

THE PENNSYLVANIA STATE UNIVERSITY
SCHREYER HONORS COLLEGE

EBERLY COLLEGE OF SCIENCE

Intersection of Intimate Partner Violence, Alcohol Use, and Mental Health Symptoms Among
College Students

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SPRING 2022

A thesis
submitted in partial fulfillment
of the requirements
for baccalaureate degrees in Biochemistry and Molecular Biology & Psychology
with honors in Science

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ABSTRACT

Intimate partner violence (IPV) is a growing public health problem that is overwhelmingly prevalent among college-age young adults. Alcohol use and negative mental health symptoms are commonly associated with IPV with complex bidirectional relationships. However, not much work has explored the phenomena from the students' perspectives. This secondary qualitative analysis examined interviews from a parent study in which participants talked about their alcohol, IPV, sexual violence (SV), and mental health experiences. The eligibility criteria for this sample were that participants had to have experienced IPV and did not endorse a disability in the parent study. The analytic sample consisted of fourteen participants who were majority white (64.3%, n=9), self-identified as solely heterosexual (71.4%, n= 10), and female (64.3%, n=9). Analysis of the interview transcripts was conducted using descriptive and thematic analysis approaches. Following the analysis, three themes were identified: 1) alcohol leading to IPV, 2) IPV leading to worsening mental health symptoms, and 3) help-seeking behaviors. Each of these themes had several subthemes and provided a comprehensive overview of the complex, multidirectional relationship between IPV, mental health symptoms, and alcohol use. These findings call for holistic IPV interventions that are individualized on a case-by-case basis and focus on 1) incorporating alcohol related content and interventions, 2) include campus and community-based resources and focus on building support systems, and 3) educate lay people such as friends and family members about IPV resources available for survivors.

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ACKNOWLEDGEMENTS

I would like to thank Dr. Anderson for her constant support and encouragement throughout the thesis writing process and other endeavors as well. She has pushed me to think critically and engage with the data in innovative and constructive ways. I really appreciate her patience and willingness to go above and beyond to help me succeed.

Next, I would also like to thank Dr. Markle and Dr. Wood for being my honors advisor and thesis reader respectively and guiding me in the writing process. I would also like to thank all my other professors at Penn State University who have inspired me and encouraged me.

Finally, I would like to thank my family and friends for being an amazing support system and encouraging me throughout my undergraduate career. I have been inspired by all my amazing friends who have pushed me to do my best in every endeavor.

Chapter 1

Introduction

Intimate partner violence (IPV) is a public health problem in the United States and globally. According to the Center for Disease Control and Prevention (Breiding et al., 2015), IPV can be defined as physical violence, sexual violence, stalking, or psychological aggression by a current or former intimate partner. More specifically, physical violence is when a partner is hurt using kicking, biting, or other physical force. Sexual violence involves forcing a partner to partake in a sexual act including touching and non-physical sexual events such as sexting without their consent. Stalking is repeated, unwanted attention by a partner that causes one fear or concern for safety or well-being. And finally, psychological aggression is using verbal and non-verbal communication to harm a partner mentally or exert control over him/her. This is an extremely common phenomenon and affects millions of people each year in the United States. About 1 in 4 women and 1 in 10 men have experienced contact sexual violence, physical violence, and/or stalking by an intimate partner in their lifetime. Moreover, more than 43 million women and 38 million men experience psychological aggression in their lifetime (Centers for Disease Control and Prevention, 2021).

Despite the fact that IPV is more prevalent in a woman's lifetime than diseases such as diabetes, depression, or breast cancer, it is often overlooked by many professionals (Miller & McCaw, 2019). Moreover, even though IPV occurs across all demographics, it is overwhelmingly prevalent among college-age young adults (Miller & McCaw, 2019). Among college students, psychological IPV is the most common form that is reported. Anywhere from 17% to 76% of college students have reported psychological violence perpetrated by an intimate partner (Scherer et al., 2016). In addition to psychological victimization, college students are also

at a high risk for being victims of physical violence. It has been reported that 1 in 5 college students have been a victim of physical aggression within a 12-month reference period. The rates of sexual IPV among college students are also between 10% and 36%. In other words, about every third college student has been a victim of sexual violence by a current or former partner in a 1-year reference period (Scherer et al., 2016).

These numbers represent a significant public health impact. In the short term, IPV has been shown to be linked to higher rates of mortality, morbidity, and other public health concerns that are prevalent among college students - alcohol misuse, depression, anxiety, and PTSD (Ahmed & McCaw, 2010). Some long-term effects of IPV include poor health status due to problems such as chronic pain, memory loss and problems carrying out daily activities, poor quality of life, and high use of health care services. For example, in a study of over 3,000 women, annual health care-costs were 42% higher among those experiencing physical IPV and 19-24% higher among those who had experienced physical IPV in the last five years (World Health Organization, 2012). IPV is also one of the most common causes of injuries in women. In fact, 40-60% of murders of women in North America are committed by an intimate partner (Campbell, 2002). Over time, the injuries, stress, and fear associated with IPV lead to chronic stress, then leading to chronic health problems such as headaches, back pain, and recurring symptoms of fatigue, and seizures. Women who have experienced IPV also have more problems in the gastrointestinal tract such as chronic irritable bowel syndrome.

A specific concern to college students is more reported mental health symptomatology and higher levels of distress among those who report IPV than those who do not (Amar & Gennaro, 2005). Furthermore, survivors of IPV are also more likely to utilize mental health services and to seek out mental health practitioners, indicating IPV has a huge impact on

the mental health of college students. A strong connection between IPV and depression has also been found among college students who have experienced IPV. IPV has also been shown to lead to an increase in self-harm behaviors such as cutting, burning, pulling hair, and punching (Romito & Grassi, 2007). These factors are important to note because they show a negative relationship between IPV and the emotional and mental well-being of college students, indicating an intersection between the two constructs.

In relation to mental health, IPV often leads to depression and post-traumatic stress disorder. There is a link between IPV and the start of depression and exacerbating symptoms of existing depression (Campbell, 2002). There needs to be more research done to understand the effects of IPV on health because we are just beginning to understand the full extent of the consequences. IPV is a major public health concern that needs to be addressed more directly in order to prevent and treat other negative outcomes of IPV.

Another factor that plays a role in IPV is alcohol. Approximately 30 to 40% of perpetrators of IPV indicate drinking at the time of the perpetration (Caetano et al., 2001). More importantly, IPV incidents that are violent and involve alcohol are more likely to be more severe and cause more severe injuries to the partner (Øverup et al., 2015). It is interesting to see, however, that drinking is both a contributing factor to and a consequence of IPV. According to Leonard (2005), heavy drinking appeared to be a contributing factor in IPV. It has a moderate effect on male perpetrated IPV and a small effect on female perpetrated IPV. Notably, although alcohol use can be a precursor to IPV, it can also be a consequence of it. IPV survivors may use alcohol as a form of self-medication. Similarly, drinking as a mechanism to cope with the effects of IPV also plays a role in the explanation of development of substance use problems. It seems to

be a never-ending cycle because those who drink to dull the negative effects of IPV experience more negative emotions, again contributing to perpetration of IPV (Øverup et al., 2015).

While there is much data related to rates of IPV, alcohol use, and mental health symptomatology among college students, far less work has explored the phenomena from the students' perspectives. Therefore, the purpose of this thesis is to explore the intersection of alcohol use, IPV, and mental health symptoms among a sample of college students who experienced IPV during college. This study will explore this intersection by conducting a secondary analysis of qualitative interview data from a parent randomized controlled trial conducted to test a brief sexual violence harm reduction intervention (Abebe et al., 2018); (Miller et al., 2020). The analysis will involve a subset of the interview data from students who reported experiencing IPV during qualitative interviews.

Chapter 2

Literature Review

Prevalence of IPV

IPV is a global phenomenon and is becoming an increasingly pressing issue that needs to be addressed. Globally, up to 38 percent of murders of women are committed by an intimate partner (World Health Organization, 2013). This statistic represents just one aspect of IPV. One in four women in the United States have been sexually or physically assaulted or stalked by an intimate partner in their lifetime (Coker et al., 2007). In a study conducted by Coker et al. (2007), the prevalence of IPV in a current relationship among the 530 women that were included in the study was 13.8 percent. Moreover, the incidence of physical IPV between April 2002 and August 2005 was 4.2 percent. Coker et al. (2007) also found that oftentimes psychological violence precedes physical violence. Therefore, screening for psychological violence can serve as a preventative measure for physical IPV. Moreover, psychological and verbal abuse often have a greater adverse effect compared to physical acts of violence on many women (Rickert et al., 2002).

Unfortunately, it has been seen that those between the ages of 16 and 24 years are most at risk for IPV with a rate of about 19.6 victims for every 1000 women (Rickert et al., 2002). IPV is also one of the leading causes of injury for women between ages 18 and 24 (Truman & Morgan, 2014). This can be dangerous because many women experiencing IPV report lower levels of contraception use due to increased threats of abuse surrounding reproductive coercion (Sutherland et al., 2015). Because of such incidents, IPV can have a huge impact on the future of the adolescent as well, making it even more important to address and prevent IPV early. In many young adult relationships, perpetration and victimization often co-

occur. Moreover, the perpetration of violence against one partner is the strongest predictor of perpetration of violence against another partner (Øverup et al., 2015).

Rickert et al. (2002) found there was also a relationship between educational attainment and reports of physical IPV. Some mediating factors for this relationship might include additional social factors that education contributes to, such as limited career opportunities and financial status – factors that can lead to relationship stress, one aspect contributing to IPV. Increased educational attainment is correlated to a reduced risk of experiencing physical aggression, however, there does not seem to be a similar correlation between educational attainment and experiencing verbal aggression. Another explanation for this could be that a woman's attempt to further her education might contribute to increased violence in the relationship (Rickert et al., 2002).

Social norms also play a role in determining the risk of both IPV victimization and perpetration. Some cross-cultural research has shown that societies with stronger ideologies of male dominance also have higher rates of IPV (Jewkes, 2002). In such societies, situations that challenge male identity such as poverty and being unable to support one's family also lead to increased risk of IPV. This risk is also mediated by the stress caused by poverty as well. Although male dominance is a risk factor for IPV, social support serves as a protective factor. Therefore, women who experience IPV are usually isolated by their partners which also negatively affects the women's mental health (Jewkes, 2002).

IPV on College Campuses

As young adults are already at risk for IPV, IPV is a significant problem on college campuses due to campus culture. The prevalence of IPV on college campuses is between 20% and 50% (Nabors, 2010). The vast range can be attributed to the difference in recency of the

statistics and discrepancies in self-reporting related to varying measurement. This means that up to 1 out of 2 students in college experience one or more forms of IPV. Evidence also suggests that dating couples are more likely to engage in IPV than married couples (Nabors & Jasinski, 2009). Most couples in college are dating couples, again, putting them at a higher risk for IPV. Physical assault especially is more prevalent among college students. About 30% of students physically assault their partners whereas 5% to 20% of college students engage in severe physical assault through acts such as choking, kicking, or attacking partners with weapons (Straus, 2004).

The high rates of IPV can partly be attributed to acceptance towards IPV. In fact, beliefs supportive of IPV are more predictive of abuse among intimate relationships in college students than among women in domestic violence shelters or males convicted of physically abusing partners ((Nabors & Jasinski, 2009). This means that thought processes supporting IPV are more dangerous among college students than among other populations. There is also a relationship between childhood victimization and perpetration of IPV. Therefore, preventing childhood abuse can greatly reduce IPV, especially on college campuses. Although male perpetration of IPV is more significantly associated with gender norms and attitudes, female perpetration of IPV is often self-defense (O'Keefe, 1997). Therefore, male partners' perpetration of IPV is a strong predictor of female IPV victimization in relationships. The authors of this study found this particularly dangerous because between their first and second years in college, male students' acceptance of violence increased - perhaps attributable to membership in athletic and fraternal organizations. On the other hand, acceptance of male violence and endorsement of chivalry decreased among female students after their first year of college (Nabors & Jasinski, 2009).

Rape culture is similar construct, in which male sexual violence is normalized and victims are unfortunately blamed for their own assault (Orth et al., 2020). Rape culture is common on campuses and stems from an unwillingness to change gender norms in the context of sexual activity in which women are thought to be passive while men are thought to be active participants. Moreover, it is also sustained by the idea that rape is overwhelmingly perpetrated by strangers and not acquaintances. However, this is untrue as reports have actually found that 20% of women are victims of sexual assault during college and 90% of assaults are perpetrated by non-strangers (Gourley, 2016). Only 12% of survivors report the assault, attributable to the lack of response by law-enforcement and university officials and fear of being judged. Rape culture on college campuses promotes gender stereotypes that contribute to the occurrence of IPV as well among college students.

Help-Seeking for IPV

IPV can take a huge mental and emotional toll on those who experience it, therefore, survivors of IPV often need to reach out for help. IPV survivors often need medical and legal assistance and counseling and emotional support (Choi et al., 2021). Help seeking options are often categorized into formal and informal sources of help (Cheng et al., 2020). Formal sources of help include the police and receiving medical, legal, and counseling services. On campus, formal help seeking would also include reporting to a campus's Title IX system or seeking accommodations on campus. Informal sources of help include seeking help from family, friends, and coworkers. Among college students, informal help-seeking has been shown to be much more common than formal help-seeking as students may feel more comfortable talking with people they already know. Friends were the most common sources of help seeking even for significant violence such as sexual abuse and severe physical abuse (Choi et al., 2021).

Although many IPV victims are in need of help Choi and colleagues found that less than half the sample asked for from anyone (Choi et al., 2021). Some factors increased the likelihood of help-seeking such as being female, being older, and being a sexual minority; individuals who had IPV training also reported increased help-seeking behaviors. In fact, the more consequences of IPV victimization the victim experiences (such as missing work, school, or normal routine), the more likely the victim is to reach out for help (Brewer & Thomas, 2019; Choi et al., 2021). This work suggests that college campuses can work to reduce harmful consequences of IPV by implementing informational programs.

Consequences of IPV

Physical Health Outcomes

Approximately 1 in 4 women and 1 in 13 men experience IPV at some point in their life; thus, IPV is a public health problem (Black, 2011). In the short term, IPV can involve repeated physical violence which increases the risk of injuries to the head, face, neck, thorax, and breasts (Campbell, 2002). In a study conducted by Campbell and colleagues, women commonly reported headache, back pain, vaginal infection, and digestive problems in both the control group and the IPV group. However, in the IPV group, all these problems were more frequently reported than in the control group. Moreover, those experiencing IPV also reported more hypertension, loss of appetite, and abdominal pain. Women experiencing IPV had a 60% higher rate of all health problems when compared to the control group (Campbell et al., 2002). In this way, the injuries and stress that result from IPV also lead to chronic health problems such as chronic pain and other symptoms such as fainting and seizures.

Sexual and Reproductive Health Outcomes

Sexual and reproductive health problems are a major consequence of IPV, particularly when sexual violence is involved. They represent perhaps the most consistent, long-lasting, and largest physical health difference between abused women and non-abused women (Campbell et al., 2013; Campbell, 2002). The odds of having a sexual and reproductive health problem are three times greater for women that have experienced IPV. Some of the sexual health issues that victim/survivors are at increased risk for include: sexually transmitted diseases, vaginal bleeding, unintended pregnancy, urinary-tract infections, and fibroids.

Risk for these symptoms or diagnoses is hypothesized to be increased from multiple biologic and behavioral pathways. Physiologically, high levels of stress and depression depress the immune system, increasing risk of such health problems, and trauma from forced sex can lead to increased transmission of microorganisms. Behaviorally, individuals who experience sexual violence in a relationship are more likely to have partners with concurrent partners or who use intravenous drugs. These survivors may also use substances to cope, placing them at risk for HIV, hepatitis C, through needle sharing or a myriad of sexually transmitted infections through exchanging sex for substances (Campbell et al., 2013).

Specifically, IPV is also an important contributor to women's vulnerability for HIV and STIs. This can be because of forced sexual intercourse and decreased ability to negotiate condom use in an abusive relationship. Moreover, there is evidence that men who are perpetrators of IPV are more likely than their non-perpetrator counterparts to engage in behaviors that are high risk for HIV such as having multiple sexual partners, frequent alcohol use, visiting sex workers, and having an STI. All of these conditions also increase the women's risk of contracting HIV (World Health Organization, 2013).

In addition to HIV and STIs, pregnant individuals that experience IPV also have a higher risk of giving birth to a baby with low birth weight (Alhusen et al., 2015). Living in the same household as the perpetrator can lead to chronic stress which is an important risk factor that affects birth weight. In one study, even after adjusting for confounding factors, IPV was associated with low birth weight and preterm birth (Alhusen et al., 2015).

Alcohol Use and IPV

Alcohol plays an important role in the perpetration and consequences of IPV. Although the direction of the effect is not completely established, alcohol and IPV are definitely intertwined. Approximately 30 to 40% of perpetrators reported they were drinking during the time of perpetration. Moreover, IPV involving physical violence is more likely to lead to serious injuries when combined with alcohol (Øverup et al., 2015). In relation to alcohol use and IPV, there are two major theories that are widely accepted. The intoxication-violence model states that drinking to cope with negative life experiences leads to more drinking problems and subsequently increases the risk of experiencing IPV in a relationship. This theory suggests that people experience more violence in a relationship as a consequence of drinking (alcohol → drinking problems → violence). On the other hand, the self-medication model states that violence in the relationship leads to drinking to cope which then leads to more drinking problems. This theory suggests that experiences of IPV lead to drinking problems because people drink to cope with their negative experiences (violence → alcohol → drinking problems) (Øverup et al., 2015).

The study by (Øverup et al., 2015) found that there was more support for the self-medication model in which the relationship between alcohol and IPV is because of drinking to cope. (Goldstein et al., 2010) also found that emotion regulation is a major reason for drinking

among college students, and female students in particular cited drinking to cope with anxiety and depression as a big reason for drinking. Similarly, individuals who experience IPV seem to be drinking to cope with the negative effects of their victimization such as depression, anxiety, and social problems. The level of abuse often depends on the number of IPV-related problems, with more problems leading to more drinking, which then leads to a higher vulnerability for IPV (Øverup et al., 2015). Drinking to cope is a substantial problem because it just leads to more negative emotions rather than solving the cause of the drinking. Drugs and alcohol can also serve as an escape from reality for those experiencing IPV.

Mental Health and IPV

IPV also has a negative impact on mental health. Depression, suicidality, PTSD, alcohol abuse, and drug abuse are common consequences of IPV (Golding, 1999). In the study by Golding (1999), it was found that there was a higher risk for depression and post-traumatic stress disorder as a result of IPV than even childhood abuse. The evidence also indicated that depression often remitted followed by cessation of violence. Moreover, the severity and duration of violence was also associated with the severity and duration of PTSD and depression, indicating they are related. In addition to depression and PTSD, women that were victims of IPV had a higher rate of anxiety, insomnia, and social dysfunction. In Nicaragua, 70% of cases of emotional distress can be attributed to IPV (Campbell, 2002).

Similar to alcohol use and IPV, the direction between the relationship of mental health symptoms and IPV has not yet been defined. It seems to be that the relationship is bidirectional. On one hand, exposure to traumatic events can lead to feelings such as stress, fear, and isolation, which amount to depression, and can be followed by suicide attempts. On the other hand, there are studies that suggest that women with severe mental health problems are more likely to be

victims of IPV (Karakurt et al., 2014). For example, in a study (Ahmed & McCaw, 2010), out of the 6,870 women who identified as having experienced IPV in a healthcare setting, 37% used mental health services within 60 days of identification. It was found that receiving an electronic referral from a provider was the strongest predictor of whether the women would utilize mental health services. As seen before, patients experiencing high levels of distress were also more likely to utilize mental health services. Moreover, only 16% of those that reported experiencing IPV utilized mental health services to address emotional problems. The lack of help seeking can be attributed to embarrassment, expenses, ineffectiveness, and social stigma (Próspero & Vohra-Gupta, 2008).

Syndemics and IPV

A syndemic framework is based on the idea that the combination of two or more diseases or health conditions in a population leads to the exacerbation of the negative health effects of any or all of the conditions involved (Xavier Hall & Evans, 2020). A syndemic framework also indicates that this clustration of health conditions is more likely to happen due to the influence of conditions such as poverty, stigma, stress, and structural violence. Syndemic framework is often applied to infectious disease but it can also be applied to social phenomena such as IPV. The SAVA syndemic was the first conceptualized syndemic and was used to explain the interconnectedness of substance abuse, violence, and AIDS (Singer, 1996).

As mentioned, HIV and substance abuse have previously been associated with IPV. Moreover, there are striking connections between each of those and serious mental health problems among low-income and minoritized women. For example, women who live with a violent intimate partner have a higher risk of experiencing depression and women with HIV also experience higher depressive rates compared to their socio-demographic comparable

counterparts. Finally, there is also an association between substance abuse issues and depressive symptoms. This comprehensive framework was helpful because it brought to light the fact that social support can serve as a huge protective factor for those that fall under the SAVA syndemic and reduce the intensity of the negative outcomes (Illangasekare et al., 2013).

A syndemic framework provides the overarching framework for this study. Although substance use and mental health symptoms are commonly associated with IPV either as antecedents, risk factors, or consequences, defining them through the syndemic framework emphasizes the adverse reactions and intensifies the long-term consequences that are seen as a result of IPV. The interrelated nature of alcohol use, mental health symptoms, and IPV should be considered when examining their effects on health outcomes (Peasant et al., 2017). A syndemic framework emphasizes the need to address the specific social comorbidities in a broader context. It can be hypothesized that those who are exposed to more factors of the syndemic and with increased severity might be at the highest risk for experiencing long term negative consequences of IPV. Using syndemic theory to examine IPV experiences of college students may reveal important aspects of intervention, policy, and social context.

Research Question

There is not much research from students' perspectives on the intersection of IPV, alcohol use, and mental health symptoms. Therefore, there is a need to gain a deeper understanding between the three constructs. For this study we focus on college students, who are most at risk for experiencing IPV. Studying the intersection of the three constructs from a syndemic perspective can help formulate broader interventions, policies, and resources for people who experience IPV. Therefore, the overall research goal for this thesis is to examine how alcohol use and mental health symptoms intersect with the students' experience of IPV.

Chapter 3

Methods

Parent Study

The qualitative data used in this study was collected in the context of a larger parent study which was a cluster randomized controlled trial (RCT) of a brief intervention to reduce alcohol-related sexual violence and improve care at campus health and counseling centers (Abebe et al., 2018). For the parent study, 28 campuses from Pennsylvania and West Virginia participated. To be eligible, a campus had to have a student health or counseling center, staffed by a health professional, who provides direct services to students. For students to be eligible, they had to be between 18 to 24 years old, literate in English, seeking care at the college health center for any reason, and have sufficient time before seeing their provider to complete a baseline survey (approximately 20 minutes) (Abebe et al., 2018).

Parent Study Qualitative Data Collection

Interviews were conducted with a subset of college student participants who had reported experiencing IPV or sexual violence in the parent study ($n=96$). These interviews served as a built-in quality control step to assess the intervention fidelity and acceptability. Interviews were conducted at the end of the 12 month follow up period. The purpose of the interviews was to talk to students from both the control group and intervention group regarding their feelings about the intervention and what they thought about health care provider's involvement in assessment and response to sexual violence. Researchers oversampled groups of students underrepresented in sexual violence research such as students with disabilities, queer students, and men. Overall, 14 of the 28 campuses were represented in the interviews. The researchers also added broader questions into the interview about the participants' alcohol use, substance use, and experiences

with sexual violence and IPV using a life history timeline method. The interviews were digitally audio recorded, professionally transcribed, and de-identified for analysis by the primary research team. The research team used Dedoose software for coding and sorting data within the transcripts (Dedoose, 2021).

Current Study

The present secondary analysis aimed to examine the relationships between IPV, mental health symptoms, and alcohol use. Secondary analysis involved exploring new relationships within previously gathered data. For this analysis, the transcripts were examined to determine which participants met the following eligibility criteria: participants who experienced IPV and participants who did not endorse having a disability in the parent study survey or interview data collection phases. Participants who endorsed having a disability on the parent study's measures were excluded as their data had been previously explored by the study team (Anderson et al., 2021; Chugani et al., 2021). After examining the data for these criteria, 14 transcripts were included in the final analysis.

Data Analysis

Qualitative descriptive and thematic analysis approaches were used (Braun & Clarke, 2006; Crabtree et al., 1995; Sandelowski, 2000). The parent study research team included holistic codes in the codebook and overall dataset (Saldana, 2015). These codes incorporated broad topics that were included in the interviews (e.g. alcohol use, IPV experiences, SV experiences (Saldana, 2015). After familiarizing myself with the existing codebook and dataset, additional codes were added related to IPV and mental health and IPV and alcohol, highlighting where relationships and overlap were noted. Coding of the transcripts used

structural coding and pattern coding to organize the data based on specific themes (e.g. Alcohol + IPV and IPV leading to worsening symptoms) (Saldana, 2015).

IPV types were also examined in depth and related to mental health and alcohol. With the IPV types sorted, a spreadsheet was created which contained quotes and specific code segments relating to the categories of IPV and its intersection with alcohol use and mental health symptoms. The differences in IPV experiences and presence of alcohol use and mental health symptoms were compared and noted. Throughout this analysis process, there was a constant note of emerging themes, recurring themes, and intersections of the three primary constructs (alcohol use, IPV, mental health symptoms). The transcripts were re-read several times to elucidate concrete connections between events in the participants' lives and IPV's intersection with alcohol and mental health symptoms (Denzin & Lincoln, 2011).

A final additional analysis technique included case summaries for each transcript which included the type of intersection with mental health and alcohol if any, IPV perpetrator, IPV type, description of the IPV (e.g. effects on mental health and help-seeking behaviors after IPV), and additional any notable experiences in the participant's life (e.g. sexual violence, stalking, and drug use) (Denzin & Lincoln, 2011). The summaries were cross checked with code frequency tables in Dedoose to ensure fidelity.

Reflexivity Statement

This secondary analysis was led by an undergraduate student at Pennsylvania State University with majors in Biochemistry and Molecular Biology & Psychology. The undergraduate student was not involved in the data collection process but team meetings with a nurse scientist mentor who was involved in all aspects of the data collection, interviewing, and analysis happened weekly throughout the entire analysis process. A third primary team member

was a Master's in Public Health student also working with the same dataset. All members of this data analysis team are cisgender females with interest or background working in the intersections of health and violence.

Chapter 4

Results

The analytic sample consisted of fourteen participants. The majority were white (64.3%, $n=9$), completely heterosexual (71.4%, $n=10$), and female (64.3%, $n=9$). Additional demographic details are provided in Table 1. Throughout the results illustrative quotes will be used, to provide context for these quotes, participant gender and age are provided.

Table 1. Participant Demographics as Reported at Baseline During Parent Study

Demographics	n	Percentage
Gender		
Male	5	35.7
Female	9	64.3
Sexual Orientation		
Completely Heterosexual	10	71.4
Mostly Heterosexual	2	14.3
Bisexual	1	7.1
Completely Gay/Lesbian	1	7.1
Race		
White	9	64.3
Black or African American	5	35.7
Age		
Under 21	11	78.6
21 or Over	3	21.4
Residence		
Campus Residence Hall	8	57.1
Other College/University Housing	3	21.4
Other Off-Campus Housing	3	21.4
Campus Involvement*		
Athletic Team	4	28.6
Other Student Organizations	8	57.1
None	4	28.6

Note: Categories in which no participants indicated being a part of were not included in the table

*Not mutually exclusive

Overview of Themes

Three themes were identified in this analysis (see Table 2): 1) alcohol leading to IPV, 2) IPV leading to worsening mental health symptoms, and 3) help-seeking behaviors. Alcohol leading to IPV has several sub themes including: 1a) impaired decision making, 1b) increased fighting when drinking, and 1c) unwanted physical touching under the influence. The second theme identified was IPV leading to worsening mental health symptoms. Participants noted worsening symptoms because of being isolated from friends. Other aspects of this theme include dealing with threats to kill oneself, being tracked, and being codependent. The last theme identified was help-seeking behaviors which has two major aspects: 3a) using friends and family as a resource and 3b) drinking to cope with stress and negative mental health symptoms. These themes are well demonstrated in the data and provide a comprehensive overview of how college students experience IPV and how it intersects with the use of alcohol and mental health symptoms.

Table 2. Summary of Observed Themes

Theme/Subtheme	Illustrative quote
1) Alcohol leading to IPV	
1a) Impaired decision making	“...but when you put alcohol into place, anything is possible because sometimes all of this comes down. I haven’t received it, but maybe I have been verbal or emotional abusive to my partners in my casual relationships, yes.” (female, 21)
1b) Increased fighting when drinking	“It’s more so, it’s very—we fight a lot, actually, when we’re drinking. Because I end up getting upset that he doesn’t want anything to happen. I end up calling him out on it, and we end up screaming at each other.” (female, 18)
1c) Unwanted physical touching	“He likes to any time—like drunk or not drunk, he just likes to cuddle and always be really close to me, but when he's drunk, if he's

	<p>trying to cuddle or make out, he's just lying, having his entire body weight on top of me, and I can't move or do anything. It's just like dead weight that I can't control. That is scary to me because I know if he just wanted to hurt me or wanted to do something that I was saying no, that I couldn't really prevent it.” (female, 20)</p>
2) IPV leading to negative mental health symptoms	
2a) Increased feelings of depression	<p>“Well, yeah, cuz I already told you how that one was like I didn't feel the greatest. I was just putting on a face. Then, the tenth grade one till sophomore, pretty much of the time, I was completely fine, until closer to maybe halfway towards our end, whenever I started feeling different, or I started—well, I told you about the prom thing. I wouldn't eat and all that kinda stuff. I would get—I was really depressed, not in my state.” (female, 20)</p>
2b) Increased feelings of anxiety	<p>“I had a panic attack once in one of my classes...It was right after we broke up. We were still sitting right next to each other... I just completely flipped out, not distracting anyone, still quietly in my box flipping out.” (female, 22)</p>
3) Help-seeking behaviors	
3a) Using friends and family as a resource	<p>“The second one, I would talk to my friends about it, some of them. Never really my mom. More towards the end, I talked to my mom, whenever I started feeling more type of way with it. Other than that, it'd probably been—it was just my friends, my close ones. Then, some of my teammates for that one, too, because they witnessed things when they were here.” (female, 20)</p>
3b) Drinking to cope with stress and negative mental health symptoms	<p>“It probably didn't help, the addition of moving across the country, and the stresses of starting grad school, and new environments, and [current city] streets, and the—all of that.” (female, 22)</p>

Alcohol Leading to IPV

Many participants reported being more aggressive or engaging in IPV after being under the influence of alcohol. These abusive episodes include the full range of IPV types including physical, sexual, and psychological aggression. This theme manifested in three key ways a) impaired decision making, b) increased fighting when drinking, and c) unwanted physical touching. Additional information regarding participants reported “typical” alcohol use during interviews is noted in Table 3.

Impaired Decision Making

One property of alcohol leading to IPV is reduction of inhibitions which often leads to impaired decision making. This involves drinking more than intended, saying things without thinking, and having sex without appropriate consent. In relation to IPV, impaired decision making often leads to psychological aggression, also known as verbal abuse. Participants mention that when alcohol is involved, “anything can happen” because things are said that might not be meant and probably would not have been said if alcohol was not involved. Oftentimes, participants do not identify these as IPV but regret saying them.

One participant admitted to perpetrating psychological aggression towards casual partners under the influence because they felt like they had less control over their thoughts and actions. In this situation, IPV was not present before alcohol got involved. Another participant mentioned that when she was drunk, she became really annoying to be around. One of her bigger regrets while drinking was “being a jerk to people”. She said:

“Mainly it was just being a jerk to people. I would get mad and then—especially my ex-fiancé. I would be like, ‘Dude, we never talk about anything.’ I would just get mad about

it instead of trying. I tried to talk to him. I guess, but then I guess I got drunk, I just get more rude about it. Like, ‘Bitch, you never talk to me. You’re never home.’” (female, 23)

This participant mentioned that she realized that alcohol was affecting many of her relationships negatively and eventually cut down her drinking because of this.

Increased Fighting When Drinking

Another property of alcohol leading to IPV is increased fighting when under the influence of alcohol. Central to this property is the amplification of feelings. In these cases, both the partners are often drinking and minor annoyances become amplified and lead to vivid fights. This involves both physical and verbal fights. Increased confidence also plays a role in this aspect of alcohol leading to IPV. One participant said,

“It gives you the courage to do something. If you’re angry, you’re most definitely gonna say something about it. It’s not really a good thing.” (female, 18)

During the interview, the participant also said she would take back a lot of fights and many of the things she has said when drinking if she could.

Participants noted that fighting when drunk is often normalized and therefore, many participants do not realize that it is also considered as IPV. It is often brushed to the side because “everyone fights when drunk” or it is “normal to become aggressive under the influence.” However, because of the impaired decision making mentioned earlier, fighting under the influence, especially physical fights, can lead to dangerous situations.

Unwanted Physical Touching

The third property of alcohol leading to IPV is unwanted physical touching. Many participants mention having unwanted physical experiences with long-term and/or casual partners when under the influence. Often when the perpetrator is under the influence they get more ‘handsy’, do not listen to the other person’s wishes, leading to nonconsensual sexual encounters ranging from touching or kissing to forcible rape. Moreover, if the other person is also under the influence of alcohol, it becomes difficult for them to control what the perpetrator is doing. One participant stated:

“... he gets very handsy. I was drunk. I couldn’t really stop him from being that way.”

(female, 20)

Unwanted physical touching occurred with friends, acquaintances, and partners. Many participants mention hanging out with a friend or acquaintance when upset, drinking with them, and then “being taken advantage of” or pressured to do things they were not comfortable with. Without alcohol, they felt they may have had more control over their actions and the situation. Similarly, one participant mentioned that her boyfriend was much bigger than her and when he is drunk, he is “uncoordinated and sloppy”. So, when he puts his whole weight on her, there is not much she can do even when she wants him to stop.

IPV Leading to Negative Mental Health Symptoms

While the students in this sample excluded those who had previously denied any specific mental health diagnoses, many students shared experiences of IPV leading to mental health symptoms. This experience was particularly seen in participants experiencing psychological violence or controlling behaviors from their partners. The worsening of mental health symptoms

occurred as a result of various things such as being isolated from friends, being tracked all the time by a partner, a partner threatening to kill themselves, or due to being codependent.

Increased Feelings of Depression

Students often experienced increased feelings of depression as a result of being isolated from their friends and being tracked constantly by a partner. Some participants mention perpetrating this kind of IPV as well. One participant says:

“I wouldn’t want him to go to his friend’s house, because I’d be afraid that he’d talk to a girl. He wouldn’t want me to go hang out with some of my friends, cuz he’s worried I could meet a boy or something.” (female, 23)

In this relationship both partners were trying to establish control and ended up isolating each other from their friends. The participant mentioned that when she would go out he would tell her to come back and they would end up fighting. This led to worsening of mental health symptoms and she mentioned feeling more depressed.

Another participant mentioned that she felt like she had missed out on many things that her teammates did her freshman year because she was never there since her partner at the time used to get angry at her for going out. When referring to how it affected her mental health, she said:

“Well, yeah, cuz I already told you how that one was like I didn’t feel the greatest. I was just putting on a face... I wouldn’t eat and all that kinda stuff. I would get—I was really depressed, not in my state.” (female, 20)

She also reported feeling trapped but not having the energy to argue with her partner and therefore leading to worsening mental health as a result of his controlling behavior.

Oftentimes, fights which sometimes led to breakups led to worsening of mental health symptoms in many individuals. However, many did not realize this was a form of psychological IPV and continued to stay in the relationship, hoping their partner would change.

One participant mentioned feeling depressed as a result of their partner threatening to destroy their belongings and constantly yelling at them. He said:

“Just some depression, like why is this happening to me? This sucks, all that. Never thought about killing myself about it but it was a pretty depressing moment.” (male, 20)

The student said he was feeling really stressed which affected him academically and socially as he was having a hard time focusing. Moreover, he felt the need to constantly adjust his actions in order to avoid making her angry and this increased stress led to him feeling more depressed

Increased Feelings of Anxiety

One participant mentioned increased feelings of anxiety when their partner threatened to kill herself. He mentioned that she has bipolar disorder and therefore he was always confused in the relationship - at one point she would want to talk to him all the time and at other times she would completely ignore him. Due to situations like this, he kept getting anxious and decided to end the relationship. However, when he did this, his partner threatened to kill herself, increasing the participant's anxiety. This emotional abuse can be really stressful in a relationship because it made the student think he would be responsible if she went through with it and that really bothered him. This participant also mentioned another relationship in which his partner was

constantly stalking him - in classes and even at home because they lived in the same neighborhood. This also increased his anxiety.

Another participant also mentioned feelings of increased anxiety when their partner threatened to kill themselves. She said:

“Then he was like well, I’m gonna kill myself on the way home, started pulling that card. He’s pulled it before on me, when I try to break up with him.” (female, 20)

This was negatively affecting her mental health because she felt trapped and isolated in the relationship but when she tried to leave, her partner threatened to kill himself. This made her feel like there was increased pressure on her to make sure he was alright and prevented her from taking care of her own mental health.

One student also mentioned feeling increased anxiety when he felt like his partner was being controlling. He said:

“She just used to stress me out cuz she was always tryin’ be in my business. She always bein’ nosy with stuff that didn’t concern her. She always wanna know my whereabouts like she’s my mother.” (male, 19)

Help-Seeking Behaviors

Students experiencing negative mental health symptoms as a result of IPV or otherwise often turn to non-professional methods of coping such as talking to friends and family and self-medicating with alcohol. Therapy and other professional counseling services offered by the schools were typically not used despite awareness of the resources (see Table 3 for details of help seeking behaviors by participants). Although these help-seeking methods might provide

short-term relief, they may not sustain the participant in the long-term, especially using alcohol to cope with negative mental health symptoms and stress.

Using friends and family as a resource

Help-seeking to family and friends often occurs after an incident of sexual violence or IPV, more specifically, psychological IPV. This was attributed to a variety of things by the participants such as presence of stigma, lack of access to the mental health services on campus and off campus, and feeling less comfortable talking to a professional.

One participant noting the effects of a particular relationship in which he was experiencing psychological IPV, said he started feeling depressed. When asked how he coped with the depression he said:

“Just my friends, nothing like professional, like a service or anything like that. I just asked my friends to help me out, what I should do and stuff like that.” (male, 20)

Another participant found that it was helpful to confide in their mom because their partner at the time had isolated them from their friends. He said:

“Then it was my mom who was a real help with it. My mom actually talked to her [participant’s partner] just to let things go and just gotta live your life. She [mom] helped in that way, talkin’ her [participant’s partner] down a little bit.” (male, 19)

These situations indicate that the participants felt more comfortable sharing their experiences with people close to them than professionals because they felt as though their friends and family knew them well and would be able to help without judgment. Professional services did not seem to cross their minds as an option.

Table 3. Common Experiences and Behaviors Among Participants

ID#	IPV help-seeking behaviors*				Alcohol use behaviors**						Age		IPV Type				SV
	Friend	Family	Trusted adult	Alcohol/drugs	Parties/events	Bars/restaurants	Alone	Binge drinking	Rarely	To cope with stress	Under 21	21 or over	Physical	Psychological	Sexual	Verbal	Non-IPV
29044					X	X			X			X		X		X	
23204	X			X			X	X		X		X	X	X		X	X
23097	X	X			X						X		X				
23016	X				X			X			X			X		X	
21056		X						X			X		X	X	X	X	
21051		X			X			X			X			X			
21030	X	X			X				X		X			X			
21016					X			X	X		X			X	X		
21009						X		X			X		X				
21006	X	X			X	X			X	X	X		X	X	X		X
21001					X	X		X		X	X			X		X	X
16059					X	X		X			X		X	X	X	X	X
9071		X			X			X		X		X		X			X
1027	X		X			X					X		X				

Note: SV = Sexual violence, IPV = intimate partner violence

*No participants reported help seeking from formal sources such as police, health care providers, or violence advocates

**Alcohol use information comes from interview self-report data which asked about participant "typical use" throughout college

Drinking to cope with stress and negative mental health symptoms

Participants often mentioned drinking to cope with general stress. These sources of stress can include moving to a new city, breaking up with a significant other, losing a loved one or a team member, and trying to juggle academics and a social life in college. Using alcohol as a method to relax was also noted to be the result of a general belief that most people drink to calm their nerves or to make themselves more comfortable in a particular situation. It was even encouraged by friends and often participants mention succumbing to peer pressure in such situations. In one case, a student's friends pressured her to drink following a break up. Trying to get her to drink was her friend's way of trying to reduce her stress. However, despite her desire not to, and recognizing it would not work, she succumbed to peer pressure and did it anyway, noting:

“Then I had one beer, and I was like it's not helping. That's not gonna cure it. When I wake up in the morning, I'm gonna be extra pissed.” (female, 20)

Drinking to cope with mental health symptoms among the participants usually involves social drinking with the mindset of letting go of all negative triggers. Participants mention hanging out with friends or going to parties when upset with the mindset of drinking enough to numb their feelings. Many of them report blacking out and getting sick by the end of the night. However, there is also one example of a participant who demonstrated more severe alcohol use disorder tendencies such as drinking by herself when she was going through a depressive state.

She said:

“Being very depressed. Using drinking as a way to deal with it, cuz I still wasn’t goin’ to see therapists or anything, so it was, I guess, a way of self-medicating. I don’t know. I just didn’t wanna deal with my problems really.” (female, 23)

Much of this was because of the problems she was having with her significant other and because of her anxiety which prevented her from keeping a job and hanging out with her friends. She mentions repeatedly drinking alone even when her friends were knocking on her door and asking her to hang out. However, growing up with a stigma of psychiatrists being for ‘crazy people’, she struggled to reach out and get professional help.

Another participant mentioned that her partner drank to cope with his PTSD after he came back from the marines. She said:

“When we first started dating, he definitely had a very much of, ‘I’m going to drink alcohol because it’s the only way I can sleep. I’m gonna drink enough so that I pass out, get six hours of sleep,’ because if he didn’t, every single little noise, air conditioner turning, or somebody closing their car door, the freeway, because we live in a city—wake him up, and possibly send him into nightmares about thinking there were bombs going off, near him, so use of alcohol in that case was not necessarily healthy, but it had some positive aspects. It was mostly, ‘I’m doing this really unhealthy, negative thing to let me sleep.’” (female, 22)

In this case the participant viewed her partner's drinking as a healthier coping mechanism than using other hard drugs.

Chapter 5

Discussion

The study found that college students are particularly vulnerable to IPV after consuming alcohol, are prone to worsening mental health symptoms after experiencing IPV, and prefer to seek out help from family and friends after experiencing IPV rather than professional services. These three themes highlight the syndemic nature of alcohol, IPV, and mental health symptoms among college students. For example, alcohol leading to IPV may lead to negative mental health symptoms in survivors and help-seeking may include substance or alcohol use, increasing vulnerability to IPV as a result. These complex, intertwined relationships require similarly nuanced and comprehensive responses - not siloed treatment plans - to see improvement. Many of these implications are well documented in the literature as well.

Further Support for a Syndemic Approach to IPV Among College Students

Involvement of alcohol in IPV is especially prevalent on college campuses because many campuses promote cultures of alcohol use and violence generally (Graham et al., 2017). Moreover, objectification of women and sexism seem to normalize behaviors that lead to IPV. Cultures in which such attitudes are promoted, may provide perpetrators with the environmental permission and temporal cues that increase chances of IPV. One example of this is at bars and clubs where men engage in acts such as grabbing a woman's breast, rubbing against a woman on the dance floor, and making comments about her body. Security staff often reinforce this culture by doing little to prevent this type of aggression and often engaging in it themselves because of the way women are dressed or their level of intoxication (Graham et al., 2014). Alcohol is also often used as an excuse by perpetrators of IPV and as an explanation by victims of IPV. This has important implications for research because these kinds of attitudes might delay help-seeking in

victims, increase self-justification in perpetrators, and decrease likelihood of outside intervention (Graham et al., 2017).

The results from the analysis support the intoxication-violence model that was mentioned previously which indicates that drinking to cope leads to more drinking problems and therefore, higher rates of IPV (Øverup et al., 2015). This is in contrast to the findings of the study by (Øverup et al., 2015) and colleagues which found more support for the self-medication model which states that IPV leads to increased drinking rather than vice versa (Øverup et al., 2015). Therefore, more research needs to be done specifically on the directionality of the effects of alcohol and IPV. Learning more about this can be useful for student affairs representatives at universities in order to implement programming to reduce alcohol prevention in addition to addressing IPV directly to lower rates of IPV overall. Furthermore, mental health professionals might also benefit from the research as they can develop more effective treatment strategies for preventing IPV by addressing alcohol use rather than targeting IPV alone (Stuart, 2005; Wilson et al., 2014).

Implications for College Campuses

Some interventions that might work to reduce IPV by addressing alcohol consumptions at a policy level include raising taxes and prices of alcohol, restricting alcohol sales by altering times that alcohol is sold, and reducing the amount of alcohol outlets (Wilson et al., 2014). At the micro level, interventions can include couple-based treatment to reduce alcohol consumption and individual treatment to address alcohol consumption (Wilson et al., 2014). The micro level interventions can be addressed by student affairs representatives at universities and helping professionals such as social workers, psychologists, nurses, and physicians.

Some work has been done in campus settings to look at individual level interventions to provide healthy relationship information to student to address IPV and sexual violence. The parent study for this analysis conducted a cluster RCT to test an intervention that aimed to prevent sexual violence among students that received care from campus health centers (Miller et al., 2020). The intervention was titled GIFTSS ‘Giving Information for Trauma Support and Safety’. Its aim was to raise awareness about alcohol related sexual violence and to connect students to sexual violence services. It was found that although those who received the GIFTSS intervention were more likely to disclose experiences of SV and IPV, they did not utilize SV services more (Miller et al., 2020). A second intervention that aims to reduce IPV among college-aged women was the MyPlan app. It was created to be used by both abused women and their friends. The MyPlan app allows the user to information about relationship health, safety priorities, and severity of violence and then gives a personalized safety plan and resources to the user (Glass et al., 2015). If proven to be successful, this could also be an invaluable resource for survivors of IPV who may not feel comfortable sharing their experiences with helping professionals. However, more research needs to be done before implementing policies and treatments to identify the possible effectiveness of these interventions.

In addition to finding that alcohol use was associated with higher rates of IPV, the study by Øverup and colleagues (2015) found that IPV also leads to negative mental health symptoms. In a study by Ogbe and colleagues, it was found that community-based advocacy interventions for women that focused on helping survivors access resources, social support, and helped them cope with the effects of IPV were the most effective (Ogbe et al., 2020). Community-based interventions take advantage of existing services and help connect survivors of IPV to the most appropriate services for their needs. Examples of community-based advocacy interventions

include helping survivors find access to mental health resources, helping them safety plan, and improving their physical and mental health. Compared to other community services available, advocacy interventions can reduce partner aggression and increase social support for survivors. Such community-based interventions have also been shown to reduce depression and anxiety among IPV survivors. Interestingly, however, psychotherapy alone did not show significant change in depression and PTSD scores (Ogbe et al., 2020). This underscores the importance of informal social support for mediating mental health symptoms experienced in survivors of IPV. Another important aspect in IPV intervention is the need for collaboration between mental health professionals, researchers, and practitioners (Ellsberg & Emmelin, 2014). A comprehensive IPV care program in which survivors were provided with psychosocial and legal intervention in addition to a life-skills group received an overwhelmingly positive response from participants (Rees et al., 2014). This shows that a systems approach providing holistic care to survivors of IPV can reduce negative mental health symptoms and increase likelihood of survivors removing themselves from the abusive situation. An idea of an intervention that can be implemented is educating the community about the causes and consequences of IPV and communicating that to perpetrators they do not have a right to be violent towards their partners (Simmons et al., 2020). An example of an intervention that has shown to be successful globally to reduce HIV and violence against women (VAW) is the SASA! Program. The name means 'now' in Kiswahili and is an acronym for the four phases of the approach - Start, Awareness, Support, Action (Starmann et al., 2018). It was developed in Uganda and its goal is to create dialogue in the community about imbalances in power that lead to IPV. At the relationship level, SASA! helps improve communication between partners, increases joint decision making, and helps explore alternatives to violence for dealing with anger for adults and young adults

(Abramsky et al., 2014; Ellsberg & Emmelin, 2014). The SASA! program may be transferable to United States setting by developing programs that raise awareness of IPV among campus policy makers and all campus faculty. Raising awareness is one way to create dialogues on college campuses and begin to eliminate the imbalances in power which lead to IPV. Content would need to be modified to address ingrained views surrounding consent and rape culture on college campuses. Furthermore, content would also need to be tailored to appeal to college students specifically, perhaps by integrating technology in the implementation of the intervention.

Although community-based and large-scale interventions can be helpful for preventing IPV and reducing the negative consequences of IPV, this analysis found that most students reach out to their friends and not formal service providers for support after experiencing IPV. This finding highlights the need to incorporate entire campus communities into IPV prevention and response models and interventions. Research regarding incorporation of friends or peers and their behaviors has grown in the past decade, largely focusing on bystander intervention (Mulla et al., 2022). One study found that people who had a closer relationship with the victim or perpetrator were more likely to intervene in the situation and that students are likely to intervene varyingly depending on severity and location of the situation (Palmer et al., 2016). Therefore, it might be most beneficial to provide students with practice intervening in a multitude of situations in which their relational distance to the survivor varies as well.

There is also an emerging body of literature regarding use of technology to provide friends information and resources to respond to IPV (Alhusen et al., 2015; Glass et al., 2015). The MyPlan app mentioned above was one of the first to engage friends of abused college women. It gathers information from friends of IPV survivors about risk factors they observe in their friends' relationships, their priorities such as concern for friends' safety, privacy, personal

safety, and social support. Following this, it also provides personalized information and resources to the friend who might be able to use them to help the IPV survivor (Glass et al., 2015). Since friends were seen to be a primary source of support for IPV survivors, it would be useful to develop and test similar interventions that educate friends and family members about IPV and available resources.

Limitations

The study had its limitations. First, the study was not representative of the diversity of all college students despite efforts to oversample underrepresented populations. All the students in the sample were either White or African American. No participants were Hispanic, Asian, or Native American/American Indian. The majority of the of the sample also identified as female and heterosexual. Second, as qualitative data were collected at the end of a 12-month study period and the interview guide covered the participants entire college experience, recall bias was possible. The interview team used a life course timeline to aid participant recall. Thirdly, as a secondary data analysis, the data were not collected to answer the specific question of this analysis - so steps to ensure data transferability such as thematic saturation during data collection and providing “thick description” were not completed (Miles et al., 2020).

Conclusions

The purpose of the thesis was to explore the constructs of IPV, mental health symptomology, and alcohol use from students’ perspectives among a sample of college students who reported experiencing IPV during college. The intersection of the three constructs was studied by conducting a secondary analysis of qualitative interview data from a parent randomized controlled trial that tested a brief sexual violence harm reduction intervention. The secondary analysis used a syndemic framework to emphasize the need to address IPV, alcohol

use, and mental health symptomology in a broader context as it was hypothesized that those who are exposed to more of the factors of the syndemic and with increased severity might be at the highest risk for experiencing long term negative consequences of IPV. Three specific themes found were: 1) alcohol leading to IPV, 2) IPV leading to worsening mental health symptoms, and 3) help-seeking behaviors. These themes were demonstrated in the data and provided a comprehensive overview of how college students experience IPV. My findings contribute to ongoing discussions in the literature and on college campuses regarding the role alcohol plays in contributing to a climate in which violence is accepted as common. The syndemic and cyclic nature of IPV, alcohol use, and mental health were evident in our data and point to a need for earlier interventions, multilevel interventions, and multi-target interventions. While there is some evidence to that community and individual level interventions have moved the needle on addressing individual violence or alcohol related outcomes, to date we are unaware of any interventions that holistically address prevention of IPV – inclusive of the complex role alcohol plays without allowing it to become a scapegoat for IPV perpetration.

Overall, this analysis found additional evidence to support a complex, multidirectional relationship between IPV, mental health symptoms, and alcohol use. Therefore, there is a need for holistic interventions that are individualized on a case-by-case basis because students have different needs to be addressed. To begin to work toward a more inclusive and holistic model, campus IPV programming needs to: 1) incorporate alcohol related content and interventions; 2) include campus and community-based resources and focus on building support systems; and 3) educate lay people (particularly friends and family members) about IPV and resources available for survivors. More research needs to be done on the best models for incorporating these features and scaling them in campus settings.

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ACADEMIC VITA**KHUSHI DOSHI**

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EDUCATION

Pennsylvania State University, Schreyer Honors College Fall 2018 – Present

- Biochemistry and Molecular Biology (B.S.)
- Psychology – Neuroscience Option (B.S.)
- Dean’s List

MEDICAL EXPERIENCE

TEMPLE HOSPITAL Summer 2021

Volunteer

- Provided fast-paced patient care support
- Supported nurses on unit floors
- Organized patients at the in-hospital COVID clinic

REMOTE AREA MEDICAL Fall 2018 – Present

Member

- Participated in clinics conducted in underserved communities
- Assisted in providing dental and optical care

OTHER EXPERIENCES

CENTRE HELPS Fall 2021 - Present

Hotline Counselor

- Provided non-judgmental, confidential support for people in crisis
- Conducted suicide lethality assessments
- Accurately and efficiently logged client interactions in detail

DR. ANDERSON’S LAB Summer 2021 - Present

Research Assistant

- Assisted in setting up a pilot study for a text message intervention
- Coordinated submission of documents to IRB
- Aided in recruitment of participants
- Reviewed intervention content for upload into text message delivery system

BIOLOGY 110 Spring 2020 – Fall 2021

Learning Assistant

- Assisted students in class by clarifying and explaining material
- Held office hours outside of class to provide additional support

SCHREYER FOR WOMEN Fall 2019 – Present

Service Chair

- Coordinated service events for members
- Arranged partnerships with community organizations such as Girl Scouts and OCCDA

JADHOOM BOLLYWOOD DANCE TEAM Fall 2018 – Spring 2019

Fundraising Chair

- Recruited sponsors for funding competition trips
- Managed team finances and hosted fundraisers

CERTIFICATIONS

- EMT certified
- CPR certified
- Lab Safety certified at Penn State