration.

Rachel

Rachel Eikenberry, M.Ed.

Director

Office of Student Standards and Conduct

Pomfret Hall B 110 Fayetteville AR, 72702 Office: 479-575-5170 Fax: 479-575-7191 E-Mail: reikenbe@uark.edu

Website: ethics.uark.edu

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