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THE ASSOCIATION AMONG VARIOUS TYPES OF SUBSTANCE USE AND THE PERPETRATION AND VICTIMIZATION OF PHYSICAL AND PSYCHOLOGICAL INTIMATE PARTNER VIOLENCE

Sam Ferreira
University of Rhode Island, samferreira3@uri.edu

THE ASSOCIATION AMONG VARIOUS TYPES OF SUBSTANCE USE AND THE PERPETRATION AND VICTIMIZATION OF PHYSICAL AND PSYCHOLOGICAL INTIMATE PARTNER VIOLENCE

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SAM FERREIRA

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SAMANTHA FERREIRA

Thesis Committee:

Major Professor: Hans Saint Eloi-Cadely

Nicole Weiss

Tiffani Kisler

Hector Lopez-Vergara

Brenton DeBoef

DEAN OF GRADUATE SCHOOL

UNIVERSITY OF RHODE ISLAND

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ABSTRACT

The current study identified the association between substances and the perpetration and victimization of physical and psychological IPV. Due to limited data collected, the research questions were modified to specifically examine alcohol and cannabis use rather than various substances. Thus, the following questions were examined: (1) How are cannabis and alcohol use related to perpetration and victimization of physical IPV among adolescent females? and (2) How are cannabis and alcohol use related to perpetration and victimization of psychological IPV among adolescent females? These research questions were examined through four binary logistic regression models to examine the relationship between the predictors (alcohol and cannabis use) and outcomes (victimization and perpetration of physical and psychological IPV). There were no significant findings in this study to determine a relationship between substance use and physical and psychological IPV. Limitations of this study include limited reports of data and the cross-sectional nature of this study. Further research can be used to assist teachers, parents, social workers, and other professionals working or engaging with adolescents using substances and perpetrating or experiencing physical or psychological IPV.

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CHAPTER 1

INTRODUCTION

Intimate partner violence (IPV) and Substance Use (SU) are both very prevalent societal issues affecting adolescents (Roberts et al., 2003). In fact, 1 in 12 U.S. high school students experience physical IPV (CDC, 2022). Moreover, between the years of 2016 and 2020, the rates of SU among 8th graders in the U.S. has increased by 61% and 50% of U.S. teenagers have misused a drug at least once (NCDAS, 2023). Thus, these problem behaviors are affecting the development of adolescents. IPV is described as behavior by an intimate partner or ex-partner that can cause physical, sexual, or psychological harm (Stewart et al., 2021). In the present study, physical and psychological abuse will be examined.

Physical abuse can consist of throwing objects, pushing, kicking, biting, slapping, punching, strangling, hitting, beating, threatening with any form of weapon, and/or using a weapon (CDC, 2021; Stewart et al., 2021). Psychological abuse can include verbal abuse, isolation, and control of the victim. Some examples include the following: name calling, degradation, blaming, threats, stalking, isolation from family and friends, financial control, deprivation of food, money, transportation, and/or depriving access to health care (CDC, 2021; Stewart et al., 2021). SU is the use of selected substances that can be consumed, inhaled, injected, or absorbed by the body in another way with possible risks for dependence and other detrimental risks (CDC, 2022). Alcohol and cannabis are the most used substances among adolescents (CDC, 2020). By 12th grade, about two-thirds of adolescents have tried alcohol and close to two in ten students have reported

misuse of prescription medication (CDC, 2020). About 50% of high school students ranging from 9th-12th grade reported trying cannabis and about four in ten high school students have tried cigarettes (CDC, 2020). During the adolescence stage, the body is developing cognitively, psychologically, socially, and physically. Thus, the misuse of substances can significantly alter this growth period (Squeglia, 2009; HSS, 2022). Detriments from substance use can obstruct the developing body which may lead to future health problems. The purpose of this study is to identify the associations between substance use, specifically alcohol and cannabis and the perpetration and victimization of physical and psychological IPV.

As SU and IPV become more prevalent issues among the younger population, females are the most susceptible to the effects of these conditions (Roberts et al., 2003). Therefore, it is imperative to examine this group of individuals as they are at highest risks. Females in particular are more vulnerable to the side effects of substances such as cannabis (Agabio et al, 2016). Women have also been observed to be more vulnerable to the side effects of medications used to treat SU (Agabio et al, 2016). The present study is focused on predominantly African American female adolescents, who are an underrepresented population in previous research. The significance of examining this population is because specific racial or ethnic groups are more vulnerable to IPV. For instance, adolescent females who identify as African American or multiracial are at greater risk of IPV compared to those who identify as White, Asian American, or Latinx (Fix et al, 2022). This population is more vulnerable to IPV as there are several factors such as education level, number of parents in the household, socioeconomic status, use of substances, exposure to community violence, and access to media that pertain to ethnic

minority urban adolescents. Each of these factors have been found to be related to higher rates of IPV (Eaton & Stephens, 2018).

Alterations to the brain structure, functions and neurocognition can result from adolescent substance use (Squeglia, 2009). Substance use may lead to deficits in skills related to social outcomes such as lack of problem-solving skills, empathy, and communication along with aggression (Lepage, 2014). Thus, adolescents who are developing and changing are being deeply affected by substance use, which is associated with other problem behaviors, such as IPV. Both alcohol and cannabis are related to cognitive and behavior disorders, along with several other substances (American Addiction Centers, 2023). Therefore, it is important to not only examine substance use and IPV but to look at the differences across individual substances. When various substances are collapsed as one variable, it is not specific enough for people to understand the deep impact of some substances. For example, Brabete et al (2021) examined the associations between substance use and natural disasters, pandemics, and IPV but did not give detail on which substances were considered in the variable. Brabete et al examined the relationship between natural disasters, pandemics, IPV, and substance use. Results indicated that there was a positive relationship between natural disaster and pandemics with both IPV and substance use. Moreover, it was found that people who experienced IPV and substance use were not treated for these at the same time. Brabete and colleagues also did not identify individual substances and their relationship with these causes. Thus, each individual substance should be examined as should the different forms of IPV. Identifying independent substances and their relationship to different forms of IPV, such as physical or psychological IPV is important to determine specific

conclusions regarding different situations within romantic relationships. Findings regarding specific situations present more information when providing support for specific circumstances. Therefore, narrowing down relationships between specific substances and IPV can draw more specific conclusions rather than based on broad, all-inclusive categories. Prior research regarding SU and IPV has found contradicting results. Examining the relationship between individual substances and IPV will shed light on these contradicting findings. Additionally, findings regarding these topics can add to the support that these individuals and couples may need. The high co-occurrence of SU and IPV can be considered a growing issue in today's society affecting the younger population, specifically adolescents. SU is considered to be a cognitive disruptor causing the user to think very deeply about something and react with great emotion or action leading to problem behaviors such as IPV (Stalans and Ritchie, 2008). Each year, 16 million female and 11 million male adolescents report experiencing IPV in the United States (CDC, 2022). To prevent IPV and keep adolescents safe, it is important to identify the effects of different types of substance use on the perpetration and victimization of physical and psychological IPV.

CHAPTER 2

REVIEW OF LITERATURE

Substance Use (SU)

Of the many substances, each is classified depending on if it can be used for medical use and/or the potential likelihood of abuse. When examining the side effects of substances, it is typical to refer to the substance as the overall kind of drug such as stimulant, sedative, and psychedelic. Alcohol which is either examined on its own or considered a sedative, has direct effects of perpetrating psychological IPV (Stalans and Ritchie, 2008). SU affects the brain by inhibition of the brain and conflict coping mechanisms. The decrease in inhibition can lead to the use of IPV when resolving conflicts due to the effects of SU clouding the judgment of the user (Yu et al., 2019). Thus, it is important to identify the effects of SU on the perpetration and victimization of psychological and physical IPV. Specifically, this paper will identify individual substances to examine the relationship they have with the perpetration and victimization of physical and psychological IPV. In this study, the specific substances that will be examined include the following: alcohol and cannabis. Cannabis was found to have an indirect effect on IPV considering it may create conflicts between partners such as financial issues (Stalans and Ritchie, 2008). Alcohol is related to the perpetration and victimization of IPV (Temple & Freeman, 2011; de Bruijn & de Graaf, 2016). Prior studies have examined the combination of different SU and its association with IPV. To get a clearer understanding of SU as a predictor of IPV, it is important to examine substances related to IPV individually.

Physical IPV

Physical IPV refers to the intent to physically hurt or injure the other party in the relationship by using forms of physical contact such as hitting, kicking, shoving, and biting. (CDC, 2022). Perpetration relates to the acts of conducting these behaviors towards their partner. It is expected that results will vary between perpetration and victimization as there are differences among context and reasonings for SU related to IPV. The relationship between certain substances and the perpetration of physical IPV has been examined and met with mixed results. For instance, alcohol use was related to higher rates of perpetrating physical IPV. Cannabis use did not have an association with perpetration of physical IPV (Crane et al., 2014; Jarnecke, 2022). Alcohol consumed by both males and females was related to higher rates of perpetration of physical IPV (de Bruijn & de Graaf, 2016). Therefore, using SU as a broad term for a variety of substances, for example using *substances* as a term referring to opioid, cannabis, and alcohol use and the association it has with perpetration of physical IPV, can lead to inconclusive findings as unlike alcohol, opioid and cannabis use are not associated with the perpetration of physical IPV (de Bruijn & de Graaf, 2016). Therefore, saying substances are related to perpetration of IPV is not specific enough given the mixed results in prior research identifying a relationship between SU and the likelihood of perpetrating physical IPV (de Bruijn & de Graaf, 2016). Due to these inconclusive findings, examining the individual substances used and its linkage with perpetration of physical IPV can allow for a better understanding of the relationship between individual substances and the different forms of IPV.

Victimization from physical IPV refers to the recipient of the abuse that results in harm due to physical abuse by a partner. Cannabis use was found to be related to physical IPV victimization (Salom et al., 2015). Nevertheless, due to the lack of specifics across studies, it is hard to differentiate among all the different kinds of illicit drugs to pinpoint the individual substance and its association with the victimization from physical IPV. Thus, leaving confusion regarding which substances are correlated with IPV. Understanding this can protect and help victims prevent or avoid physical IPV and thus creating a safer environment for themselves.

Psychological IPV

Perpetration of psychological IPV refers to the acts of verbal or nonverbal communication to harm the mental and emotional health of their partner at times to obtain control (CDC, 2022). Among women, SU effects decreased the likelihood of perpetrating psychological IPV. However, alcohol increased the odds of perpetrating same-day psychological aggression in both young men and women (Jarnecke, 2022). Additionally, cannabis and depressants were associated with an increase of perpetrating psychological IPV (Jarnecke, 2022; Nabors, 2009). When taken a closer look at the specific substances, it was found that cannabis and cocaine use were associated with higher rates of psychological IPV perpetration (Jarnecke, 2022; Moore et al., 2008). Cannabis has been identified to increase the co-occurrence of relationship conflicts and verbal aggression when only the perpetrator consumes the substance (Jarnecke, 2022; Testa et al., 2018). Despite these advances in the research, more in-depth studies related

to the specific substances and their individual relationships to different forms of IPV are needed to provide additional clarification.

Receiving mental and/or emotional abuse by a partner is referred to as the victimization from psychological IPV. Alcohol has a strong correlation with victimization from psychological abuse (Reyes et al., 2022; Salom et al., 2015). Victims of psychological IPV are more likely to engage in higher levels of alcohol consumption compared to perpetrators (Martino et al., 2005). SU is a potential maladaptive coping strategy for victims of IPV as it is a form of avoidance coping (Clements et. al., 2022). The use of substances can be used as a form of self-administered coping for victims.

The Present Study

Due to the inconsistencies among prior research, it is important to identify specific substances and individually examine their relationship to the perpetration and victimization of both physical and psychological IPV. The prevention or intervention of adolescents involved in an abusive relationship is critical to prevent the potential continuation of such behaviors beyond adolescence (CDC, 2022; Saint-Eloi Cadely et al., 2020, 2021). To provide support and protect the physical and psychological well-being of adolescents, understanding the relationship between IPV and various forms of SU is an essential step that needs to be made. Thus, the present study attempts to identify the association between two types of SU and the perpetration and victimization of physical and psychological IPV among adolescents. The research questions that will be examined throughout this study are 1. How are cannabis and alcohol use related to perpetration and victimization of physical IPV among adolescent females? and 2. How are cannabis and

alcohol use related to perpetration and victimization of psychological IPV among adolescent females? These findings will provide support to care for adolescents who engage in these risk behaviors. The specific examinations of this study will also provide additional resources to help this vulnerable population in the future.

CHAPTER 3

METHODOLOGY

Participants

The analysis sample for this study is 157 participants. They were compensated $25.00 for taking the baseline survey which took approximately 30-45 minutes. For each participant who completed the baseline assessment, they were also asked to complete a survey about their partner. All data are protected by the National Archive of Criminal Justice Data Fast Track Release. Data were collected through research funded by the National Institute of Justice to examine situational and contextual differences among adolescent females who live in the city of Baltimore, Maryland. Each participant met specific criteria to be in the study. Participants were females between the ages of 16-19 years old who spoke English fluently and lived in Baltimore, Maryland. The average age of participants included in the data set is 18.11 years old (*SD* =1.1). Of these participants, 19.7% were 16 years old, 22.3% were 17 years old, 32.5% were 18 years old, and 25.5% were 19 years old. Additionally, 92.4% of the participants were African American, 2.5% of participants were White, 0.6% were Native American, 1.3% were Asian/Asian American, 1.9% were multiracial and 1.3% of the participants were Latina (see Table 1). Each participant must have been in a current dating relationship with a male partner. Participants who did not complete the study were not included in the study. Approximately 61.1% of students were in school and 11.5% of participants were in school but on vacation. The remaining 27.4% of participants were not in school. Moreover, 11.5% of participants last completed some college or technical school, 35%

completed high school or earned a GED, 51% completed some high school, and 2.5% of the participants completed an education up to 8th grade.

Measures

Intimate Partner Violence (IPV)

Victimization and perpetration of physical IPV were measured by questions that were created by researchers such as *"How many male romantic partners have you had in your life; pushed, shoved, grabbed, slapped, or hit you (him)?* and *punched, choked, bit, or kicked you (him)?* The answers ranged between 0 and 96, so that participants could identify the number of partners in which they experienced physical IPV with. Other questions to measure victimization of physical IPV were *"Have any of your dating or romantic partners ever done any of the following to you; Dumped you out of the car, Threw something at you that hit you, Burned you, Hit you with his fist, Hit you with something hard besides his fists, Tried to choke you,* and *Beat you up."* This set of questions were dichotomous. The item "*assaulted you with a knife?",* did not have any variance which is why this variable was not used as representation for victimization nor perpetration of physical IPV. These same set of questions were also used to assess perpetration of physical IPV: "*Have you ever done any of the following to any of your dating or romantic partners; Dumped him out of the car?, Threw something at him that hit him?, Burned him?, Hit him with your fist, Hit him with something hard besides your fists?, Tried to choke him?, Beat him up?, and Assaulted him with a knife or gun?*" This set of questions were also dichotomous. All sets of items were dichotomized to indicate perpetration or victimization from physical IPV. Thus, a dichotomized variable for perpetration and victimization from physical IPV was created from these sets of items (0

= *No perpetration/No victimization from physical IPV*, 1 = *Perpetrated/Experienced some form of physical IPV*). Cronbach alphas were tested for the second set of items for physical IPV victimization (α = .547) and physical IPV perpetration (α = .584).

Victimization and perpetration of psychological IPV were measured by questions, developed by the researchers asking, *"How many male romantic partners have you had in your life; call you (him) fat, ugly, stupid or some other insult?, threatened to hit, punch, kick, or hurt you (him)?, and made you (him) feel afraid of him (you)?"* The answers ranged between 0 and 96, so that participants could identify the number of partners in which they experienced psychological IPV. To identify an experience of either perpetration or victimization from psychological IPV, these two variables were dichotomized into two separate variables: perpetration of psychological IPV and victimization from psychological IPV (0 = *No perpetration/No victimization from psychological IPV*, 1 = *Perpetrated/Experienced some form of psychological IPV*). Cronbach alphas were tested for psychological IPV victimization (α = .768) and psychological IPV perpetration (α = .728).

Substance Use (SU)

Substance use was assessed via three different questions. For alcohol, the *Alcohol Use Disorder Identification Test* (AUDIT) scale was used to determine how much and how frequently the participant consumed alcohol in the past year (AUDIT; Hallit et al., 2020). Participants were asked to answer, "How often do you have a drink containing alcohol?" Answers were measured on a five-point scale: (0) *Never*, (1) *Monthly or Less,* (2) *2 to 4 times a month,* (3) *2 to 3 times a week,* and (4) *4 or more times a week* (AUDIT; Hallit et al., 2020). Another question asked is *"How many drinks containing alcohol do*

you typically have when you are drinking?" Answers were measured on a five-point scale: (0) *1 or 2,* (1) *3 or 4,* (2) *5 or 6,* (3) *7,8, or 9,* and (4) *10 or more.* Each item was treated as an independent variable. Next, the frequency of cannabis use in the past six months was measured. The question was developed by researchers to measure use per month asking, *"How often did you use marijuana in the past six months? (per month)"* which was measured on a seven-point scale: (0) *Never,* (1) *Once,* (2) *2-3 times,* (3) *4-6 times,* (4) *7-10 times,* (5) *11-20,* and (6) *more than 20.*

Plan of Analysis

SPSS Version 29 was used to complete descriptive analyses to examine the sample, assess for skewness and reliability, and identify outliers among the variables of interest. Correlations were conducted to identify the association between various substances and the different forms of IPV.

Alcohol and cannabis were the only substance variables used based on the limited data provided (see Table 2). The associations between these substances were examined for multicollinearity, which was not found. Correlations between demographics and outcomes of the present study were examined to determine whether any demographics needed to be treated as control variables (Abu-Bader, 2021).

Four binary logistic regression models were fit to the data to examine whether participants belonged in the category of having perpetrated/being victimized from psychological/physical IPV based on the predictor variable. This procedure also indicated the odds ratio which provided the likelihood/probability of participants having perpetrated/being victimized from psychological/physical IPV. Each form of IPV was an

outcome for each model (i.e., one outcome per model). The three predictors used in each of the models were (1) alcohol use, (2) number of drinks, (3) cannabis use. These predictors were included in the same model; thus, all predictors were controlled for.

Chapter 4

FINDINGS

Descriptive analyses were conducted for substance use including alcohol, cannabis, and eleven other substances. The original survey was provided to adolescent females ages 16-19 (N = 7,004). Only 157 participants responded, however many of the participants did not respond to several of the questions related to substance use. Thus, alcohol and cannabis use were specifically examined rather than all the substances included in the original study (see Table 2). Table 3 indicates the frequencies of substance use and IPV variables after the latter variables were dichotomized. The variables measuring IPV were dichotomized and computed into four separate variables to identify perpetration and victimization of physical and psychological IPV.

Correlations Between Substance Use and IPV

Pearson correlation analyses were fit across predictor and outcome variables. It was found that there were no significant correlations between cannabis use or alcohol use and IPV.

The following correlations are for the predictors and victimization of psychological IPV: cannabis use (r=.063, p=.633), alcohol use (r=.11, p=.279), and number of drinks (r=.231, p=.102). Listed next are the correlations for substance use and perpetration of psychological IPV: cannabis use (r=.214, p=.117), alcohol use (r=.16, p=.131), and number of drinks (r=.157, p=.328). As for the predictors and victimization of physical IPV as the outcome, the correlations were cannabis use (r=.39, p=.768), alcohol use (r=.129, p=.168), and number of drinks (r=.241, p=.089). Lastly, the correlations for

substance use and perpetration of physical IPV are cannabis use (r=.162, p=.233), alcohol use (r=.084, p=.382), and number of drinks (r=.26, p=.066) (see Table 3).

Moreover, there was no significant correlation between race and IPV as correlations and significance for predictors being race and outcomes being each form of IPV are as follows: victimization of psychological IPV (r= -.077, p= .488), perpetration of psychological IPV (r= -.147, p= .165), victimization of physical IPV (r= .078, p= .407), and perpetration of physical IPV (r= -.025, p= .799). Correlations between age and IPV were also ran, finding no significant relationship between age and each form of IPV. The following are the correlations for age and IPV: victimization of psychological IPV (r= .072, p= .48), perpetration of psychological IPV (r= -.164, p= .12), victimization of physical IPV (r=-.88, p= .346), and perpetration of physical IPV (r=.-.136, p= .156). Thus, it was determined that there were no variables that needed to be controlled for.

Binary Logistic Regression Between Substance Use and IPV

Four binary logistic regression models were fit to the data. Thus, there are four models, one for each of the following outcomes: a) victimization of psychological IPV, b) perpetration of psychological IPV, c) victimization of physical IPV, and d) perpetration of physical IPV.

Binary Logistic Regression Between Substance Use and Psychological IPV

Model 1 represents the binary logistic regression results of alcohol use, number of drinks, and cannabis use related to victimization of psychological IPV. Results indicated that there were no significant relationships between the predictors and outcome for alcohol use and victimization of psychological IPV (B= .301, SE= 1.093, p= .783),

number of drinks and victimization of psychological IPV (*B*= 19.423, *SE*= 6,601.177, *p*= .998), and cannabis use and victimization of psychological IPV (*B*= -.258, *SE*=.357, *p*= .469) (see Table 5).

Model 2 represents the binary logistic regression results of alcohol use, number of drinks, and cannabis use related to perpetration of psychological IPV. Results indicated that there were no significant relationships between the predictors and outcome for alcohol use and perpetration of psychological IPV (*B*= .202, *SE*= .884, *p*= .341), number of drinks and perpetration of psychological IPV (*B*= .842, *SE*= .875, *p*= .817), and cannabis use and perpetration of psychological IPV (*B*= .052, *SE*= .29, *p*= .857) (see Table 6).

Binary Logistic Regression Between Substance Use and Physical IPV

Model 3 represents the binary logistic regression results of alcohol use, number of drinks, and cannabis use related to victimization of physical IPV. Results indicated that there were no significant relationships between the predictors and outcome for alcohol use and victimization of physical IPV (*B*= .223, *SE*= .667, *p*= .738), cannabis use and victimization of physical IPV (*B*= -.146, *SE*= .327, *p*= .655), and number of drinks and victimization of physical IPV (*B*= 1.079, *SE*= 1.087, *p*= .321) (see Table 7).

Model 4 represents the binary logistic regression results of alcohol use, number of drinks, and cannabis use related to perpetration of physical IPV. Results indicated that there were no significant relationships between the predictors and outcome for alcohol use and perpetration of physical IPV (*B*= -.965, *SE*= .643, *p*= .134), number of drinks and

perpetration of physical IPV (*B*= 2.363, *SE*= 1.618, *p*= .144), and cannabis use and perpetration of physical IPV (*B*= -.27, *SE*= .386, *p*= .484) (see Table 8).

Chapter 5

DISCUSSION

The purpose of this study was to identify the relationship between substance use and physical and psychological IPV. After analyzing the data for both substances and IPV, it was found that there was not enough data for other substances. Thus, alcohol and cannabis were the only substances that resulted with enough data to be used for the study. Due to different scales used for each item to represent IPV, each IPV variable was dichotomized to indicate experiencing IPV whether it was perpetration or victimization of physical or psychological IPV.

In response to the research questions, more is needed to understand whether (Q1) alcohol and cannabis are related to the perpetration or victimization of physical IPV and (Q2) alcohol and cannabis use are related to the perpetration or victimization of psychological IPV. Low responses for all substances included in the survey may have contributed to the present study's non-significant findings.

Regarding prior literature, this study has added to the inconsistencies regarding the relationship between substance use and IPV. Specifically, the use of substances and the victimization and perpetration of physical and psychological IPV among adolescents is a prevalent issue. Adolescents are engaging in these problem behaviors, however the relationship between these factors is not clear. It has been found in earlier studies confirming significant relationships between alcohol and the perpetration and victimization of IPV (Temple & Freeman, 2011; de Bruijn & de Graaf, 2016). This was not a finding that was made in this present study, as there were no significant results found. It is important to note the the lack of significance in this study does not unjustify

prior findings, but instead adds to the inconsistent findings for the relationship between alcohol and other substances.

Model 1 and Model 2 represent the likelihood of adolescents using cannabis or alcohol who will also experience victimization or engage in perpetration of physical IPV. Models 3 and 4 show the binary logistic regression results between alcohol and cannabis and the victimization and perpetration of psychological IPV. For those who use cannabis, there's a negative relationship to all forms of IPV except perpetration of psychological IPV.

It was concluded that there were no significant correlations to substance use and IPV. Further examination was used as a binary logistic regression model was fit to the data to represent the likelihood of substance use and IPV occurring. Based on the regressions, there was no significant relationships between alcohol and cannabis use and perpetration and victimization of physical and psychological IPV.

Limitations

Limitations include that there were only 157 participants who responded and fewer who responded to substances other than alcohol and cannabis use. With a lack of frequency of responses, this limited other substances to be examined. The low frequency in reports also limited the ability to find significant findings. Therefore, these findings added to the inconsistencies in the literature. Thus, these results cannot be generalized to the adolescent population due to their lack of significance. Another limitation in this study was low reliability scores for the perpetration and victimization of physical IPV. The low response rate for these items may have contributed to the low reliability of these variables. Moreover, each form of SU was assessed only via one item and the IPV items

measured number of partners instead of frequency of occurrence. This is important to note because the number of partners does not accurately represent the occurrence of IPV. Multiple experiences with IPV may have occurred with one partner. Lastly, the data used was from a cross sectional study indicating the data was collected at one time point rather than over time. This does not allow for the determination of causality which limits findings to determine if the predictors can lead to the outcomes.

Future Directions & Implications

Due to the lack of reports of substance use and IPV which does not coincide with societal current events, it is important to identify if the cohort of people being studied fits the needs of the study. Perhaps sampling from the troubled youth community and those who have engaged in delinquent behaviors specifically may lead to better conclusions regarding the relationship between substance use and physical and psychological IPV among adolescent females. Furthermore, using a longitudinal study to examine the variables over time may lead to more accurate conclusions regarding this relationship. Using more items that measure frequency of occurrence and severity for IPV may add more information regarding one's experiences with IPV. Another strategy to use for future implications would be to use multiple items regarding cannabis. Perhaps using questions from standardized measures for substances other than alcohol, as it used the AUDIT Scale (AUDIT; Hallit et al., 2020), and for IPV variables rather than the questions made by the researchers would be beneficial to the study as well. In summary, the associations between various forms of SU and specific forms of IPV is worthy of further investigation.

As more studies are being conducted on the topic, professionals working with adolescents may find it useful for their practice. Social workers, teachers, therapists, anyone working with individuals experiencing either substance use or IPV may want to be aware of other evident factors that may affect the person whom they are servicing to assist the person in need of the support. Parents are also able to better approach situations with further information with assistance of family educators who can give factual information to parents for healthy lifestyles within the family dynamic. This can create better relationships between families and adolescents experiencing substance use and/or IPV. Teachers providing information to educate individuals who are making the choice when engaging in either substance use and/or IPV may have a better understanding of factors related to choices made during their adolescent years.

Table 1. *Descriptive Statistics for demographics, education, residence, and substance use.* (*N*=157).

Demographic	
	mean [SD]
Age (range from 16-19)	18.11 [1.1]
	n (%)
Race:	
African American	145 (92.4)
White	4 (2.5)
Native American	1 (.6)
Latino	2 (1.3)
Asian/Asian American	2 (1.3)
Multiracial	3 (1.9)
Education	
In school	
In school, but on vacation	96 (61.1)
Not in school	18 (11.5)
Highest Grade Completed	43 (27.4)
8th grade or less	
Some high school	4 (2.5)
High school/GED	80 (51)
Some college/tech	55 (35)
	18 (11.5)
Residence (residing with)	(N=156)
	n (%)
Biological mother	97 (61.8)
Biological father	15 (9.6)
Grandmother	15 (9.6)
Grandfather	5 (3.2)
Aunt	10 (6.4)
Uncle	5 (3.2)
Foster mom	4 (2.5)
Adoptive mother	2 (1.3)
Mom's boyfriend	1 (.6)
Stepmother	2 (1.3)
Stepfather	6 (3.8)
Sibling (brother or sister)	22 (14)
Friends' parents	2 (1.3)
Alone	19 (12.1)

Table 2. *Frequencies of responses to various SU questions*. (*N*=157).

Substance Use	N
Alcohol	157
Cannabis	85
Cocaine	2
Crack	1
Freebase	1
Heroin	3
Ecstasy	6
Crystal Meth	0
Speed	0
LSD	3
Painkillers	5
Hallucinogenic Mushrooms	1
ADHD Medication	4

Table 3. *Frequencies of variables for substance use* (*N*=157).

Frequencies of variables for IPV after dichotomization (*N*=157).

Predictor and Outcome Variables	*N* (%)
Substance Use	
Alcohol Use	72 (45.9)
Number of Drinks	33 (21.1)
Cannabis Use	73 (46.5)
Intimate Partner Violence (IPV)	
Victimization of Psychological IPV	88 (56.1)
Perpetration of Psychological IPV	60 (38.2)
Victimization of Physical IPV	88 (56.1)
Perpetration of Physical IPV	77 (49.0)

Table 4. *Correlations between substance use between perpetration and victimization of physical and psychological IPV (N*=157).

Variable	1	2	3	4	5	6	7
1. Cannabis	-						
2. Alcohol Use	.305**	-					
3.Number of drinks	.566***	0.224	-				
4.Vic. Psy. IPV	0.063	0.11	0.231	-			
5.Perp. Psy. IPV	0.214	0.16	0.157	.456***	-		
6.Vic. Phys. IPV	-0.039	0.129	0.241	.688***	.574***	-	
7.Perp. Phys. IPV	0.162	0.084	0.26	0.141	.859***	.676***	-
M	3.08	0.78	0.6	0.8889	0.6593	0.7589	0.7
SD	2.221	1.01	0.781	0.3159	0.4766	0.4298	0.4604

** Correlation is significant at the .01 level (2-tailed)

***. Correlation is significant at the .001 level (2-tailed)

Table 5. *Binary Logistic Regression between Victimization of Psychological IPV and Substance Use* (*N*=157).

	Victimization of Psychological IPV			
	B	*(SE)*	Sig.	OR
(Constant)	1.603	(1.956)	.412	4.97
Alcohol Use	.301	(1.093)	.783	1.351
Number of Drinks	19.423	(6601.177)	.998	272485097.66
Cannabis Use	-.258	(.357)	.469	4.97

Note. 0= No experience of psychological IPV, 1= Experienced psychological IPV

Table 6. *Binary Logistic Regression between Perpetration of Psychological IPV and Substance Use* (*N*=157).

	Perpetration of Psychological IPV			
	B	*(SE)*	Sig.	OR
(Constant)	-.438	(1.446)	.762	.645
Alcohol Use	.202	(.884)	.341	2.321
Number of Drinks	.842	(.875)	.817	1.224
Cannabis Use	.052	(.29)	.857	1.054

Note. 0= No experience of psychological IPV, 1= Experienced psychological IPV

Table 7. *Logistic Regression between Victimization of Physical IPV and Substance Use* (*N*=157).

	Victimization of Physical IPV			
	B	*(SE)*	Sig.	OR
(Constant)	1.388	(1.8)	.595	4
Alcohol Use	.223	(.667)	.738	1.25
Number of Drinks	1.079	(1.087)	.321	2.941
Cannabis Use	-.146	(.327)	.655	.864

Note. 0= No experience of physical IPV, 1= Experienced physical IPV

Table 8. *Logistic Regression between Perpetration of Physical IPV and Substance Use* (*N*=157).

	Perpetration of Physical IPV			
	B	*(SE)*	Sig.	OR
(Constant)	3.8	(2.2024)	.06	44.721
Alcohol Use	-.965	(.643)	.134	.381
Number of Drinks	2.363	(1.618)	.144	10.618
Cannabis Use	-.27	(.386)	.484	.763

Note. 0= No experience of physical IPV, 1= Experienced physical IPV

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