

Walden University ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2-26-2024

The Relationship Between Domestic Violence and Substance **Abuse Treatment Outcomes**

Bernardina Marcelo Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations



Part of the Clinical Psychology Commons

Walden University

College of Psychology and Community Services

This is to certify that the doctoral dissertation by

Bernardina Marcelo

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

Review Committee

Dr. Delinda Mercer, Committee Chairperson, Psychology Faculty
Dr. Reba Glidewell, Committee Member, Psychology Faculty

Chief Academic Officer and Provost Sue Subocz, Ph.D.

Walden University 2024

Abstract

The Relationship Between Domestic Violence and Substance Abuse Treatment

Outcomes

by

Bernardina Marcelo

MS, Walden University 2015

BS, Fresno State University, 2001

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

Clinical Psychology

Walden University

February, 2024

Abstract

Little is known about how domestic violence treatment outcomes relate to substance abuse among intimate partners. Previous studies have reported that intimate partners who are in treatment for substance use struggle with the containment of domestic violence. Therefore, the purpose of this quantitative correlational study was to investigate how substance abuse among intimate partners relates to domestic violence treatment outcomes. Two theoretical frameworks, namely cycle of violence theory and social exchange theory informed the study. A convenience sample of 76 participants participated in the study. Data were analyzed using binary logistic regression, and the results showed that women in domestic are less influenced by substance abuse in their completion of treatment programs. However, men are more affected by substance abuse in completing treatment programs. Furthermore, employment significantly impacts treatment program completion because employed individuals are more likely to complete treatment programs than those unemployed. The results provide significant insight to the stakeholders in the criminal justice systems and rehabilitation organizations to understand the impact of substance abuse and employment status on the offenders and victims of domestic violence. Further research should be conducted to determine the strategies to reduce intimate partner violence in the community.

The Relationship Between Domestic Violence and Substance Abuse Treatment

Outcomes

by

Bernardina Marcelo

MA, Walden University 2015

BS, Fresno State University, 2001

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy in
Clinical Psychology

Walden University

February 2024

Dedication

This thesis is dedicated to God, the guiding force on my journey to fulfill the mission, he has set before me. In loving memory of my mother, who may no longer be with us physically but forever encourages me to be my best, emphasizing the importance of education. To my sister, a constant pillar of support, who believed in my abilities and motivated me to persevere. Heartfelt gratitude to my husband, my soulmate, for steadfastly having my back during late nights and being my rock when doubt crept in. A special dedication to my children, my enduring motivation to strive for excellence.

Acknowledgments

The successful completion of my doctoral journey has been shaped and facilitated by a number of individuals. I extend my warm gratitude to Dr. Delinda Mercer and Dr. Reba Glidewell, my dissertation committee, and the university research reviewer for their valuable support, which played a crucial role in the completion of my dissertation. Special thanks go to Dr. Jeffrey Mar, my Clinical supervisor, whose unwavering support has been instrumental in this journey and remains a guiding force in my professional development. I am also grateful for the encouragement and guidance provided by my cohort and friends, who offered support through meaningful phone calls. Your collective contributions have been instrumental in reaching this accomplishment.

Table of Contents

List of Tables	V
List of Figures	vii
Chapter 1: Introduction to the Study	1
Introduction	1
Background	4
Problem Statement	7
Purpose of the Study	9
Research Questions and Hypotheses	9
Theoretical Framework	11
Nature of the Study	12
Definitions	15
Assumptions	15
Scope and Delimitations	16
Limitations	16
Significance	17
Summary	18
Chapter 2: Literature Review	19
Introduction	19
Literature Search Strategy	19
Theoretical Framework	20

Literature Review Related to Key Variables and/or Concepts	22
Overview of Domestic Violence	22
Defining IPV	23
Prevalence of IPV	25
Substance Abuse and Intimate Partner Violence	26
Treatment Options for IPV among Substance-Abusing Patients	29
Relationship between Substance Abuse Treatment Programs and Increased	
Violence	31
Summary of Literature on the Relationship between Domestic Violence	
and Substance Abuse	40
Risk Factors for Domestic Violence and Its Influence on Substance Used	
Treatment Program	42
Summary and Conclusions	48
Chapter 3: Research Method	50
Introduction	50
Research Design and Rationale	52
Methodology	54
Population	54
Sampling and Sampling Procedures	54
Procedures for Recruitment, Participation, and Data Collection	58
Instrumentation and Operationalization of Constructs	58
Operationalization	59

	Data Analysis Plan	. 61
	Threats to Validity	63
	Ethical Procedures	63
	Summary	64
Ch	apter 4: Data Analysis and Results	67
	Introduction	67
	Descriptive Findings	68
	Demographics	. 68
	Study Variables	. 70
	Data Analysis Procedures	71
	Results73	
	Summary	77
Cł	napter 5: Summary, Conclusions, and Recommendations	80
	Introduction	80
	Interpretation of the Findings	80
	Limitations of the Study	82
	Recommendations	88
	Recommendations for Future Research	. 90
	Recommendations for Practice	. 90
	Implications	91
	Implications for Positive Social Change	. 93
	Theoretical Implications	. 93

Conclusion	94
D C	95

List of Tables

Table 1. Hypothesis Summary, Statistical Tests, and Scales of Measurement	60
Table 2. Gender	68
Table 3. Age	69
Table 4. Race	69
Table 5. Marital Status	69
Table 6. Education Level	70
Table 7. Current Susbstance Use	70
Table 8. Employment Status	71
Table 9. Re-Offender	71
Table 10. Completed Treatment Program	71
Table 11. Binary Logistic Model of Age, Current Susbtance Abuse, and Employment	
Status Predicting Re-Offence	73
Table 12. Binary Logistic Model of Age, Current Susbtance Abuse, and Employment	
Status Predicting Completion of Treatment Program	74
Table 13. Binary Logistic Model of Age, Current Susbtance Abuse, and Employment	
Status Predicting Re-Offence (Women)	74
Table 14. Binary Logistic Model of Age, Current Susbtance Abuse, and Employment	
Status Predicting Re-Offence (Men)	75
Table 15. Binary Logistic Model of Age, Current Susbtance Abuse, and Employment	
Status Predicting Completion of Treatment Program (Female)	76

Table 16. Binary Logistic Model of Age, Current Susbtance Abuse, and Employment	t
Status Predicting Completion of Treatment Program (Male)	77

List of Figures

Figure 1. G*Power Output for Minimum Sample Required for Binary Logistic	
Regression	57

Chapter 1: Introduction to the Study

Introduction

Substance use has been found to play a role in clients' compliance with treatment and further perpetuation of violence. According to research, there is a relationship between domestic violence and substance abuse (Amstrong et al., 2019). Substance abuse is a factor in a large percentage of the incidents that involve intimate partner violence (IPV) (Amstrong et al., 2019). Substance abuse can exacerbate and precipitate the risk of perpetrating intimate partner violence (Armstrong et al., 2019). However, there is a gap in the research about how substance abuse affects offenders' treatment and further violence (Peterson et al., 2018).

This study focused on exploring how substance abuse affects treatment compliance among individuals who commit IPV. Numerous research studies address the connection between substance abuse and violence. Research has found a strong association between criminality and substance abuse, which is the reason why a substance abuser is more likely to become the perpetrator (Giarrantano et al., 2020). Substance abuse damages the body system and the abuser's ability to think clearly.

Research indicates that women and men are the aggressors in relationships at similar rates (Raj & Shankar, 2017). It is essential to understand the role that gender plays in domestic violence and substance abuse. There are different motivations, severity, and ongoing patterns of abuse. Several studies have found that substance abuse affects

males and females differently, which poses unique obstacles to treatment effectiveness (Giarratano et al., 2020). Research shows that women with poor mental health are three times more likely to have experienced domestic violence and substance abuse (Manuel et al., 2017). Reviewing current research that addresses when and how these issues occur can shed light on the association between substance abuse and domestic violence.

It is crucial to take into consideration factors that may strengthen the relationship between substance abuse and IPV. Factors that may deserve attention are co-occurring disorders such as substance abuse and mental illness. Several studies have found an association between mental illness and IPV (McKee & Hilton, 2019). Treatment programs address substances and mental illness in assessments; however, it is not the focus of a domestic violence treatment program. Courts have found themselves having to refer clients to multiple treatment programs to address these issues. Research has found that when offenders are provided with multiple treatment referrals, it hurts success and completion rates (Brunner et al., 2019). This is because they are likely to avoid the treatments altogether by showing no commitment to the different referrals.

Previous studies have found a relationship between substance abuse and reduced treatment for intimate partner violence (McKee & Hilton, 2019). The study addressed whether substance abuse affects IPV treatment by reducing compliance and participation in treatment, in other words causing increased dropout, and/or whether substance abuse contributes directly to further incidents of IPV or both. This study sought to understand the relationship between substance abuse and the treatment of IPV. Further issues that hinder the treatment of individuals who commit IPV are comorbid substance abuse

disorders and mental health issues like depression, anxiety, posttraumatic stress disorder, and bipolar disorder (McKee & Hilton, 2019). Physical aggression has been found to increase in individuals with multiple underlying issues (McKee & Hilton, 2019).

There is a repeated failure of treatment programs to address the factors that affect retention and changing the delivery of services (Brunner et al., 2019). Individuals abusing substances while in court-ordered treatment programs are more likely to drop out of Batterer Intervention Programs (Brunner et al., 2019). Substance abuse creates a context in which risk is exacerbated (Horstman et al., 2019). Despite the high rates of IPV in individuals who abuse substances, there is very little information on the treatment approaches that are used with this population (Brunner et al., 2019). To obtain an understanding of the best treatment outcome, it is essential to address the multiple factors affecting treatment. Hence, interventions that target substance abuse in individuals who have a history of IPV may lead to a reduction of IPV. Individuals who commit IPV are referred to attend counseling/education programs (known as the Batterer Intervention Program) (BIP). Most pro-arrest laws mandate arrest by law enforcement in cases of domestic violence incidents regardless of the incident's intensity and possibly prosecutors cannot drop charges.

Chapter 1 is organized into several sections, which discusses the different themes addressed. The researcher will discuss background information on the relationship between domestic violence and substance abuse treatment programs, identify the problem statement, the purpose of the study, and research questions and hypotheses guiding the study. In addition, the researcher will introduce the theoretical frameworks, namely the

cycle of violence theory and social exchange theory, to inform the study. Last, the researcher will discuss the nature of the study, definition of terms, assumptions, scope and delimitations, limitations, and significance, and will provide a summary of the chapter.

Background

Domestic violence, particularly IPV, is a common acute problem with negative effects on victims and aggressors. In 2019, the World Health Organization classified IPV as a health epidemic affecting the public globally (McKee & Hilton, 2019). While research suggests that men and women are common perpetrators of IPV, Spencer et al. (2021) established that the majority of the victims are usually women who report experiencing serious forms of violence such as battering and verbal abuse. In acute IPV, Stringer and Baker (2018) reported that there is an increased risk of victims developing mental problems or substance use disorders.

Research suggests that domestic violence is occurring at an alarming rate globally. As an illustration, Sullivan (2018) estimated that at least 35 percent of women in the United States have instances of rape, physical violence, or stalking from their intimate partners. In Canada, current data suggests that at least 25 percent of women experience IPV in their lifetime (Sullivan, 2018). Conflicting with the above results, Telles et al. (2020) cautioned care to be undertaken when examining the prevalence rate of IPV in the treatment population given the increase in IPV cases. For instance, a recent systematic review (Amstrong et al., 2019) established that nearly half of all victims in

mental health care settings have at least been directly witnessed or involved in IPV, which varies across the globe.

Research has established a direct link between IPV and substance use. Zarling et al. (2019) conducted a qualitative study to establish the relationship between domestic violence and substance abuse on a sample of 213 drug addicts recruited in treatment programs. Based on the study findings, IPV was associated with acute depression, sleep disorders, suicidal thoughts, and PTSD, which negatively impaired the psychological functioning of the victims. Researchers including Telles et al. (2020) also reported that the severity of IPV on victims depends on the type of violence committed against them, including shoving which could be linked to depression, or stalking which could be linked to suicidal thoughts. Additional research by Manuel et al. (2017) demonstrated that emotional abuse, which is an aspect of IPV, is connected to acute depression, low esteem among individuals, and recurring PTSD. Thus far, the evidence reviewed suggests that IPV is a serious problem associated with several health issues, including depression, low self-esteem, PTSD, and suicidal thoughts that could have negative effects on the psychological well-being of the victims.

A decrease in IPV has been linked to substance use in domestic violence treatment programs. For example, Peterson et al. (2020) found that at least 30 percent of women in substance abuse treatment programs have experienced IPV in their lives.

According to Manuel et al. (2017), the focus is to reduce the severity and frequency of IPV by influencing behavior change among individuals to adopt positive behaviors.

Researchers have suggested that the link between IPV and substance abuse treatment programs is complex. For instance, Zarling et al. (2019) found an indirect relationship between domestic violence and substance treatment outcomes whereby the rate of violence continued to surge despite the treatment for domestic violence. However, Peterson et al. (2018) found that substance abuse treatment programs have a positive effect on reducing the prevalence rate of IPV. Pérez and Ruiz (2017) found that 60 percent of men enrolled for substance abuse treatment had a 30 percent decrease in their previous behaviors. Despite the evidence suggesting a possible direct link between IPV and substance abuse treatment outcomes, limited research has been conducted to establish whether substance use treatment programs directly or indirectly affect IPV rates where one or both partners have been enrolled in treatment for substance use programs (Pérez & Ruiz, 2017). As such, there has been a continued trend of increased IPV rates among individuals enrolled in substance abuse treatment programs despite the assurance that such programs will reduce victim's exposure to domestic abuse (Peterson et al., 2020). There is the need therefore to investigate the relationship between substance abuse and domestic violence treatment outcomes.

Historically, policymakers have initiated policies to regulate substance use abuse. Some of the policies have targeted the supply chain by limiting the amount of drugs delivered to people. However, limited efforts have been focused on the relationship between substance use and IPV when one of the partners is enrolled in substance abuse treatment programs (Amstrong et al., 2019, Cafferky et al., 2018). To address the above

gap, I conducted a quantitative correlational-study to investigate the relationship between substance abuse and domestic violence treatment.

Problem Statement

Little is known about how domestic violence treatment outcomes relate to substance abuse among intimate partners. Previous researchers such as Manuel et al. (2017) have reported that intimate partners who are in treatment for substance use have an improved containment of domestic violence. More intimate partners enrolled in treatment for substance abuse engage in IPV than intimate partners not enrolled in substance abuse treatment (Spencer et al., 2019). Researchers have reported that some domestic abuse treatment programs could increase aggressiveness in individuals enrolled in domestic abuse treatment programs, thereby increasing IPV rates due to drug abuse incidences (McKee & Hilton, 2019). Substance abuse addicts have been found to struggle with IPV, Telles et al. (2020) found that when someone is receiving treatment for domestic abuse while still having substance use problems, their aggressive behavior toward a victim increases. Intimate partner violence is a common problem for people in substance use disorder treatment programs. Research on substance use disorder by Spencer et al. (2019) established that the rate of IPV towards partners was about 50 percent, nearly three times the rate of IPV reported in community-based samples who do not use substances. Similarly, a study by McKee and Hilton (2019) on substance use treatment on a sample of 319 DV victims established that IPV relating to partners surpassed 67 percent for men while 39 percent for women, and the rates were 70 percent higher for men and women with close intimate partner relationships. Involvement in IPV

is a predictor of substance abuse problems, and poor domestic violence treatment response by the offenders enrolled in treatment programs (Manuel et al., 2017).

Researchers have linked IPV with several costs, such as physical, mental, interpersonal impairment, and occupational problems that affect individuals' lives directly (McKee & Hilton, 2019). Thus, it is critical to explore the relationship between domestic violence treatment outcomes and substance abuse among intimate partners.

Despite the surge in IPV among individuals in substance use treatment programs, there is limited understanding of the relationship that exists between domestic violence treatment outcomes and substance abuse among intimate partners (Manuel et al., 2017). There is evidence that substance use problems do not respond well to IPV treatment. However, via counseling and monitoring, treatment programs across the US have attempted to lower the number of IPV instances. The consequence is that domestic violence treatment programs are typically recommended to a smaller number of people who are struggling with substance use. Domestic violence treatment programs are important in providing IPV-targeted programs that would result in reduced IPV rates against partners.

However, past research suggests a gap in the literature regarding the link that exists between domestic violence treatment outcomes and substance abuse, especially when one or both partners are enrolled in domestic violence treatment programs.

Researchers such as Spencer et al. (2019) identified the need for additional research to examine domestic violence treatment outcomes, especially IPV, and its link to substance abuse where one of the partners is participating in substance abuse treatment. McKee and

Hilton (2019) also recommended additional research to understand the extent to which domestic violence treatment outcomes relate to substance use and IPV rates among intimate partners. The gaps identified above clearly suggest the need to understand the relationship that exists between domestic violence treatment outcomes and substance abuse among intimate partners to mitigate its costs related to health and interpersonal relationships.

Purpose of the Study

The purpose of this quantitative correlational study is to investigate how substance abuse among intimate partners relates to domestic violence treatment outcomes. The study findings may fill the current gap in the literature identified by previous researchers relating to the extent to which DV treatment outcomes influence substance abuse among intimate partners (Pérez & Ruiz, 2017). For instance, Spencer et al. (2019) identified a gap in the literature by noting that there is limited understanding to explain how domestic violence outcomes influence substance abuse among the victims. To address this gap in the literature, the researcher conducted a quantitative correlational study to explore the extent to which domestic violence treatment outcomes influence substance abuse among intimate partners. The independent variable for the study is substance abuse and the dependent variable is domestic violence treatment outcomes.

Research Questions and Hypotheses

Based on the theoretical framework of the study, the following research questions and hypotheses were used in guiding the study:

RQ₁: How does substance abuse among intimate partners relate to domestic violence treatment outcomes?

 H_{10} : Substance abuse among intimate partners is unrelated to domestic violence treatment outcomes.

 $H_{11:}$ Substance abuse among intimate partners is related to poorer domestic violence treatment outcomes.

RQ₂: Will women in domestic violence treatment programs who abuse substances be at higher risk of reoffending than women who do not abuse substances?

 H_{20} . Women who abuse substances are not at higher risk of reoffending than women who do not abuse substances.

 H_{21} . Women who abuse substances are at higher risk of reoffending than women who do not abuse substances.

RQ₃: Will men in domestic violence treatment programs who abuse substances be at higher risk of reoffending than men who do not abuse substances?

 H_{30} . Men who abuse substances are not at higher risk of reoffending than men who do not abuse substances.

 H_{31} . Men who abuse substances are at higher risk of reoffending than men who do not abuse substances.

 RQ_4 : Are women involved in domestic violence treatment programs who abuse substances more likely not to complete treatment than women who do not abuse substances?

 H_{40} : Women involved in domestic violence treatment programs who abuse substances are not more likely not to complete treatment as compared to those who do not abuse substances.

 H_{41} . Women involved in domestic violence treatment programs who abuse substances are more likely not to complete treatment as compared to those who do not abuse substances.

RQ₅: Are men involved in domestic violence treatment programs who abuse substances more likely not to complete treatment than men who do not abuse substances?

 H_{50} : Men involved in domestic violence treatment programs who abuse substances are not more likely not to complete treatment as compared to those who do not abuse substances.

 H_{51} . Men involved in domestic violence treatment programs who abuse substances are more likely not to complete treatment as compared to those who do not abuse substances.

Theoretical Framework

Two theoretical frameworks, namely cycle of violence theory and social exchange theory, informed the study. Walker (1972) pioneered the cycle of violence theory. The theory has three phases that explain how violence occurs. The three phases include tension building, such as a person feeling angry, embarrassed, or hopeless which could cause tension to build and lead to violence. Victims may feel frustrated and self-righteous when the abuser becomes arrogant, controlling, or engages in drug use. Phase two is the violent episode, which is characterized by behaviors such as protecting oneself,

submitting helplessly, or seeking help. The behavior displayed in phase two, which is the violent episode, is when the aggressor becomes increasingly controlling and is dangerous and violent enough to hurt the victim.

The third phase is the remorse or honeymoon stage which is used to explain the process that the aggressor goes through after exploding into violent acts. In the remorseful or honeymoon stage, the aggressor may feel resentful, be in denial, and feel hopeful that the crime will not occur again. By focusing on the three phases of violence, namely tension building, violent episode, and remorseful stage, the cycle of violence theory was used in this study to understand the stages of IPV. In addition, the three stages were used to understand how behavior change following violence, such as remorse could reduce IPV.

The second theoretical framework to guide the study is the social exchange theory (Arthur & Clark, 2009). Social exchange theory is based on the assumption that people can evaluate the benefits and risks of their social relationships with people (Arthur & Clark, 2009). Individuals will seek to engage in activities that minimize social risks while engaging in positive behaviors that promote the physical, emotional, and psychological well-being of their close friends. Social exchange theory was used in this study to understand behavioral intentions relating to intimate partners' intentions to re-offend by assessing the risks and benefits of engaging in IPV.

Nature of the Study

A quantitative research methodology has been selected for the current study.

Researchers use a quantitative study to investigate a phenomenon using numerical data or

numbers (Antwi & Hamza, 2015). In addition, Winter (2000) argued that a quantitative study is used when the researcher intends to test a hypothesis by investigating the relationship between study variables (Antwi & Hamza, 2015, Bloomfield & Fisher, 2019). In this study, the researcher used a quantitative methodology because the intent is to test research hypotheses relating to the extent to which substance abuse relates to DV treatment outcomes. Quantitative research methodology is appropriate for investigating the current research problem. Specifically, I investigated the relationship between substance abuse (independent variable) and IPV treatment outcomes, including reoffending and treatment completion (dependent variables). Therefore, a quantitative research methodology is adequate to address the current study problem.

Alternative research methodologies were also considered but rejected for failing to align with the study's purpose. Researchers investigate a phenomenon using a qualitative research methodology through participants' views and perceptions in natural settings (Winter, 2000). Here, researchers focus on using self-related data on participants to explore a phenomenon (Bloomfield & Fisher, 2019). While using qualitative research methodology to explore a phenomenon, the researcher does not test hypotheses to test the relationship between study variables (Antwi & Hamza, 2015). The focus of this study is to investigate the relationship between study variables using numbers, statistics, and hypothesis testing. Therefore, a qualitative research methodology is deemed inappropriate for investigating the current problem and was rejected.

A mixed methods approach was also considered. According to Antwi and Hamza (2015), a mixed-method approach is used when a researcher intends to investigate a

phenomenon using qualitative and quantitative information. The primary purpose of using a mixed-method approach is for the researcher to initiate exhaustive research on a phenomenon using different methods that can provide an in-depth analysis of the phenomenon being studied (Winter, 2000). However, for the present study, the researcher does not intend to collect both qualitative and quantitative data but only collect quantitative data (Bloomfield & Fisher, 2019). In this case, the mixed method approach was incompatible with the study focus, and thus discarded.

A correlational research design has been selected to guide the current study. A correlational research design is used when the purpose of the study is to establish a relationship between variables (Curtis et al., 2016). In this study, I intend to investigate the relationship between domestic violence treatment outcomes and substance abuse, making a quantitative correlational research design appropriate for the study. Alternative quantitative research designs such as quasi-experimental and cross-sectional research designs were considered, but rejected because they did not align with the study purpose (Curtis et al., 2015). Experimental design focuses on conducting experiments on variables while manipulating the independent variables (Curtis et al., 2016). However, the current study does not entail the manipulation of variables, making experimental design inappropriate for the study.

Data were be collected through a survey instrument. The domestic violence inventory (DVI) was used to collect data on domestic violence history. The DVI is a multi-dimensional report survey instrument that has six subscales: truthfulness, violence, control, alcohol, drug, and stress-coping abilities. The survey is estimated to take 60

minutes and participants respond using true or false options. To acquire a thorough picture of the prevalence of domestic violence, the researcher also accessed secondary data that has already been gathered by Fresno County probation departments or Domestic violence treatment programs. The information that were gathered includes DVI assessments as well as quarterly reports from various agencies that include demographic data such as the number of clients in the program that are active, terminated, and graduated. Data analysis was conducted through multiple regression supported by SPSS software.

Definitions

Intimate partner violence. Intimate partner violence refers to a conflict between individuals with close relationships, such as couples (Winter, 2000).

Substance abuse. Substance abuse refers to the excessive use of psychoactive drugs, including alcohol, pain medications, and other illegal drugs (McKee & Hilton, 2019).

Assumptions

Assumptions refer to the things that the researcher considers true when conducting a study (Bloomfield & Fisher, 2019). The researcher assumes participants was honest with their responses. The assumption was important because truthful responses will improve the credibility, validity, and generalizability of the study results. It is also assumed that the selected participants have adequate time to take part in the study. The assumption is valid because low participant participation is likely to hurt the sample size used, which could compromise the generalizability of the study findings.

Scope and Delimitations

Scope of delimitations refers to the boundaries that the researcher uses to guide the study (Winter, 2000). The present topic about the relationship between domestic violence and substance abuse outcomes delimited the study. In particular, the study focused on substance abuse and DV treatment outcomes. Literature beyond this scope were not used. The geographical location selected delimited the study. In this case, I only used participants from Fresno City in California in data collection. Lastly, the selected research methodology delimited the data collection process. A quantitative correlational study design has been selected for the current study in data collection, implying that no other research methodology was used.

Limitations

Assumptions are the potential weaknesses in a study (Winter, 2000). The first limitation of the study relates to the sample size used. First, the study used a small sample size because this is an academic study. A small sample size is used because the researcher has to complete the study within a pre-defined period. To reduce the impact of this limitation on the study process, the researcher screened all participants.

Another limitation of the study is related to funding. This being an academic study, there is a problem regarding its funding. Limited funding could hurt the research process because the researcher has to finance different processes such as transportation costs from one place to another which are vital to the outcome of the study. To mitigate this limitation, the researcher will use personal savings and gifts from family members to finance the research process.

The last limitation of the study relates to the researcher's novice skills in data collection and analysis. Notably, this is the first formal research I have conducted.

Limited skills in conducting surveys, interacting with participants, and conducting data analysis using statistical software could limit the thoroughness of the study results.

However, to address this problem, the investigator took part in training programs on data collection and analysis. The researcher consulted with methodological experts in the study to ensure that key concepts are aligned with research methods.

Significance

There are several benefits relating to theory and practice that the study findings will inform. The present study seeks to offer valuable information that researchers, scholars, and stakeholders may use in the criminal justice system to understand better the link between substance abuse and domestic violence treatment outcomes among intimate partners. The study results may be impactful to the criminal justice system and the relevant DV treatment programs.

In terms of theoretical contribution, the study was be based on two theories, namely the cycle of violence theory and social exchange theory. According to Manuel et al. (2017), the cycle of violence theory identifies three stages through which violence occurs. In particular, the theory emphasizes that violence occurs through three stages namely tension-building phase, violent episode, and remorseful and honeymoon stage. The variables forming the theory may add to the current literature on how IPV occurs in terms of the process and behavior change. The study findings may make a key contribution to practice by providing scientific research with information that can

influence substance abuse among intimate partners and adherence to domestic treatment outcomes to reduce the prevalence of IPV.

The study made several contributions to positive social change. In particular, the researcher provided information that can address substance abuse and its link to domestic abuse treatment outcomes. Offenders in domestic violence treatment programs may be rehabilitated through effective treatment that reduces substance use and intimate partner violence. A reduction in domestic violence, consequently IPV, contributed to the positive growth of the community because people may develop healthier relationships with reduced IPV.

Summary

Chapter 1 discussed several sections. I discussed background information on the relationship that exists between domestic violence and substance abuse treatment programs. I identified the problem statement, the purpose of the study, and the research questions and hypotheses guiding the study. I also introduced theoretical frameworks, namely the cycle of violence theory and social exchange theory, to inform the study. Lastly, I discussed the nature of the study, the definition of terms, assumptions, scope and delimitations, limitations, and significance. In the next chapter, Chapter 2, I will review the literature related to the current topic.

Chapter 2: Literature Review

Introduction

Domestic violence has become an issue of public health concern among stakeholders who consider it a threat to a partner relationship. As reported by Cafferky et al. (2018), domestic violence among substance addicts is high and alarming. Gilchrist et al. (2019) investigated the effectiveness of treatment programs in reducing domestic violence among male perpetrators. Several interventions were reviewed on their effectiveness in reducing violence among this population. The study found that the incorporation of treatment for substance abuse and trauma seems to have better results as compared to the programs that did not incorporate these components (Gilchrist et al., 2019). The researchers suggested the need for additional research to address comorbid issues such as substance abuse and trauma in treatment programs since addressing these issues assists in the reduction of domestic violence perpetration (Gilchrist et al., 2019). The focus of this study is to investigate the relationship between substance use and domestic violence treatment programs. The chapter presents different sections related to the literature review.

Literature Search Strategy

Chapter two entails a detailed review of various literature sources including seminal work, peer-reviewed journal articles, books, professional journals, and government publications or reports relevant to the topic. As supported by Mendez et al. (2016), the strength of a literature review analysis is determined by the selection and evaluation of foundational sources that consolidate a knowledge base to justify or

validate the nature of references used. Similar thoughts are echoed by Reynolds et al. (2016) who assert that conducting a literature review should be extensive enough to effectively underpin the supporting literature relating to the current topic of study. Given this, the investigator implemented an elaborate literature review process that was used to search and locate the most suitable sources needed for the review.

The researcher used the World Wide Web, the Walden University Library, and Google Scholar to locate several databases for scholarly or peer-reviewed articles relevant to the topic of study. The researcher then searched different databases, including PubMed Central, Database of Abstracts of Reviews of Effects, PsycINFO, UpToDate, PubMed, Psycharticles, ProQuest, PsychoInfo, Academic Premier, Sage, JSTOR, ResaearchGate, EMBASE, ScienceDirect, Google Scholar, Cochrane Library, Emerald, EBSCO, and Elsevier. The keywords or search terms used to search databases include domestic violence intervention, recidivism, intimate partner violence, domestic violence, substance abuse, substance abuse treatment outcomes, victim-offender mediation, and batterer intervention program. To provide the most current and relevant information, the investigator focused on sources that were published from 2017-2021. This ensured that the sources used were current within 5 years.

Theoretical Framework

The study was based on two theoretical frameworks. The first framework is the cycle of violence theory suggested by Walker (1972). The theory of cycle violence has three phases. The first phase is the tension-building phase. In the tension-building phase, the person feels angry, unfairly treated, embarrassed, or hopeless (Telles et al., 2020).

The partner may feel tense, frustrated, and self-righteous. In this case, one of the partners may verbally be abusive, arrogant, controlling, and use drugs. Such demands and acts of aggression create a conducive environment for tensions that would later result in conflicts (Koziol-McLain et al., 2018). Phase two explains violence as a violent episode. This episode's common behavior includes an individual trying to protect oneself, submitting helplessly, or seeking help (Foulds et al., 2017). The partner may feel angry, enraged, or frustrated. The behavior exhibited in this case is dangerously violent and may hurt an individual and the perpetrator's controlling behavior increases (Spencer et al., 2019).

Phase three is the remorseful or honeymoon stage. After exploding and hurting a partner, the next stage of violence includes the perpetrator being remorseful of their practices (Curry et al., 2018). The person may feel resentful, hopeful, self-denial, and full of excuses for the crime committed (Telles et al., 2020). Some of the individuals may decide to withdraw from others to prevent future incidences. Behavior change may include making promises to change, blaming others for the mysteries, or using drugs as an excuse (Geyen & Bailey, 2021). The theory may be used in this study to understand distinct phases of violence and how they result in IPV. The theory was also used to understand how behavior changes after committing a crime can reduce IPV (Gilchrist et al., 2019).

The second theory that was used in this study is the social exchange theory. Social exchange theory is based on the premise that individuals can evaluate their social relations' risks and benefits (Geyen & Bailey, 2021). In this theory, individuals attempt to minimize risks by engaging in positive behaviors. The theory helped understand

substance abuse patients' behaviors and their intentions to commit and avoid violence against partners after enrolling in a treatment program (Gilchrist et al., 2019). The theory was also used to understand behavioral intentions linked to intentions to re-offend by accessing the risks and benefits of engaging in a crime (Giarratano et al., 2020).

Literature Review Related to Key Variables and/or Concepts Overview of Domestic Violence

Domestic violence has been defined as any form of physical, sexual, or emotional abuse perpetrated by one individual toward another who has or has had an intimate relationship (Koziol-McLain et al., 2018). Researchers have also described domestic violence as a form of abuse against children or the elderly in families (Koziol-McLain et al., 2018). In the United States, it is estimated that domestic abuse is reported frequently among family members or close friends (Cafferky et al., 2018). Domestic violence, as described by Gilchrist et al. (2019), includes close friends with intimate relations. Statistics suggest that domestic abuse in the United States affects at least 10% -15% of women and children (Koziol-McLain et al., 2018). Easton et al. (2018) reported that domestic violence prevalence differs contextually based on the methods and metrics adopted to define and report it. In selected groups, the prevalence of domestic violence varies from 0.3% - 4% and 8% - 17% of the total violence reported (Chen et al., 2018). The link between domestic violence, including females and males with a history of an intimate relationship, has surged globally. Most of the cases include sexual harassment, bullying, victimization, and stalking. The most frequent victims of domestic violence, as

reported by McKee and Hilton (2019), are children and women, particularly within families where one of the parents abuses drugs.

Defining IPV

Several theories have been advanced to identify factors that contribute to IPV.

From a feminist point of view, IPV is considered an issue of control whose history is linked to historical traditions characterized by male dominance within intimate relationships (Godley et al., 2017). Other scholars (Easton et al., 2018; Koziol-McLain et al., 2018) consider IPV a normal conflict resulting from daily stressors in life, which could easily turn into conflicts if poorly addressed. Some conflicts may turn into violence against an immediate person (Gilchrist et al., 2019). IPV comprises a wide set of physically aggressive behaviors among partners that vary along different dimensions such as.

- 1. The type or severity of aggression (push or injury).
- 2. Frequency of the aggressive behavior.
- 3. Emotional or physical impact of the aggression.

Based on this perspective, Godley et al. (2017) pioneered a conceptual model of IPV premised on control within relationships. Specifically, Chen et al. (2018) identified and described three forms of IPV. The first component of IPV is intimate terrorism characterized by outright male-to-female aggression. The aggression is physical, which includes punching, pushing, or threatening a partner with a weapon. In such instances, female-to-male violence is limited and only occurs in self-defense. Intimate terrorism is usually accompanied by the increased likelihood over time of physical injury or fear

toward their male partners. Koziol-McLain et al. (2018) reported that intimate aggression is considered terrorism because it involves dominance and control by one partner over the other. The dominance may be displayed through different forms such as violence and other practices that achieve total control over an individual (Easton et al., 2018). The second form of IPV is violent resistance (Gilchrist et al., 2019). This type of IPV is characterized by violence occurring due to a partner's violent or controlling behaviors (Cafferky et al., 2018). In this category, the individual resisting aggression is violent yet not controlling.

The last category of IPV is known as couple violence. As described by Koziol-McLain et al. (2018), situational couple violence includes two-way partner aggression that is primarily moderate. The conflict may occur as a response to a conflict escalation. Important to emphasize is that situational couple violence does not involve control or fear among partners (Cafferky et al., 2018). Despite the nature of IPV, it is important to emphasize that each type of violence relates to power, control, and intimidation among victims, particularly those abusing drugs (Godley et al., 2017).

A considerable part of the current literature has focused primarily on intimate terrorism, disregarding that most of the IPV reported includes situational couple violence. According to Gilchrist et al. (2019), this is a common experience of a violent couple in which one of the partners enrols in a substance abuse treatment program. Håkansson and Jesionowska (2018) reported that over 95% of these couples' repeated episodes of partner aggression that are like the description of couple violence instead of patriarchal terrorism. Patriarchal terrorism refers to violence exclusively initiated by men as a way of

gaining and maintaining absolute control over their female partners (Håkansson & Jesionowska, 2018).

Prevalence of IPV

Depending on the definition adopted for violence, including the contextual setting, statistics suggest that physical aggressions between partners significantly vary from one country to another (Horstman et al., 2019). Statistics released by the Justice Department indicate that at least 1,500 incidences of homicide or manslaughter between intimate partners occur annually (Horstman et al., 2019). Most of these incidences, at least 1200, involve women being victimized (Horstman et al., 2019). Additionally, 250,000 emergency department visits are reported in the United States annually involving victims of IPV (Horstman et al., 2019). Håkansson and Jesionowska (2018) also reported that at least 15000 female victims of IPV are documented yearly. Findings from metaanalysis studies suggest that at least one out of every eight male partners engage in physically aggressive behaviors such as pushing or slapping their intimate partners (Amstrong et al., 2019; Karakurt et al., 2019). Results also suggest that women are likely to perpetrate aggressive behaviors in intimate relationships at an equal or slightly higher rate than their male counterparts (Peitzmeier et al., 2020). Cafferky et al. (2018), assert cautioned that the negative consequences of male-to-female aggression in IPV are more severe than female-to-male aggression.

It is important to note that there are inconsistencies in study results on factors influencing IPV prevalence between males and females. Most of the inconsistencies have been linked to the varying definitions of IPV (Godley et al., 2017). Quantitative measures

have differed from qualitative metrics that are used for defining and reporting IPV.

Regardless of the inconsistencies in the IPV definition, it is important to underscore that IPV is a global health concern and that partners engaged in substance abuse behaviors are disproportionately affected. (Geyen & Bailey, 2021).

Substance Abuse and Intimate Partner Violence

Intimate partner violence is one of the major public health concerns globally. Substance abuse has been established to co-occur in 40% - 60% of IPV incidences reported worldwide. Researchers (Habigzang et al., 2018) have suggested that IPV is linked to substance abuse whereby one person who is abusing substances could become violent and threaten the other person's safety. In response to the increase in domestic violence, studies have suggested different interventions to target substance use in men with a history of IPV, especially regarding the use of alcohol (McKee & Hilton, 2019). Research conducted by Geyen and Bailey (2021) established that 20% of males who engaged in IPV were abusing drugs even after being enrolled in treatment programs. Wichaidit and Assanangkornchai (2020) also reported that IPV is linked to alcohol use even if the aggressor is enrolled in a treatment program. The implication is that IPV is related to substance use.

Although historically conceived as a private issue, IPV has recently been considered a widespread public health concern. As such, Cafferky et al. (2018) maintained that IPV requires the immediate attention of both the treatment community and the criminal justice system. A study conducted by Geyen and Bailey (2021)

suggested that most couples have reported a surge in aggression from their partners who are abusing drugs even if they are enrolled in substance treatment programs.

Similar findings are reported by Geyen and Bailey (2021) who found that instances of aggression, such as slapping or pushing partners, have risen from 15% to 20% yearly, including husband-to-wife violence from 2016 to 2020. The statistics above suggest that IPV has increased due to drug abuse and the failure of treatment programs to result in positive outcomes. Individuals abusing drugs are five times more likely to engage in IPV than their counterparts who do not abuse drugs or have completed substance use treatment programs successfully and have reformed (Easton et al., 2018). Faced with the increase in IPV among individuals and family-involved assessments in substance abuse treatment, Zarling et al. (2019) argued that stakeholders are baffled by the challenge of managing such a complex situation.

There is evidence that IPV gets worse and happens more frequently when alcohol is consumed (Sontate et al.., 2021). Relevant alcohol effects include a deterioration in cognitive and physical mechanisms that reduce self-control, which lowers one's ability to settle conflicts amicably (Sontate et al., 2021). A partner's heavy drinking might also exacerbate existing household tensions like adultery, childcare challenges, and financial difficulties. Additionally, beliefs held by people and society that alcohol creates animosity may lead to more aggression.

Abuse of alcohol or other drugs has a convoluted relationship to IPV. One common misconception concerning domestic abuse is that it is primarily brought on by drugs and alcohol. In actuality, some substance abusers use their addiction to substances

as justification for acting violently. Drink enables the abuser to explain away his abusive actions by blaming them on the alcohol. The user's capacity to receive, comprehend, and process information is impacted by alcohol. Although this mental distortion does not result in violence, it may raise the possibility that the user would misinterpret his partner's or another's actions (Chalfin et al., 2021). A significant amount of alcohol, or any amount for alcoholics, may improve the user's sense of dominance over others, according to some research. Conflict over alcohol consumption (or attempts to stop it) or the act of obtaining and consuming substances, especially illegal narcotics, can lead to violence. According to other studies, a battered woman may use drugs with her abuser to try to control the violence and improve her safety, and many times the victim is made to use other drugs with the perpetrator (Sontate et al., 2021).

Unfortunately, effective treatment plans available for individuals dealing with IPV and substance abuse are much limited (Pérez & Ruiz, 2017). To date, one of the widely used techniques is for providers to refer IPV cases to law enforcement officers or rehabilitation centers (Håkansson & Jesionowska, 2018). Nonetheless, there are fundamental challenges with this approach. First, most of the batterers' programs will only accept legally mandated persons to participate in IPV treatment (Cafferky et al., 2018). This means that the majority of IPV patients are not allowed to participate in IPV treatment programs. This study focuses on exploring the risk factors of IPV among individuals attending substance use programs.

Treatment Options for IPV among Substance-Abusing Patients

Researchers have differed about the most effective treatment programs that patients can use to address IPV. Researchers have suggested a different mechanism that can be used to solve IPV among substance-abusing patients. Regardless of the inconsistencies in the definition of IPV discussed, below are some of the ways of treating substance abuse problems.

Treatment - As - Usual (TAU)

Based on the increased prevalence of IPV in men seeking substance abuse treatment, it is reasonable to deduce that substance abuse treatment techniques could provide an important opportunity for addressing IPV. Nonetheless, studies have suggested that referrals to domestic violence intervention programs are rare (McKee & Hilton, 2019). For instance, Geyen and Bailey (2021) argued that persons enrolling in alcoholism treatment programs are typically unassessed for IPV. The findings suggest that referring and assessing for IPV in individuals in substance abuse treatment is an important intervention that can support effective treatment programs. Wichaidit and Assanangkornchai (2020) studied IPV among 301 alcoholic men who were enrolling in an outpatient substance abuse treatment program. The focus of the research was to evaluate these individuals for IPV because IPV was not part of the treatment. Before the treatment, 56% of patients with alcohol problems perpetrated violence against their female partners compared to 14% in a group with no alcohol abuse (Wichaidit & Assanangkornchai, 2020). Following the completion of the study, the researchers found a

25% rate of IPV in all patients treated but only 15% in recovering alcoholics and at least 32% in relapsed patients (Wichaidit & Assanangkornchai, 2020).

Although there is a gap in the literature relating to female alcoholics, current results are like those reported for male counterparts. Håkansson and Jesionowska (2018) studied the impact of intensive alcoholism outpatient treatment programs on female IPV perpetration. The study results suggested that there was a decrease in the prevalence and frequency of IPV after the alcoholism treatment (Gilchrist et al., 2019). Study results also indicated that females who experienced relapse during the first year of post-treatment follow-ups had higher chances of perpetrating IPV than females who did not experience relapse (Zarling et al., 2019).

Interesting results are reported by Geyen and Bailey (2021) who argued that IPV might not predict a decrease in standard alcoholism treatment, especially in patients who do not have relapse incidences in the post-treatment period. The results support the assumption that patients with alcohol problems should receive substance abuse treatment as a significant component of the IPV intervention. Nonetheless, researchers have identified several flaws in this approach to managing IPV because it focuses primarily on alcohol abstinence as the means to violence reduction. Other factors such as conflict resolution skills may also influence IPV and the overall effectiveness of this approach.

Referral To Domestic Violence Intervention Programs

As previously discussed, it can be argued that a reasonable approach would be for stakeholders to train substance abuse treatment programs to have the capacity to evaluate the incoming patients for the likelihood of IPV and refer such patients to domestic

violence intervention programs. A review of the current literature suggests that domestic violence intervention programs play a key role in reducing IPV among patients with substance use disorders (Geyen & Bailey, 2021). Similar findings were reported by Håkansson and Jesionowska (2018) who argued that domestic violence intervention programs effectively reduce IPV. Other treatment options for IPV include cognitive therapy and behavioral therapy.

Relationship between Substance Abuse Treatment Programs and Increased Violence

Drug abuse has a detrimental impact on individuals' judgment and behavior. In a study conducted by Curry et al. (2018), the researchers described the relationship between drug abuse and domestic violence, as "cause-effect". Given this study, it was established that the link between alcoholism and substance addiction treatment programs and violence affects many thresholds, such as posing a public consequence, domestic violence, and impairing an individual's psychological functioning. In a comparable study, Peacock et al. (2017) established that about 75% of the study participants (substance abusers) who took part in drug addiction treatment reported having committed various acts of violence such as physical assault, mugging, and using weapons to attack innocent people. This study's findings further showed that the rate of violence among men seeking drug addiction treatment was higher than that of women. All genders reported engaging in violent acts because of the influence of their substance abuse. Taken together, the literature presented above demonstrates the impact that alcoholism or other substance

abuse has on an individual's judgment and behavior and, in turn, leads them to commit various acts of violence.

As expressed by Anderberg and Dahlberg (2018), the risk for violent behavior increases with intoxication. Substance abuse treatments are offered to alcohol and drug abusers to help mitigate their negative behavior, such as indulgence in violent activities. Anderberg and Dahlberg argued that individuals who are not used to suppressing their emotions of anger while sober are most likely to exhibit violent behavior due to their overindulgence in substance abuse. In a comparable study, Widom (2017) recommended that such individuals need to be provided with better intervention strategies to help them control themselves. In Widom's view, people who exhibit violent behavior after engaging in substance abuse need to be helped to overcome this by being offered substance abuse treatment programs that seek to address their anger when they are not sober. As expressed in the reviewed literature, it can be deduced that IPV programs that aim to address the substance use of those people who indulge in drug abuse can significantly help to reduce the violent behaviors they exhibit.

People who fail to manage their anger are more likely to engage in substance abuse than those prone to taking control of their anger when sober. According to a study by Witkiewitz and Tucker (2020), people who reported hiding their anger were less likely to commit a violent offense after a drinking spree. The 11% increase in extreme substance abusers reflected people who had an impairment in addressing their angry emotions while sober (Witkiewitz & Tucker, 2020). Such people, given a comparable study by Sommer et al. (2017), are connected to a surge in the chance of engaging in

violent behavior. The possibility of a person being violent during or after drinking is attributed to how satisfactorily individuals who engage in substance abuse can deal with their anger while sober. Taken together, it is imperative to note that drinking alcohol and consuming other substances can compel risky behavior, lower inhibitions, and rob people of their self-control, thus causing them to act antisocially after intoxication, especially due to rage.

Previous researchers suggest that IPV treatment programs that fail to address addicts' antisocial behavior are likely to result in increased violence and suicide intentions among the victims. For instance, Easton et al. (2018) reported that those individuals who seek substance abuse treatment have problems controlling their violent acts or managing suicidal thoughts. Study findings further clarified that individuals who struggle to control anger are vulnerable to act on violence and relapses, which could affect those who are around them (Easton et al., 2018). Treatment programs that fail to address anger may not be successful in providing the required, leading to increased violent acts among partners of the affected victims (Spencer et al., 2021). If drug use problems are inadequately treated, the victims may be vulnerable to homicides. In a different study, Witkiewitz and Tucker (2020) reported that self-directed violence is linked to substance addiction, calling for the need for effective treatment interventions to support the victims in addressing drug addiction problems by offering mental and emotional support to the victims.

Substance abuse treatment programs that result in unhealthy coping mechanisms have a high probability of increasing drug abuse-related domestic violence against

intimate partners. Of immense importance to underscore that domestic violence related to drug abuse among partners is underreported compared to other cases of homicides. The implications are that the victims may be hesitant to seek medical support for injuries sustained, causing further pain in fear of retaliation from their abusive partners (Curry et al., 2019). Koziol-McLain et al. (2018) also found that partners who experienced domestic violence attributed did not seek professional treatment because of shame, fear of being arrested, or did not want to reveal their drug and substance abuse practices.

Failure to seek medical treatment for drug abuse-related problems has rendered drug abuse victims susceptible to mental health problems. According to a study by Lila et al. (2020), about 56% of partners who experienced domestic violence linked to drug abuse were diagnosed with mental health disorders such as suicidal thoughts. The literature reviewed thus far suggests the need for proper treatment for both victims and perpetrators of domestic violence.

Individuals who engage in substance abuse are vulnerable to depression, anxiety, and other psychosocial disorders. For instance, depression, aggression, and anxiety have been reported as considerable contributors to increased violence (Spencer et al., 2021). Substance abuse interventions that do not address mental disorders in drug addicts are ineffective in providing healing to them, thereby increasing violence linked to drug abuse. Depressed individuals are likely to engage in antisocial behavior, such as domestic violence against intimate partners. Treatment measures adopted to help such drug addicts must address issues related to depression, anxiety, and aggressive behaviors (Pérez & Ruiz, 2017). Thus far, the articles reviewed show that effective therapeutic techniques

that address depression, anxiety, and aggression among drug addicts can reduce instances of domestic violence among partners (Cafferky et al., 2018). Besides, it is also significant to underscore that ineffective DV treatment programs that fail to address the depression, anxiety, and aggression in substance abuse addicts could lead to a surge in intimate partner violence.

DV program's failure to address substance abuse could lead to increased intimate partner violence. Peacock et al. (2017) expressed that about 61% of Americans aged 18 and older indulge in substance abuse, including the use of alcohol. The study suggested that 43% of victims consume more than five drinks a day. In 2017, during this study's period, 1% of the general population participated in intimate partner violence. Peacock et al. noted that the increased domestic violence rate in the United States has been attributed to drug abuse. Anderberg and Dahlberg (2018) also reported that exposure to drug abuse without timely treatment increases the likelihood of intimate partner violence occurring. Widom (2017) recommended DV treatment programs for Americans who are vulnerable to drug abuse practices as a strategy for reducing intimate partner violence. Taken together, the articles reviewed suggest that delayed treatment programs following exposure to drug abuse practices among partners could increase intimate partner violence.

Individuals using drugs such as heroin and cocaine have a high chance of committing intimate partner violence when they fail to secure enough money to purchase the drugs. As presented by Widom (2017), narcotics, alcohol, psychomotor stimulants, and hallucinogens differ from each other and their relatedness to various kinds of crimes. Therefore, people who use narcotics need intervention to abstain from criminal offenses

that they do to raise extra cash for drug purchases. DV Treatment programs that focus on how individuals can avoid addiction are reported to be effective in managing criminal acts and instances of intimate partner violence among theme (Geyen & Bailey, 2021). The literature reviewed justifies that ineffectual DV treatment programs do not address the facts presented above, leading to a surge in criminal cases emanating from individual's overindulgence in substance abuse.

Substance abuse and crime have been interlinked for a long time. The two concepts have had a causal relationship, leading to a person involved in one vice to, at some point, get involved in the other vice as well. According to Koziol-McLain et al. (2018), inmates who have just been released from prison, especially those who have a history of drug use, have a very high chance of reporting relapses and becoming more violent against their partner (Easton et al., 2018). Relapse is likely to be reported in the first few months after being released from prison. Zarling et al. (2019) also affirmed that at least half of the American inmate population experiences relapse, which increases the chances of being arrested and committing intimate partner violence. Upon being released from prison, most of the inmates find it challenging to integrate back into society. In particular, the prison environment, which is characterized by violence, is different from the outside environment. In such instances, the ex-inmates may find themselves committing crimes or engaging in aggressive behaviors that are categorized as intimate partner violence (Easton et al., 2018). For inmates who are introduced to drug abuse while in prison, they may be forced to engage in crime to fund their drug habits, which is a classic sample of reoffending (Pérez & Ruiz, 2017). Similarly, inmates who were

arrested for substance abuse are likely to be rearrested for the same offense a few months after being released from prison.

From a different perspective, inmates who have just been released from prison have faced challenges that could cause intimate partner violence or reoffending. The main challenges include getting employment, getting along with their friends, access to healthcare, and education (Geyen & Bailey, 2021). Koziol-McLain et al. (2018) reported that ex-inmates face unwarranted stigma and suspicion from society, making it challenging for them to get the required social support to aid their reintegration process. In the absence of such support, they are likely to contemplate committing crimes leading to intimate partner violence. Faced with limited social support from society, the former inmates get involved in substance abuse and other criminal activities to fund their life needs. While under the influence of drugs, some of the inmates engage in criminal activities, such as vandalism or intimate partner violence as a form of revenge against the society that has ignored their need for social support (Cafferky et al., 2018).

Similarly, inmates who are trying to reintegrate into society experience stress. The stress can result from poor relationships with close family members and friends after being incarcerated (Geyen & Bailey, 2021). Likewise, other social factors that may cause stress to former inmates include an increased financial burden to finance their lives (Giarratano et al., 2020) and challenges in finding employment (Cafferky et al., 2018). The above challenges are bound to make the first few months of their reintegration into society difficult and unstable (Easton et al., 2018). Stress resulting from the lack of social support and employment opportunities may cause former inmates to engage in substance

abuse as a way of forgetting about their problem of finding money illegally to support their daily needs (Brunner et al., 2019).

Inmates coming from prison report different mental problems because of the hostile environment they live in during their prison time. According to Koziol-McLain et al. (2018), mental health problems among inmates may be caused by living conditions in prison or some traumatic events that befell the inmates after being incarcerated.

According to Giarratano et al. (2020), the inmates' mental health issues may be worsened by the difficulties encountered in prison, which hurt their subsequent reintegration into society. Mental health could also be linked to the effects of an individual withdrawing from drug abuse and the continued conflict to overcome negative thoughts related to drug abuse (Gilchrist et al., 2019). Mental health issues manifest in violent acts, such as intimate partner violence or other criminal activities (Zarling et al., 2019). Substance abuse also contributes to the escalation of violent acts among people suffering from related mental health issues that are known (Easton et al., 2018).

Drug abuse and crime have always coexisted with each other. According to Horstman et al. (2019), at least thirty-eight percent of inmates on parole had a substance use disorder in the year 2012. It would be prudent to note that substance abuse on its own is a crime, punishable by law, and for which people have been incarcerated. Over half of the parolees and two-thirds of the offenders recidivate within the first three years following their release from prison (Isobe et al., 2020). The addictive nature of drugs being abused has been a significant reason for a higher likelihood of former drug offenders engaging in substance abuse even after being released from prison.

Criminal cognition refers to how people justify their criminal behavior, exhibit distorted thinking, and neutralize the negative consequences resulting from crime (Easton et al., 2018). Substance abuse is one of the most significant causes of criminal cognitions. Inmates who have just been released from prison exhibit behaviors that are consistent with criminal cognitions to justify their participation in illegal activities (Geyen & Bailey, 2021). Substance abuse has been known to create anarchy among former inmates in that the inmates develop a mental mindset that criminal life is highly rewarding (Isobe et al., 2020). Likewise, the inmates' challenges as they try to fit into society cause them to take part in substance abuse. As a result, the inmates get forced towards substance abuse, which interferes with their mental state and increases the likelihood of the former inmates reoffending and finding their way back to prison.

Research suggests that not all repeated crimes are caused by the criminal cognitions of the offenders. Individuals with severe substance use disorders are likely to engage in reoffending (Zarling et al., 2019). Addiction related to particular substances has become one of the greatest driving forces causing reoffending among former inmates (Cafferky et al., 2018). Crimes associated with addiction include possession of illegal substances or engaging in other crimes such as domestic violence and theft or robbery with violence to acquire resources to fund one's addictive habits (Brunner et al., 2019). Suppose one does not have a strong dependence on substances. In that case, there is a limited likelihood of being caught up in substance-related offenses such as possession and robbery to acquire resources to fund drug habits (Isobe et al., 2020). It is, therefore, quite clear that substance abuse increases the likelihood of an inmate reoffending.

Recidivism as a vice also depends on the nature of substances being used by former inmates. According to Horstman et al. (2019), the chances of reoffending among substance-involved individuals were at least three or four times higher than individuals not abusing drugs. The drugs involved also played an essential part, as indicated by the fact that the chances of reoffending were at least six times higher for those who use crack cocaine than those who did not (Isobe et al., 2020). Similarly, recidivism had three times greater chances of happening to those who use heroin, two and a half times greater for those who use powder cocaine, and about one and a half times greater for offenders who use marijuana than inmates who did not use any of the substances as mentioned above (Isobe et al., 2020).

Substance abuse can be said to be one of the most significant contributors to the likelihood of recidivism among former IPV inmates (Koziol-McLain et al., 2018). Substance abuse is associated with a myriad of social ills, together with detrimental effects on the mental and physical health of the people who abuse them. Societal failures such as stigma towards former inmates and hesitation in accepting them back into society is also a significant driving force that pushes the former inmates towards substance abuse (Cafferky et al., 2018), increasing the likelihood of the inmates re-offending.

Summary of Literature on the Relationship between Domestic Violence and Substance Abuse

Study results by Giarratano et al. (2020) suggested that behaviors related to aggression among females are linked to substance use. Research has shown that most partners engaging in substance use practices are likely to commit more crimes than men

(Håkansson & Jesionowska, 2018). Crime and substance abuse are linked. A systematic review conducted by Horstman et al. (2019) in the prison population established that alcohol abuse is 18% - 30% in males and 10% - 24% in females. Important to emphasize from the study findings is that Zarling et al. (2019) reported that substance use was linked to violent crimes (Horstman et al., 2019).

Violent crimes such as assault, homicide, and other IPV forms are related to substance use. According to Sullivan (2018), substance abuse increases the likelihood of an individual engaging in domestic violence. Comparable findings were reported by Geyen and Bailey (2021) who argued that domestic violence is a widespread problem linked to the excessive use of drugs among patients. A comparative study to assess the relationship between substance and IPV established that most domestic violence-involved partners were linked to substance use (Isobe et al., 2020). Domestic violence is higher, so it is important to emphasize that substance use is related to the increased risk of IPV (McHugh et al., 2018). Gray and Squeglia (2018) reported that the increase in IPV among substance use patients was linked to mental disability that affected their ability to evaluate the offending risks and benefits. Reoffending cases have widely been reported in patients with substance use problems. Stringer and Baker (2018) reported that IPV cases among prisoners were higher even though many were recruited to different programs. Taken together, it can be concluded that the intentions to re-offend depend on the substance use behaviors among individuals.

Risk Factors for Domestic Violence and Its Influence on Substance Used Treatment Program

Age

Study findings have suggested a positive link between substance use and IPV. Researchers such as Manuel et al. (2017) have argued that age influences treatment, whereby young individuals tend to withdraw from substance use treatment programs that are meant to reduce their IPV vulnerabilities. According to Peterson et al. (2018), age is a consistent factor in IPV, particularly among adults. Giarratano et al. (2020) also found that age was linked to IPV.

Young individuals enrolled in substance use treatment programs are more likely to engage in domestic violence than their aged counterparts. In a similar study consisting of 200 substance abuse patients, Sullivan (2018) established a direct link between domestic violence among individuals abusing drugs and their likelihood of engaging in domestic violence again. Lilley-Walker also reported comparable findings et al. (2018) whose study findings on factors that influence recidivism among alcoholic individuals linked age to domestic violence. Based on their study, researchers established that young people were three times more likely to engage in domestic violence while on substance use treatment programs than the aged.

In a different study to investigate the effects of age on substance use program adherence and recidivism among offenders, Hill et al. (2021) found that adults aged 55 years and above show compliance to different treatment programs compared to youths. The researchers also reported that adults were three less likely to engage in repeated

domestic violence against their partners than youths (Mancera et al., 2018). Taken together, the study findings suggest that age is an important predictor of domestic abuse and adherence to substance use treatment programs (Isobe et al., 2020). Additionally, it can also be concluded that age determines the willingness of an individual to be remorseful of their past domestic violence and prevent future violence than youth who would blame situations for their domestic violence and continue engaging in IPV even after enrolling in substance use programs (Wilsnack et al., 2018). In summary, it can be concluded that age plays an essential role in determining substance use treatment program adherence response among individuals. Researchers have also found a direct link between adherence to substance use treatment programs and domestic violence, as discussed below.

Gender

The current literature overall suggests that people are likely to perpetrate IPV on an equal margin (Ahmadabadi et al., 2017). Conflicting results from systematic reviews conducted by Giarratano et al. (2020) indicated that domestic violence and willingness to adhere to treatment programs differ across genders. Findings reported by Bernardi and Steyn (2019) on the differences in domestic violence perpetrated based on gender established that women were more likely to commit domestic violence than their male counterparts. Additional findings by Brunner et al. (2019) established that gender played a key role in determining domestic violence prevalence. According to the study, it was established that males and women had an equal chance of perpetrating violence against each other (Easton et al., 2018).

Equally, Armstrong et al. (2019) found that people had an equal chance of engaging in domestic violence, especially if they abused drugs. Similarly, study findings by Gilchrist et al. (2019) established that people were 30% more likely to engage in domestic violence, which was harmful to each other. Based on the above results, it can be concluded that gender played a key role in determining the prevalence rate of domestic violence. According to a study by Ahmadabadi et al. (2017), it was established that people had an equal chance of perpetrating domestic violence, particularly if one of the partners abusing drugs.

The findings above are consistent with those of Giarratano et al. (2020) who found that female IPV perpetration was higher than in men. The results suggested that men were more aggressive in using physical forces to dominate their female partners. This led to an increased IPV number among couples where one partner is enrolled in substance use programs. Findings by Easton et al. (2018) suggested that the rate of domestic violence among substance use abusers was higher in males than in females because women were less hostile compared to their male counterparts. The findings also suggested that men were more violent when perpetrating domestic abuse than females (Brunner et al., 2019).

The reviewed above articles present mixed results on the prevalence of domestic abuses among genders. Researchers have reported the domestic abuse rate to be higher among men abusing drugs based on the context. Other researchers have reported a direct link between gender and domestic violence when both couples are using drugs (Bernardi & Steyn, 2019; Isobe et al., 2020). In instances where both couples abuse drugs, study

results have suggested that domestic violence prevalence is equal as each partner is likely to engage in domestic violence against his or her partner.

Additional findings have reported significant differences in the adherence rates to treatment programs that are meant to treat IPV among individuals abusing drugs. For instance, Brunner et al. (2019) reported a high likelihood that females would adhere to different treatment programs than their male counterparts. Given the above findings, females were three times more likely to adhere to substance use treatment programs meant to help them reduce domestic abuse than men. Comparable findings were reported by Giarratano et al. (2020) who conducted a study to investigate adherence to treatment programs among substance use abusers. In their research, 215 substance use abusers were recruited to take part. Based on the findings, it was established that 90% of women participated fully in a treatment program that sought to address IPV.

Different from Mancera et al. (2018), Sullivan (2018) established that men were 50% less likely to finish their treatment sessions than women. The noncompletion of substance use treatment programs among men significantly increased the risk of engaging again in domestic violence (Easton et al., 2018). In summary, the study findings suggest that there is a direct relationship between treatment adherence and domestic violence across the genders (Telles et al., 2020). The findings indicated that a person's likelihood to engage again in domestic violence depends on their ability to complete substance abuse treatment programs (Armstrong et al., 2019). Additionally, individuals who were less likely to complete their treatment program had higher chances of minimizing their risk of engaging in domestic violence (Armstrong et al., 2019).

Socioeconomic Factors

Socioeconomic status is a significant predictor of domestic violence. According to Giarratano et al. (2020), economically sound individuals have a lower probability of engaging in domestic violence. A study conducted by Wilsnack et al. (2018) established that employed individuals were three times less likely to engage in domestic violence because they could afford essential bills. On the contrary, a report by Raj and Shankar (2017) established that unemployed individuals found themselves motivated to engage in substance abuse, domestic violence, and non-compliance to treatment programs.

McKee and Hilton (2019) found that substance abusers had a low probability of engaging in treatment programs because they found it difficult to pay for their basic needs such as house rent or buy food. The frustration attached to lack of employment, as reported by Armstrong et al. (2019) could lead to most of them engaging in domestic violence, substance abuse, and no adherence to treatment programs. Bernardi and Steyn (2019) found that 90% of individuals enrolled in IPV treatment programs were more likely to engage in domestic violence against their partners as a way of shielding their incapability to provide for their families. Bernardi and Steyn's (2019) findings were supported by Mancera et al. (2018) who also found that a lack of financial support for drug addicts accused of IPV increased their likelihood of engaging in domestic violence again after abusing drugs.

Lilley-Walker supported comparable thoughts et al. (2018) who established that unemployed drug addicts were 70% more likely to report recidivism compared to their counterparts who could attain support from friends, family members, or colleagues.

Easton et al. (2018) also reported that financial incentives are a major factor influencing the likelihood of substance abusers committing crimes. A study conducted by McKee and Hilton (2019) established that most individuals who offended their partners while on treatment linked it to a lack of financial support. A study conducted by Gilchrist et al. (2019), on predictors of substance use and domestic violence found that 90% of individuals who withdrew from substance use treatment programs linked it to a lack of economic resources to finance their life needs as they continued accessing treatment programs. Cafferky et al. (2018) reported an increase in substance abuse incidences among individuals enrolled in substance use treatment programs linked to the socioeconomic aspect.

Additional studies have reported inconsistent findings on the relationship between socioeconomic status, substance abuse, and domestic violence. For instance, a study by Gilchrist et al. (2019) found that an individual's socioeconomic status, such as education and income level, was indirectly linked to domestic violence and adherence to treatment to substance abuse programs. Findings by Telles et al. (2020) suggested that individuals' likelihood to engage in domestic violence again after enrolling in substance use treatment programs was independent of their socio-economic status. According to their results, Geyen and Bailey (2021) found that reoffending among offenders registered for substance treatment programs was dependent on individual factors such as personal behavior.

Researchers such as Raj and Shankar (2017) also found that individual behaviors, such as remorse after engaging in domestic violence and enrolling in substance use

programs, were dependent on their attitudes on the extent to which they were remorseful. Such personal factors insignificantly correlate with an individual's willingness to recommit to domestic violence (McKee & Hilton, 2019). Taken together, the study above findings suggest that there is a direct link between socioeconomic status and substance use treatment programs.

Researchers have established a direct link between substance use, domestic violence, and adherence to substance treatment programs. According to Mancera et al. (2018), socioeconomic status influences human life and functioning, such as physical and mental health. Low socioeconomic status and its primary correlates, including low educational achievements, poverty, and poor health, affect an individual functioning (Spencer et al., 2019). The implication is that low socioeconomic status may affect an individual's ability to cognitively function well and access the risk of committing crimes, thereby showing a high probability of achieving domestic violence. Study results by Curry et al. (2018) have shown that the prevalence of domestic correlates with low economic status and has an indirect relationship with education. According to the researchers, socioeconomic status affects an individual's mental stability to concentrate on substance use programs (Wilsnack et al., 2018), making it particularly important for them to have an income source that would support their livelihood (Raj & Shankar, 2017).

Summary and Conclusions

The focus of this study is to investigate the relationship between domestic violence and substance abuse treatment programs. According to Easton et al. (2018),

substance use has become an important aspect of domestic violence. The analysis conducted suggests that at least 90% of all domestic violence is associated with substance abuse. These findings are consistent with Telles et al. (2020), who reported a statistically significant relationship between substance use and intimate partner violence.

Although studies have previously linked domestic violence to substance use, the current literature search did not reveal research examining the relationship between domestic violence and substance use treatment outcomes. Spencer et al. (2019) identified a literature gap relating to the relationship between domestic violence and substance abuse treatment outcomes. McKee and Hilton (2019) also suggested the need for further research to investigate the relationship between domestic violence and substance abuse treatment. Mancera et al. (2018) also suggested the need for further research to understand the impact of substance use treatment programs on domestic violence for a better understanding of how it influences recidivism among offenders.

Chapter 3: Research Method

Introduction

The purpose of this quantitative study is to explore the relationship between domestic violence treatment outcomes and substance abuse of adult male and female offenders. The study sought to fill a gap in understanding the risk factors that can lead to reoffending in domestic violence. Due to a lack of adequate information, organizations have had challenges in dealing with domestic violence and substance abuse issues. The current research project is unique because it explores the impact that substance abuse has on intimate partner violence (IPV). It explores the role that substance abuse has in dropout and noncompliance in court-ordered Batterer Intervention Program (BIP) treatment and the effect of substance abuse on IPV's continued incidents.

Substance abuse has been recognized as a very significant issue when treating individuals who commit intimate partner violence. Substance abuse is found to exacerbate and precipitate the risk of perpetrating intimate partner violence (Armstrong et al., 2019). However, there is a gap in the research about how substance abuse impacts offenders' treatment and further violence (Kraanen et al., 2014). Data were collected from Fresno County Probation to address the following research questions:

RQ₁: How does substance abuse among intimate partners relate to domestic violence treatment outcomes?

 H_{10} : Substance abuse among intimate partners is unrelated to domestic violence treatment outcomes.

 $H_{11:}$ Substance abuse among intimate partners is related to poorer domestic violence treatment outcomes.

RQ₂: Will women in domestic violence treatment programs who abuse substances be at higher risk of reoffending than women who do not abuse substances?

 H_{20} . Women who abuse substances are not at higher risk of reoffending than women who do not abuse substances.

 H_{21} . Women who abuse substances are at higher risk of reoffending than women who do not abuse substances.

RQ₃: Will men in domestic violence treatment programs who abuse substances be at higher risk of reoffending than men who do not abuse substances?

 H_{30} . Men who abuse substances are not at higher risk of reoffending than men who do not abuse substances.

 H_{31} . Men who abuse substances are at higher risk of reoffending than men who do not abuse substances.

RQ₄: Are women involved in domestic violence treatment programs who abuse substances more likely not to complete treatment than women who do not abuse substances?

 H_{40} : Women involved in domestic violence treatment programs who abuse substances are not more likely not to complete treatment as compared to those who do not abuse substances.

 H_{41} . Women involved in domestic violence treatment programs who abuse substances are more likely not to complete treatment as compared to those who do not abuse substances.

RQ₅: Are men involved in domestic violence treatment programs who abuse substances more likely not to complete treatment than men who do not abuse substances?

 H_{50} : Men involved in domestic violence treatment programs who abuse substances are not more likely not to complete treatment as compared to those who do not abuse substances.

*H*₅₁. Men involved in domestic violence treatment programs who abuse substances are more likely not to complete treatment as compared to those who do not abuse substances. Chapter 3 contains an overview of the methodology used for this study. This overview will include the study design, population, sampling method, sample size, instrumentation, and data analysis methods. Ethical considerations and study limitations are also described.

Research Design and Rationale

This research used a quantitative approach. Quantitative research provides an understanding of the relationship between the variables. This quantitative method involved a comparative non-experimental design that is consistent with the cross-sectional survey method (Edmonds & Kennedy, 2016). A quantitative method is appropriate for the current research project since the main aim of the study is to measure variables which in turn explain the issue being studied.

Additionally, the researcher employed a non-experimental quantitative study with a correlational design to determine if there are relationships between domestic violence treatment outcomes and substance abuse of adult male and female offenders. A nonexperimental quantitative methodology with a correlational design is most appropriate for specific reasons. First, the study includes numerical data that are analyzed to test hypotheses (McCusker & Gunaydin, 2015). Second, the choice of a nonexperimental quantitative method with a correlational design ensures research objectivity as the researcher is separated from the research participants (McCusker & Gunaydin, 2015). Third, there is no manipulation of independent variables; thus, this study is a nonexperimental quantitative method with a correlational design (McCusker & Gunaydin, 2015). Additionally, a nonexperimental quantitative method with a correlational design is the correct design for the current study because the objective is to identify and evaluate the relationship between the dependent variables (re-offense and completing treatment program) and the independent variables (substance abuse).

A quantitative research methodology uses numerical data that allows for statistical analyses, helps reduce biases, and is based on an objectivity paradigm (Bowers, 2017). Quantitative research measures include statistical, mathematical, or numerical analyses of data collected through questionnaires and surveys or by the manipulation of pre-existing statistical data using computational techniques. A qualitative approach is not appropriate because the study does not focus on exploring a phenomenon or establishing a theory, model, or definition (Allwood, 2012). Due to the nature of the research questions posed, binary logistic regression is the best fit for data analysis for this study. Binary logistic

regression analysis is used to predict a dichotomous dependent variable, re-offense (yes/no) and treatment completion (yes/no), in this case, based on an independent variable, substance abuse -yes/no (Mertler & Vannata, 2013). Additionally, binary logistic regression analysis also determines the overall fit and the relative contribution of each of the predictors to the total variance explained (Mertler & Vannatta, 2013). In binary logistic regression, covariates may be added to the model to control for the effects they may have. Possible covariates that may be considered are age, gender, and employment status.

Methodology

Population

The population of this study includes domestic violence offenders in treatment in Fresno County. Adult arrests for domestic violence account for about 60% of all adult arrests for interpersonal violence in the United States according to the FBI's National Incident-Based Reporting System can be used to make the calculation (NIBRS).

Sampling and Sampling Procedures

The researcher utilized a convenience sampling approach to select several participants for the study. According to Etikan et al. (2016), convenience sampling entails the recruitment of participants based on the ease with which they can be accessed. As such, convenience sampling is typically done based on proximity, especially when there are significant cost and time implications that can only be eased with convenience sampling. In the current study, convenience sampling allowed the investigator to randomly select participants until the required sample size is attained. This sampling

strategy was selected because other probabilistic methods such as simple random, stratified, and cluster sampling are not only costly but also inappropriate.

Before selecting the convenience sampling approach, the researcher considered several probabilistic sampling techniques particularly designed for quantitative studies. First, the researcher considered the random sampling approach, which involves initially obtaining a list of all the members of the target population and blindly selecting a sample from the list. Generally, simple random sampling allows a researcher to gather the greatest number of participants, which is necessary when attempting to gain as many participants as required in quantitative research (Etikan et al., 2016). This sampling technique means that a researcher makes use of various population-contact methods, rather than honing the search for a sample toward a specific means (such as emails) that are often more appropriate for other sampling techniques (such as purposive or snowball sampling)

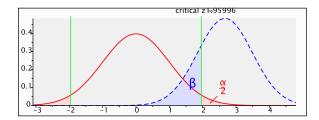
Despite its lucrative benefits, particularly of low bias and reduced sampling error, the random sampling technique was deemed inappropriate for the current study since the researcher could not obtain a list of all adult offenders of domestic violence in the United States. Additionally, even if the researcher could have obtained such a list, the list would probably have been too lengthy thus requiring a significant amount of computational time and resources currently not at the researcher's disposal. The population included in the current study includes only those adult offenders (18 years of age or older) of domestic violence provided by Domestic Violence Treatment program (Family and Behavior Intervention Services Inc.) located in Fresno County.

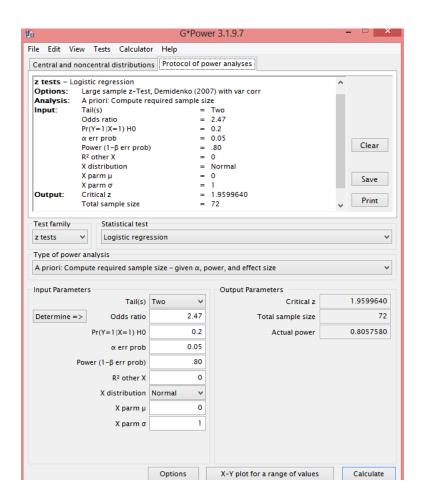
A priori power analysis was conducted using G*Power to determine the required minimum sample size for the study. Four factors were considered in the power analysis: significance level, effect size, the power of the test, and statistical technique. The significance level, also known as Type I error, refers to the chance of rejecting a null hypothesis given that it is true (Haas, 2012). Most quantitative studies make use of a 95% confidence level because it adequately provides enough statistical evidence of a test (Creswell & Poth, 2017). The effect size refers to the estimated measurement of the relationship between the variables being considered (Cohen, 1988). Cohen (1988) categorizes effect size into small, medium, and large. Berger, Bayarri, and Pericchi (2013) purported that a medium effect size is better as it strikes a balance between being too strict (small) and too lenient (large). The power of a test refers to the probability of correctly rejecting a null hypothesis (Sullivan & Feinn, 2012). In most quantitative studies, 80% power is usually used (Sullivan, & Feinn, 2012).

The statistical test to be used for this study is binary logistic regression. The calculation of a minimum sample size for logistic regression requires previous knowledge such as the expected odds ratio (effect size), the proportion of observations in either group of the dependent variable, and the distribution of each independent variable (Faul et al., 2009: Berman & Silvers, 2016). If these are not known, it is best to use an estimate to determine the appropriate sample size. Using G*Power, the minimum sample size was computed by utilizing a medium effect size of OR = 2.47, based on the categorization of effect sizes by Chinn (2000) who categorized odds ratio into small (OR = 1.44), medium (OR = 2.47), and large (OR = 4.25). To conduct binary logistic regression to detect a

medium effect size of OR = 2.47, at the 5% level of significance, with 80% power, a minimum sample size of at least 72 is required. The G*Power output is depicted in Figure 1.

Figure 1G*Power Output for Minimum Sample Required for Binary Logistic Regression





Procedures for Recruitment, Participation, and Data Collection

Research data was collected from different sources. These included Quarterly reports from Fresno County Probation, DVI – Domestic Violence Inventory responses from the participants, and statistics from the domestic violence database on multiple domestic violence charges. Permission from the Domestic Violence Treatment Program (Family and Behavior Intervention Services Inc.) was obtained to gain access to the study data. Additionally, consent was obtained from study participants to use their responses to the DVI.

The DVI is a multidimensional self-report test that assesses adults with a domestic violence history. The DVI scales measure six areas: Truthfulness, Violence, Control, Alcohol, Drug, and Stress Coping Abilities. Administration of the test takes about 30 minutes and is computer-scored. There are 155 true and false and multiple-choice questions. The DVI is a reliable instrument (Lindeman & Rhanuma, 2011). The computer-generated scores are available for this study, to ensure the privacy of the sample identifying information were blacked out. The scores that were used for this study are the domestic violence scale and alcohol and drug scales. Other information such as the gender of the participants was used.

Instrumentation and Operationalization of Constructs

As mentioned in the previous section, secondary data provided by the Domestic Violence Treatment Program includes scores from the Domestic Violence Inventory (DVI). The DVI is a multidimensional self-report questionnaire that evaluates adults who have perpetrated domestic violence. The variables measured in the DVI include

Truthfulness, Violence, Control, Alcohol, Drug, and Stress Coping Abilities. However, this study focused on the independent variable of substance abuse (yes or no) and the dependent variables of re-offending (yes or no) and completion of treatment (yes or no). These variables are all measured at the nominal level of measurement and are dichotomous. Gender was assessed at the nominal level of measurement as either male or female. Employment status was assessed and measured at the nominal level as either employed or unemployed. Lastly, age was measured at the interval level of measurement.

The reliability has been tested by the creators of the instrument (DeVon et al., 2007). Test reliability refers to a scale's consistency of measurement. Cronbach's Alpha, a measure of reliability, was used to measure the internal consistency of each scale. A generally accepted rule is that α of 0.6-0.7 indicates an acceptable level of reliability and 0.8 or greater is a very good level. Nunnally (1978) recommends a minimum level of .7. Reliability ranged from .70 - .80 indicating acceptable reliability (Murphy & Davidshofer, 2001). In testing, the term validity refers to the extent to which a test measures what it was designed to measure. The DVI exhibited acceptable construct validity, as individuals known to have more severe problems or symptoms received higher scale scores than individuals known to have fewer problems or symptoms (DeVon et al., 2007).

Operationalization

This study utilized the independent variables of substance abuse, measured at the nominal level of measurement and coded as 0 for no and 1 for yes; Gender, assessed at the nominal level of measurement as either 0 = male or 1 = female; Employment status

assessed and measured at the nominal level as either 1 = employed or 0 = unemployed and age was measured at the interval level of measurement. There are two dependent variables including re-offending (1 = yes or 0 = no) and completion of treatment (1 = yes or 0 = no). These variables are all measured at the nominal level of measurement and are dichotomous. Table 1 below summarizes the statistical tests, variables, and hypotheses tested in the data analysis.

Table 1

Hypothesis Summary, Statistical Tests, and Scales of Measurement

Null Hypothesis	Statistical Test	Independent Variables/Scale of Measurement	Dependent Variable/Scale of Measurement
H1 ₀ : Men who abuse substances are not at higher risk of reoffending than men who don't abuse substances.	Binary logistic regression	Substance abuse/nominal Age/interval Employment status (nominal)	Re-offending (nominal dichotomous)
H2 ₀ : Women who abuse substances are not at higher risk of reoffending than women who don't abuse substances.	Binary logistic regression	Substance abuse/nominal Age/interval Employment status (nominal)	Re-offending (nominal dichotomous)
H3 ₀ : Men involved in domestic violence treatment programs who abuse substances are not at higher risk of not completing treatment as compared to those who do not abuse substances.	Binary logistic regression	Substance abuse/nominal Age/interval Employment status (nominal)	Treatment completion (nominal dichotomous)

Table 1 (continued)

Null Hypothesis	Statistical Test	Independent	Dependent
		Variables/Scale of	Variable/Scale of
		Measurement	Measurement
H40: Women involved in domestic violence treatment programs who abuse substances are not at higher risk of not completing treatment as compared to those who do not abuse substances.	Binary logistic regression	Substance abuse/nominal Age/interval Employment status/nominal	Treatment completion/ nominal dichotomous

Data Analysis Plan

Analysis of the resulting quantitative data was conducted using the statistical software suite Statistical Package for the Social Sciences (SPSS) version 23. The data were cleaned by examining the dataset for missing data (Field, 2013). If a value is missing, the entire case was removed from the analysis (listwise deletion). In listwise deletion, a case is dropped from an analysis because it has a missing value in at least one of the specified variables. The analysis is only run on cases that have a complete set of data.

Descriptive statistics of the data for the predictor and dependent variables were reported. Frequency and percentages summary were obtained for categorical variables while the measure of central tendencies of means and standard deviations and minimum and maximum values were conducted for continuous demographic variables, such as age.

To address the research questions, binary logistic regression was conducted to test the following four models:

- (1) For males: $logit(Re-offending) = \beta 0 + \beta 1 Substance Abuse + \beta 2 Age + \beta 3 Employment Status$
- (2) For females: $logit(Re-offending) = \beta 0 + \beta 1 Substance Abuse + \beta 2 Age + \beta 3 Employment Status$
- (3) For males: logit(Treatment Completion) = $\beta 0 + \beta 1$ Substance Abuse+ $\beta 2$ Age + $\beta 3$ Employment Status
- (4) For females: logit(Treatment Completion) = $\beta 0 + \beta 1$ Substance Abuse+ $\beta 2$ Age + $\beta 3$ Employment Status

However, before conducting binary logistic regression, some assumptions must be met. These include linearity between the continuous independent variables and the logit transformation of the dependent variable, the absence of multicollinearity, and the absence of significant outliers (Field, 2013). Linearity was tested using the Box-Tidwell procedure (Field, 2013). To perform the Box-Tidwell procedure, all continuous independent variables (age) are first transformed into their natural logs. Second, interaction terms for each of the continuous independent variables and their respective natural log-transformed variables are created. Third, binomial logistic regression is carried out with the dependent variables and independent variables as well as the interaction term. If the interaction term is not significant (p > .05), there is no violation of the assumption. Multicollinearity was tested by calculating variance inflation factors (VIF) and any VIF over 9 was considered evidence of multicollinearity (Field, 2013). Standardized residuals will be calculated to test for outliers. Any residual over 2.0 was considered an outlier (Field, 2013). Once the assumptions are tested, to explore the research questions, the independent variables of substance abuse, age, and employment

status were entered into SPSS. The dependent variables of re-offending and treatment completion was then be entered. Significance was assessed at the 5% level, thus any p-value less than or equal to 0.05 was deemed significant.

Threats to Validity

Heale and Twycross (2015) defined validity as the degree to which the constructs of a study are measured in a quantitative study. The researcher assumes that the study maintains research validity because the survey adequately measures the constructs of the DVI. The DVI exhibits acceptable construct validity, as individuals known to have more severe problems or symptoms received higher scale scores than individuals known to have fewer problems or symptoms (DeVon et al., 2007). Additionally, the current research project used a convenience sampling technique in selecting the research participants. This sampling technique is known for its inability to generalize the research findings to the population as a whole, thus producing a threat to external validity.

Ethical Procedures

Ethical considerations are an integral part of all research. The Belmont Report (U.S. Department of Health and Human Services, 1979) describes the ethical considerations researchers must address. Researchers must protect vulnerable participants and adhere to respect for persons, autonomy, justice, and beneficence. The study employed convenience nonprobability sampling and the data collected did not include any personally identifying information. The data collected did not include any names, IP addresses, or emails of the participants. The data was downloaded to a secure, password-protected personal computer.

The researcher adhered to respect for persons by ensuring that no personally identifiable information is collected. If the results did contain any such data, it was stripped by the researcher before data analysis. The researcher conformed to autonomy by ensuring that individuals voluntarily participate in the study without being coerced. The researcher ensured that no vulnerable participants will be included in the study by specifying the minimum age of 18 as inclusion criteria. Beneficence was achieved as the researcher helped safeguard the welfare of participants by obtaining IRB approvals for the study. The IRB reviewed the study to determine that there is minimal risk to participants.

Summary

The purpose of this quantitative study is to explore the relationship between domestic violence treatment outcomes and substance abuse of adult male and female offenders. Secondary data were utilized from the Domestic violence treatment program and Fresno County Probation Department to address the following research questions and corresponding null and alternative hypotheses:

RQ₁: How does substance abuse among intimate partners relate to domestic violence treatment outcomes?

 H_{10} : Substance abuse among intimate partners is unrelated to domestic violence treatment outcomes.

 $H_{11:}$ Substance abuse among intimate partners is related to poorer domestic violence treatment outcomes.

RQ₂: Will women in domestic violence treatment programs who abuse substances be at higher risk of reoffending than women who do not abuse substances?

 H_{20} . Women who abuse substances are not at higher risk of reoffending than women who do not abuse substances.

 H_{21} . Women who abuse substances are at higher risk of reoffending than women who do not abuse substances.

RQ₃: Will men in domestic violence treatment programs who abuse substances be at higher risk of reoffending than men who do not abuse substances?

 H_{30} . Men who abuse substances are not at higher risk of reoffending than men who do not abuse substances.

 H_{31} . Men who abuse substances are at higher risk of reoffending than men who do not abuse substances.

RQ₄: Are women involved in domestic violence treatment programs who abuse substances more likely not to complete treatment than women who do not abuse substances?

 H_{40} : Women involved in domestic violence treatment programs who abuse substances are not more likely not to complete treatment as compared to those who do not abuse substances.

 H_{41} . Women involved in domestic violence treatment programs who abuse substances are more likely not to complete treatment as compared to those who do not abuse substances.

RQ₅: Are men involved in domestic violence treatment programs who abuse substances more likely not to complete treatment than men who do not abuse substances?

 H_{50} : Men involved in domestic violence treatment programs who abuse substances are not more likely not to complete treatment as compared to those who do not abuse substances.

This chapter provided a comprehensive description of the quantitative correlational research design used for this study. The results and findings from the data analysis will be presented in Chapter 4, along with the tables and graphics providing the descriptive results and inferences regarding the underlying connection between the study variables. Following, the interpretations of the findings are provided in Chapter 5, along with the study's limitations, recommendations for future studies, and implications for positive social change.

Chapter 4: Data Analysis and Results

Introduction

The purpose of this quantitative correlational study was to investigate how substance abuse among intimate partners relates to domestic violence treatment outcomes. The research questions that guided this study were:

- RQ₁: How does substance abuse among intimate partners relate to domestic
 violence treatment outcomes?
- RQ₂: Will women in domestic violence treatment programs who abuse substances be at higher risk of reoffending than women who do not abuse substances?
- RQ₃: Will men in domestic violence treatment programs who abuse substances be at higher risk of reoffending than men who do not abuse substances?
- RQ₄: Are women involved in domestic violence treatment programs who abuse substances more likely not to complete treatment than women who do not abuse substances?
- RQ5: Are men involved in domestic violence treatment programs who abuse substances more likely not to complete treatment than men who do not abuse substances?

The following is a discussion of the study's population and sample as well as a demographic description of the sample. Demographic descriptions included frequencies and percentages for categorical (nominal) variables and mean and standard deviations measured at the interval level of measurement. Also presented are the testing of

parametric assumptions for the statistical analysis and the results of statistical testing.

This chapter concludes with a discussion of the results of this project.

Descriptive Findings

Demographics

Research data were collected from Quarterly reports from Fresno County Probation, DVI – Domestic Violence Inventory responses from the participants, and statistics from the domestic violence database on multiple domestic violence charges. Permission from the Domestic Violence Treatment Program (Family and Behavior Intervention Program Inc.) was sought to gain access to the study data. Additionally, consent was sought from study participants to use their responses. After data collection, there were a total of N = 76 participants which included 23 (30.3%) females and 53 (69.7%) males. Ages ranged from 21 to 64 years (M = 35.38, SD = 8.72). Most participants were Hispanic, 40 (52.6%). This was followed by Caucasian, 12 (15.8%); some other race, 8 (10.5%); Black, 7 (9.2%); Native American, 4 (5.3%); and Asian, 2 (2.6%). Regarding marital status, most were single, 40 (52.6%). Regarding the highest education level, most participants had a high school education, 23 (30.3%). Tables 2 through 6 provide this information.

Table 2 *Gender*

	Frequency	Percent	
Female	23	30.3	
Male	53	69.7	
Total	76	100.0	

Table 3

Age

	Minimum	Maximum	M	SD	
Age	21.0	64.0	35.382	8.7162	

Table 4

Race

	Frequency	Percent	
Asian	2	2.6	
Black	7	9.2	
Caucasian	12	15.8	
Hispanic	40	52.6	
N/A	3	3.9	
Native American	4	5.3	
Other	8	10.5	
Total	76	100.0	

Table 5

Marital Status

	Frequency	Percent	
Divorced	6	7.9	
Divolecu	O	1.)	
Married	19	25.0	
N/A	6	7.9	
Separated	4	5.3	
Single	40	52.6	
Widowed	1	1.3	
Total	76	100.0	

Table 6Education Level

	Frequency	Percent
8th grade or less	4	5.3
College Graduate	3	3.9
General education diploma	8	10.5
High School	23	30.3
N/A	6	7.9
Some College	10	13.2
Some high School	21	27.6
Technical/Vocational school	1	1.3
Total	76	100.0

Study Variables

The independent variables of this study included age, current substance abuse, and employment status. The two dependent variables included re-offender and treatment completion. Regarding current substance abuse, 54 (71.1%) stated no use and 18 (23.7%) stated they currently use substances. Most participants were employed, 47 (61.8%) and 27 (35.5%) were unemployed. Among the participants, 52 (68.4%) did not re-offend, and 24 (31.6%) did re-offend. Lastly, 57 (75.0%) participants did not complete the treatment program and 19 (25.0%) did complete the program.

Table 7Current Substance Use

	Frequency	Percent
No	54	71.1

Yes	18	23.7
No response	4	5.3
Total	76	100.0

Table 8

Employment Status

	Frequency	Percent
Not employed	27	35.5
employed	47	61.8
No response	2	2.6
Total	76	100.0

Table 9

Re-Offender

	Frequency	Percent
No	52	68.4
Yes	24	31.6
Total	76	100.0

Table 10

Completed Treatment Program

	Frequency	Percent	
No	57	75.0	
Yes	19	25.0	
Total	76	100.0	

Data Analysis Procedures

To address the research questions, binary logistic regressions were conducted to test the following models:

Overall model: logit(Re-offending) = β0 + β1Substance Abuse+ β2Age +
 β3Employment Status

Stratified by Sex:

- For males: logit(Re-offending) = β0 + β1Substance Abuse+ β2Age +
 β3Employment Status
- For females: $logit(Re-offending) = \beta 0 + \beta 1 Substance Abuse + \beta 2 Age + \beta 3 Employment Status$
- For males: logit(Treatment Completion) = β0 + β1Substance Abuse+ β2Age +
 β3Employment Status
- For females: logit(Treatment Completion) = β0 + β1Substance Abuse+ β2Age +
 β3Employment Status

However, before conducting binary logistic regression, some assumptions must be met. These included linearity between the continuous independent variables and the logit transformation of the dependent variable, the absence of multicollinearity, and the absence of significant outliers (Field, 2018). Linearity was tested using the Box-Tidwell procedure (Field, 2018). This was accomplished by computing the natural log of age and entering the interaction term age*LnAge into the regression model. The interaction was not significant (p > .05) indicating no violation of the linearity assumption (Field, 2018). Multicollinearity was tested by calculating variance inflation factors (VIF) and any VIF over 10 was considered evidence of multicollinearity (Field, 2018). There were no VIFs that exceeded this threshold, thus no issues with multicollinearity. Lastly, standardized residuals were calculated to test for outliers. There were no standardized residuals over 3.0, thus no issues with outliers (Field, 2018). Once the assumptions were tested, to

explore the research questions, the independent variables of age, substance abuse, and employment status were entered into SPSS. The dependent variables re-offending and treatment completion were entered. The regression models were run five times to assess the relationships between the variables stratified by gender as well as collectively. Significance was assessed at the 5% level, and any p-value less than or equal to 0.05 was deemed significant.

Results

This first research question was addressed:

RQ₁: How does substance abuse among intimate partners relate to domestic violence treatment outcomes?

Regarding re-offense, the model was not significant, $\chi 2(3) = 2.845$, p = .416. Age, current substance abuse, and employment status were not significant predictors of re-offense (p > .05). Table 11 provides this information.

Table 11Binary Logistic Model of Age, Current Substance Abuse, and Employment Status
Predicting Re-Offence

	В	S.E.	Wald	df	p	OR	95% C.I.	for <i>OR</i>
							Lower	Upper
Age	.007	.031	.050	1	.823	1.007	.948	1.070
Current substance use	.935	.590	2.512	1	.113	2.548	.801	8.103
Employment status	.390	.571	.467	1	.494	1.477	.482	4.527
Constant	-1.610	1.186	1.842	1	.175	.200		

However, regarding the completion of the program, the model was significant, $\chi 2(3) = 12.429$, p = .006. Specifically, employment status was significant (B = 1.765, OR = 5.853, p = .033). People who are employed are 5.853 times as likely to complete the program as those who are not employed. Table 12 provides this information.

Table 12

Binary Logistic Model of Age, Current Substance Abuse, and Employment Status

Predicting Completion of Treatment Program

	В	S.E.	Wald	df	p	OR	95% C.I	.for <i>OR</i>
							Lower	Upper
Age	.034	.036	.914	1	.339	1.035	.965	1.110
Current substance use	-2.020	1.110	3.312	1	.069	.133	.015	1.168
Employment status	1.765	.828	4.550	1	.033	5.843	1.154	29.589
Constant	-3.340	1.539	4.710	1	.030	.035		

The relationship between age, current substance abuse, employment status, and re-offense was assessed separately for females and males to address RQ 2 and RQ 3. The second research addressed was:

RQ₂: Will women in domestic violence treatment programs who abuse substances be at higher risk of reoffending than women who do not abuse substances? The model was not significant, $\chi^2(3) = 1.391$, p = .708. None of the predictors were significant (p > .05). These results are provided in Table 13.

Table 13Binary Logistic Model of Age, Current Substance Abuse, and Employment Status
Predicting Re-Offence (Women)

B S.E. Wald df p OR 95% C.I.for OR

							Lower	Upper
Current substance use	.510	1.481	.119	1	.731	1.666	.091	30.366
Age	051	.095	.289	1	.591	.950	.788	1.145
Employment status	1.232	1.090	1.278	1	.258	3.430	.405	29.046
Constant	.171	2.868	.004	1	.952	1.187		

The third research question addressed was:

RQ₃: Will men in domestic violence treatment programs who abuse substances be at higher risk of reoffending than men who do not abuse substances? The model was not significant, $\chi 2(3) = 4.220$, p = .239. Although none of the predictors were significant (p > .05), current substance abuse was marginally significant (B = 1.347, OR = 3.847, p = .054), indicating that participants were a current substance abuse are 3.847 times likely to re-offend compared with no current substance abuse. These results are provided in Table 14.

Table 14

Binary Logistic Model of Age, Current Substance Abuse, and Employment Status

Predicting Re-Offence (Men)

	$\boldsymbol{\mathit{B}}$	S.E.	Wald	df	p	OR	95% C.I.fo	r EXP(B)
							Lower	Upper
Current substance use	1.347	.701	3.699	1	.054	3.847	.975	15.184
Age	.022	.035	.394	1	.530	1.022	.955	1.094
Employment status	.098	.717	.018	1	.892	1.102	.270	4.496
Constant	-2.344	1.505	2.425	1	.119	.096		

The relationship between age, current substance abuse, employment status, and treatment program completion was assessed separately for females and males to address RQ4 and RQ5. The fourth research addressed was:

RQ₄: Are women involved in domestic violence treatment programs who abuse substances more likely not to complete treatment than women who do not abuse substances?

The model was not significant, $\chi 2(3) = 1.850$, p = .604. Age, current substance abuse, and employment status were not significant predictors of treatment program completion (p > .05). Table 15 provides this information.

Table 15

Binary Logistic Model of Age, Current Substance Abuse, and Employment Status

Predicting Completion of Treatment Program (Female)

	В	S.E.	Wald df		p	OR	95% C.I.for EXP(B)	
							Lower	Upper
Current substance use	-19.255	22929.608	.000	1	.999	.000	.000	
Age	072	.118	.364	1	.546	.931	.738	1.174
Employment status	.916	1.380	.441	1	.507	2.499	.167	37.359
Constant	.240	3.488	.005	1	.945	1.271		

The fifth research question addressed was:

RQ₅: Are men involved in domestic violence treatment programs who abuse substances more likely not to complete treatment than men who do not abuse substances?

The model was significant, $\chi 2(3) = 13.675$, p = .003. Current substance abuse was marginally significant (B = -2.279, OR = 0.102, p = .054), indicating that participants

with current substance abuse are less likely to complete treatment compared with no current substance abuse. Additionally, those participants who are employed are 13,571 times more likely to complete the treatment program compared to those who are not employed (B = 2.608, OR = 13.571, p = .030). Table 16 provides this information.

Table 16

Binary Logistic Model of Age, Current Substance Abuse, and Employment Status

Predicting Completion of Treatment Program (Male)

	В	S.E.	Wald	df	p	OR	95% C.	I.for OR
							Lower	Upper
Current substance use	-2.279	1.185	3.701	1	.054	.102	.010	1.044
Age	.050	.042	1.402	1	.236	1.051	.968	1.142
Employment status	2.608	1.202	4.708	1	.030	13.571	1.287	143.097
Constant	-4.358	2.139	4.150	1	.042	.013		

Summary

The purpose of this quantitative correlational study was to investigate how substance abuse among intimate partners relates to domestic violence treatment outcomes. The research questions that guided this study were:

- RQ₁: How does substance abuse among intimate partners relate to domestic violence treatment outcomes?
- RQ₂: Will women in domestic violence treatment programs who abuse substances be at higher risk of reoffending than women who do not abuse substances?
- RQ₃: Will men in domestic violence treatment programs who abuse substances be at higher risk of reoffending than men who do not abuse substances?

- RQ₄: Are women involved in domestic violence treatment programs who abuse substances more likely not to complete treatment than women who do not abuse substances?
- RQ₅: Are men involved in domestic violence treatment programs who abuse substances more likely not to complete treatment than men who do not abuse substances?

Regarding the first research question, age, current substance abuse, and employment status were not significant predictors of re-offense However, regarding completion of the program, employment status was significant (B = 1.765, OR = 5.853, p= .033). People who are employed are 5.853 times as likely to complete the program as those who are not employed. Regarding the second research question, women in domestic violence treatment programs who abused substances were not at higher risk of reoffending than women who did not abuse substances. Regarding men (RQ3), current substance abuse was marginally significant (B = 1.347, OR = 3.847, p = .054), indicating that participants who had current substance abuse are 3.847 times more likely to reoffend compared with no current substance abuse. Regarding treatment completion for women (RQ4), age, current substance abuse, and employment status were not significant predictors of treatment program completion. Regarding treatment completion for men (RQ 5), participants with current substance abuse are less likely to complete treatment compared with no current substance abuse. Additionally, those participants who are employed are 13.571 times more likely to complete the treatment program compared to those who are not employed (B = 2.608, OR = 13.571, p = .030).

What follows in Chapter 5 is a discussion of how the results of this study are interpreted in the context of the theoretical framework. Any limitations of the results of the study will be provided. Additionally, recommendations for future research will be discussed.

Chapter 5: Summary, Conclusions, and Recommendations

Introduction

Chapter 5 presents a discussion of the results of this study, their implications, and how they are interpreted in the context of the theoretical framework. Limitations of the study are discussed. Further, implications for social change, recommendations for practice, and future research are discussed.

The problem addressed in this research is that little is known about how domestic violence treatment outcomes are related to substance abuse among intimate partners. The study aimed to fill the current gap in the literature relating to the extent to which DV treatment outcomes influence or are influenced by substance abuse among intimate partners (Pérez & Ruiz, 2017). To fill the gap in research, the study sought to investigate how substance abuse among intimate partners relates to domestic violence treatment outcomes, including reoffending and treatment completion. There was the need, therefore, to explore the relationship between substance abuse and domestic violence treatment outcomes. This study seeks to offer valuable information to researchers, scholars, and stakeholders who may use it in the criminal justice system to understand better the link between substance abuse and domestic violence treatment outcomes among intimate partners. Further, this information may impact the criminal justice system and the relevant DV treatment programs.

In this study, the researcher used quantitative methodology because the intent was to test research hypotheses relating to the extent to which substance abuse among individuals in DV treatment relates to DV treatment outcomes. The resulting quantitative

data was analyzed using the statistical software suite Statistical Package for the Social Sciences (SPSS) version 23. Descriptive statistics of the data for the predictor and dependent variables were reported. Frequency and percentage summaries were obtained for categorical variables, while the scale measure was conducted for continuous demographic variables, such as average age.

Results of the current research demonstrated that age, substance abuse, and employment status did not significantly predict re-offense. However, employment status was a significant predictor of completion of the treatment programs such that employed people are more likely to complete the programs than unemployed people.

Surprisingly, in this study, women in domestic violence treatment programs who abused substances were less likely to re-offend than those who did not engage in substance abuse. The difference could have been influenced by the underlying trauma the women have as well as the availability of social support networks that can support women in overcoming re-offending behaviors. Other than having social support networks and underlying impacting intention to re-offend, motivation to change may also influence re-offense among women in violence treatment programs. Men who abused substances were more likely to re-offend than men without current substance abuse. Age, current substance abuse, and employment status were not significant predictors of treatment completion for women. Men with current substance abuse were less likely to complete treatment programs than those without current substance abuse. The study indicates that employed individuals are more likely to complete treatment programs than those who are unemployed.

Interpretation of the Findings

The interpretation of findings was discussed based on each research question as described below.

RQ₁: How does substance abuse among intimate partners relate to domestic violence treatment outcomes?

Although current substance abuse, age, and employment status were not significant predictors of re-offence, results further demonstrated that employment status was a significant predictor of the completion of the treatment program. The findings imply that employed people are more likely to complete domestic violence treatment programs than those who are not employed. Past research indicates that age influences the willingness of an individual to be remorseful of their past domestic violence and refrain from future violence, such that older offenders are more likely to be remorseful than youth who would be more likely to blame situations for their domestic violence and continue engaging in IPV even after enrolling in substance use programs (Wilsnack et al., 2018). It suggests that age plays an essential role in determining substance use treatment program adherence response among individuals.

Unlike current study findings that current substance abuse, age, and employment status were not significant predictors of re-offense, previous research indicates a direct link between age, substance abuse, and re-offense (Sullivan, 2018). Sullivan (2018) established a *direct* relationship between domestic violence among individuals abusing drugs and their likelihood of engaging in domestic violence again. Lilley-Walker et al. (2018) also revealed that young people were three times more likely to engage in

domestic violence while on substance use treatment programs compared to older people. The previous research findings by Lilley-Walker et al. (2018) and Sullivan (2018) contradict the current study findings that substance abuse and age had no significant link with re-offending in domestic violence. The discrepancy in findings could be because of the different sample sizes, as the current study used a small sample size which may limit the generalizability of findings.

On the other hand, the current study findings agree with other past studies stating that people with employment complete violence treatment programs at a higher rate compared to those without employment. Consistent with this finding, previous empirical studies indicate that employed individuals were three times less likely to engage in domestic violence because they could afford to pay essential bills. Similar to the current study findings, a report by Raj and Shankar (2017) established that unemployed individuals were motivated to engage in substance abuse, domestic violence, and noncompliance with treatment programs. Unemployed individuals engage in such behaviors due to stress and economic strain, loss of identity and self-esteem as well as a sense of hopelessness and lack of future orientation (Raj and Shankar (2017) McKee and Hilton (2019) found that substance abusers had a low probability of engaging in treatment programs because they found it difficult to pay for their basic needs, such as house rent or buying food, leading to substance abuse and limited adherence to treatment programs. Agreeing with current study findings, previous literature highlights that the frustration attached to lack of employment could lead to offenders engaging in domestic violence, substance abuse, and nonadherence to treatment programs (Armstrong et al., 2019). The

findings contributed to previous research by indicating that employment significantly predicts adherence to domestic violence treatment programs.

RQ₂: Will women in domestic violence treatment programs who abuse substances be at higher risk of re-offending than women who do not abuse substances?

The findings indicated that women who abused substances were less at risk of reoffending compared to women without substance abuse. These results imply that women
who engage in substance abuse were not as likely to re-offend as the women who do not
engage in substance abuse. However, in their research, McKee and Hilton (2019) found
that IPV among women with substance abuse was higher than those without substance
abuse who are less likely to re-offend. Involvement in IPV predicts substance abuse
problems among women and poor domestic violence treatment response by the offenders
enrolled in treatment programs (Manuel et al., 2017). The current study findings are
discrepant from what previous research has found. This may be due to the small sample
of women in this research or to other unknown factors. Further research could help to
clarify the role current substance abuse plays in DV re-offending among females.

RQ3: Will men in domestic violence treatment programs who abuse substances be at higher risk of re-offending than men who do not abuse substances?

While no predictors were significant in predicting re-offence among men who abuse substances, men with current substance abuse were more likely to re-offend than those without. The results suggest that current substance abuse among men is likely to contribute to re-offenses compared to men who do not have current substance abuse. Similar to the current study results, past research highlighted that IPV is directly linked to

substance abuse, whereby men who abuse substances could become violent and threaten the other person's safety again (Habigzang et al., 2018). To respond to an increase in domestic violence among men, as current study findings indicate, other studies have suggested different interventions to target substance use in men with a history of IPV (McKee & Hilton, 2019). In support of current study findings, Geyen and Bailey (2021) established that most males who engaged in IPV abused drugs even after enrolling in treatment programs. Wichaidit and Assanangkornchai (2020) also reported that IPV is linked to alcohol use even if the aggressor is enrolled in a treatment program, indicating that IPV is related to substance use among re-offending men. The study results add to the previous research by establishing that men in this study with current substance abuse were likelier to re-offend than men without current substance abuse.

RQ4: Are women involved in domestic violence treatment programs who abuse substances more likely not to complete treatment than women who do not abuse substances?

Research findings indicated that employment status, age, and current substance abuse were not significant predictors of treatment program completion among women. The findings imply that age, substance abuse, and employment status of women did not predict their completion of treatment programs. Contrary to the current study results, other studies indicate a significant association between violence treatment programs and age, employment, and current substance abuse. Bernardi and Steyn (2019) found that most individuals, especially women enrolled in IPV treatment programs, were more likely to engage in domestic violence against their partners to shield their incapability to

provide for their families because of lack of employment. The current study results are in contrast to Mancera et al.'s (2018) findings, which found that lack of financial resources for drug addicts accused of IPV increased their likelihood of engaging in domestic violence again and non-compliance with treatment. Giarratano et al. (2020) also stated that other social factors that may cause stress to individuals include financial burden, which may increase their engagement in domestic violence.

The current research found that employment did not significantly impact adherence to domestic violence treatment programs. On the one hand, previous literature indicates that women who receive limited social support may feel socially alienated or socially disenfranchised and this may lead them to become involved in substance abuse (Cafferky et al., 2018). These findings add to the previous literature by revealing that women's age, substance abuse, and employment status did not predict domestic violence treatment program completion.

RQ₅: Are men involved in domestic violence treatment programs who abuse substances more likely not to complete treatment than men who do not abuse substances?

The results demonstrated that current substance abuse was a significant predictor of not completing violence treatment programs among men. As per the findings, men with current substance abuse are less likely to complete treatment compared to those with no current substance abuse. Further, the findings revealed that employed people are more likely to complete domestic violence treatment programs than those who are not employed. The result implies that employment and substance abuse predict the completion of domestic violence treatment programs such that those who engage in

substance abuse are less likely to complete treatment programs than those who do not. The findings are consistent with Telles et al. (2020), who established a link between substance use, domestic violence, and adherence to substance treatment programs Previous studies indicated that a person's likelihood to engage again in domestic violence depends on their ability to complete substance abuse treatment programs (Armstrong et al., 2019). In this regard, the noncompletion of substance use treatment programs among men significantly increased the risk of engaging again in domestic violence (Easton et al., 2018).

In addition, the current study indicates that men with employment are more likely to complete treatment programs than those unemployed. However, the findings failed to indicate whether employment has an impact on women completing treatment programs. This may be because of the small sample size used in this research or other factors such as fewer women are employed because they are taking care of children or other family members, so they have family responsibilities instead of employment. The results support Mancera et al.'s (2018) findings indicating that socioeconomic status, such as employment income, influences human life and functioning, including physical and mental health, and lack of employment contributes to non-adherence to domestic violence treatment programs. Curry et al. (2018) demonstrated that the prevalence of domestic violence correlates with low economic status, including unemployment, which can lead to a lack of adherence to treatment programs. As a result, unemployed and substance-abusing individuals are more likely to disengage from substance abuse and domestic violence treatment programs than those employed and with higher socioeconomic status

(Wilsnack et al., 2018). People in domestic violence treatment programs need employment because it is particularly important for them to have an income source to support their needs (Raj & Shankar, 2017).

In contrast to the current study findings, Geyen and Bailey (2021) found that reoffending among offenders registered for substance treatment programs depended on individual factors such as personal behaviors and substance abuse had no impact on their engagement in domestic violence treatment programs. Others, such as Peacock et al. (2017), also indicate a direct link between adherence to substance use and domestic violence treatment programs and employment status among men who abuse substances.

Limitations of the Study

The study is limited by scope because the study was conducted in one geographical setting. Using one location will limit the generalizability of the study findings to other geographical locations and populations. This study was also limited by research design. A quantitative correlational study design was used in the current study in data collection, and no other research methodology was used. Limiting research to only statistical data eliminated further information that may have been received from participants through in-depth interviews.

Quantitative studies are more effective, and the findings are more reliable when a large sample size is adopted (Winter, 2000). However, this study was limited by the sample size. A small sample size was used because the researcher had to complete the study within a pre-defined period. Such time restrictions negatively affected the study

outcomes because most predictors were not found to predict treatment completion and reoffense, particularly among women in violence treatment programs.

The study was limited to archival data. With archival data, one can only use the data that is already collected and cannot ask other questions that one might wish to ask if it were up to them to seek clarity of the information provided in the archival data.

Another limitation of the study was related to funding. Being an academic study, there was an issue with its funding. Limited funding negatively impacted the research process because the researcher had to finance different processes, such as transportation costs from one place to another, which were vital to the study's results. To mitigate this limitation, the researcher used personal savings and gifts from family members to finance the research process.

The last limitation of the study related to the researcher's novice data collection and analysis skills. Notably, this was the first formal research the researcher ever conducted. As a result, limited skills in conducting surveys, interacting with participants, and conducting data analysis using statistical software limited the thoroughness of the study results. However, to address this problem, the researcher took part in data collection and analysis training programs.

Recommendations

Several recommendations were discussed, including recommendations for further research and recommendations for practice.

Recommendations for Future Research

The geographical setting limited the study. The population of this study included domestic violence offenders in treatment in Fresno County. Based on this limitation, the researcher recommends that more studies be conducted in different settings to enhance the generalizability of the study outcomes. Additional study locations and settings could improve the reliability and generalization of the findings to different locations and populations.

This study was limited to a quantitative correlational design used in the current study in data collection. Limiting research to only statistical data eliminated further information that may have been received from participants through interviews. As a result, there is a need for further research to use qualitative research design to collect views and perceptions of participants about the lived experience of substance abusers in domestic violence treatment programs. Qualitative research exploring participants' lived experiences in DV treatment might yield ideas that could lead to improvement in DV programs. Also, it would be particularly valuable to study because female offenders in domestic violence treatment programs do not appear to respond like males. Females in this study were not more likely to engage in repeated domestic violence if they continued to abuse substances, nor were they more likely to complete treatment if employed, and we do not understand why this is.

Quantitative studies require large data samples for the effectiveness and reliability of study findings (Winter, 2000). However, this study was limited by the small sample size because the researcher had access to a particular domestic violence program and

needed to complete the study within a pre-defined period. More research using a larger sample and multiple locations could improve the reliability and generalizability of the findings.

Further research should be conducted to explore the relationship between substance abuse and women in domestic violence treatment programs. The results of this study found some unexpected gender differences. Women who abused substances had a lower rate of re-offending than those who were not current substance abusers, while men who abused substances had a higher rate of re-offending than those who did not. Also, men who did not abuse substances had a higher rate of treatment completion than men who did abuse substances, while there was not a significant difference among women. All the variables of age, substance abuse, and employment should be investigated to determine how they impact women and men in domestic violence treatment programs using a larger sample size. There may be some differences in how men and women use and respond to treatment which would be useful for treatment providers to better understand so programs could be developed with these issues in mind.

Recommendations for Practice

It is recommended establishing and implementing community mentorship programs to support people developing healthier relationships with reduced IPV. These programs would create awareness among couples and families of the importance of peaceful and healthier relationships. Cafferky et al. (2018) stated that IPV needs the consideration of both the treatment community and the criminal justice system. This can also be affected by creating awareness about healthier relationships. Healthier

relationships may be void of substance abuse and domestic violence among partners in the community. Peacock et al. (2017) established that both genders, men, and women engage in violent acts because of the influence of their substance abuse, thus healthier relationships are void of such acts.

I would also recommend creating and implementing domestic violence treatment programs that address both substance abuse and domestic violence. There are offenders who may be rehabilitated through effective treatment that reduces substance use and domestic violence among families in the community. Community partners such as local authorities should mentor families about disengaging from substance abuse. Peterson et al. (2018) found that substance abuse treatment programs may positively reduce the IPV prevalence rate in the community.

Researchers and scholars are also recommended to use the study findings as a point of reference to determine further the strategies to reduce domestic violence in couples and families. It would be useful to focus on whether males and females are affected differently by victimization or perpetration of domestic violence and the relationship substance abuse has to this. Future research might focus on the relationship between substance violence and family violence and how treatment can be designed to most effectively address both problems.

Implications

The study's implications were described as implications for positive social change and theoretical implications, as discussed below.

Implications for Positive Social Change

The research findings provide several contributions to positive social change. In particular, the findings provide critical insight to address substance abuse and its association with domestic abuse treatment results. The study findings offer valuable information that researchers, scholars, and stakeholders can use in the criminal justice system to understand better the link between substance abuse and domestic violence treatment outcomes among intimate partners. The study results may also impact the criminal justice system and the relevant DV treatment programs that would understand the effect of substance abuse and employment on domestic violence.

Intimate partners can also use these findings to understand the need to abstain from substance abuse for strong, healthier relationships devoid of domestic violence. The results may also help intimate partners with domestic violence problems to comprehend the importance of engaging and completing violence treatment programs. Domestic violence treatment programs are significant in providing IPV-targeted programs that reduce IPV rates against intimate partners (Spencer et al., 2019).

The government may use the study findings to establish and adopt rehabilitation centers for treating domestic violence victims and perpetrators. Victims and offenders in domestic violence treatment programs may be rehabilitated through effective treatment that reduces substance use and intimate partner violence. Reducing domestic violence and IPV may lead to positive growth in the community because people are more likely to develop positive, healthier relationships with reduced IPV among intimate violence.

Theoretical Implications

Regarding theoretical contribution, the study adopted two theories: the cycle of violence theory and social exchange theory. According to Manuel et al. (2017), the cycle of violence theory identifies three stages of violence. The theory emphasizes that violence occurs through three stages, namely the tension-building phase, violent episode, and remorseful and honeymoon stage. The study findings provide a key contribution to practice by providing greater insight into what can impact substance abuse among intimate partners and adherence to domestic treatment outcomes to reduce the prevalence of IPV. The findings indicated that engaging in substance abuse contributes to the lack of DV treatment participation and that employment affects treatment program completion. The implication is that study findings are consistent with the cycle of violence theory by revealing how engaging in substance abuse impacts treatment program completion as the theory emphasizes that the occurrence of violence happens through three stages including the tension-building phase contributing to substance abuse violent episode leading to domestic violence, and remorseful and honeymoon stage enhanced by the completion of treatment.

The study also adopted the social exchange theory, based on the premise that individuals can evaluate their social relations' risks and benefits (Geyen & Bailey, 2021). In this theory, individuals minimize risks by engaging in positive behaviors. The theory helps understand substance abuse patients' behaviors and intentions to commit and avoid violence against partners after enrolling in a treatment program (Gilchrist et al., 2019). As a result, study findings support this theory by indicating that negative behaviors, such as

substance abuse, result in domestic violence, while positive behaviors, such as engaging in and completing violent treatment programs, contribute to reduced IPV rates.

Transportation and money can be a complicated factor in domestic violence treatment because victims of domestic violence face challenges in accessing treatment services. The limited movement can prevent domestic violence survivors especially those in rural areas with sparse populations, and transportation networks, from accessing medication, guiding and counselling sessions as well as seeking shelter away from the perpetrator. This contributes to increased violence against the victim by the abuser. Further, domestic violence increases financial dependence due to economic abuse of the victims which limits them from accessing safe shelter and affords the cost of transportation to the treatment center and safe housing as they may lack money to incur the related costs. The challenges indicate the need for financial support to the victims to provide solutions including help in their movement to seek treatment and shelter to make sure that the domestic violence survivors can access the requisite resources to enhance their recovery. The lack of money among the victims can limit their access to counselling sessions due to the inability to incur transportation costs, while a sparse transportation network prevents the survivors from accessing treatment and counselling centers, making transportation and money, a complicated factor.

Conclusion

This study aimed to fill the research gap about how DV treatment and substance abuse among domestic violence offenders are related. The current research examined how substance abuse among intimate partners relates to domestic violence treatment

outcomes. This study sought to offer valuable information to researchers, scholars, and stakeholders who may use it in the criminal justice system to understand better the link between substance abuse and domestic violence treatment outcomes among intimate partners. The research may provide valuable information for the criminal justice system and the relevant DV treatment programs to use to develop more effective strategies to reduce DV in the community. Employment status influences the completion of treatment programs such that employed people are more likely to complete the programs than those who are unemployed.

The study suggests that women in domestic violence treatment are less influenced by substance abuse in their completion of treatment programs. However, men are more affected by substance abuse in completing treatment programs, such that men who currently abuse substances are less likely to complete treatment. The study provides valuable insight into how employment significantly impacts treatment program completion because employed individuals are more likely to complete treatment programs than those unemployed. The results provide significant information to the stakeholders in the criminal justice systems and rehabilitation organizations to understand the impact of substance abuse and employment status on the offenders and victims of DV. Further research can extend these findings by determining the most effective strategies to reduce substance abuse and IPV in the communities.

References

- Ahmadabadi, Z., Najman, J. M., Williams, G. M., Clavarino, A. M., & d'Abbs, P. (2017).

 Gender differences in intimate partner violence in current and prior relationships. *Journal of Interpersonal Violence*, 0886260517730563.

 https://doi.org/10.1177%2F0886260517730563
- Allwood, C. M. (2012). The distinction between qualitative and quantitative research methods is problematic. *Quality & Quantity*, 46, 1417-1429.

 https://doi.org/10.1007/s11135-011-9455-8
- Anderberg, M., & Dahlberg, M. (2018). Gender differences among adolescents with substance abuse problems at Maria clinics in Sweden. *Nordic Studies on Alcohol and Drugs*, 35(1), 24-38. https://doi.org/10.1177%2F1455072517751263
- Antwi, S. K., & Hamza, K. (2015). Qualitative and quantitative research paradigms in business research: A philosophical reflection. *European Journal of Business and Management*, 7(3), 217-225. https://core.ac.uk/download/pdf/234626233.pdf
- Armstrong, E. M., Glover Reed, B., & Bennett, L. W. (2019). How and how much: combined services for domestic violence and substance abuse. *Violence Against Women*, 25(12), 1450-1470. https://doi.org/10.1177%2F1077801218820201
- Berger, J., Bayarri, M. J., & Pericchi, L. R. (2013). The effective sample size. *Economic Reviews*, 33(1-4), 197-217. https://doi.org/10.1080/07474938.2013.807157
- Bernardi, D. A., & Steyn, F. (2019). A model for female-perpetrated domestic violence. *Victims & Offenders*, *14*(4), 441-461. https://doi.org/10.1080/15564886.2019.1602573

- Bloomfield, J., & Fisher, M. J. (2019). Quantitative research design. *Journal of the Australasian Rehabilitation Nurses Association*, 22(2), 27-30. https://search.informit.org/doi/abs/10.3316/INFORMIT.738299924514584
- Brunner, F., Neumann, I., Yoon, D., Rettenberger, M., Stück, E., & Briken, P. (2019).

 Determinants of dropout from correctional offender treatment. *Frontiers in Psychiatry*, *10*, 142. https://dx.doi.org/10.3389%2Ffpsyt.2019.00142
- Boserup, B., McKenney, M., & Elkbuli, A. (2020). Alarming trends in US domestic violence during the COVID-19 pandemic. *The American Journal of Emergency Medicine*, 38(12), 2753-2755. https://doi.org/10.1016/j.ajem.2020.04.077
- Bowers, A. J. (2016). Quantitative research methods training in education leadership and administration preparation programs as disciplined inquiry for building school improvement capacity. *Journal of Research on Leadership Education*, 12(1), 72-96. https://doi.org/10.1177/1942775116659462
- Cafferky, B. M., Mendez, M., Anderson, J. R., & Stith, S. M. (2018). Substance use and intimate partner violence: A meta-analytic review. *Psychology of Violence*, 8(1), 110. https://psycnet.apa.org/buy/2016-44359-001
- Chalfin, A., Danagoulian, S., & Deza, M. (2021). COVID-19 has strengthened the relationship between alcohol consumption and domestic violence (No. w28523).

 National Bureau of Economic Research.
- Chen, Z., Brodie, M. J., Liew, D., & Kwan, P. (2018). Treatment outcomes in patients with newly diagnosed epilepsy treated with established and new antiepileptic drugs: a 30-year longitudinal cohort study. *JAMA Neurology*, 75(3), 279-286.

https://doi.org/10.1001/jamaneurol.2017.3949

- Chinn S. (2000). A simple method for converting an odds ratio to effect size for use in meta-analysis. *Statistics in Medicine*, 19(22), 3127–3131.

 <a href="https://doi.org/10.1002/1097-0258(20001130)19:22<3127::aid-sim784>3.0.co;2-m">https://doi.org/10.1002/1097-0258(20001130)19:22<3127::aid-sim784>3.0.co;2-m
- Cochran, W.G. (2007). Sampling techniques. John Wiley & Sons.
- Crane, C. A., Godleski, S. A., Przybyla, S. M., Schlauch, R. C., & Testa, M. (2016). The proximal effects of acute alcohol consumption on male-to-female aggression: A meta-analytic review of the experimental literature. *Trauma, Violence, & Abuse*, 17(5), 520–531. https://doi.org/10.1177/1524838015584374
- Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five traditions* (4th ed.). Sage Publications.
- Curry, S. J., Krist, A. H., Owens, D. K., Barry, M. J., Caughey, A. B., Davidson, K. W., ... & US Preventive Services Task Force. (2018). Screening for intimate partner violence, elder abuse, and abuse of vulnerable adults: US Preventive Services Task Force final recommendation statement. *Jama*, 320(16), 1678-1687. https://doi.org/10.1001/jama.2018.14741
- Curtis, E. A., Comiskey, C., & Dempsey, O. (2016). Importance and use of correlational research. *Nurse Researcher*, 23(6). https://doi.org/10.7748/nr.2016.e1382
- Curtis, E., Comiskey, C., & Dempsey, O. (2015). Correlational research: Importance and use in nursing and health research. *Nurse researcher*, *6*(1), 20-25. http://www.tara.tcd.ie/xmlui/bitstream/handle/2262/74298/TARA%20Correlation

al%20Research%20Revised%2030.06.15%202.pdf?sequence=1&isAllowed=y

- Easton, C. J., Crane, C. A., & Mandel, D. (2018). A randomized controlled trial assessing the efficacy of cognitive behavioral therapy for substance-dependent domestic violence offenders: an integrated substance abuse-domestic violence treatment approach (SADV). *Journal of Marital and Family Therapy*, 44(3), 483-498. https://doi.org/10.1111/jmft.12260
- Etikan, I. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1. https://doi.org/10.11648/j.ajtas.20160501.11
- Field, A. (2018). Discovering statistics using IBM SPSS statistics. Sage Publications.
- Foulds, J. A., Boden, J. M., Newton-Howes, G. M., Mulder, R. T., & Horwood, L. J. (2017). The role of novelty seeking as a predictor of substance use disorder outcomes in early adulthood. *Addiction*, *112*(9), 1629-1637.

 https://doi.org/10.1111/add.13838
- Giarratano, P., Ford, J. D., & Nochajski, T. H. (2020). Gender differences in complex posttraumatic stress symptoms, and their relationship to mental health and substance abuse outcomes in incarcerated adults. *Journal of Interpersonal Violence*, *35*(5–6), 1133–1157. https://doi.org/10.1177/0886260517692995
- Giarratano, P., Ford, J. D., & Nochajski, T. H. (2020). Gender differences in complex posttraumatic stress symptoms, and their relationship to mental health and substance abuse outcomes in incarcerated adults. *Journal of Interpersonal Violence*, *35*(5-6), 1133-1157. https://doi.org/10.1177%2F0886260517692995

- Geyen, D. J., & Bailey, R. K. (2021). Substance abuse and intimate partner violence.

 In *Intimate Partner Violence* (pp. 127-135). Springer. https://doi.org/10.1007/978-3-030-55864-2_17
- Gilchrist, G., Dennis, F., Radcliffe, P., Henderson, J., Howard, L. M., & Gadd, D. (2019).

 The interplay between substance use and intimate partner violence perpetration: A meta-ethnography. *International Journal of Drug Policy*, 65, 8-23.

 https://doi.org/10.1016/j.drugpo.2018.12.009
- Godley, M. D., Passetti, L. L., Subramaniam, G. A., Funk, R. R., Smith, J. E., & Meyers, R. J. (2017). Adolescent Community Reinforcement Approach implementation and treatment outcomes for youth with opioid problem use. *Drug and Alcohol Dependence*, 174, 9-16. https://doi.org/10.1016/j.drugalcdep.2016.12.029
- Gray, K. M., & Squeglia, L. M. (2018). Research Review: What have we learned about adolescent substance use? *Journal of Child Psychology and Psychiatry*, *59*(6), 618-627. https://doi.org/10.1111/jcpp.12783
- Haas, J. P. (2012). Sample size and power. *American Journal of Infection Control*, 40(8), 766-767. Retrieved from https://doi.org/10.1016/j.ajic.2012.05.020
- Habigzang, L. F., Schneider, J. A., Frizzo, R. P., & de Freitas, C. P. P. (2018). Evaluation of the impact of a cognitive-behavioral intervention for women in domestic violence situations in Brazil. *Universitas Psychologica*, 17(3), 1-11. https://doi.org/10.11144/Javeriana.upsy17-3.eicb
- Håkansson, A., & Jesionowska, V. (2018). Associations between substance use and type of crime in prisoners with substance use problems—a focus on violence and fatal

- violence. *Substance Abuse and Rehabilitation*, 9, 1. https://dx.doi.org/10.2147%2FSAR.S143251
- Hill, A. L., Miller, E., Borrero, S., Zelazny, S., Miller-Walfish, S., Talis, J., ... & Chang, J. C. (2021). Family planning providers' assessment of intimate partner violence and substance use. *Journal of Women's Health*, 30(9), 1225-1232.
 https://doi.org/10.1089/jwh.2020.8699
- Horstman, N. J., Bond, C. E., & Eriksson, L. (2019). Sentencing domestic violence offenders: a vignette study of public perceptions. *Journal of Interpersonal Violence*, *36*(21-22), 0886260519888533.

 https://doi.org/10.1177/0886260519888533
- Isobe, J., Healey, L., & Humphreys, C. (2020). A critical interpretive synthesis of the intersection of domestic violence with parental issues of mental health and substance misuse. *Health & Social Care in the Community*, 1394-1407. https://doi.org/10.1111/hsc.12978
- Karakurt, G., Koç, E., Çetinsaya, E. E., Ayluçtarhan, Z., & Bolen, S. (2019). Metaanalysis and systematic review for the treatment of perpetrators of intimate partner violence. *Neuroscience & Biobehavioral Reviews*, 105, 220-230. https://doi.org/10.1016/j.neubiorev.2019.08.006
- Kreager, D. A., Felson, R. B., Warner, C., & Wenger, M. R. (2013). Women's education, marital violence, and divorce: A social exchange perspective. *Journal of Marriage and Family*, 75(3), 565-581. https://doi.org/10.1111/jomf.12018
- Koziol-McLain, J., Vandal, A. C., Wilson, D., Nada-Raja, S., Dobbs, T., McLean, C., ...

- & Glass, N. E. (2018). Efficacy of a web-based safety decision aid for women experiencing intimate partner violence: randomized controlled trial. *Journal of medical Internet research*, 20(1), e8. https://doi.org/10.2196/jmir.8617
- Lila, M., Gracia, E., & Catalá-Miñana, A. (2020). More likely to dropout, but what if they don't? Partner violence offenders with alcohol abuse problems completing batterer intervention programs. *Journal of Interpersonal Violence*, *35*(9-10), 1958-1981. https://doi.org/10.1177%2F0886260517699952
- Lilley-Walker, S. J., Hester, M., & Turner, W. (2018). Evaluation of European domestic violence perpetrator programmes: Toward a model for designing and reporting evaluations related to perpetrator treatment interventions. *International Journal of Offender Therapy and Comparative Criminology*, 62(4), 868-884.

 https://doi.org/10.1177%2F0306624X16673853
- Mancera, B. M., Mungal, A. S., De Santis, J., & Provencio-Vasquez, E. (2018).

 Reflections of men of Mexican origin: A grounded theory study of intimate partner violence risk factors. *American Journal of Men's Health*, *12*(5), 1784-1798. https://doi.org/10.1177%2F1557988318787617
- Manuel, J. I., Yuan, Y., Herman, D. B., Svikis, D. S., Nichols, O., Palmer, E., & Deren, S. (2017). Barriers and facilitators to successful transition from long-term residential substance abuse treatment. *Journal of Substance Abuse Treatment*, 74, 16-22. https://doi.org/10.1016/j.jsat.2016.12.001

- McCusker, K., & Gunaydin, S. (2015). Research using qualitative, quantitative or mixed methods and choice based on the research. *Perfusion*, *30*(7), 537-542. https://doi.org/10.1177/0267659114559116
- McKee, S. A., & Hilton, N. Z. (2019). Co-occurring substance use, PTSD, and IPV victimization: Implications for female offender services. *Trauma, Violence*, & *Abuse*, 20(3), 303-314. https://doi.org/10.1177%2F1524838017708782
- Mertler, C. A. (2013). Advanced and multivariate statistical methods: practical application and interpretation / Craig A. Mertler, Rachel A. Vannatta: Practical application and interpretation / Craig A. Mertler, Rachel A. Vannatta (Fifth edition.). Pyrczak Publishing.
- Nunnally, J. C. (1978). Psychometric theory (2nd ed.). McGraw-Hill.
- Peacock, A., Leung, J., Larney, S., Colledge, S., Hickman, M., Rehm, J., ... &

 Degenhardt, L. (2018). Global statistics on alcohol, tobacco and illicit drug use:

 2017 status report. *Addiction*, 113(10), 1905-1926.

 https://doi.org/10.1111/add.14234
- Peitzmeier, S. M., Malik, M., Kattari, S. K., Marrow, E., Stephenson, R., Agénor, M., & Reisner, S. L. (2020). Intimate partner violence in transgender populations:

 Systematic review and meta-analysis of prevalence and correlates. *American Journal of Public Health*, 110(9), e1-e14.

 https://doi.org/10.2105/AJPH.2020.305774
- Pérez, E., & Ruiz, S. (2017). Substance abuse as a risk factor for criminal behavior: a systematic review. *Acción Psicológica*, *14*(2), 33-50.

https://dx.doi.org/10.5944/ap.14.2.20748

- Peterson, C., Kearns, M. C., McIntosh, W. L., Estefan, L. F., Nicolaidis, C., McCollister, K. E., ... & Florence, C. (2018). Lifetime economic burden of intimate partner violence among US adults. *American Journal of Preventive Medicine*, 55(4), 433-444. https://doi.org/10.1016/j.amepre.2018.04.049
- Raj, K., & Shankar, H. (2017). Assessment of substance abuse among husbands and domestic violence among pregnant women in a Rural Block of Varanasi. *Indian Journal of Preventive & Social Medicine*, 48(1-2), 4-4.
 https://doi.org/10.1037%2F1089-2680.6.4.325
- Sommer, J., Hinsberger, M., Elbert, T., Holtzhausen, L., Kaminer, D., Seedat, S., ... & Weierstall, R. (2017). The interplay between trauma, substance abuse and appetitive aggression and its relation to criminal activity among high-risk males in South Africa. *Addictive behaviors*, 64, 29-34. https://doi.org/10.1016/j.addbeh.2016.08.008
- Sontate, K. V., Rahim Kamaluddin, M., Naina Mohamed, I., Mohamed, R. M. P., Shaikh, M. F., Kamal, H., & Kumar, J. (2021). Alcohol, aggression, and violence: From public health to neuroscience. *Frontiers in Psychology*, 12, 699726.
 https://doi.org/10.3389/fpsyg.2021.699726
- Spencer, C. M., Morgan, P., Bridges, J., Washburn-Busk, M., & Stith, S. M. (2021). The relationship between approval of violence and intimate partner violence in college students. *Journal of Interpersonal Violence*, *36*(1-2), NP212-NP231. https://doi.org/10.1177%2F0886260517731315

- Stringer, K. L., & Baker, E. H. (2018). Stigma as a barrier to substance abuse treatment among those with unmet need: an analysis of parenthood and marital status. *Journal of Family Issues*, *39*(1), 3-27. https://doi.org/10.1177%2F0192513X15581659
- Sullivan, C. M. (2018). Understanding how domestic violence support services promote survivor well-being: A conceptual model. *Journal of Family Violence*, *33*(2), 123-131. https://doi.org/10.1007/s10896-017-9931-6
- Sullivan, G. M., & Feinn, R. (2012). Using effect size-or why the p value is not enough. *Journal of Graduate Medical Education*, *4*(3), 279-82. https://doi.org/10.4300/JGME-D-12-00156.1
- Telles, L. E., Valença, A. M., Barros, A. J., & da Silva, A. G. (2020). Domestic violence in the COVID-19 pandemic: A forensic psychiatric perspective. *Brazilian Journal of Psychiatry*, 43(3), 233-234. https://doi.org/10.1590/1516-4446-2020-1060
- Wichaidit, W., & Assanangkornchai, S. (2020). Binge-drinking and household role's associations with prevalence of domestic violence: findings from the Thailand smoking and drinking behavior survey 2017. Substance Abuse Treatment, prevention, and policy, 15, 1-10. https://doi.org/10.1186/s13011-020-00278-2
- Winter, G. (2000). A comparative discussion of the notion of validity in qualitative and quantitative research. *The Qualitative Report*, *4*(3), 1-14. https://doi.org/10.46743/2160-3715/2000.2078
- Witkiewitz, K., & Tucker, J. A. (2020). Abstinence not required: Expanding the

- definition of recovery from alcohol use disorder. *Alcoholism, clinical and* experimental research, 44(1), 36. https://dx.doi.org/10.1111%2Facer.14235
- Wilsnack, R. W., Wilsnack, S. C., Gmel, G., & Kantor, L. W. (2018). Gender differences in binge drinking: Prevalence, predictors, and consequences. *Alcohol Research:*Current Reviews, 39(1), 57–76. https://psycnet.apa.org/record/2019-05003-006
- Widom, C. S. (2017). Long-term impact of childhood abuse and neglect on crime and violence. *Clinical Psychology: Science and Practice*, 24(2), 186-202. https://doi.org/10.1111/cpsp.12194
- Zarling, A., Bannon, S., & Berta, M. (2019). Evaluation of acceptance and commitment therapy for domestic violence offenders. *Psychology of Violence*, *9*(3), 257–266. https://doi.org/10.1037/vio0000097