The Relationship between Substance Abuse, Intimate Partner Violence and Sexual Assault in College Students

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ABSTRACT

Numerous studies demonstrate linkages between substance abuse, intimate partner violence (IPV), and/or sexual assault (e.g., Nabors, 2009; Rivera, Phillips, Warshaw, Lyon, Bland, & Kaewken, 2015; Santana, Raj, Decker, & Silverman, 2006). For ages, college students have been associated with substance abuse (e.g., Hingson, Zha, and Weitzman, 2009; O’Malley & Johnston, 2002). Substance abuse has been associated with IPV and sexual assault (Nabors, 2009; Rivera, Phillips, Warshaw, Lyon, Bland, & Kaewken, 2015; Santana, Raj, Decker, & Silverman, 2006). Although much research has been conducted on the relationships between substance abuse and intimate partner violence (including sexual violence), little research has been conducted to examine how big of a problem these variables are on small, religiously affiliated college campuses. In light of the current #MeToo climate, there seems to be a ripe context for exploring this topic.

The purpose of this study was to find out if correlations exist between substance abuse, IPV, and sexual assault on a sample of students enrolled in a medium-sized religiously affiliated college campus. If findings are as predicted, a prevention and intervention program can be developed. Participants in the study were students, at a medium-sized Christian university, participating in a Brief Alcohol Screening and Intervention for College Students (BASICS) program. This presentation will briefly review literature, discuss the study methodology, and involve participants in a discussion regarding implications of findings.
The Relationship between Substance Abuse, Intimate Partner Violence and Sexual Assault in College Students

A Thesis
Presented to
The Faculty of the School of Social Work
Abilene Christian University

In Partial Fulfillment
Of the Requirements for the Degree
Master of Science in Social Work

By
Erin K. DeOtte
May 2019
This thesis, directed and approved by the committee for the thesis candidate Erin DeOtte, has been accepted by the Office of Graduate Programs of Abilene Christian University in partial fulfillment of the requirements for the degree Master of Science in Social Work.

Assistant Provost for Graduate Programs

Date

5/03/2019

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This thesis is dedicated to my family and friends who encouraged me, believed in me, and prayed for me every step of the way. I could not have done this without you.
TABLE OF CONTENTS

LIST OF TABLES ....................................................................................................... iii

I. INTRODUCTION .................................................................................................. 1

II. LITERATURE REVIEW ....................................................................................... 3

   Defining the Problem .............................................................................................. 3

       Sexual Assault .................................................................................................. 4

       Intimate Partner Violence ........................................................................... 4

       Substance Abuse .......................................................................................... 5

   Intimate Partner Violence and Substance Abuse .............................................. 5

   Sexual Assault and Substance Abuse ................................................................. 7

       Alcohol Use ................................................................................................ 8

       Drug Use ..................................................................................................... 9

   Intimate Partner Violence and College Students ............................................ 11

   Sexual Assault and College Students ................................................................. 12

   Substance Abuse and College Students ............................................................. 13

   Substance Abuse, Intimate Partner Violence, Sexual Assault, and College

       Students ................................................................................................................. 15

       Sexual Assault .................................................................................................. 15

       Intimate Partner Violence ............................................................................ 17

III. METHODOLOGY ............................................................................................. 20

     Participants ...................................................................................................... 20
LIST OF TABLES

TABLE 1: Descriptive Statistics

TABLE 2: Gender

TABLE 3: Linear Regression Results for Test of Overall Model

TABLE 4: Correlation Matrix for Dependent and Independent Variables
CHAPTER I
INTRODUCTION

Substance abuse and intimate partner violence (IPV) and/or sexual assault seem to have a strong correlation, especially in college students. College students have been stereotypically associated with substance abuse (Reid et al., 2015). Substance abuse is associated with IPV and sexual assault, with as many as 79% of victims reporting abuse in association with a substance (de Bruijin & de Graaf, 2016; Lorenz & Ullman, 2016). College students are specifically affected by this problem, though current research studying this population is minimal.

While a vast amount of research examines these separate entities, little research has been conducted on this issue as a whole (Bird, Gilmore, George, & Lewis, 2016). These three factors seem to have a correlation, especially in the current context of the “#MeToo” climate within social media. With up to 80% of college students reporting IPV (Próspero & Vohra-Gupta, 2008), one in four college students reporting some form of sexual assault during college (Fair & Vanyur, 2011; Mellins et al., 2017; Zinzow et al., 2011) and 8.5% of students reporting substance abuse during undergraduate studies (Reid et al., 2015), the problem is overarching. These numbers are cross-counted, as many students have experienced one or more incidents of IPV, sexual assault or substance abuse during their time in undergraduate studies (Fowler, 2009). These statistics clearly show the impact of these events on college campuses. It is critical to understand the
relationship between the incidents and the population in order to develop future interventions.

The purpose of this study is exploratory with the goal of revealing a correlation between substance abuse, IPV, and sexual assault in college students. The hope for the future is that an intervention could be developed to prevent future incidents. The students participating in the research are selected by Student Life to participate in the Brief Alcohol Screening and Intervention in College Students (BASICS) program due to their misconduct regarding either drugs or alcohol. An extensive gap in research is evident, as the participants in the study are part of a very select group of students going through the BASICS program at Abilene Christian University. This study will examine the relationship between substance abuse, IPV and sexual assault in these college students, providing a sample and base for future research.
CHAPTER II
LITERATURE REVIEW

Substance abuse, college students, IPV, and sexual assault are broad topics when they stand alone. When brought together, there is a significant narrowing of the literature. Each cross section of literature turned up many articles, but the addition of each element allowed for a comprehensive review of the literature. All articles were found using Abilene Christian University’s Brown Library EBSCO databases of OneSearch and Academic Search Complete. Each article was found under the parameters of full text, peer-reviewed and within the years of 2007-2018. The search terms are as follows: “Substance abuse” AND “intimate partner violence” AND “college students,” “Substance abuse defined,” “Intimate partner violence defined,” “Sexual assault defined,” “Substance abuse” AND “sexual assault” AND “college students,” “Substance abuse” AND “domestic violence” AND “college students,” “Substance abuse” AND “college students,” and “Substance abuse” AND “sexual assault”. All articles were found under these search parameters. Each article contained one or multiple subjects pertaining to the main focus of the review. The articles chosen contained clear themes, consistent data, and data relevant to the topic.

Defining the Problem

In order to thoroughly address the problem, the problem must first be defined. Due to the diverse set of definitions for each term, it is important to have one set of
definitions. For the purpose of this research, the following definitions will serve to define the topics.

**Sexual Assault**

Across the literature, there is a vast set of definitions for sexual assault that vary a great deal. Each definition has a different context, such as legal or research purposes. The definition best suited for the purpose of this research study is that of a study conducted in 2005 to assess for levels of sexual assault at universities (Beaver, 2017). This definition is all-encompassing, defining sexual assault as “an umbrella term,” which includes all rape behaviors such as all forms of penetration: anal, vaginal, oral, and digital. Digital penetration includes vaginal or anal penetration with one’s “digits” or fingers (Beaver, 2017). The definition also encompasses attempted rape, including forcible touching or fondling (Beaver, 2017; Kerner, Kerner, & Herring, 2017).

**Intimate Partner Violence**

The definition of intimate partner violence (IPV) is another definition that faces disparity across the literature. IPV has a wider range of definitions, even differing from state to state. For the purpose of this paper, the state of Texas’s definition will be used. According to the Texas Department of Public Safety (DPS) crime report from 2015, IPV/family violence is defined as a deliberate attempt to physically, emotionally, mentally, verbally or sexually harm another member of the same household (Texas DPS, 2015). Texas law defines the member of a household as a family or household member, including dating partners, roommates, former dating partners or spouses and foster children or parents (Barocas, Emery & Mills, 2016; Texas DPS, 2015).
Substance Abuse

Substance abuse disorders have many definitions, but for the purpose of this paper, the definition set by the *Diagnostic and Statistical Manual for Mental Disorders* (5th ed., American Psychiatric Association, 2013) will be used. “Substance-use disorders are patterns of symptoms resulting from the use of a substance that you continue to take despite experiencing problems as a result” (American Psychiatric Association [APA], 2013). The *DSM-5* classifies substances within ten categories, all of which could result in a substance-use disorder (APA, 2013).

Intimate Partner Violence and Substance Abuse

Extensive research has been conducted on the relationship between IPV and substance abuse. The suggested reasons for these correlations range anywhere from predicting perpetration to using substances as a coping mechanism following the abuse. Across the literature, high rates of substance abuse are correlated to high rates of IPV (de Bruijin & de Graaf, 2016; DiBello, Preddy, Overup, & Neighbors, 2017; Dworkin, Mota, Schumacher, Vinci, & Coffey, 2017; Fowler, 2009; Hines & Douglas, 2012; Kaysen et al., 2007; Kelley, Montano, Lam, Hernandez, & Miller, 2017; Shorey et al., 2018). High rates of marijuana use are also associated with high rates of sexual violence, such as forced condomless sex (Shorey et al., 2018).

There are several suggested reasons for these correlations in the literature. One of the most common is that alcohol use is often associated with aggression and depressive symptoms (DiBello et al., 2017). The depressive symptoms associated with alcohol are thought to be one of the leading causes of IPV perpetration when alcohol is used before the violence (de Bruijin & de Graaf, 2016; DiBello et al., 2017; Hines & Douglas, 2012;
Kaysen et al., 2007). Research is evident that there is a large increase in aggression after consuming alcohol, a 44% increase in women and a 90% increase in men (Quinn, Stappenbeck, & Fromme, 2013). The significant difference in increase of violence in both men and women is consistent across the literature, especially with physical violence. Men are exponentially more physically violent than women, at lower levels of provocation (Giancola et al., 2009). The alcohol myopia model, a model that states that inhibitions and awareness of consequences are dampened with alcohol use, posits that those consuming intoxicating levels of alcohol require lower levels of provocation than those not drinking, which results in a higher level of aggression and violence (Parrott & Eckhardt, 2018; Stappenbeck & Fromme, 2014). An important contributing factor to alcohol-related aggression is whether or not the person is aggressive without the influence of alcohol. Research illustrates a much higher level of alcohol-related aggression, especially in men, when the perpetrator is inclined to violence without the influence of alcohol (Kachadourian, Homish, Quigley, & Leonard, 2012). Alcohol is also used by the victim after the abuse occurs for the numbing effect given by consuming large amounts of alcohol (de Bruijn & de Graaf, 2016; DiBello et al., 2017; Hines & Douglas, 2012; Kaysen et al., 2007). While alcohol plays a large role in IPV, it is not the only substance associated with abuse.

A second common substance associated with abuse is drugs. The relationship between drugs and IPV is not as extensively researched as is the relationship between IPV and alcohol. There is significantly less literature on the correlation between the two. The correlation between IPV perpetration and using drugs, specifically marijuana, is much higher than that of alcohol use (Hines & Douglas, 2012). The perpetration of IPV
has a high association with marijuana use, especially in male perpetrators (Shorey et al., 2018). Marijuana use before IPV perpetration is tied with sexual violence at a higher rate than any other type, especially in cases when marijuana is used with alcohol before sex (Shorey et al., 2018).

Not only does marijuana use increase the incidence of IPV, its use is associated with post-traumatic stress disorder (PTSD) and self-medication. The sustained drug use in victims of IPV is often due to the perpetrator being the supplier. This is true of both intravenous drugs and marijuana (Hines & Douglas, 2012; Kaysen et al., 2007; Kelley et al., 2017). Drug use is also more commonly associated with PTSD in victims of IPV than alcohol use, due to the dissociative attributes of certain controlled substances (Kelley et al., 2017). These attributes often cause a higher rate of self-medication, leading to higher rates of addiction and tendency to stay in violent relationships to sustain the addiction (Kelley et al., 2017). Overall, the correlation between substance abuse and IPV is unmistakable.

**Sexual Assault and Substance Abuse**

Sexual assault and substance abuse have a high correlation in literature. Popular assumption correlates one with the other, and research supports that this conjecture. Up to 79% of all sexual assaults in any age group have alcohol involvement, and 58% have drug involvement (Anderson, Flynn, & Pilgrim, 2017; Lorenz & Ullman, 2016; Resnick, Walsh, Schumacher, Kilpatrick, & Acierno, 2013), demonstrating that both alcohol and drug use are associated with sexual assaults. Research suggests that these substances may be used both prior to and after the assault. Some theorize that substance use may either influence perpetration (i.e., play a causative role), whereas others theorize that substance
use may help the victim cope following the attack (Anderson et al., 2017; Blackley & Cook, 2015; Cook, Morisky, Williams, Ford, & Gee, 2016; Lorenz & Ullman, 2016; Resnick et al., 2013).

**Alcohol Use**

Alcohol use is strongly related to sexual assault in both perpetration and coping. The alcohol myopia model helps to explain the effect of alcohol on the cognitive processing of individuals (Lac & Berger, 2013). There are three classes of the model, each of which contributes to the increase of sexual violence and assault: self-inflation, relief, and excess. Self-inflation is exhibited in the perpetrator feeling as though they deserve sexual gratification, and alcohol gives them the courage to act upon such desires (Lac and Berger, 2013). Relief, in the context of sexual violence, is exhibited in that the perpetrator is seeking some sort of relief from something causing them anxiety, and if they view sexual gratification as relief, with the assistance of alcohol, they pursue the relief (Lac & Berger, 2013). The final class is that of excess. Excess is a factor when the perpetrator cannot control their state of excess brought on by alcohol, resulting in an increase to the point of dissoluteness of aggression and anger, leading to sexual assault (Lac & Berger, 2013). Increased use of alcohol often leads to an increase in myopic behaviors, leading to a higher risk of sexual violence perpetration (Giancola, Dulle, & Ritz, 2011; Lac & Berger, 2013). According to the alcohol myopia model, alcohol inhibits the “danger” sense and increases libido, reducing the person’s ability to recognize the need for consent (Cook et al., 2016; Lorenz & Ullman, 2016; Resnick et al., 2013). This concept is often targeted by perpetrators, who usually have a mild connection to the victim. An example includes a classmate or casual dating, knowing that the more
alcohol the victim consumes, the less likely they will be to verbalize a protest to the sexual act (Bedard-Gilligan, Kaysen, Desai, & Lee, 2011; Lorenz & Ullman, 2016). Alcohol-involved sexual assaults also have a high rate of severe injuries and trauma, as alcohol often increases the aggression of the perpetrator (Bedard-Gilligan, Kaysen, Desai, & Lee, 2011). Though men are typically the perpetrator of sexual assault, they can also fall victim to the act. One in sixteen men reports being sexually assaulted by a woman and, in many cases, alcohol is involved (Cook et al., 2016).

The literature indicates a correlation between consistent, continued alcohol use and previous sexual assaults (Cook et al., 2016; Lorenz & Ullman, 2016; Resnick et al., 2013). Previous victimization leads to higher levels of alcohol consumption, especially in college-aged females (Lorenz & Ullman, 2016). Use of alcohol as a coping mechanism often leads to subsequent assaults involving alcohol (Cook et al., 2016; Lorenz & Ullman, 2016; Resnick et al., 2013). Those who have been previously assaulted, especially within the context of substance abuse, are much more susceptible to future victimization (Cook et al., 2016; Lorenz & Ullman, 2016; Resnick et al., 2013). Alcohol use and previous assault are related to an increase in sexual partners as well, leading to as much as a 5% increase in sexually transmitted infections (Cook et al, 2016). Sexual assault in conjunction with alcohol use increases the risk to the victims’ safety as much or more than if there were no alcohol involved (Cook et al., 2016; Lorenz & Ullman, 2016; Resnick et al., 2013).

**Drug Use**

Drug use and sexual assault have a high correlation in the forms of drug-facilitated sexual assault and drug use as a coping strategy (Anderson et al., 2017;
One of the more common forms of drug use being associated with sexual assault is that of drug-facilitated sexual assault (DFSA) in which the perpetrator either forcibly administers a drug or takes advantage of someone who is already under the influence of a drug (Anderson et al., 2017; Blackley & Cook, 2015; Cook et al., 2016; Resnick et al., 2013). The most common drugs used in the forcible administration of a drug are fast-acting sedatives, such as flunitrazepam (rohypnol/“roofies”) or gamma hydroxybutyrate (GHB); liquid forms of methamphetamines; or even embalming fluid (Anderson et al., 2017). These drugs render the victim unconscious and often impede their memory of the event (Anderson et al., 2017). When the assault is perpetrated on someone who was already under the influence, the most popular drugs are marijuana and crack cocaine (Anderson et al., 2017; Blackley & Cook, 2015; Cook et al., 2016; Resnick et al., 2013).

Drug use as a coping strategy for sexual assault is fairly common in victims of multiple sexual assaults, especially in men victimized by women (Cook et al., 2016). These victims often use marijuana more than others, due to the numbing effects of the tetrahydrocannabinol (THC) (Cook et al., 2016; Resnick et al., 2013). Up to 73% of victims use drugs to cope after multiple sexual assaults with some starting to use as early as 12 years of age (Resnick et al., 2013). These victims, male or female, tend to use drugs and alcohol in conjunction with each other to cope with the trauma of sexual assault (Cook et al., 2016; Resnick et al., 2013).

Sexual assault has some similarities to IPV. Most importantly, the vast majority of sexual assaults are committed by a person with whom the victim is already in some form of relationship. Sexual assault, similar to IPV, is highly prevalent in college students,
who often use substances to cope with the trauma of the assault (Anderson et al., 2017; Blackley & Cook, 2015; Cook et al., 2016; Resnick et al., 2013). However, unlike verbal or physical assault, sexual assault can be much more traumatic (Witte, Kopkin, & Hollis, 2015).

**Intimate Partner Violence and College Students**

IPV is something that extends to each generation, including college students. The literature analyzed estimated that up to 80% of college students have reported some form of IPV, physical, emotional, verbal, or sexual (Próspero & Vohra-Gupta, 2008; Sutherland, Fantasia, & Hutchinson, 2016; Sylaska & Walters, 2014; Testa, Hoffman, & Leonard, 2011). In cases of IPV, the male is usually the perpetrator and the female is the victim, regardless of race. This is true in college students as well (Cho & Huang, 2017; Testa et al., 2011). Across the literature, there is no one demographic that rises above another, as each ethnic group has a high rate of IPV (Cho & Huang, 2017; Makhubele, Malesa, & Shika, 2018; Próspero & Vohra-Gupta, 2008; Sutherland et al., 2015; Sylaska & Walters, 2014; Testa et al., 2011). On average, women who have been a victim of IPV experience it for the first time when they are between the ages of 18-24 (Sutherland et al., 2016). Gender also plays a large factor in IPV with one in four women experiencing IPV and one in five men experiencing IPV; although women are largely more vulnerable to IPV, men can experience it as well (Cho & Huang, 2017; Makhubele, et al., 2018; Próspero & Vohra-Gupta, 2008; Sutherland et al., 2016; Sylaska & Walters, 2014; Testa et al., 2011).

Many factors play into the perception of IPV in college students, but the two most influential are those of gender and age. Females are more likely to be able to identify
cases of IPV, though college-aged females are not as perceptive to the problem as older women (Makhubele, et al., 2018; Rudneva, 2017). Students at faith-based universities, according to Rudneva (2017), had a lower adequate perception of IPV than other students. These students reported a higher perception of safety in relationships due to their faith, which caused them to recognize IPV at a much lower rate (Rudneva, 2017). In contrast, students who have experienced IPV have a higher rate of perception and intervention than students who have not experienced IPV (Sylaska & Walters, 2014). IPV is often perceived as the fault of the victim, especially in college-aged students (Cho & Huang, 2017; Sylaska & Walters, 2014).

Sexual Assault and College Students

Sexual assault is something that is fairly common in college students with one in four students reporting having been sexually assaulted while in college (Fair & Vanyur, 2011; Mellins et al., 2017; Zinow et al., 2011). Almost one-third of college students report being sexually touched. Sexual touching is the most common form of sexual assault reported (Mellins et al., 2017). The second most reported form reported is that of physical force with the intent of penetration, especially in women (Mellins et al., 2017). Verbal coercion is a common factor in reported sexual assaults, with numerous students reporting that the perpetrator threatened them verbally to get the victim to have sex with them (Fair & Vanyur, 2011; Mellins et al., 2017; Zinow et al., 2011).

The majority of perpetrators of sexual assault are male, especially when verbal coercion and physical force are factors (Fair & Vanyur, 2011; Mellins et al., 2017; Zinow et al., 2011). Another determinant risk factor to sexual assault is sexual orientation, as those who identify as LGBTQ+ are at a higher rate of sexual assault than
those students who identify as heterosexual (Mellins et al., 2017). The final significant risk factor identified in cases of sexual assault is whether or not the victim has been previously assaulted. If the victim has been previously assaulted, they are at a higher rate of assault than others who have not (Fair & Vanyur, 2011; Mellins et al., 2017; Zinzow et al., 2011).

There are several consequences to sexual assault. One of the most common is the appearance of post-traumatic stress disorder (PTSD) in victims (Zinzow et al., 2011). The victims report a high rate of PTSD, especially if they have been assaulted more than once (Zinzow et al., 2011). Another consequence of sexual assault is the higher rate of sexually transmitted infections (STIs) (Fair & Vanyur, 2011; Zinzow et al., 2011). The transmission of STIs is common in sexual assaults, especially among college students who are often sexually active at higher rates than the general population (Fair & Vanyur, 2011; Zinzow et al., 2011). The high prevalence of STIs in victims also leads to a dysregulation in the hypothalamic-pituitary-adrenal (HPA) axis, which leads often to the victim having lower rates of immuno-response and, in turn, being more susceptible to STIs (Zinzow et al., 2011). The high prevalence of STIs in a victim can cause dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis and a subsequent decrease in their immune response (Zinzow et al., 2011).

**Substance Abuse and College Students**

Research indicates that substance abuse is one risky behavior that is strongly correlated with being a college student (Avant, Davis, & Cranston, 2011; Lindburg & Zeid, 2017; Ranjbaran, Mohammadshahi, Mani & Karimy, 2018; Reid et al., 2015). While much of substance use in college is experimental, substance abuse still occurs at a
fairly high rate. Research suggests that as many as 8.5% of undergraduate students report substance abuse and up to 44% of college students report heavy episodic drinking behaviors (Madson, Moorer, Zeigler-Hill, Bonnell, & Villarosa, 2013; Reid et al., 2015).

There are several factors associated with substance abuse in college students. The top two factors are PTSD from previous trauma and peer influence (Avant et al., 2011; Lindburg & Zeid, 2016; Ranjbaran et al., 2018; Reid et al., 2015). Literature suggests that women have higher rates of PTSD-related substance abuse, especially with marijuana use (Avant et al., 2011). Approximately one-third of college students who have been diagnosed with PTSD use marijuana, with 18% of them being female (Avant et al., 2011). Lindburg and Zeid (2016) found that students who experienced childhood trauma had a much higher rate of substance abuse, both alcohol and drug use, than the average college student.

The second highest cause of substance abuse reported in the literature is that of peer addictions and pressures. The rates of substance abuse are much higher in students whose peers use than those students whose friends do not use (Lindburg & Zeid, 2016; Ranjbaran et al., 2018; Reid et al., 2015). Substance use among peer groups has led to higher rates of addiction among college students (Lindburg & Zeid, 2016). This has subsequently led to an increase in risky behaviors, such as adrenaline-inducing activities or risky sexual behaviors, often leading to IPV or sexual assaults (Reid et al., 2015). The increased use and abuse of substances in college aged individuals is also heavily influenced by the greater social norms, such as mainstream television and social media (Merrill, Rosen, Walker, & Carey, 2018). The desire to conform to social normalcy drives many students to increase their substance abuse intake in order to mirror the
images projected in society which, in turn, lowering their perception of the gravity of consequences associated with substance use and abuse (Merrill, Rosen, Walker, & Carey, 2018).

Substance Abuse, Intimate Partner Violence, Sexual Assault, and College Students

Substance abuse in relation to IPV and sexual assault in college students is something that researchers have been studying for many years. There is an unmistakable relationship between the four factors, as all are interconnected. One out of every four college females have been sexually assaulted, and 70% of those assaults have involved a substance (Bird, Gilmore, George, & Lewis, 2016). Approximately one-third, but up to as many as 80%, of all college students have been a victim of IPV (Fossos, Neighbors, Kaysen, & Hove, 2007). Additionally, victims and perpetrators are five times more likely to use a substance than those who have not engaged in IPV (Fossos et al., 2007). Per the definition of IPV, some of these statistics are cross-counted, as IPV often includes forms of sexual assault; however, the numbers are much higher for college students than the average population (Fowler, 2009).

Sexual Assault

Sexual assault and substance abuse in college students are related in two primary ways: substance use-induced perpetration and substance use as a coping mechanism following sexual assault. Nearly half of victims of sexual assault report that they, the perpetrator, or both they and the perpetrator were consuming some form of a substance at the time of the assault (Boyle, 2017). Substance use-induced perpetration of sexual assault, specifically in college students, is often explained by researchers using the alcohol myopia model. The alcohol myopia model states that the substance decreases
inhibitions and logic, which allows for the perpetrator to prey on the victim much easier than without a substance (Bird et al., 2016; Garneau-Fournier, McBain, Torres, & Turchik, 2017; Gilmore & Bountress, 2016; Orchowski, Mastroleo, & Borsari, 2012; Parks, Frone, Muraven, & Boyd, 2017; Tuliao & McChargue, 2014). The use of a substance, alcohol or drugs, is a predictor of sexual assault (Bird et al., 2016; Gilmore & Bountress, 2016; Orchowski et al., 2012; Parks et al., 2017; Tuliao & McChargue, 2014). Alcohol use specifically is highly associated with higher rates of sexual risk-taking behavior, namely sexual assault (Lemley, Fleming, & Jarmolowicz, 2017). Typically, in college students, the more substance consumed, the more sexual risks taken (Lemley, Fleming, & Jarmolowicz, 2017). While substance use is common in both victim and perpetrator, it is more predictive of assault when the perpetrator is using a substance or drinking (Garneau-Fournier et al., 2017; Gilmore & Bountress, 2016; Tuliao & McChargue, 2014). The use of alcohol in sexual assaults is credited to alcohol being “liquid courage,” as perpetrators report they felt more comfortable forcing the victim into a sexual act after having some form of alcohol, especially after mixing alcohol with a stimulant drug (Orchowski et al., 2012; Parks et al., 2017; Tuliao & McChargue, 2014). These factors have created an increase in perpetrators, which leads to an increase in victims. The “liquid courage” factor of alcohol use can lead to an increased level of intoxication, which often leads to an increased risk for victimization and revictimization (Bedard-Gilligan, Kaysen, Desai, & Lee, 2011). This subsequently leads to an increase in substance use to cope with the trauma of sexual assaults feeding this destructive cycle.

“Self-medication” is a popular theory used among researchers to explain the increase in substance abuse after traumatic experiences, specifically sexual assault
Significant amounts of research show that within a week of a sexual assault, the victim exhibits the majority of diagnostic criteria for PTSD, leading to higher rates of self-medication (Boyle, 2017). The numbing effects of alcohol and drugs like marijuana are seen used at higher rates among victims of sexual assault (Burnett et al., 2016; Neilson et al., 2018). Victims who did not use before the perpetration tend to use frequently after, and victims who did use before tend to use at a much higher rate than before the perpetration (Burnett et al., 2016; Neilson et al., 2018).

The severity of the sexual assault is also a predictor of the amount of alcohol or drugs used by the victim. Victims of harassment or touching often use at a lower rate than those who are victims of full penetration (Burnett et al., 2016; Neilson et al., 2018). Victims of full sexual penetration are the highest risk for developing a substance use disorder (Burnett et al., 2016; Nielson et al., 2018). In contrast, victims of harassment or touching use at a “binge” level rather than an “addiction” level (Burnett et al., 2016; Nielson et al., 2018).

**Intimate Partner Violence**

Throughout literature, there are two main perspectives of IPV: the victim and the perpetrator. Substance abuse plays a key factor in both. Victims often use substance abuse as a means of coping with the continued abuse, especially in situations where the victim is still with the perpetrator (Fish, Livingston, VanZile-Tamsen, & Patterson Silver Wolf, 2017; Fowler, 2009; Shorey, Haynes, Strauss, Temple, & Stuart, 2017; Shorey, McNulty, Moore & Stuart, 2015; Witte, Kopkin, & Hollis, 2015). Substance abuse often increases after each incident of perpetration, especially in cases of sexual violence (Fish
et al., 2017; Fossos, Neighbors, Kaysen & Hove, 2007; Fowler, 2009; Linden-Carmichael, Lau-Barraco, & Kelley, 2016; Moore, Elkins, McNulty, Kivisto, & Handsel; 2011; Shorey et al., 2015). However, the largest increase of substance use happens six to twelve months after the initial perpetration, when the mental health changes (such as PTSD or depression) have fully developed (Fowler, 2009; Shorey et al., 2015).

In contrast to the victim perspective, IPV is a predictor for increased substance abuse in perpetrators (Feingold, Washburn, Tiberio, & Capaldi, 2015; Fossos, et al., 2007; Hove, Parkhill, Neighbors, McConchie, & Fossos, 2010; Moore et al., 2011; Sabina, Schally, & Marciniec, 2017; Shorey, Brasfield, Zapor, Febres, & Stuart, 2015; Witte, Kopkin, & Hollis, 2015). The alcohol myopia model is one of the explanations for this phenomenon. The alcohol myopia model is often used for IPV as well as sexual assault, helping to explain the lack of cognitive processing when alcohol is a factor in behaviors (Lac & Berger, 2013). The three classes of the model apply to IPV as well: self-inflation, relief, and excess. Self-inflation lends to the pattern of IPV perpetrators feeling as though they are superior to the victim, leading them to act against the victim to exhibit their superiority (Lac and Berger, 2013). Relief is exhibited when the perpetrator assigns blame for an anxiety or stress factor to the victim, as the “lashing out” provides them the relief from the stress-inducing factor (Lac & Berger, 2013). The factor of excess is exemplified when the perpetrator cannot control aggression and anger, allowing it to increase to the point of excess, increasing violence and the potential of injury of the victim (Lac & Berger, 2013). Increased use of alcohol often leads to an increase in myopic behaviors, leading to a higher risk of IPV perpetration, injury, and homicide (Giancola, Dulle, & Ritz, 2011; Lac & Berger, 2013). When a substance is used,
inhibitions are often altered, causing those using the substances to engage in risky or violent behaviors such as IPV (Feingold et al., 2015). Another popular explanation is that alcohol and some drugs increase aggression, causing more frequent and more violent outbursts of IPV the more the person engages in substance use (Fossos et al., 2007; Hove et al., 2010; Moore et al., 2011; Sabina et al., 2017; Shorey et al., 2015). College students who report higher rates of alcohol consumption report higher rates of IPV as well. High rates of sexual IPV are reported in relation to higher rates of drinking (Fossos et al., 2007; Hove et al., 2010; Moore et al., 2011; Sabina et al., 2017; Shorey et al., 2015).

IPV and sexual assault are related to substance abuse and have high rates of appearance in college students. The current study aims to examine the relationship among these three factors on a college campus. The goal of the study is to formulate a basis for future research and interventions. It is through this research that the following hypothesis is established: high scores on an alcohol use scale will associate with high scores on an intimate partner violence scale.
CHAPTER III

METHODOLOGY

Substance abuse, IPV, and sexual assault are all connected, especially in college students. This study aims to examine the relationship between these three things in college students. It is important to look into the relationship between substance abuse, IPV and sexual assault to find a better way to help victims. The goal of the study is to find the parts of IPV and sexual assault that are the most related to substance consumption to lay the framework for future interventions. The following hypothesis will be tested: a higher score on the Alcohol Use Disorders Identification Test (AUDIT) will be associated with a higher score on the Revised Conflict Tactics Scale (CTS2). After obtaining approval of the study from the Institutional Review Board at Abilene Christian University (see Appendix A), data were collected.

Participants

All participants will be recruited from students referred by Student Life to participate in the Brief Alcohol Screening and Intervention for College Students (BASICS) program. Participation will be completely voluntary, and participants will have the opportunity to refuse participation following being informed of the study (see Appendix C: Informed Consent Document). Approximately 25 participants are expected to participate in the program with the majority being male. As all are college students, the expected ages will range from approximately 18 to 25 years.
Participants will be asked to attend two visits with the study staff over the course of two weeks. Each visit is expected to take one hour. During the course of these visits, participants will be asked to participate in the following procedures. They are to complete two assessment forms before the first session, one of which will be completed on a password protected iPad and the other will be completed on paper. The assessment forms include the AUDIT and the CTS2.

Data Collection

The Revised Conflict Tactic Scale a measurement of physical, sexual and psychological attacks in relationships, as well as how the participants handle conflict in relationships. There are 78 items on the CTS2, measuring how often the item has occurred. The items can be ranked on a scale of one to seven, with one meaning it has happened once in the past year, six meaning it has happened more than twenty times in the past year, seven meaning it has not happened in the past year but has happened before, and zero meaning the item has never occurred in the course of the relationship. The scale is expected to take each person around fifteen to twenty minutes to complete, and the research will be conducted from January to March of 2019. The questions on the scale ask for both sides of an argument, the victim and the perpetrator, such as “I had a sprain, bruise or small cut because of a fight with my partner” and “I pushed or shoved my partner.” This scale has been tested and recognized as both reliable and valid by several higher education and research institutions (Straus, Hamby, Boney-McCoy, & Sugarman, 1996).
Alcohol Use Disorders Identification Test

The Alcohol Use Disorders Identification Test (AUDIT) is a tool developed by the World Health Organization (WHO) to assess for alcohol use disorders, drinking behaviors, and other alcohol-related problems. The AUDIT is a ten-question assessment. Participants rate the questions, such as “how often do you have a drink containing alcohol” and “how often in the past year have you had a feeling of guilt or remorse after drinking” on a scale of zero to four. Zero is rated as “never” and four is rated as “four or more times in the past week”. The assessment is expected to take the participant around ten minutes or less to complete, and the research is being conducted from January until March of 2019. This assessment is accepted as reliable and valid and is used widely by many substance abuse counseling organizations, the WHO, and higher education institutions.

Data Storage and Analysis

Data from the CTS2 will be recorded anonymously on paper and kept in a locked filing cabinet in the Medical Care and Counseling Center at Abilene Christian University. The data will then be assigned de-identifiers and transferred onto a password protected computer for statistical analysis. The AUDIT results will be stored on a password protected iPad in the Medical Care and Counseling Center at Abilene Christian University. After collection, the data will be de-identified and transferred to a password-protected computer for statistical analysis. The data will be kept for up to three years after completion of the research, and all data will be stored in a locked cabinet on a password-protected iPad in the Medical Care and Counseling Center at Abilene Christian University.
CHAPTER IV

FINDINGS

Table 1 shows descriptive statistics for the variables used in this study. As the table shows, the ages of participants ranged from 18 to 20 with a mean of 19. Not all participants engaged in all of the Conflict Tactics. Therefore, those means should be interpreted with caution. For example, the mean of 37 for Psychological Aggression (Self) is not a midpoint for all cases but only for those in which the respondent indicated using this conflict tactic. A mean AUDIT score of three suggests the majority of participants were not experiencing an alcohol use disorder. Table 2 shows that the majority of participants were male (i.e., 64%).
Table 1

Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>14</td>
<td>18</td>
<td>20</td>
<td>19.14</td>
<td>.770</td>
</tr>
<tr>
<td>AUDIT Score</td>
<td>14</td>
<td>0</td>
<td>8</td>
<td>3.00</td>
<td>2.75</td>
</tr>
<tr>
<td>Self Negotiation</td>
<td>13</td>
<td>0</td>
<td>150</td>
<td>41.38</td>
<td>56.76</td>
</tr>
<tr>
<td>Self Psychological Aggression</td>
<td>12</td>
<td>0</td>
<td>37</td>
<td>4.33</td>
<td>10.75</td>
</tr>
<tr>
<td>Self Physical Assault</td>
<td>12</td>
<td>0</td>
<td>17</td>
<td>1.92</td>
<td>4.91</td>
</tr>
<tr>
<td>Self Injury</td>
<td>12</td>
<td>0</td>
<td>2</td>
<td>.17</td>
<td>.58</td>
</tr>
<tr>
<td>Self Sexual Coercion</td>
<td>12</td>
<td>0</td>
<td>25</td>
<td>2.33</td>
<td>7.17</td>
</tr>
<tr>
<td>Partner Negotiation</td>
<td>12</td>
<td>0</td>
<td>150</td>
<td>37.08</td>
<td>50.64</td>
</tr>
<tr>
<td>Partner Psychological Aggression</td>
<td>12</td>
<td>0</td>
<td>31</td>
<td>5.00</td>
<td>9.24</td>
</tr>
<tr>
<td>Partner Physical Aggression</td>
<td>12</td>
<td>0</td>
<td>29</td>
<td>2.75</td>
<td>8.30</td>
</tr>
<tr>
<td>Partner Injury</td>
<td>12</td>
<td>0</td>
<td>25</td>
<td>2.08</td>
<td>7.22</td>
</tr>
<tr>
<td>Partner Sexual Coercion</td>
<td>12</td>
<td>0</td>
<td>20</td>
<td>2.00</td>
<td>5.72</td>
</tr>
</tbody>
</table>

Table 2

Gender

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>5</td>
<td>35.7</td>
</tr>
<tr>
<td>Male</td>
<td>9</td>
<td>64.3</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A total of 14 participants and partners participated in the research. The majority of participants were male (i.e., 64%). Table 3 presents regression results for all Conflict
Tactics Scales subscale scores regressed independently on AUDIT scores. As the table indicates, there were no statistically significant results. In other words, with this particular sample, CTS2 subscale scores failed to account for a significant amount of variation in AUDIT scores.

Table 3

Linear Regression Results for Test of Overall Model

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>R2</th>
<th>SE</th>
<th>SS</th>
<th>SS Res.</th>
<th>F</th>
<th>p</th>
<th>β</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Negotiation</td>
<td>0.01</td>
<td>59.00</td>
<td>372.26</td>
<td>3829.82</td>
<td>0.11</td>
<td>0.75</td>
<td>0.10</td>
<td>0.75</td>
</tr>
<tr>
<td>Self Psychological Aggression</td>
<td>0.105</td>
<td>10.67</td>
<td>133.13</td>
<td>1137.54</td>
<td>1.17</td>
<td>0.30</td>
<td>-0.32</td>
<td>0.30</td>
</tr>
<tr>
<td>Self Physical Assault</td>
<td>0.032</td>
<td>5.064</td>
<td>8.47</td>
<td>256.45</td>
<td>0.33</td>
<td>0.58</td>
<td>0.18</td>
<td>0.58</td>
</tr>
<tr>
<td>Self Injury</td>
<td>0.039</td>
<td>0.59</td>
<td>0.14</td>
<td>3.52</td>
<td>0.41</td>
<td>0.54</td>
<td>0.20</td>
<td>0.54</td>
</tr>
<tr>
<td>Self Sexual Coercion</td>
<td>0.052</td>
<td>7.32</td>
<td>29.24</td>
<td>535.43</td>
<td>0.54</td>
<td>0.48</td>
<td>0.23</td>
<td>0.48</td>
</tr>
<tr>
<td>Partner Negotiation</td>
<td>0.095</td>
<td>50.51</td>
<td>2688.65</td>
<td>25516.27</td>
<td>1.05</td>
<td>0.33</td>
<td>0.31</td>
<td>0.33</td>
</tr>
<tr>
<td>Partner Psychological Aggression</td>
<td>0.051</td>
<td>9.44</td>
<td>47.93</td>
<td>892.08</td>
<td>0.54</td>
<td>0.48</td>
<td>-0.23</td>
<td>0.48</td>
</tr>
<tr>
<td>Partner Physical Assault</td>
<td>0.052</td>
<td>8.48</td>
<td>39.08</td>
<td>719.17</td>
<td>0.54</td>
<td>0.48</td>
<td>0.23</td>
<td>0.48</td>
</tr>
<tr>
<td>Partner Injury</td>
<td>0.117</td>
<td>7.11</td>
<td>66.91</td>
<td>506.01</td>
<td>1.32</td>
<td>0.28</td>
<td>-0.34</td>
<td>0.28</td>
</tr>
<tr>
<td>Partner Sexual Coercion</td>
<td>0.074</td>
<td>5.77</td>
<td>26.69</td>
<td>333.31</td>
<td>0.80</td>
<td>0.39</td>
<td>-0.27</td>
<td>0.39</td>
</tr>
</tbody>
</table>

Table 4 indicates that there were no significant correlations between any of the Conflict Tactics Scales items and AUDIT scores. For the most part, self-reports were significantly correlated with partner reports. The one exception was self-reported injury and partner reported injury ($r = -.091$). Several of the results indicated a support of the hypothesis: AUDIT score and self-negotiation have a weak positive correlation (.216), AUDIT score and self-physical assault have a weak positive correlation (.141), AUDIT score and self-sexual coercion have a weak positive correlation (.189), and AUDIT score and partner-negotiation have a weak positive correlation (.309). The remainder of the
statistical results failed to reject the null hypothesis: AUDIT score and self-psychological aggression have a weak negative correlation (-0.019) and AUDIT score and partner-psychological aggression have no correlation (.09).

Table 4

*Correlation Matrix for Dependent and Independent Variables*

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>N</th>
<th>PA</th>
<th>PAt</th>
<th>I</th>
<th>SC</th>
<th>PN</th>
<th>PPA</th>
<th>PPhA</th>
<th>PI</th>
<th>PSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUDIT Score (A)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negotiation (N)</td>
<td>0.216</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological Aggression (PA)</td>
<td>-0.019</td>
<td>0.467</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Assault (PA)</td>
<td>0.141</td>
<td>0.236</td>
<td>0.33</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injury (I)</td>
<td>0.195</td>
<td>0.117</td>
<td>-0.227</td>
<td>.606</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Coercion (SC)</td>
<td>0.189</td>
<td>0.189</td>
<td>0.275</td>
<td>.933 **</td>
<td>.606</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner Negotiation (PN)</td>
<td>0.293</td>
<td>.794 **</td>
<td>0.363</td>
<td>0.293</td>
<td>0.282</td>
<td>0.244</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner Psychological Aggression (PPA)</td>
<td>0.09</td>
<td>.524 *</td>
<td>.760 **</td>
<td>.665 *</td>
<td>0.38</td>
<td>.614 *</td>
<td>.505 *</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner Physical Assault (PPhA)</td>
<td>0.336</td>
<td>0.072</td>
<td>0.112</td>
<td>.576 *</td>
<td>.616 *</td>
<td>.644 *</td>
<td>0.223</td>
<td>0.442</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner Injury (PI)</td>
<td>-0.35</td>
<td>0.35</td>
<td>0.5</td>
<td>0.495</td>
<td>-0.091</td>
<td>0.385</td>
<td>0.121</td>
<td>0.464</td>
<td>-0.168</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Partner Sexual Coercion (PSC)</td>
<td>0.12</td>
<td>0.264</td>
<td>0.42</td>
<td>.915 **</td>
<td>0.448</td>
<td>.848 **</td>
<td>0.223</td>
<td>.702 **</td>
<td>0.483</td>
<td>.616 *</td>
<td>1</td>
</tr>
</tbody>
</table>

*P < .05; **p < .001
CHAPTER V
DISCUSSION

This study sought to examine the relationship between alcohol consumption levels and IPV and sexual assault in college students. These relationships were tested using the AUDIT scale to evaluate for level of alcohol consumption in the sample of students ($N=14$), as well as the CTS2 scale, which tested for several conflict areas in relationships in the sample ($N=12$).

**Discussion of Major Findings**

In order to analyze the data, an exploratory, descriptive analysis was run to identify the relationship of the participants to the factors within the scales administered. For instance, the descriptive statistics indicated the presence of more male participants than female, and that the majority of the participants did not score high enough on the AUDIT to indicate a clinical substance abuse issue. Following the descriptive analysis, a linear regression test was run to analyze the relationship between the AUDIT scores and the CTS2 subscores. A correlation test was also run to determine AUDIT and CTS2 subscore correlative properties.

Despite the literature that supports the hypothesis (Fossos et al., 2007; Hove et al., 2010; Lemley, Fleming, & Jarmolowicz, 2017; Moore et al., 2011; Sabina et al., 2017; Shorey et al., 2015), the scope of implications in this research is limited due to the small sample size represented within the data. Significance is also limited due to the participants limited experiences of the factors measured on the CTS2 scale. If the study
was able to attain a larger, more diverse group of participants, stronger relationships and correlations between AUDIT and CTS2 scores may have been observed.

The findings of this study provide a baseline for future research in the area of substance abuse in relationship to IPV and sexual assault in college students. Though there were no significant relationships between factors observed, a larger sample would benefit universities in research and potential development of prevention programming and treatment. Recommendations for further research include expanding the population tested. The sample used was exclusive to the BASICS program at Abilene Christian University, where future research could encompass the broader student population. This has the potential to diversify and expand the results.

**AUDIT Scores**

Descriptive statistics representing AUDIT scores of the sample are illustrated in Table 2. Higher AUDIT scores (an 8 or above) is indicative of an alcohol abuse problem in the student. The descriptive statistics indicate that very few scored this high on the scale, though 8 was the maximum score. The mean score of a 3 is demonstrative of the students having minimal interactions with alcohol, even inferring that it is the first or second interaction with the substance. The range of ages (18-20) in relation to the AUDIT scores support the literature the age group tested is more likely to engage in risky behaviors, such as drinking alcohol under the legal age (Avant, Davis, & Cranston, 2011; Lindburg & Zeid, 2017; Ranjbaran, Mohammadshahi, Mani & Karimy, 2018; Reid et al., 2015). The low AUDIT scores could lend to the fact that students these ages cannot purchase alcohol; however, the concerning factor is that there is already an AUDIT score at this age. In contrast, the minimum score on the AUDIT was a 0, indicating no
perceived frequency in interactions with alcohol. These scores are comparable with the national average of AUDIT scores, $M=5$ (DeMartini & Carey, 2012). Though the scores from the BASICS participants are lower, this could be due to the smaller sample size, and should the sample be larger, Abilene Christian University scores may level with the national average for college students.

**CTS2 Scores**

Descriptive statistics representing the subscales of the CTS2 scores are illustrated in Table 2. The higher the score on the subscale indicates that the practice measured by the subscale was frequented by the participant. The subscale of the highest scores (150) was that of negotiation both in self and partner scores, indicating that this practice was the most frequently used among the participants. The subscale of the lowest score was self-reported injury (2), indicating that the participants were rarely injured by their partner. The mean scores of all of the subscales were fairly low for the maximum score to be 150, with the highest at 41.38. These means indicated that, though each subscale was experienced by a participant at some point, there was not much interaction between the participants and the practices measured by the CTS2. The minimum score on each subscale was 0, indicating that a few participants have not experienced the practices evaluated at all. However, it is concerning that this age group is starting to use physically and sexually violent coercion tactics. Both partner and self-scoring indicates that several of the participants encountered these violent coercion tactics at some point during a relationship.
AUDIT and CTS2 Scores

Regression analysis indicates there is no significant relationship between AUDIT scores and CTS2 scores. There is also no significant correlation between AUDIT and CTS2 scores. This does not reflect the literature that states that there is a causative relationship between substance abuse and IPV and/or substance abuse (Fossos et al., 2007; Hove et al., 2010; Lemley, Fleming, & Jarmolowicz, 2017; Moore et al., 2011; Sabina et al., 2017; Shorey et al., 2015). This could be due to the small sample size represented in the data.

Implications for Research

Based on the above findings and discussions, it is recommended that further research is conducted on this topic. One of the largest needs for continued research is expanding the data being collected. A university-wide survey should provide sufficient results to get a sample large enough to yield significant results. The results would be collected from a more diverse set of participants, rather than the very limited population of BASICS participants, potentially leading to statistically significant results.

Another recommendation for future research is to address social norms for the population being surveyed (Lemley, Fleming, & Jarmolowicz, 2017; Merrill, Rosen, Walker, & Carey, 2018). It is important to establish the beliefs of the participants about the accepted social norms in order to establish a baseline of behavior for the participants. The participants’ beliefs about IPV and substance abuse stem from their beliefs about the social acceptability of each factor, and it informs their responses to the surveys (Lemley, Fleming, & Jarmolowicz, 2017; Merrill, Rosen, Walker, & Carey, 2018). The university culture could be achieved by leading focus-group style meetings to collaborate with
students, creating a baseline for societal norms (Lemley, Fleming, & Jarmolowicz, 2017). This is especially important at a school with an environment such as ACU’s due to the unique nature of ACU’s culture, being a medium-sized faith-based university. This unique culture will influence the answers of the survey, so it is important to establish a cohesive understanding of the culture before administering the campus-wide survey.

The final suggestion for future research would be to investigate the reason for substance use in relation to the IPV and/or sexual assault. Across the literature, another scale, the Alcohol Effects Questionnaire, was used to determine this (Bedard-Gilligan, Kaysen, Desai & Lee, 2011; Kachadourian, Homish, Quigley, & Leonard, 2012; Stappenbeck & Fromme, 2014). This questionnaire examines the effects of alcohol and the reasoning behind the drinking activities (Bedard-Gilligan, Kaysen, Desai & Lee, 2011; Kachadourian, Homish, Quigley, & Leonard, 2012; Stappenbeck & Fromme, 2014). This additional survey could help to inform the other two surveys to provide more foundation for the behaviors and results of the student responses to the surveys.

**Implications for Policy and Practice**

This research formulates implications for practice in that it informs the practicing areas about the interactions students have with the present issues. Though there is no statistical significance, there is a cause for concern with students aged 18-20 scoring on each survey. It would be advisable for ACU to create prevention and intervention programs to address these problems, as they are present in the community. While there are several different ways this can be addressed, it is recommended that separate prevention and intervention programs be implemented.
Abilene Christian University requires incoming freshman to complete an online module about sexual assault in college students. Residence life also addresses the use of alcohol and/or drugs in a seminar-style lecture during Wildcat Week, an camp-style orientation for freshman. It is recommended, based on the results of the research, that a prevention-style unit be added to the Cornerstone class required of all freshmen. This prevention-style unit could include information about the effects of alcohol and drugs both stand alone and in relationship with sexual assault and IPV. The unit could also address the dynamics and signs of sexual assault and IPV.

Intervention measures at Abilene Christian University end after investigations have been completed at Title IX. According to the literature, coping mechanisms for the trauma experienced appear six to nine months after the initial trauma (Fowler, 2009; Shorey et al., 2015). This is typically after the completion of the Title IX services. It is recommended for Abilene Christian University to provide services beyond Title IX, such as a support group for victims. A support group could create the community that many victims seek and help to develop healthy coping mechanisms that do not involve a substance. This support group could be facilitated by a counselor in the Abilene Christian University Medical Care and Counseling Center so that it is therapy based.

**Conclusion**

A relationship between substance abuse and IPV and sexual assault was conceptualized through the review of literature and research using the AUDIT and CTS2 scales conducted. Further research is needed to adequately assess the relationship between substance abuse and IPV and sexual assault, especially in the context of Abilene Christian University. The greatest limitation for this study is the small sample of
participants in the study. Implications for future research include expanding the sample size, learning university culture, and adding an additional informational survey. These implications, should they be implemented, would fuel further research and provide a baseline for creating prevention and treatment plans for Abilene Christian University
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disorders in a national sample of college women. *Journal of American College
APPENDIX A

IRB Approval Letter

Dear [Name],

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled [Project Title] was approved by expedited review (Category 7) on 12/12/2018 (IRB # 18-118). Upon completion of this study, please submit the Inactivation Request Form within 30 days of study completion.

If you wish to make any changes to this study, including but not limited to changes in study personnel, number of participants recruited, changes to the consent form or process, and/or changes in overall methodology, please complete the Study Amendment Request Form.

If any problems develop with the study, including any unanticipated events that may change the risk profile of your study or if there were any unapproved changes in your protocol, please inform the Office of Research and Sponsored Programs and the IRB promptly using the Unanticipated Events/Noncompliance Form.

I wish you well with your work.

Sincerely,

Megan Roth

Megan Roth, Ph.D.
Director of Research and Sponsored Programs
APPENDIX B

Revised Conflict Tactics Scale

APPENDIX: Part 3 Continued

1. I showed my partner I cared even though we disagreed. 1 2 3 4 5 6 7 0
2. My partner showed care for me even though we disagreed. 1 2 3 4 5 6 7 0
3. I explained my side of a disagreement to my partner. 1 2 3 4 5 6 7 0
4. My partner explained his or her side of a disagreement to me. 1 2 3 4 5 6 7 0
5. I insulted or swore at my partner. 1 2 3 4 5 6 7 0
6. My partner did this to me. 1 2 3 4 5 6 7 0
7. I threw something at my partner that could hurt. 1 2 3 4 5 6 7 0
8. My partner did this to me. 1 2 3 4 5 6 7 0
9. I twisted my partner’s arm or hair. 1 2 3 4 5 6 7 0
10. My partner did this to me. 1 2 3 4 5 6 7 0
11. I had a sprain, bruise, or small cut because of a fight with my partner. 1 2 3 4 5 6 7 0
12. My partner had a sprain, bruise, or small cut because of a fight with me. 1 2 3 4 5 6 7 0
13. I showed respect for my partner’s feelings about an issue. 1 2 3 4 5 6 7 0
14. My partner showed respect for my feelings about an issue. 1 2 3 4 5 6 7 0
15. I made my partner have sex without a condom. 1 2 3 4 5 6 7 0
16. My partner did this to me. 1 2 3 4 5 6 7 0
17. I pushed or shoved my partner. 1 2 3 4 5 6 7 0
18. My partner did this to me. 1 2 3 4 5 6 7 0
19. I used force (like hitting, holding down, or using a weapon) to make my partner have oral or anal sex. 1 2 3 4 5 6 7 0
20. My partner did this to me. 1 2 3 4 5 6 7 0
21. I used a knife or gun on my partner. 1 2 3 4 5 6 7 0
22. My partner did this to me. 1 2 3 4 5 6 7 0
23. I passed out from being hit on the head by my partner in a fight. 1 2 3 4 5 6 7 0
24. My partner passed out from being hit on the head in a fight with me. 1 2 3 4 5 6 7 0
25. I called my partner fat or ugly. 1 2 3 4 5 6 7 0
26. My partner called me fat or ugly. 1 2 3 4 5 6 7 0
27. I punched or hit my partner with something that could hurt. 1 2 3 4 5 6 7 0
28. My partner did this to me. 1 2 3 4 5 6 7 0
29. I destroyed something belonging to my partner. 1 2 3 4 5 6 7 0
30. My partner did this to me. 1 2 3 4 5 6 7 0
31. I went to a doctor because of a fight with my partner. 1 2 3 4 5 6 7 0
32. My partner went to a doctor because of a fight with me. 1 2 3 4 5 6 7 0
33. I choked my partner. 1 2 3 4 5 6 7 0
34. My partner did this to me. 1 2 3 4 5 6 7 0
35. I shouted or yelled at my partner. 1 2 3 4 5 6 7 0
36. My partner did this to me. 1 2 3 4 5 6 7 0
37. I slammed my partner against a wall. 1 2 3 4 5 6 7 0
38. My partner did this to me. 1 2 3 4 5 6 7 0
39. I said I was sure we could work out a problem. 1 2 3 4 5 6 7 0
40. My partner was sure we could work it out. 1 2 3 4 5 6 7 0
41. I needed to see a doctor because of a fight with my partner, but I didn’t. 1 2 3 4 5 6 7 0
42. My partner needed to see a doctor because of a fight with me, but didn’t. 1 2 3 4 5 6 7 0
43. I beat up my partner. 1 2 3 4 5 6 7 0
44. My partner did this to me. 1 2 3 4 5 6 7 0

(continued)
APPENDIX: Part 3 Continued

45. I grabbed my partner. 1 2 3 4 5 6 7 0
46. My partner did this to me. 1 2 3 4 5 6 7 0
47. I used force (like hitting, holding down, or using a weapon) to make my partner have sex. 1 2 3 4 5 6 7 0
48. My partner did this to me. 1 2 3 4 5 6 7 0
49. I stomped out of the room or house or yard during a disagreement. 1 2 3 4 5 6 7 0
50. My partner did this to me. 1 2 3 4 5 6 7 0
51. I insisted on sex when my partner did not want to (but did not use physical force). 1 2 3 4 5 6 7 0
52. My partner did this to me. 1 2 3 4 5 6 7 0
53. I slapped my partner. 1 2 3 4 5 6 7 0
54. My partner did this to me. 1 2 3 4 5 6 7 0
55. I had a broken bone from a fight with my partner. 1 2 3 4 5 6 7 0
56. My partner had a broken bone from a fight with me. 1 2 3 4 5 6 7 0
57. I used threats to make my partner have oral or anal sex. 1 2 3 4 5 6 7 0
58. My partner did this to me. 1 2 3 4 5 6 7 0
59. I suggested a compromise to a disagreement. 1 2 3 4 5 6 7 0
60. My partner did this to me. 1 2 3 4 5 6 7 0
61. I burned or scalded my partner on purpose. 1 2 3 4 5 6 7 0
62. My partner did this to me. 1 2 3 4 5 6 7 0
63. I insisted my partner have oral or anal sex (but did not use physical force). 1 2 3 4 5 6 7 0
64. My partner did this to me. 1 2 3 4 5 6 7 0
65. I accused my partner of being a lousy lover. 1 2 3 4 5 6 7 0
66. My partner accused me of this. 1 2 3 4 5 6 7 0
67. I did something to spite my partner. 1 2 3 4 5 6 7 0
68. My partner did this to me. 1 2 3 4 5 6 7 0
69. I threatened to hit or throw something at my partner. 1 2 3 4 5 6 7 0
70. My partner did this to me. 1 2 3 4 5 6 7 0
71. I felt physical pain that still hurt the next day because of a fight with my partner. 1 2 3 4 5 6 7 0
72. My partner still felt physical pain the next day because of a fight we had. 1 2 3 4 5 6 7 0
73. I kicked my partner. 1 2 3 4 5 6 7 0
74. My partner did this to me. 1 2 3 4 5 6 7 0
75. I used threats to make my partner have sex. 1 2 3 4 5 6 7 0
76. My partner did this to me. 1 2 3 4 5 6 7 0
77. I agreed to try a solution to a disagreement my partner suggested. 1 2 3 4 5 6 7 0
78. My partner agreed to try a solution I suggested. 1 2 3 4 5 6 7 0

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APPENDIX C

Alcohol Use and Disorders Identification Test

## AUDIT ALCOHOL SCREENING TOOL

### UNIT GUIDE

- **1 unit is typically:**
  - Half-pint of regular beer, lager or cider; 1 small glass of low ABV wine (9%); 1 single measure of spirits (25ml)

- **The following drinks have more than one unit:**
  - A pint of regular beer, lager or cider, a pint of strong/premium beer, lager or cider, 440ml regular can cider/lager, 440ml “super” lager, 175ml glass of wine (12%)

### Questions

<table>
<thead>
<tr>
<th>Questions</th>
<th>Scoring system</th>
<th>Your score</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you have a drink containing alcohol?</td>
<td>Never</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Monthly or less</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2 - 4 times per month</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2 - 3 times per week</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4+ times per week</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How many units of alcohol do you drink on a typical day when you are drinking?</th>
<th>1 - 2</th>
<th>3 - 4</th>
<th>5 - 6</th>
<th>7 - 9</th>
<th>10+</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>How often have you had 6 or more units if female, or 8 or more if male, on a single occasion in the last year?</th>
<th>1 - 2</th>
<th>3 - 4</th>
<th>5 - 6</th>
<th>7 - 9</th>
<th>10+</th>
</tr>
</thead>
</table>

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<thead>
<tr>
<th>How often during the last year have you found that you were not able to stop drinking once you had started?</th>
<th>1 - 2</th>
<th>3 - 4</th>
<th>5 - 6</th>
<th>7 - 9</th>
<th>10+</th>
</tr>
</thead>
</table>

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<thead>
<tr>
<th>How often during the last year have you failed to do what was normally expected from you because of your drinking?</th>
<th>1 - 2</th>
<th>3 - 4</th>
<th>5 - 6</th>
<th>7 - 9</th>
<th>10+</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>How often during the last year have you needed an alcoholic drink in the morning to get yourself going after a heavy drinking session?</th>
<th>1 - 2</th>
<th>3 - 4</th>
<th>5 - 6</th>
<th>7 - 9</th>
<th>10+</th>
</tr>
</thead>
</table>

<table>
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<tr>
<th>How often during the last year have you had a feeling of guilt or remorse after drinking?</th>
<th>1 - 2</th>
<th>3 - 4</th>
<th>5 - 6</th>
<th>7 - 9</th>
<th>10+</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>How often during the last year have you been unable to remember what happened the night before because you had been drinking?</th>
<th>1 - 2</th>
<th>3 - 4</th>
<th>5 - 6</th>
<th>7 - 9</th>
<th>10+</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Have you or somebody else been injured as a result of your drinking?</th>
<th>No</th>
<th>Yes, but not in the last year</th>
<th>Yes, during the last year</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested that you cut down?</th>
<th>No</th>
<th>Yes, but not in the last year</th>
<th>Yes, during the last year</th>
</tr>
</thead>
</table>

### Scoring: 0 – 7 Lower risk, 8 – 15 Increasing risk, 16 – 19 Higher risk, 20+ Possible dependence
APPENDIX D

Informed Consent

You may be eligible to take part in a research study. This form provides important information about that study, including the risks and benefits to you, the potential participant. Please read this form carefully and ask any questions that you may have regarding the procedures, your involvement, and any risks or benefits you may experience. You may also wish to discuss your participation with other people, such as your family doctor or a family member.

**Introduction:** The Relationship between Substance Abuse and Intimate Partner Violence and Sexual Assault in College students

**PURPOSE AND DESCRIPTION:** Substance abuse, intimate partner violence and sexual assault are all inherently connected, especially in college students. This study aims to examine the relationship between these three things in college students. It’s important to look into the relationship between substance abuse, intimate partner violence and sexual assault in order to find a better way to help victims. The goal of the study is to find the parts of intimate partner violence and sexual assault that are the most related to substance consumption to lay the framework for future interventions.

If you agree to participate, you will be asked to attend two visits with the study staff over the course of two weeks. Each visit is expected to take 1 hour. During the course of these visits, you will be asked to participate in the following procedures: 1. complete two assessment forms before the first session; one of these will be completed on a password protected iPad; the other will be completed on paper.

**RISKS & BENEFITS:** There are risks to taking part in this research study. Below is a list of the foreseeable risks, including the seriousness of those risks and how likely they are to occur:

One assessment form, the Conflict Tactics Scales Revised, asks personal questions pertaining to intimate partner violence. There is a slight possibility you may find some of the questions intrusive or disturbing. **If in any way you do not feel safe in being involved with this research, you should consider excluding yourself from participating.** A number of counseling resources exist, on and off campus that can help you process any emotional discomfort created by these questions. Please ask Erin DeOtte or Abby Pimentel, at the ACU Medical and Counseling Care Center for information and referral information.

You may not experience any personal benefits from participating in this study.

**PRIVACY & CONFIDENTIALITY:** Information collected about you will be handled in a confidential manner in accordance with the law. Abby Pimentel, the office administrator, will review this informed consent document with you and give you an
opportunity to ask questions about your rights, and protections, as a research participant. To protect your confidentiality, Ms. Pimentel will ask you to sign this informed consent document, but will place the document in a file folder that will be kept separate from your other data. Other information collected (i.e., on the iPad and the Revised Conflict Tactics Scales) will be placed in a separate file, and will not contain any personally identifiable information (e.g., names, student ID’s, Social Security Numbers, etc.). All data will be entered anonymously into a password protected computer file and analyzed in aggregate.

Some identifiable data may have to be shared with individuals outside of the study team, such as members of the ACU Institutional Review Board; however, the only identifiable data will be the informed consent document. Your confidentiality is of utmost importance and will be protected.

**CONTACTS:** If you have questions about the research study, the Principal Investigator is Erin DeOtte, BSW, MSSWc and may be contacted at [ekd14a@acu.edu or alcoholedu@groupmail.acu.edu]. If you are unable to reach the Principal Investigator or wish to speak to someone other than the Principal Investigator, you may contact Dr. Alan Lipps, PhD at ajl07a@acu.edu]. If you have concerns about this study, believe you may have been injured because of this study, or have general questions about your rights as a research participant, you may contact ACU’s Chair of the Institutional Review Board and Executive Director of Research, Megan Roth, Ph.D. Dr. Roth may be reached at: (325) 674-2885
megan.roth@acu.edu
320 Hardin Administration Bldg, ACU Box 29103
Abilene, TX 79699

Your participation in this research is entirely voluntary. You may decline to participate or withdraw from the study at any time and for any reason without any penalty or loss of benefits to which you are otherwise entitled.

**Additional Information**

Your participation may be terminated early by the investigators under certain conditions, such as if you no longer meet the eligibility criteria, the researchers believe it is no longer in your best interest to continue participating, you do not follow the instructions provided by the researchers, or the study is discontinued. You will be contacted by the investigators and given further instructions in the event that you are withdrawn by the investigators.
Please let the researchers know if you are participating in any other research studies at this time.