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A Comparative Analysis of Demographic Characteristics of Male Intimate Partner Violence Perpetrators

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This is to certify that the doctoral dissertation by

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has been found to be complete and satisfactory in all respects,
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Walden University
2025

Abstract

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MCHS, University of Washington, 2016

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Forensic Psychology

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Abstract

Intimate partner violence is a significant and widespread social issue with far-reaching personal, societal, and economic consequences. Nonfatal strangulation is an act of violence that is considered a strong predictor of homicide within violent relationships. While research about nonfatal strangulation has improved, there is still limited knowledge about individuals who commit acts of strangulation within violent relationships. This study was an investigation of demographic characteristics of male individuals who commit acts of strangulation within intimate relationships. This research was grounded in the power and control theory, general strain theory, and social learning theory. The research questions for the study examined the demographic factors of relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status for any correlation with the likelihood of committing an act of strangulation. Assault cases from 2018-2023 within a Superior Court system were examined in this correlational, stratified sample study, and 1,715 cases were included in the final analysis. Binomial logistic regression of the dependent variable, an act of strangulation, and independent variables of demographic characteristics revealed that strangulation is less likely in first- and second-degree relative and roommate relationships but more likely in dating relationships. There was no correlation between strangulation and prior acts of violence, a finding that is contrary to most established research linking a history of violence with increased lethality risk. The results of this study contributed to positive social change by demonstrating the need for additional, broad studies in this area.

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Dedication

This dissertation and degree are dedicated wholeheartedly to my parents. Their belief in me and my ability to do hard things has been unshakeable, and most notably, they have demonstrated that it is entirely possible to be raised in a tumultuous environment and break that cycle for the subsequent generation. Thank you, Mom and Dad, for giving me everything, from endless “ground support” to the perfect turkey sandwich.

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To my dear friend Blake, who inspired me with her courage to write a book because…why not?

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To my rowing team and the sport of rowing – we have alignment!

To my committee chair, Dr. Hickey – onwards!

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Chapter 1: Introduction to the Study

Introduction

Intimate partner violence is a significant and widespread social issue in the United States and globally, with far-reaching personal, societal, and economic consequences. Research on intimate partner violence has primarily focused on victims' experiences, with additional studies exploring the backgrounds, psychopathology, and treatment outcomes of perpetrators. Intimate partner violence is often interconnected with other serious social issues, including mass shootings, homicide, and homelessness (Snyder, 2020). Additionally, intimate partner violence is recognized as an adverse childhood experience (ACE) for those who witness or experience it during childhood or adolescence, potentially contributing to intergenerational cycles of violence (Zhu et al., 2023).

Background

Nonfatal strangulation is an area of growing research interest in the intimate partner violence community. Starting in 2001, Gael Strack, a prosecutor with the San Diego District Attorney, examined cases of intimate partner violence involving strangulation and discovered that many strangulation cases were being discounted or missed by law enforcement, forensic examiners, or prosecution because of the lack of external signs and symptoms (Strack et al., 2001). At approximately the same time, Dr. Jacquelyn Campbell examined fatality cases of intimate partner homicide in a large metropolitan emergency room. She discovered that many of them had a history of strangulation episodes before their death (Campbell et al., 2009). Together, these discoveries led to the Danger Assessment (Campbell et al., 2009), a risk stratification tool

for intimate partner homicide risk. These discoveries also led Strack to found the Strangulation Training Institute, which helps to train individuals who may interact with survivors of nonfatal strangulation, as well as fostering community and ongoing research. Campbell et al. (2009) discovered that a single episode of nonfatal strangulation in a violent relationship raised the potential fatality risk by almost 500%. Multiple episodes of strangulation further increased the risk of homicide at the hands of the same partner (Campbell et al., 2009).

While research continues to expand the understanding of intimate partner violence -related homicide and near-lethal behaviors, knowledge gaps remain. However, existing data indicate that intimate partners are responsible for approximately 50% of homicides involving women in the United States, making intimate partner violence -related homicide five times more likely for women than for men (AbiNader et al., 2023). This risk is even higher for minority women, as non-Hispanic Black women experience intimate partner violence-related homicide at twice the rate of White and Asian/Pacific Islander women (Rice II et al., 2021).

As research on intimate partner violence progresses, attention has shifted toward behaviors within violent relationships that increase the risk of homicide (Spencer & Stith, 2020). One such behavior is nonfatal strangulation, defined as the external compression of blood vessels in the neck that does not result in death (Patch et al., 2019). Nonfatal strangulation has been identified as a strong predictor of future homicide within violent relationships, with survivors facing an increased risk of being killed by their partner (Campbell et al., 2009; Spencer & Stith, 2020).

Over the past decade, scholarly understanding of nonfatal strangulation has grown, leading to greater awareness of its physical and psychological effects on victims. Additionally, research has contributed to an improved understanding of intimate partner violence perpetrator characteristics, including background factors and behavioral patterns. However, there is still limited knowledge about individuals who engage in strangulation within intimate partner violence contexts. Specifically, research has yet to explore why specific perpetrators choose strangulation as a means of violence and how their characteristics and motivations may differ from other intimate partner violence perpetrators.

Problem Statement

Intimate partner violence in the United States is a widespread and serious social problem, affecting 1 in 4 women and 1 in 7 men over their lifetime (CDC, 2021). Intimate partner violence has severe physical and mental health consequences and imposes a significant economic burden, costing approximately $2 trillion annually in healthcare-related expenditures (Snyder, 2020). Among the various forms of intimate partner violence, nonfatal strangulation, defined as an episode of strangulation that does not result in the homicide of the victim, has been identified as a dangerous behavior due to its strong association with increased lethality and coercive control (Patch et al., 2018; Stark, 2023).

Despite research on intimate partner violence perpetrators in general, little is known about those who commit strangulation in intimate relationships. Existing literature has examined intimate partner violence perpetration from multiple perspectives,

including perpetrators' backgrounds and childhood experiences (Lee et al., 2022; Zhu et al., 2023) and the risk factors associated with becoming a perpetrator (Spencer & Sith, 2020). Research has also explored the mindset of intimate partner violence perpetrators through qualitative studies (Ager, 2021; Cunha et al., 2022). Lastly, studies have assessed intervention modalities and their effectiveness in reducing intimate partner violence perpetration and recidivism (Karakurt et al., 2019; Morrison et al., 2021).

While this body of research provides an understanding of intimate partner violence perpetration, there appears to be a knowledge gap regarding individuals who commit acts of strangulation. Understanding the motives, associated behaviors, and background of those who commit nonfatal strangulation may contribute to the development of targeted intervention, enhanced risk assessment strategies, and efforts to prevent the escalation of violence to homicide. I sought to address this gap by exploring the demographic characteristics of individuals who commit acts of strangulation within intimate relationships.

Purpose of the Study

The purpose of this quantitative study was to explore the demographic characteristics of intimate partner violence perpetrators who commit acts of strangulation. The goal was to identify factors or patterns, such as relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status that may influence an act of intimate partner violence strangulation. The dependent variable was the presence or absence of an act of strangulation, while the independent variables included the relationship status between the perpetrator and the victim, the race of the perpetrator,

prior acts of violence, and prior acts of intimate partner violence committed by the perpetrator, and the indigency status of the perpetrator.

Research Questions and Hypotheses

RQ1: Do relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status influence the act of strangulation in intimate partner violence?

$H_0$1: Relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status do not influence the act of strangulation in intimate partner violence.

$H_1$1: The act of strangulation within violent relationships is influenced by the demographic characteristics of relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status.

RQ2: Are perpetrators with a history of violence, either general violence or intimate partner violence, more or less likely to commit an act of strangulation than those perpetrators without a history of violence?

$H_0$2: Perpetrators with a history of prior violence are equally likely to commit acts of strangulation as those without a history of prior violence.

$H_1$2: Perpetrators with a history of prior violence are more likely to commit acts of strangulation in violent relationships compared to those without a history of prior violence.

Theoretical Frameworks

This study is grounded in three key theories: power and control theory, general strain theory, and social learning theory. These theories provide a framework for understanding the motivations, social structures, and behavioral patterns that contribute to the perpetration of nonfatal strangulation within intimate partner violence.

Power and Control Theory

Power and control theory, initially developed by John Hagan, seeks to explain the gendered nature of criminal behavior, specifically intimate partner violence. This theory suggests that differences in parental roles, especially in patriarchal family structures, shape beliefs about power, control, and violence (McKinley et al., 2021). Within intimate partner violence, this theory helps explain how perpetrators may use violence to reinforce dominance and exert control over their partners.

General Strain Theory

General strain theory, introduced by Robert Agnew, posited that individuals experiencing strain, including economic hardship, relationship instability, or emotional distress, are more likely to engage in criminal behavior (McLeod et al., 2020). Given that intimate partner violence is often more prevalent in relationships characterized by financial insecurity, low educational attainment, and other high-risk factors (Steele et al., 2021), this theory provides insight into why some individuals resort to strangulation as a form of violence in response to perceived or actual strain.

Social Learning Theory

Social learning theory, developed by Albert Bandura, suggested that violent behaviors are learned through observation and reinforcement. This theory is widely applied to intimate partner violence research, as it can help explain how perpetrators who may have been exposed to violence in childhood are shaped by that exposure in adulthood (Zhu et al., 2023).

By applying these theories, I sought to examine whether specific demographic characteristics are more prevalent among those who engage in nonfatal strangulation within intimate partner violence. The research questions are designed to assess whether specific demographic factors, such as age, socioeconomic background, or other measurable characteristics, are associated with the perpetration of strangulation.

Nature of the Study

To address the research questions in this quantitative study, the specific research design included a descriptive research approach from an ecological perspective, commonly used for comparing or contrasting data that has already been collected (Aggarwal & Ranganathan, 2019).

The dependent variable in this study was the presence or absence of an act of strangulation. The independent variables were the demographics associated with intimate partner violence perpetrators, including racial background, indigency status, relationship type (married, cohabiting, sharing children, dating, etc.), and prior history of intimate partner violence or generally violent assault.

The data were collected from a county in Washington State's Superior Court documents on cases involving either intimate partner violence, nonfatal strangulation, or both. The data for this study were obtained from publicly accessible court records. All cases within the prescribed time frame of 2018-2023 were manually reviewed and included if they did not meet the exclusion criteria. The data was then analyzed using logistic regression analysis to examine whether an act of strangulation was associated with any of the demographic variables collected or whether an act of strangulation was associated with prior acts of intimate partner violence or general community violence.

Definitions

Adverse childhood experience: potentially traumatic events that occur in childhood (0-17 years), such as bullying, witnessing domestic violence, experiencing child abuse, or witnessing community violence (CDC, 2023).

Choking: mechanical obstruction of the trachea by a foreign body, such as a piece of inhaled food; a common colloquial term for nonfatal strangulation (IFAS, 2023).

Coercive control: a pattern of behavior that seeks to take away the victim's liberty or freedom and to strip away and erode their sense of self and connection with the world (Stark, 2023).

Domestic violence: a pattern of abusive behavior in any relationship that one partner uses to gain and maintain power and control over the other partner; essentially synonymous with intimate partner violence (OVW, 2023).

Financial violence: generally considered to be limiting access to work or advancement opportunities, manipulating or controlling financial resources, incurring

debt in the name of the victim, and controlling access to immigration paperwork, identification, and other sources of freedom (NNEDV, n.d.).

Healthcare provider: a licensed person or facility that provides healthcare services; this will refer to individuals (ONC, n.d.).

Interpersonal violence: The intentional use of physical force or power against other persons by an individual or a small group of individuals. Interpersonal violence may be physical, sexual, or psychological and may involve deprivation and neglect. This is often subdivided into family or intimate partner violence and community violence (Ziaei & Hammerstrom, 2023).

Intimate partner: the spouse, former spouse, cohabiting or former cohabiting individual, current or former romantic partner, or co-parent of an individual (Cornell Law, n.d.).

Intimate partner violence: Behavior by an intimate partner or ex-partner that causes physical, sexual, or psychological harm, including physical aggression, sexual coercion, psychological abuse, and controlling behaviors (WHO, 2021).

Nonfatal strangulation: the obstruction of blood vessels or airways by external pressure to the neck, decreasing or preventing oxygen delivery to the brain and head that does not cause death to the victim (IFAS, 2023).

Perpetrator: one who commits a crime or is presumed to have committed a crime; this will refer to those who are both accused of and formally convicted of violence against an intimate partner.

Physical violence: the use of physical force to inflict pain, injury, or physical suffering on the victim. Examples include slapping, kicking, punching, pinching, biting, shoving, pushing, dragging, stabbing, spanking, scratching, burning, strangling, or threatening to do any of these activities (Yalch & Rickman, 2021).

Psychological violence: the use of various behaviors intended to humiliate and control another individual in public or private. Examples may include verbal abuse, name-calling, constant criticizing, blackmailing, gaslighting, threats, stalking behaviors, or restricting access to outside support sources (i.e., isolation) (Yalch & Rickman, 2021).

Sexual violence: any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic within an intimate relationship. This could include physically forcing a partner to have sex (spousal or intimate partner rape), forcing degrading or humiliating sexual acts, uncomfortable practices or positions, or family planning manipulation (such as forcing a pregnancy to term, forcing sex without protection, manipulating or limiting access to family planning resources) (Yalch & Rickman, 2021).

Socioeconomic status: a measure of the social and economic standing and class of an individual, typically considered to encompass educational attainment, occupational prestige, and subjective impressions of social status and social class (APA, 2022).

Survivor: commonly refers to one who has begun or finished the process of recovery from a violent relationship; because this process differs individually, this term is frequently used by victim advocacy services but will generally not be used outside of direct quotations.

Throttling: another commonly employed colloquial term for strangulation (IFAS, 2023).

Traumatic brain injury (TBI) is a form of acquired brain injury occurring when a sudden trauma affects the structures of the head and brain, inclusive of nonfatal strangulation (NASEM, 2019).

Victim: one who is the recipient of violence from an intimate partner. This will refer to those who have undergone abuse at the hands of an intimate partner.

Assumptions

The primary assumption made in this study was that perpetrators who were studied within the context of this data collection were presumed to have completed the acts they were accused of completing. This violated the fundamental tenet of the court system of the United States that one is presumed innocent until proven guilty, but this was necessary to complete this research for several reasons. First, the percentage of cases carried forward into the court system was minimal compared to the problem's scope. As an example, Garner and Maxwell (2009) noted that one-third of cases reported to law enforcement are carried through prosecution. Of those cases that result in prosecutorial action, about half result in a conviction (Garner & Maxwell, 2009). Lastly, the prevalence of false accusations of physical violence or strangulation has been hotly debated for decades (Mazeh & Widrig, 2016), with little consensus being established but generally believed to be low (Mazeh & Widrig, 2016).

Garner and Maxwell (2009) and Mazeh and Widrig (2016) represent their respective areas' most recent scholastic literature. There are more recent studies

discussing rates of false victimization of sexual violence (Huntington & Berkowitz, 2022), but none could be found that were more recent about intimate partner violence.

Scope and Delimitations

This retrospective, correlational explorative study examined demographic characteristics associated with both general perpetrators of intimate partner violence and perpetrators of intimate partner violence who strangle their victims from 2018 to 2023. The purpose of this research was to explore the demographic characteristics of intimate partner violence perpetrators who engage in strangulation. The goal was to identify factors or patterns, such as relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status that may influence an act of intimate partner violence strangulation. The dependent variable was the presence or absence of an act of strangulation, while the independent variables included the relationship status between the perpetrator and the victim, the race of the perpetrator, prior acts of violence, and prior acts of intimate partner violence committed by the perpetrator, and the indigency status of the perpetrator.

This study was limited to the superior court system in a specific county in Washington State. This limitation was chosen because it provided a geographic region to which demographic characteristics of the study population could be compared. There were no data included on perpetrators or victims who did not interact with the legal system due to intimate partner violence (e.g., if a perpetrator interacts with the legal system due to a separate, unrelated crime, this demographic data was not included), as this was outside the scope of this research. This specific focus was chosen deliberately

for this research as a research gap in the literature review and, thus, contributed meaningfully to the body of knowledge on nonfatal strangulation and perpetration of intimate partner violence.

Limitations

This study's limitations include geographic and sampling limitations. These data were gathered from a specific county in Washington State. This creates a geographic limitation that may limit generalizability because the demographic composition of this county may differ from others. Sampling limitations included that all individual cases utilized in this study had prosecutorial action initiated against them because of violence within relationships. This limitation excluded cases in which there was no interaction with law enforcement or the legal system. This study was also temporally limited to the years 2018 to 2023, as these were the data that were available for public access.

Significance

This research may help the research community deepen their understanding of perpetrators who utilize strangulation. The results may also lead to additional research studies, such as qualitative examinations of perpetrators and their relationship with ACEs or the way violence manifests in different types of relationships. This study may contribute to meaningful, positive social change by enhancing the understanding of the interaction between coercive control and intimate partner violence. This research could also assist in strengthening the earlier detection of potentially dangerous or lethal violent relationships, thus reducing morbidity and mortality because of intimate partner violence.

Summary

Intimate partner violence remains a prevalent social problem in the United States and worldwide. The research community has continued to improve its understanding of intimate partner violence, including the growing awareness of the dangerous and potentially lethal role of nonfatal strangulation within violent relationships. Furthering the knowledge of nonfatal strangulation is essential for the continued growth and development of programs and interventions from both the perpetrator and the victim side that specifically target potentially lethal relationships. From this point, a comprehensive literature review was presented, covering intimate partner violence perpetration, nonfatal strangulation, lethality risk factors in relationships, and intimate partner violence perpetration treatment modalities.

Chapter 2: Literature Review

Introduction

Intimate partner violence in the United States is a widespread and serious social problem, affecting 1 in 4 women and 1 in 7 men over their lifetime (CDC, 2021). Intimate partner violence imposes a significant economic burden, costing approximately $2 trillion annually in healthcare-related expenditures, a sum that rises to approximately $3 trillion annually when other costs are considered, such as loss of wages, relocation costs, and lost productivity at work (Snyder, 2020). Among the various forms of intimate partner violence, nonfatal strangulation has been identified as a dangerous behavior due to its strong association with increased lethality and coercive control (Patch et al., 2018; Stark, 2023).

Despite research on general perpetrators of intimate partner violence, little is known about those who commit acts of strangulation in intimate relationships. Existing literature has examined intimate partner violence perpetration from multiple perspectives, including the backgrounds and ACEs of perpetrators, the risk factors associated with becoming a perpetrator, the mindset of intimate partner violence perpetrators through qualitative studies, the role of co-occurring substance abuse in violent behavior, and intervention modalities and their effectiveness in reducing intimate partner violence perpetration.

Lee et al. (2022) and Zhu et al. (2023) examined the role of ACEs on the overall experience and process of becoming a perpetrator. Spencer and Stith (2020) looked more

broadly at the risk factors associated with becoming a perpetrator of intimate partner violence.

Ager (2021) examined the perceptions and mindsets of perpetrators through the lens of cognitive behavioral therapy (CBT). Cunha et al. (2022) researched what perpetrators believed contributed to their violent acts. Senkans et al. (2020) proposed an evaluation of perpetrators' cognition from the framework of aggressive relational schemas. Stairmand et al. (2020, 2021) examined perpetrators' perspectives on family violence and used coercive control as a framework to examine perpetrators' motivations for completing violent acts.

Gilchrist et al. (2019) and Radcliffe et al. (2021) both examined the role of substance use and abuse on perpetrator actions and how efficacious it was to have a mixed methods perpetrator intervention strategy that addressed both substance use and the underpinnings of violent behavior.

Lastly, multiple researchers have examined perpetrator intervention modalities and efficacy, including Gilchrist et al. (2019) and Radcliffe et al. (2021). Karakurt et al. (2019) explored multiple perspectives on perpetrator intervention. McGinn et al. (2020) examined perpetrator intervention from the perpetrator's perspective, and Morrison et al. (2021) looked at perpetrator intervention programs from the standpoint of the moderators. Murphy et al. (2020) evaluated whether perpetrators responded better to individual or group therapy models.

While this research provides an understanding of intimate partner violence perpetration, there is a gap in knowledge regarding individuals who engage specifically

in acts of strangulation. Understanding the motives, associated behaviors, and background of those who commit nonfatal strangulation may contribute to the development of targeted interventions, improved risk assessment strategies, and policy or procedure changes that could prevent escalation to homicide. Without this knowledge, efforts to reduce intimate partner violence-related fatalities may remain incomplete. This study seeks to address this gap by exploring the demographic characteristics, including relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status of individuals who commit acts of strangulation within intimate relationships, contributing to a more comprehensive understanding of nonfatal strangulation perpetration.

What follows in Chapter 2 is a description of the strategy deployed during the literature search, how sources were selected and cataloged, the theoretical foundations that were chosen for the background of this study, and a complete literature review that examined the literature that exists regarding the perpetration of nonfatal strangulation.

Literature Search Strategy

A comprehensive search of relevant databases and search engines initiated this literature review. Following this encompassing search, additional articles and resources were collected by closely reviewing the references for each initially reviewed article.

The first literature search was completed without time frame criteria to ensure the development of a comprehensive evaluation of the available resources. Once this initial review was completed, the time frame was narrowed to 2019-2024, reflecting the last 5 years of research. Some seminal works not duplicated or replaced within this time frame

were also included. Most sources were limited to the United States, with rare exceptions being Canada, the United Kingdom, and Australia / New Zealand, all English-speaking areas with a comprehensive country-wide awareness of coercive control and legal precedent for the prosecution of coercive control and nonfatal strangulation. Several other rare exceptions were admitted to the literature review from Spain and Portugal for their relevance to the area of qualitative studies on perpetrators of intimate partner violence.

Key terms used for the search process were *nonfatal strangulation, strangulation, choking, throttling, intimate partner violence, domestic violence, domestic abuse, interpersonal violence, adverse childhood experiences, coercive control, perpetrator, abuser, offender, victim, survivor, sequelae*, and *side effects*.

Databases searched were APA PsycInfo, Bureau of Justice Statistics, Center for Disease Control (CDC), CINAHL and Medline, Criminal Justice Database, Google Books, Google Scholar, OpenDissertations, ProQuest Central, PubMed, Sage Journals, ScienceDirect, Taylor and Francis Online, and the World Health Organization.

There were relatively few research studies that examined specifically perpetrators of nonfatal strangulation. For this literature review, literature was included on the total of perpetration of intimate partner violence, utilized as a corollary and a comparative tool to the research results of this study.

Theoretical Foundation

The study of intimate partner violence is complex, with multiple theories underpinning intimate partner violence, coercive control, intimate partner violence perpetration, and nonfatal strangulation. While all these theories offer some contextual

background and essential information for developing an understanding of intimate partner violence, several were selected for this research that most closely aligned with the act of perpetration. These theories were the general strain theory, the power and control theory, and the social learning theory.

General Strain Theory

Social scientist Robert Agnew first proposed general strain theory in the early 1990s (Agnew, 2001). Agnew proposed that strain could produce an uncomfortable environment in which criminal behavior or delinquency was a possible solution to relieve this discomfort (Agnew, 2001). Agnew defined strain broadly as "relationships in which others are not treating the individual as [they] would like to be treated" (Agnew, 2001). Agnew further clarified and subdivided the concept of strain by referring to objective strain, subjective strain, and the emotional response to an event or condition.

An objective strain was safely assumed to be a noxious condition or state that most individuals would object to, such as being the victim of physical assault, homelessness, starvation, or lack of other essential resources required for human function (Agnew, 2001).

By contrast, a subjective strain is one that an individual objects to. This can be much more varied, as it can be personal; something other than a globally or widely accepted experience to qualify. Some subjective strains may start as objective strains, such as divorce or the death of a loved one but become more significant or lesser subjective strains dependent upon the individual's experience with that strain (Agnew, 2001). For example, a divorce is accepted as a human stressor and an objective strain.

Still, an individual who is leaving an abusive or controlling relationship may experience this strain subjectively much differently than somebody who is losing a supportive and valuable relationship (Agnew, 2001).

Lastly, the emotional response to strain is crucial to evaluating strain, which is closely related to the experience of subjective strain. For example, if an individual gets a bad grade in school, this could represent subjective strain. Still, some individuals may get very angry because of this suboptimal grade and consider themselves unfairly persecuted. Another may become depressed, and another may become galvanized to do better because of this subjective strain (Agnew, 2001).

General strain theory can be helpful in the evaluation of intimate partner violence from the perpetrator's perspective by offering a framework for interpreting events that may surround episodes of violence in intimate partner violence. From the exploration of the meaning of strain, a perpetrator may experience objective strain, such as poverty, loss of employment, or starvation, and their subjective response to this strain might be the selection of violence against their partner (Agnew, 2001; Pesta et al., 2019). Some research theorized that control is identified as a necessary element of life for some perpetrators. Therefore, the loss of control or the perceived emancipation of a partner may qualify as a strain that promotes the selection of violence (Eriksson & Mazerolle, 2013).

General strain theory specified that strain could represent the application of noxious or unwanted stimuli or the removal of positive stimuli (Agnew, 2001). Therefore, intimate partner violence could be representative of both qualities at once,

such as a case in which the perpetrator is faced with the concept of losing control over their partner or losing their relationship with their partner, in addition to the threat of prison time, legal sanctions, or other stressors (Eriksson & Mazerolle, 2013; Pesta et al., 2019). Because the research questions of this study addressed demographic and socioeconomic factors that perpetrators may be exposed to, general strain theory may directly relate to the research findings by identifying socioeconomic opportunities for increased strain that may increase the likelihood of intimate partner violence.

Power and Control Theory

John Hagen first conceptualized power and control theory in the mid-1990s. This theory has been widely applied to intimate partner violence. However, as Wagers (2015) noted, there needs to be a well-defined deconstruction of the fundamental tenets of power or control as they apply to violent relationships. This is also a theory that directly relates to the concept of coercive control, as proposed by Stark (2023). Fundamentally, Wagers defined power as the potential or capacity to influence and the possession of resources to affect change in another individual. He defined control as the deployment of these resources to influence the behavior of another individual.

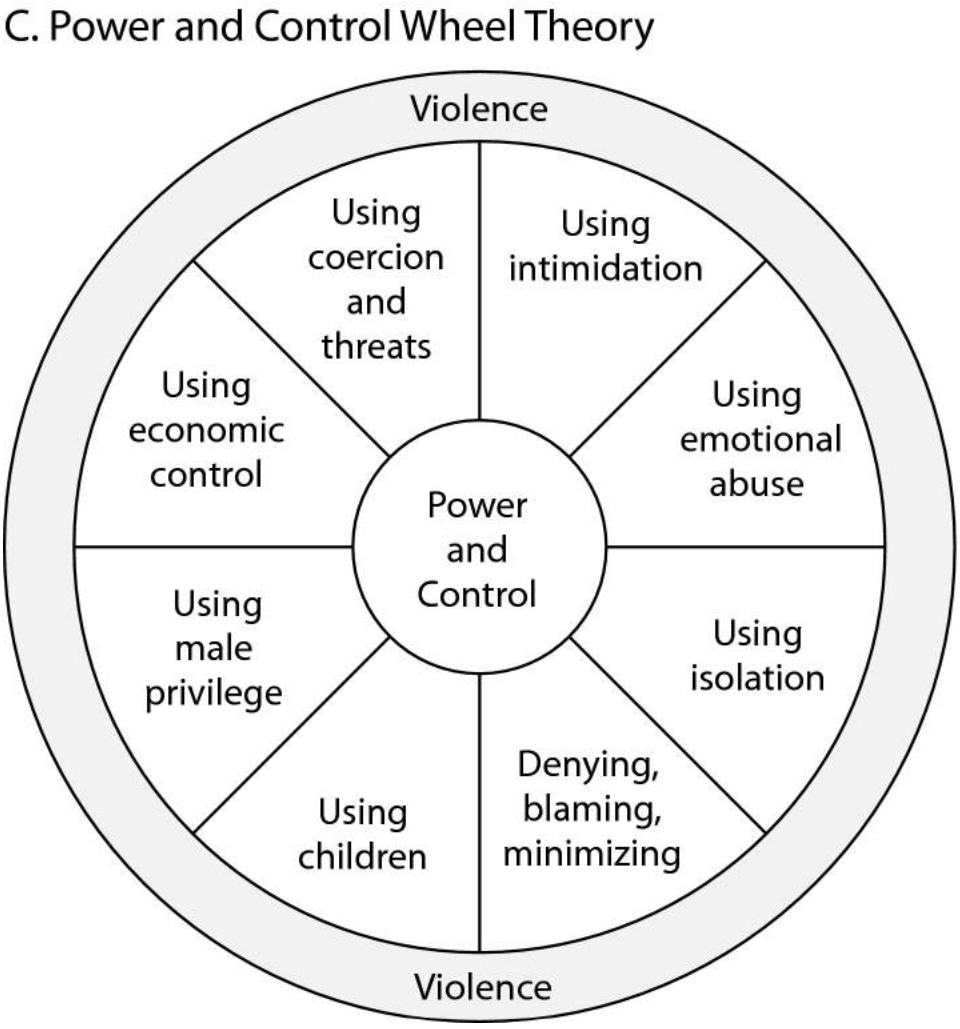
Power and control theory in intimate partner violence is often grounded in feminist theory. As it applies to power and control theory, feminist theory asks us to examine power and control from a fundamentally patriarchal viewpoint; men traditionally hold power and control in the United States, and women are typically influenced or directed by that power and control (Stark, 2023; Wagers, 2015). This power dynamic is a direct extension of men, often being the primary breadwinners and job holders, and

women, usually holding a position within the household (Eitle et al., 2014). This may be a functional relationship dynamic, but Stark (2023) argued that this becomes coercive control when the victim partner feels that there are consequences for not adhering to the specifications set forth by the perpetrator partner. This is also sometimes conceptualized by a wheel depicting nonphysical techniques used by perpetrators of intimate partner violence to assert control over their victims, which is pictured in Figure 1 (Katerndahl et al., 2010). The elements of coercive control, as discussed by Stark (2023), will be further elucidated throughout the literature review. Power and control theory was chosen because of its applicability to the perpetration of intimate partner violence.

Figure 1

Power and Control Wheel

Katerndahl et al., 2010



Social Learning Theory

Social learning theory was first conceived by Arthur Bandura in 1977 and subsequently refined from a deviancy perspective by Akers (Ali & Naylor, 2013; Cochran, 2015). Bandura and Akers posited, after observing behavior changes in preschool children, that many behaviors were learned by observing others in your immediate environment, including violent behaviors. Bandura further theorized that violence within intimate relationships was a learned behavior by both perpetrators and victims: perpetrators learned to act violently towards their partners from watching their fathers abuse their mothers, and victims learned to accept abuse by watching their mothers be abused (Ali & Naylor, 2013). From this theory came the derivation of intergenerational transmission of violence and the role of non-violent communication and conflict resolution skills in treating and preventing intimate partner violence (Ali & Naylor, 2013).

Social learning theory comprises four parts: imitation, definitions, differential associations, and differential reinforcement (Cochran, 2015; Sellers et al., 2005). Imitation refers to the degree of emulation of role models that a person assumes in their life and the behavior of these role models. For example, an adolescent who is gang-affiliated or associates with other delinquent or violent youth may have a more permissive view of violence than one who grew up in a non-violent household (Cochran, 2015; Sellers et al., 2005). Definitions are regarding individuals' opinions about deviancy, criminal behavior, and taboo behavior; these attitudes can be approving, disapproving, or morally neutral towards any given behavior (Cochran, 2015; Sellers et al., 2005).

Differential associations measure the dose-dependent relationship between imitation and definitions of an individual's behavior. While the exact dose is not clear or even measurable, this creates a theory for understanding why some who are exposed to large amounts of violence do not become violent themselves; their definitions may prevent them from engaging in this behavior despite observation of violent behavior (Cochran, 2015; Sellers et al., 2005). Lastly, differential reinforcement is the net risk and benefit calculations applied to a specific behavior. For example, a perpetrator may wish to be violent but be significantly deterred by how his peer group would interpret this information or the threat of prison time if he is apprehended (Cochran, 2015; Sellers et al., 2005).

Literature Review

Intimate Partner Violence

Definitions and Prevalence

Intimate partner violence refers to behavior within an intimate relationship that causes physical, sexual, or psychological harm. This can include acts of physical aggression, sexual coercion, coercive control, and psychological abuse (World Health Organization, 2022). Using the term intimate partner allows for the recognition that these types of violence can exist outside the constraints of a marital or heteronormative relationship (Ali et al., 2016). While the definition of intimate partner is often left to individual states, the federally suggested definition is of a current partner or spouse, a former partner or spouse, a parent of a child in common, or individuals that are currently cohabitating or have cohabitated in the past (Cornell Law, n.d.). These were the

definitions adopted for collecting variable data for this study, with the addition of first- and second-degree family members, to delineate familial and cohabiting relationships from cohabiting romantic relationships. Intimate partner violence is a prevalent problem that exists in all societies worldwide and in the United States (CDC, 2021; WHO, 2022). Within the United States, about 41% of women and 26% of men experience physical intimate partner violence within their lifetime, and about 61 million women and 53 million men have experienced psychological violence within their lifetime (CDC, 2021). While beyond the scope of this literature review, it is worthwhile to note that research indicates that the process of intimate partner violence begins early, with many victims and perpetrators alike experiencing ACEs and teen dating violence that predisposes them to experience additional episodes of violence within their lifetime (CDC, 2021).

Subtypes of Violence

There exists some variation in the accepted subcategories of intimate partner violence. There is universal agreement that intimate partner violence can be roughly subdivided into the following categories: physical violence, sexual violence, psychological violence, and financial violence (OVW, 2023; Snyder, 2020), which was relevant to this study as it helped to detect intimate partner violence within case reports reviewed. Some resources may include emotional violence, technological violence, or other subcategories (OVW, 2023).

Physical Violence. Any form of physical injury or threat of bodily injury against a victim, including hitting, punching, pushing, slapping, pinning, biting, grabbing,

pinching, burning, or strangling. This category also encompasses denying or limiting medical care or access to medical care (OVW, 2023).

Sexual Violence. This category includes any coercive or forced sexual action, including marital rape, forced or coerced sexual behavior, uncomfortable practices or positions, and family planning resource manipulation (OVW, 2023).

Psychological Violence. This category may include fear by intimidation, threats of physical harm to the perpetrator, the victim, children, or pets belonging to the victim, destruction of possessions that are valuable to the victim, and forcing isolation from social groups of importance to the victim (OVW, 2023). This category is often considered to include coercive control, which will be discussed further throughout this literature review (Stark, 2023).

Economic Violence. This category is sometimes excluded from classification schemes (CDC, 2021). It encompasses any restriction or controlling behavior on financial resources, ability to advance financially, or life movement, such as controlling identification papers, threatening deportation, and coercive behavior around living wills or durable power of attorney (OVW, 2023).

Intimate Partner Violence as a Societal Problem

A pervasive myth of intimate partner violence is that it only happens to classes of individuals or in specific types of communities. Common iterations of this myth include a denial that upper-class, suburban, stable communities experience domestic violence, or that “good people” do not become victims (Snyder, 2020). According to Leemis et al. (2022), 40.8% of non-Hispanic White women, 42.1% of Hispanic women, 53.6% of non-

Hispanic Black women, 63.8% of multiracial women, 27.2% of Asian, and 57.7% of American Indian / Alaska Native women have experienced physical violence by an intimate partner in their lifetime. By sheer statistical volume, individuals in all communities are experiencing intimate partner violence.

Leemis et al. (2022) observed that some communities accept an undue burden of this violence. From the statistics cited above, American Indian / Alaska Native, Black women, and multiracial women experience intimate partner violence at disproportionate levels – almost two times as often as non-Hispanic white women. LGBTQ+ individuals are also victimized at high rates and much remains to be known about the prevalence and background of violence in the LGBTQ+ community (Scheer & Baams, 2019). While statistical values vary, sources generally agree that lesbian and bisexual women experience intimate partner violence at anywhere from one to two times greater prevalence than the general population (Scheer & Baams, 2019).

Classification of Perpetrators of Intimate Partner Violence

An introduction to existing classification schemas for intimate partner violence perpetrators will now be addressed. Perpetration is complicated and an individual experience. Many attempts have been made to organize perpetrators into categories by type of violence, attitude towards violence, or similar lifetime experiences. While there is disagreement amongst researchers about various aspects of the perpetration of intimate partner violence, there are several common threads upon which researchers unanimously agree: perpetrators often share several life experiences, one of which is the experience of

ACEs during childhood (Forster et al., 2021; Voith et al., 2020), and there is often a common thread of coercive control or controlling violence (Stark, 2023).

Typologies of Intimate Partner Violence Perpetrators

Fowler and Western (2011) and Ali et al. (2016) offer typologies of violent relationships based on different characteristics. Fowler and Western divided perpetrators into three global categories. Ali et al. provided multiple proposals for classifications of intimate partner violence, both by type and style of violence and by perpetrator behavior and attitudes. These classifications are summarized in Figure 2. Multiple qualitative studies examine attributions of violence by perpetrators (Ager, 2021; Cunha et al., 2022; Stairmand et al., 2021).

Fowler and Western (2011) proposed dividing perpetrators into three categories that are based on personality traits and type and frequency of violence. They divided perpetrators into psychopathic offenders, hostile/controlling offenders, and borderline/dependent offenders. Psychopathic offenders mirror psychopathic traits in the general population, showing characteristics such as problem substance use, general disregard for others, impulsivity, manipulation of others, and overall criminal behavior (Fowler & Western, 2011). They are less likely to blame substances or other people for their behavior because they lack remorse; instead, perhaps blame their partner for noncompliance (Ager, 2018). Hostile/controlling offenders tend to be angry, hold grudges, be critical of others, attribute blame for personal failings to others, have out-of-proportion responses to stimuli, and tend to be prone to violence (Fowler & Western, 2011). Examples of attributions from this subtype of offenders tend to center around

jealousy and criticism, as in “because she looked at someone and I was pissed” or “there were arguments because of jealousy, I distrusted her” (Cunha et al., 2022). Borderline/dependent offenders are often clinically depressed and anxious, tend to feel guilty about their behavior, and tend to be needy or dependent upon others for emotional regulation (Fowler & Western, 2011). As an example, one perpetrator noted that his behavior was related to his psychological condition, “I was hospitalized…I couldn’t go out…I didn’t sleep, I didn’t eat and then I’m very ruminative” (Cunha et al., 2022).

Holtzworth-Munroe divided perpetrators into four subtypes: family only, dysphoric-borderline, low-level antisocial, and generally violent antisocial (Alexander & Johnson, 2023; Ali et al., 2016). Family-only offenders are sometimes referred to as “moderately violent” offenders because they typically do not engage in regular or severe physical violence. Instead, they tend to control their victims through psychological and sexual abuse and are more likely to apologize for their abusive behavior after the fact (Alexander & Johnson, 2023; Ali et al., 2016). They tend to misinterpret social cues and are often insecure, leading to the perpetration of violence to restore control within a relationship (Alexander & Johnson, 2023; Ali et al., 2016). Dysphoric-borderline perpetrators are moderately to severely violent. This violence is typically focused on their intimate partner, with little to no violence occurring outside the home. They are frequently psychologically distressed, showing signs of borderline personality disorder (BPD) or other psychopathology, and are the most emotionally volatile out of the subtypes. They are also the most likely to struggle with substance use (Alexander & Johnson, 2023; Ali et al., 2016). Generally, violent antisocial perpetrators are the most

violent, and they engage in frequent and severe intimate partner violence. They are the most likely to exhibit other criminal behavior outside of the home, are frequently unrepentant, and are most likely to recidivate, even after undergoing treatment (Alexander & Johnson, 2023; Ali et al., 2016). Lastly, low-level antisocial perpetrators fall between family violence offenders and generally violent and antisocial offenders. They are likely to engage in equal levels of intrafamilial and extrafamilial violence but are less likely to have antisocial or borderline personality traits (Alexander & Johnson, 2023; Ali et al., 2016).

Michael Johnson pioneered a classification system for perpetrators. His categories are simple: the perpetrator is either an intimate partner terrorist or engages in what he initially termed as common couples' violence (Cavanaugh & Gelles, 2005). Since the initial naming of the categories, his classification has been expanded to include coercive controlling violence, violent resistance, situational couple violence, mutually violent control violence, and separation-instigated violence (Ali et al., 2016). Johnson is unique in that he maintains that either the feminist perspective, which identifies intimate partner violence as a gendered crime with female victims and coercively controlling male perpetrators, or the family model, which claims that violence within the family can take many forms, can be accurate (Ali et al., 2016). Johnson also identifies some of the categories of mutually violent or resistive violence that victims may engage in. Violent resistance, for example, occurs when victims attempt to resist coercively controlling relationship dynamics (Ali et al., 2016). Lastly, his category of situational couple violence is described as violence that arises not from a place of power, control, or

dominance but from a heated argument or situation that becomes physical. He believed that this was the most common form of violence in relationships and was distinct from that of coercively controlling violence (Ali et al., 2016; Cavanaugh & Gelles, 2005).

Perpetrators are sometimes classified based on their life experiences. In these cases, one aspect becomes their history of ACEs or exposure to intimate partner violence in childhood (Nikulina et al., 2021; Zhu et al., 2023). As Zhu et al. (2023) noted, ACEs seemed to mediate the experience of both perpetration and victimization in a dose-dependent relationship; as levels of ACEs rose, so did the overall likelihood of becoming either a victim or perpetrator. Elmquist et al. (2016) echoed these findings with their research that indicated that family-of-origin violence was positively associated with hostility and psychological aggression in adulthood. Other studies, such as Nikulina et al. (2021), demonstrated a more tenuous connection between ACEs and intimate partner violence, with only the ACE of witnessing domestic violence in the childhood household being associated with intimate partner violence experience as a young adult.

Connected to social learning theory and the development of perpetration later in life, Clare et al. (2021) found that those who witness intimate partner violence as children were more likely to hold more adversarial opinions about their partners, were more likely to be hostile, and expressed a generally greater mistrust in individuals, including their partners than did those with no or little exposure to intimate partner violence in childhood. Lee et al. (2013) also found that those who witnessed family violence growing up were more likely to rank themselves lower on scales of perceived self-control, which is aligned with some of the observations directly from perpetrators, who felt that they

were provoked to a moment of “fatal peril” (Snyder, 2020) and had no choice but to resort to violence, and no ability to control that violence. Aligned with this, Clare et al. reported that those who had witnessed violence in childhood were more likely to report behaviors consistent with oppositional aggression disorders.

There is a single study that was located that explicitly addresses the childhood experiences of those who favor strangulation as a means of violence. This study is recent and focuses exclusively on homicidal strangulation, but the conclusions drawn are relevant. Petreca et al. (2023) found that in a sample of 200 perpetrators who engaged in fatal strangulation, randomly pulled from the Serial Killer Database, almost half of them (45.5%) had a known history of childhood trauma or abuse. 44% of these cases were physical abuse, and 19.8% were sexual abuse. They also noted, in alignment with previous observations, that a great bulk of these cases demonstrated a history of domestic violence of some kind (Petreca et al., 2023).

Some have argued that classifying perpetrators is merely an academic exercise that does not present any solutions to intimate partner violence or offer any guidance on the treatment of intimate partner violence (Alexander & Johnson, 2023). What classification potentially accomplishes is understanding what exists in the world of perpetration and a hint of the motivations that perpetrators use to justify their violent actions (Alexander & Johnson, 2023). Although potentially valuable for considering classifications, Alexander and Johnson (2023) recommend a cautious approach because of the lack of overall validity and extensive testing of perpetrator typologies. Further understanding of the motivations behind perpetration can be gleaned by examining the

quantitative and qualitative studies that have asked perpetrators to describe some of their motivations and behaviors.

Figure 2

Typologies of Intimate Partner Violence Perpetrators

Adapted from Cavanaugh & Gelles (2005)

Gondolf (1988)	Gottman et al (1995)	Hamberger et al. (1996)	Holtzworth-Munroe & Stuart (1994)	Johnson (1995)
Type 1: sociopathic	Type 1: cobra	Antisocial	Generally violent - antisocial	Intimate terrorist
Type II: antisocial	Type II: pit bull	Passive aggressive - dependent	Dysphoric - borderline	Common couple violence / situational violence
Type III: typical		Nonpathological	Family only	

Intimate Partner Violence Perpetrators' Behavior Attributions

Several studies examine perpetrator motivations or attitudes around their violent behavior. All these studies identify several themes that funnel into one global problem: violent offenders are committed to their violence (Snyder, 2020, p. 107). This commitment encourages them to find various justifications or minimizations of their violent behavior, which then allows them and their social circles to excuse the violence (Snyder, 2020).

As Cunha et al. (2022) found, perpetrators generally attribute violence to at least one of three categories. Those categories are self, partner, and situational factors. Cunha et al. had a small sample size of only seven offenders but found that all those offenders

universally mentioned self and partner as attributions for intimate partner violence. Self was further divided into personality characteristics (that could not be changed), emotional disturbance, and jealousy (Cunha et al., 2022). As one perpetrator said, “I’m a bit sudden,” and another, “I’m not a perfect person, I also have my faults, sometimes I also have my tantrums and I’m very stubborn” (Cunha et al., 2022). The quality of minimization is displayed – a “bit” sudden and calling a jealous rage a “tantrum,” implying that it invokes the same level of harm as an upset toddler. Speaking about their partners, the men acknowledged that “she blinded me with rage. She had always to be right. There were things I didn’t understand” and “she’s a bit rude when she gets nervous, which leads me to exhaustion…” (Cunha et al., 2022). In both quotations, blame is placed on the partner; if they had not acted as they did, the perpetrator would not have been provoked into anger and violence.

As Snyder discussed, when she visited an outpatient batterer intervention program (BIP), they taught the men in the program that some of the justification mechanisms for violence that were commonly employed were to deny, minimize, blame, or collude (Snyder, 2020, p. 134). However, what became clear to Snyder (2020) and the leaders of the perpetrator intervention group was that there was a moment of what they called “fatal peril,” sometimes also referred to as the moment somebody “snapped,” in which violence becomes a decision to defend a belief or a way of life.

Some perpetrators acknowledge that they are very aware of coercively controlling behaviors, as in McGinn et al. (2017): “My first phase of abuse was verbal…I was very good at manipulating women. But then once I’d get them in my corner, I’d strip them of

all their rights…like I used to get all in an uproar…just to put the fear into her, to get control of her."

Others note that violence was a way of life that was given to them by their parents, lending weight to the theoretical backing of social learning theory: "My jefe used to tell me that sometimes you have to hit a woman to keep her in line or she will disobey you." (McGinn et al., 2017). Snyder (2020) observed that many perpetrators had "internalized a selfish, narcissistic father…" and routinely failed to view that father as a perpetrator or partially or wholly responsible for their violence later in life. David Adams surveyed perpetrators' perceptions of their fathers, asking them to rank them as either "good," "bad," or "mixed." Only one out of seven rated their father as "bad," and yet qualitatively, these men also told stories of mothers being bloodied by their fathers, routine physical abuse, controlling behaviors, alcoholism, and other behaviors that the perpetrators observed and were a part of as children (Snyder, 2020, pp. 154-55).

Others do not gain insight into their behaviors, resorting to minimization when asked about their abuse: "Well it's no big deal. I'm not saying that I'm not as bad as the next one, but I know people who have actually beat up a woman like they've beat up a guy, with kicking in the head. I'd never do that to a girl" (McGinn et al., 2017). Whiting et al. (2014) observed a perpetrator who told his victim, "You're making a mountain out of an ant hill, it wasn't that bad." Snyder recorded a series of voicemails that a perpetrator left for a victim while he was in jail, awaiting sentencing: "You're blowing it out of proportion. I was just fucking with you. I wasn't trying to kill you" (Snyder, 2020, pp. 150-151).

One conclusion that can be drawn about perpetration is that it is just as individual as being a victim; no two states of perpetration are identical, and thus, having intervention and prevention programs that are flexible and adaptable are more practical at responding to a wide variety of perpetrator states.

Stansfield and Williams (2021) had one of the few studies released currently that look directly at perpetrators of nonfatal strangulation, as opposed to more general overviews of perpetrators of intimate partner violence. They concluded that nonfatal strangulation was a crucial and oft-deployed tactic of coercive control. Thus, additional studies were needed that examined various aspects of the perpetration of strangulation, including some of the factors of this study, such as financial status, demographic background, and prior law enforcement contacts for intimate partner violence (Stansfield & Williams, 2021).

Perpetrators and Psychopathology

There is a societal expectation that perpetrators of intimate partner violence are instantly recognizable from a distance, presenting as generally angry, aggressive, unhinged, out-of-control individuals, when the opposite is often closer to the truth (Snyder, 2023). Researchers have set out to address whether there is a correlation between intimate partner violence perpetration and personality disorders, particularly BPD, conduct disorder (CO), generalized aggression and aggressive relationship schemas, narcissistic personality disorder or narcissistic personality traits, and even depression and PTSD (Collison & Lynam, 2021; Oliver et al., 2024). Others have

commented on the “toxic masculinity” and “machismo” traditions (Clare et al., 2021) and how they impact perpetration, sexual aggression, and violence in relationships.

BPD affects approximately 1% of the global population. Still, it is often overrepresented in clinical samples, with as high as one-fifth of clinical populations meeting the criteria for diagnosis (Leichsenring et al., 2023). Given that one of the clinical constructs of BPD is interpersonal relationship dysfunction, it is not surprising that BPD is significantly linked to intimate partner violence, both victimization and perpetration, although more specifically perpetration (Collison & Lynam, 2021; Spencer et al., 2019), It is essential to distinguish the fact that this tendency towards violent behavior does not indicate that all of those with BPD diagnoses are violent (Collison & Lynam, 2021). Most of the reviews cited (Collison & Lynam, 2021; Jackson et al., 2015; Spencer et al., 2019) focus on physical violence of intimate partner violence, although Spencer et al. (2022) examined the correlation between personality disorders and emotional violence perpetration and found that BPD was also significantly correlated with emotional violence perpetration. There are also strong correlates between BPD and the presence of anger management challenges, emotional dysregulation, and a host of other personality traits that are both connected to the presence of a clinical diagnosis of BPD and likely make the diagnosis more challenging, while also raising the risk factors for intimate partner violence perpetration as part of that individual’s life experience (Collison & Lynam, 2021; Spencer et al., 2022; Spencer et al., 2019).

David Adams first commented on narcissism and its connection to the perpetration of intimate partner violence in 2002 when he said, “Many batterers conduct

some, if not most, of their nonfamilial relationships in a respectful manner, which indicates that they already know how to practice respectful treatment of others when they *decide* to" (Snyder, 2020, p. 156). He went on to note that narcissism frequently receives a bad reputation from clinical sources, who assume that those with narcissistic traits are "conspicuous misfits" who fail to integrate successfully with society; in reality, the opposite is often true: narcissists are often "high-functioning, charismatic, and professionally successful" (Snyder, 2020, p. 156). Adequately describing narcissism is important, as narcissism is clinically split between two different forms: grandiose and vulnerable (Carton & Egan, 2017), which may interact differently with perpetration. The grandiose subtype correlates with a strongly inflated sense of self-worth and importance. In contrast, the vulnerable subtype is associated with social withdrawal and hypersensitivity to rejection. In some cases, vulnerable narcissists maintain a dependency on others for the maintenance of their self-worth. Unlike dependent attachment styles or personality traits, an understanding that this consistent reinforcement from others is deserved and expected (Jauk et al., 2021). As Oliver et al. (2023) found, vulnerable trait narcissism (to be distinguished from narcissistic personality disorder) is much more strongly correlated with intimate partner violence perpetration than grandiose narcissism. However, they noted that the strength of this overall correlation is not well understood. From their meta-analysis, Oliver et al. (2023) found a Pearson's r of 0.11 for grandiose narcissism ($p < 0.001$) and a Pearson's r of 0.25 ($p < 0.001$) for vulnerable narcissism, indicating a stronger relationship between vulnerable narcissism and intimate partner violence perpetration. Spencer et al. (2022) also confirmed the association between

narcissism and intimate partner violence perpetration, specifically emotional abuse perpetration.

Multiple studies have noted a link between intimate partner violence perpetration and specific cultural backgrounds that celebrate aggression, masculinity, or the concept of "machismo" in heterosexual relationships (Ayubi & Satyen, 2024; Clare et al., 2021; O'Connor et al., 2022). Willie et al. (2018) noted that sexual and cultural scripting that favors males as the aggressors and women as the passive recipients of sexual advances or behavior tended to result in higher levels of emotional and physical violence within adolescent and young adult relationships. This finding is significant because it failed to designate sexual violence because of this aggressive cognitive schema. However, Willie et al. postulated that this may have been because sexual violence was either underreported by the participants or because the most prescient abuse was the result of a woman's failure to comply with sexual aggression. Machismo is commonly associated with an "expansive" sexual appetite, and behaviors such as promiscuous sexual activity and infidelity are common (Willie et al., 2018). These behaviors are underpinned by the broad schema of male dominance and female submission (Willie et al., 2018). This is reflected in many of the teaching points in BIPs; as Snyder (2020, p. 143) mentioned in the main teaching points for Man Alive, "Man does not get disrespected. Man does not get lied to. Man's sexuality does not get questioned. Man is the authority. Man does not get dismissed. Woman should be submissive, obedient, supportive to man". Deviations from this belief system provoke the moment of "fatal peril", where violence is a decision to defend the perpetrator's world view. This is echoed by Sileo et al. (2022), who

observed that what they termed masculine discrepancy stress is responsible for the perpetration of violence. Masculine discrepancy stress was experienced when men had a perceived failure to adhere to masculine gender norms (Harrington et al., 2021; Sileo et al., 2022). Violence related to machismo and male dominance is reported in immigrant populations, predominantly Latino immigrants. As one perpetrator noted in Ayubi and Satyen (2024), "violence in my country [had] a very different outcome. In my country, she had tolerated the abuse…nobody would think it was important". O'Connor et al. (2022), through a review of data generated by the United Nations, found that gender disparities were mediated through traditional gender beliefs and contributed to intimate partner violence perpetration. As one immigrant from Ayubi and Satyen (2024) noted, "I believed that because I was a man I had the right to offend my partner and to do whatever I wanted to her. I was abusive, I drunk too much and I came home aggressively." Gender attitudes and behaviors, as well as other qualities that influence perpetration, can also be influenced by substance use or abuse. As noted by Radcliffe et al. (2021), substance use is most often cited in relationships in which men adhere to the most traditional gender roles.

Intimate Partner Violence and the Legal System

For cases that get reported to law enforcement and are carried through to an arrest, the next step is the prosecutorial decision on whether to file charges and promote the case to sentencing. This section is included in the literature review because of its possible impact on the availability of the data and the outcome of the cases included in the research. As noted by Wagers et al. (2022), multiple factors contribute to a

prosecutor's decision to carry or drop charges against a perpetrator of intimate partner violence. Some of these factors are related to the strength of the evidence or the victim's willingness to testify. More recently, the focal concerns theory has been used to identify components related to prosecutorial decision-making around criminal activity. The three areas of concern were blameworthiness of the offender, protection of the community (i.e., the danger level of the offender), and practical considerations for the system (i.e., caseloads, the overall burden of cases within the system, etc.; Wagers et al., 2022), as well as a fourth consideration, called "perceptual shorthand," which relates to either the experience or bias of the prosecutor. As Wagers et al. (2022) learned in their study, perceptual shorthand had more to do with prosecutorial decision-making than objective facts, such as high scores on the danger assessment.

Wagers et al. (2022) also found that victim requests not to file and reluctance to appear impacted prosecutorial decision-making at a moderate level. This finding is surprising given that the first signing of the Violence Against Women Act (VAWA), which occurred in 1994, included the advent of several "no drop" policies that promoted continuing with criminal trials even if the victim requested that the charges be dropped or refused to appear (Garner & Maxwell, 2009). However, as Garner and Maxwell (2009) noted, prosecutorial rates are trending positively over time with the reauthorization of VAWA and the increased awareness and education of the legal system regarding intimate partner violence.

Intimate Partner Violence and Risk of Homicide

Beginning with Dr. Campbell's work on intimate partner homicide (Campbell et al., 2009), there has been an increasing knowledge about the behaviors in violent relationships that correlate with increased lethality (Spencer et al., 2024), only one of which is nonfatal strangulation. Homicide is a leading cause of death for women in the United States, with approximately half of these deaths occurring from violent relationships (Johnson et al., 2022). As Johnson et al. (2022) suggested, one challenge with these risk assessments is aligning a data-driven approach with the expectations and understandings of the victims.

The research surrounding factors increasing the risk of homicide within violent relationships is unanimous on some factors that contribute to an elevated risk for homicide. As Graham et al. (2021) discovered, there are at least twenty-nine tools that examine homicide risk in violent relationships. Most offer statistics on their predictive validity, with sixteen out of eighteen reporting validity statistics. Still, only one study assessed the feasibility or utility of the tools, pointing to an area of needed research (Graham et al., 2021).

What is known from the Danger Assessment and other tools is that there are factors that increase the risk of lethal violence within relationships. One of these factors is a prior history of intimate partner violence; in other words, if the partner has been violent before, they are more likely to be violent again, and violence tends to increase over time as opposed to staying consistent or decreasing (Graham et al., 2021). One of the strongest socioeconomic correlates is unemployment and low overall socioeconomic

status, confirming the importance of using these instruments within social services and others that interact with groups with lower socioeconomic status (Johnson et al., 2022). Other factors that increase the likelihood of homicide include perpetrator access to a gun and alcohol or drug use (Graham et al., 2021; Johnson et al., 2022). Lastly, as is the subject of this literature review, the act of strangling a victim within a violent relationship strongly correlates with an increased risk factor for homicide at the hands of that perpetrator (Campbell et al., 2009; Graham et al., 2021; Johnson et al., 2022). What is not well-delineated by risk stratification tools is the potential interplay between these factors. For example, is the relationship between a perpetrator with a prior history of intimate partner violence and a prior history of strangulation dose-dependent, cumulative, or exponential?

One potential solution that has been utilized for reducing intimate partner homicide is that of a multidisciplinary team, often referred to as a domestic violence high-risk team (DVHRT). The first DVHRT was established in Massachusetts in 2002 following the case of Dorothy, in which these organizations failed to communicate with each other and the courts, resulting in her perpetrator returning to the house on bail with a shotgun and fatally shooting both himself and the victim (Snyder, 2020). While all individuals who heard from this victim recognized the severity of the abuse, the lack of coordination contributed to her death, and the individuals involved realized that they needed a different system (Snyder, 2020).

DVHRT teams involve a multidisciplinary team drawn from parties who interact with victims and perpetrators of intimate partner violence. They may include victim

advocates, prosecutors, law enforcement detectives or officers, social services, and BIPs (Anderson et al., 2022). The outcomes of DVHRT teams are mixed, with some studies indicating that they increase the likelihood of prosecution and sentencing that is in line with other violent crimes and other studies suggesting that they either have no effect on sentencing or reduce the possibility of prosecution (Anderson et al., 2022). As Anderson et al. (2022) noted, some studies on DVHRTs may be skewed by the mere fact that they encourage communication between disparate groups, thus increasing the likelihood of understanding the breadth of violence within particularly violent relationships. They also promote the use of tools such as Campbell's Danger Assessment (Campbell et al., 2009), which can assist involved parties in understanding the likely lethality of some intimate relationships (Anderson et al., 2022). Anderson et al. concluded that the DVHRT teams had the most significant outcome on sentencing severity and length, suggesting that they influence judges and prosecutorial behavior more than they impact the detection and behavior of victim advocates and law enforcement.

Perpetrator Treatment

The concept of treatment programs for perpetrators of intimate partner violence began gaining traction in the mid-1990s, at approximately the same time as the general awareness and modern philosophies of intimate partner violence began to change (Adams, 2003). Like criminal justice reform, the overarching philosophy is one of rehabilitation and prevention of recidivism (Stephens-Lewis et al., 2019). The field benefits from and suffers secondary to the lack of a governing body, which has led to multiple types of programs, different foci of programs, and vastly varied facilitators

(Travers et al., 2021). Many of these programs exist through the criminal justice system, whether attached to court-mandated anger management programs, parole conditions, in-prison programs, or through law enforcement referrals (Travers et al., 2021). While this is an effective way to intersect with a population of perpetrators, this limits the reach and influence of BIPs to only those perpetrators who interact with law enforcement or the criminal justice system. This breeds a similar set of problems to other involuntary programs, such as anger management or parenting classes: most who are forced to take a program such as this are likely to participate passively, express anger, or resist the absorption of information from the program, depending on whether they may be in the stages of change model (pre-contemplation, contemplation, preparation, action, and maintenance), a technique that is borrowed from motivational interviewing, in which the motivation of the participant has for change is assessed (Adams, 2003; Chovanec, 2014; Travers et al., 2021). As one participant noted, “The initial factor for me to come down here was that they had put me on probation, and they said I had to do what I had to do for that situation that I was in…” (Chovanec, 2014). Most programs are organized in a group format, both for logistics and because there is a general philosophy that the presence of others in similar situations to the program participants can increase the likelihood of the messages of the program being absorbed (Karakurt et al., 2019), forming a corollary to the social learning theory that is often used to help explain intimate partner violence and pattern development. The outcomes of these programs remain controversial, and there are varied opinions on whether the philosophy, protocol, and outcomes should be standardized (Herman et al., 2014; Travers et al., 2021).

Two structural philosophies contribute to BIPs: the Duluth and psychotherapy models. The Duluth model remains the dominant model, although by a narrow margin, as 53% of programs surveyed (Cheng et al., 2019) identified themselves as a Duluth-based program. The Duluth model was first developed in the early 1980s as a feminist, psycho-educational program that focuses on helping men understand behaviors that contribute to the development of power and control, offering alternatives to these behaviors, and confronting denial of violent behaviors. It also educates using the Power and Control Wheel versus the Equality Wheel, which helps to reframe violent and coercive behaviors. Other lessons are often included, such as the appropriate use of "time out" and different techniques for creating space and managing anger and impulse control (Cheng et al., 2019). Karakurt et al. (2019) observed that because of the potential time required for the dismantling of deeply ingrained gender roles and the movement towards a more egalitarian attitude towards gender roles, the Duluth model may need much more extended treatment times, thus raising the risk of program drop-out. Critics of the Duluth model argue that the feminist approach of the model is in direct opposition to what it is trying to treat, attempting to treat a patriarchal problem with a feminist approach (Karakurt et al., 2019). However, it is worth noting that Cheng et al. (2019) observed that both the dominant models have borrowed from each other so significantly that the root of individual programs is often indistinguishable.

The second most common program model is based on the foundation of CBT (Cheng et al., 2019). Programs often combine these two approaches, including philosophies consistent with feminist models within a CBT framework. CBT-based

programs include elements to address cognitive distortions, faulty attitudes and beliefs, and skill-building in areas such as anger management, communication, problem-solving, and relationship skills training (Karakurt et al., 2019). Many programs employing a CBT approach in a group environment rely upon program participants to help others unravel cognitive distortions, inappropriate language use, avoidance, and denial (Berg Nesset et al., 2020). As Snyder (2020, p. 137) observed while sitting in on one session in which a participant was describing an episode of violence against his partner, another participant spoke up and encouraged the participant to "stay on track," a reminder not to use language and storytelling to stray from the nidus of the story. A group facilitator gently reminded the same participant not to use "program words" or language that participants had learned through their attendance to that point (Snyder, 2020, p. 136). Proponents of CBT-based programs believe they are stronger because they more closely mirror techniques shown to be effective in individual psychotherapy (Karakurt et al., 2019). Gannon et al. (2019) found that perpetrators who underwent specialized psychotherapeutic programs, mostly CBT-based or combination programs, had generally lower recidivism rates. However, this is a conclusion that they caution is drawn from a low *k* value and small sample size.

The third most dominant type of BIP is that of a combination program, most commonly a BIP with substance abuse treatment. These programs may vary in their emphasis; some are to dismantle abusive behavior and offer substance use counseling as a secondary benefit, while others emphasize substance use counseling and treatment with intermittent educational opportunities that address intimate partner violence (Siria et al.,

2022). Karakurt et al. (2019) observed that substance abuse comorbid treatment programs were showing promise at lower recidivism rates and greater program compliance, indicating overall improved success. Newer programs often combine treatment for ACEs or trauma exposure with perpetrator treatment since these are also highly comorbid conditions that are likely heavily intertwined (Karakurt et al., 2019).

Measuring the success of programs is inherently difficult, as the marker for success remains variable across programs (Cheng et al., 2019; Karakurt et al., 2019; Travers et al., 2021). Some reviews and studies measure program efficacy based on recidivism or reoffending levels, others by qualitative endorsement of the program, and still others by program completion or quantitative measures designed to measure attitudes of violence or perceptions of the structure of interpersonal relationships. In Snyder (2020, p. 123-24), a program at San Bruno was studied using a different prison area as a control group, although this is among the general minority of studies involving BIPs. While the overall efficacy of BIPs remains poorly delineated (Eckhardt et al., 2013; Gannon et al., 2019; Karakurt et al., 2019), some factors have been found to increase the success of programs. As Gannon et al. (2019) observed, especially with programs based on CBT, the employment of psychotherapists or trained therapists improved program success over facilitators without formal training or less experience.

Holtrop et al. (2017) found that participants enjoyed and identified with the program more when they were with individuals in a group setting and when they could identify and feel connected with other group members. As one group member explained, “It’s really helpful to be in…a group with guys that have the same kind of problems as

me and talk about it. Nobody's there to judge, you know?" (Holtrop et al., 2017). Karakurt et al. (2019) observed that BIPs generally show at least some efficacy compared to a complete lack of intervention. Schwartz, a long-time facilitator of BIPs, observed that "this stuff is too delicate and compelling to pretend that any one thing is the answer…I think of the cancer analogy. You have people going through chemotherapy and then someone dies. Does that mean that you stop your clinical trial?" You keep at it, keep tweaking, keep developing, keep trying new combinations. "That's what this is," she said. "It's a clinical trial" (Snyder, 2020, pp. 123-24). As more is learned about trauma, ACEs, and the experience of both victims and perpetrators in these complicated and fraught relationships, this knowledge can be applied to programs that are dynamic, effective, and valuable for participants.

Summary and Conclusions

The existing research on intimate partner violence and nonfatal strangulation consistently highlights the scope and severity of the issue, indicating that it affects individuals across various socioeconomic backgrounds, life experiences, genders, sexual orientations, races, and ethnicities. Intimate partner violence is closely tied to social and gender dynamics and influences how individuals engage in relationships. Research has also explored the impact of intimate partner violence exposure on children, even when they are not direct victims, suggesting potential long-term consequences.

The study of strangulation within violent relationships is a relatively recent area of intimate partner violence research, as is the examination of perpetration. Both fields have developed alongside increased recognition of intimate partner violence as an issue that

extends beyond private family matters. While existing research has identified strangulation as a particularly dangerous form of intimate partner violence, with one act potentially increasing the risk of homicide within the same relationship (Spencer et al., 2024), there are still areas where further exploration is needed. The role of coercive control in violent relationships has also received growing attention, contributing to an understanding of how fear and power imbalances shape victim experiences (Stark, 2023).

Despite these advancements, less is known about whether certain demographic characteristics are associated with the likelihood of a perpetrator engaging in strangulation compared to other forms of intimate partner violence (Stansfield & Williams, 2021). Additionally, while prior violent convictions are often considered a general risk factor for future intimate partner violence (Campbell, 2003), the extent to which they specifically relate to strangulation within relationships remains unclear. Further investigation into these factors could provide valuable insights into patterns of intimate partner violence perpetration and inform prevention and intervention efforts.

In Chapter 3, attention will be turned to the design and rationale for this study, with specific attention on how this research will help address the literature gaps identified in the literature review.

Chapter 3: Research Methods

Introduction

The purpose of this quantitative study was to explore the demographic characteristics of intimate partner violence perpetrators who engage in strangulation. The goal was to identify factors or patterns, such as relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status that may influence an act of intimate partner violence strangulation.

Chapter 3 will begin with a description of the research design for this study and the rationale for selecting this research design. Then, the research methodology, data collection, and manipulation will be described in detail. Ethical procedures to ensure privacy and ethical treatment of human subjects will be discussed, along with a description of potential threats to internal and external validity, as identified from the methodology and data collection methods.

Research Design and Rationale

The dependent variable was the presence or absence of an act of strangulation, while the independent variables included the relationship status between the perpetrator and the victim, the race of the perpetrator, prior acts of violence, and prior acts of intimate partner violence committed by the perpetrator, and the indigency status of the perpetrator.

This study was a quantitative, retrospective, correlational research design. Correlational research is used in quantitative research for studies in which the outcomes desired are comparative analyses of variables without the researcher manipulating or

controlling any of the variables (Morling, 2020). This contrasts with the experimental study design, in which one or more variables are controlled, and another group is observed for any changes (Morling, 2020). Because this study used retrospective data, it was well-suited to correlational research design, as there was no opportunity for creating a control and experimental group (Morling, 2020).

RQ1: Do relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status influence the act of strangulation in intimate partner violence?

RQ2: Are perpetrators with a history of violence, either general violence or intimate partner violence, more or less likely to commit an act of strangulation than those perpetrators without a history of violence?

Two research questions were identified for this study. Based on the literature review, the experimental hypothesis for the first research question was that the act of strangulation within violent relationships would be influenced by the demographic characteristics delineated. The null hypothesis was that no demographic characteristic would influence the act of strangulation within violent relationships.

The second research question examines perpetrators and their history of violence. There is research understanding that perpetrators who have a prior history of violence are more likely to be lethal or near-lethal (Campbell et al., 2009; Graham et al., 2021; Johnson et al., 2022). Therefore, because of this and the correlation between nonfatal strangulation and increased likelihood of lethality (Campbell et al., 2009), the experimental hypothesis was that perpetrators with a history of prior violence (either

general or intimate partner violence) were more likely to commit acts of strangulation in violent relationships than those without a history of prior violence.

Because both research questions examine comparative values using demographic characteristics as the independent variables and acts of strangulation as the dependent variable, both research questions are well-suited for a correlational design. The data were historical, making it a good match for a retrospective study design, as there was no opportunity to create control and experimental groups.

The primary constraint was the time required to interpret, organize, code, and clean all the initial data. Because I created this data set, it was time-intensive and laborious, as the data for each separate case was gleaned by reviewing individual police reports and court records and coding by hand.

A secondary constraint was the uniformity of the data available. As these data were not initially intended for research studies, not all demographic factors were collected thoroughly, resulting in some missing values.

This research design is consistent with those needed to advance knowledge in this discipline. There is limited research overall into perpetrators of nonfatal strangulation and little understanding of contributing factors to committing acts of strangulation within violent relationships. Therefore, correlational research design, with its focus on comparative analysis, is a good design choice to create a foundation of knowledge for perpetrators of nonfatal strangulation.

Methodology

Population

This study examined perpetrators of intimate partner violence within the court system in a county in Washington State. This location was chosen because the primary researcher could receive complete lists of data within this court system, simplifying the process of aggregating and creating the data set. However, this study is still replicable in other areas and court systems, as the information itself is subject to the provisions of the Freedom of Information Act and is publicly available. This study examined both general intimate partner violence perpetrators and those who engaged in strangulation within violent relationships. The initial goal was to analyze between 200 and 500 cases, which was chosen based on the initial G*Power analysis. The breadth of cases available was 4,755 across all years, and after exclusion criteria were determined and applied, 1,715 cases were included, allowing for a more comprehensive analysis.

Sampling and Sampling Procedures

Data were collected from the Superior Court records for 2018-2023. The population was perpetrators of intimate partner violence who interacted with the court system during the specified time frame. Data were anonymized by replacing names with identification numbers once it was confirmed that there was no duplicative material, as occasionally, a charge was dropped and then reopened with the same combination of perpetrator and victim.

Stratified random sampling is a technique for sampling in which the population is divided into groups labeled strata (Salkind, 2007). For this study, stratified random

sampling was used to isolate perpetrators of intimate partner violence from the larger collection of perpetrators of assault. Another stratum was created by delineating perpetrators of nonfatal strangulation within perpetrators of intimate partner violence. By selecting cases that specifically involved intimate partner violence and, within that, cases involving strangulation, the study ensured that the sample was representative of the population relevant to the research questions. This approach allowed for a structured comparison between intimate partner violence perpetrators who engaged in strangulation and those who did not while maintaining replicability by relying on systematic case inclusion criteria rather than researcher discretion (Lemm, 2010). These population groups were kept separate during the case review and anonymizing process. Once a case had been individually and thoroughly reviewed, it was assigned a random 7-digit code. The dependent variable, an act of strangulation, was a dichotomous variable assigned a value of either "yes," indicating that there had been an act of strangulation, or "no," indicating the lack of an act of strangulation.

Duplicate cases were discarded to avoid skewing the study outcomes. The population in the strangulation data set was pre-screened and kept separate from the general domestic violence offenders until the time for data analysis. At that point, the dichotomous dependent variable was utilized to combine the data sets.

G*Power software Version 3.1.9.6 was utilized to perform two power analyses for each research question and estimate the potential sample size; the following results were obtained.

Research Question 1: logistic regression, a priori computation, and two-tailed. According to the obtained results, the sample size must be at least 1,325 cases to be substantial enough to support logistic regression analyses of a two-tailed test with an odds ratio of 1.49, an α error probability of 0.05, a β error probability of 0.95, and a normal distribution. The odds ratio was calculated using $Pr(Y=1|X=1)$ for $H_1= 0.55$ and $Pr(Y=1|X=1)$ for $H_0= 0.45$. After exclusion criteria were applied, the total collection of cases was 1,715, producing an adequate sample size to conduct a logistic regression with confidence.

Research Question 2: logistic regression, a priori computation, and two-tailed. According to the obtained results, the sample size must be at least 1,325 cases to be substantial enough to support logistic regression analyses of a two-tailed test with an odds ratio of 1.49, an α error probability of 0.05, a β error probability of 0.95, and a normal distribution. After exclusion criteria were applied, the total collection of cases was 1,715, producing an adequate sample size to conduct a logistic regression with confidence.

Cases were included if they were cases of intimate partner violence within the specified time frame of 2018-2023. Duplicate cases were excluded. Additional exclusion criteria were female perpetrators, who were determined to be outliers during data analysis, open cases, as these cases were not confirmed to be cases of intimate partner violence, cases that were dismissed, as these lacked the demographic characteristics necessary to complete analysis, and cases returned with a verdict of not guilty, indicating that the perpetrator was not believed to have committed the acts described in the initial report.

Procedures for Data Collection

Archival data were used. This data was accessed using the Freedom of Information Act, which allowed for the viewing and utilizing data associated with the criminal justice system without employment within or with individual permission from the law enforcement division involved (FOIA.gov, n.d.). The legal system from which the data was drawn uses the Linx system for data storage. This online data and material storage system includes demographic data and probable cause statements for all filed cases of Assault 1, 2, 3, and 4 brought forth by the Prosecutor's Office. The Prosecutor's Office lead prosecuting attorney provided a list of cause numbers and names of defendants for a specified time frame after signing a letter of agreement approved by Walden University's Institutional Review Board (Appendix). This information was then used to search the Linx system. The researcher was able to identify strangulation perpetrators through probable cause statements.

Once data were identified, it was entered into a Microsoft Excel spreadsheet that was password protected. This spreadsheet was initially listed by cause number and then was blinded with a random 7-digit code once it was determined that there were no duplications of cases or individuals.

Data that were collected included the gender of the perpetrator, the race of the perpetrator, the primary and secondary relationship between the perpetrator and the victim (although only the primary relationship was used in the final analysis), prior acts of intimate partner violence, prior acts of other violent crime, and indigency status of the perpetrator. Each case was reviewed individually, and data were entered by hand into the

Microsoft Excel spreadsheet. These data were then transferred to SPSS once data collection was complete.

Role of the Researcher

In quantitative research, the predominant role of the researcher was in formulating a research question and designing a hypothesis to support that research question (Barroga et al., 2023). I was also responsible for maintaining and utilizing the chosen data set while remaining reflexive and objective about the conclusions (Jamieson et al., 2023). Lastly, I was responsible for analyzing the data using appropriate statistical tools and reporting the results of those analyses objectively and without bias.

Data Analysis Plan

Data analysis began by creating a blinded Microsoft Excel spreadsheet that identified data limited to the demographics in question and a 7-digit, randomized identification code to ensure that data were not duplicated. After data collection, the data set was transferred to SPSS software, which was used to clean and analyze the data.

Data Cleaning

The first level of data cleaning and manipulation was excluding cases that were irrelevant to the research questions. Exclusion criteria included duplicate cases, female perpetrators, open cases, cases that were dismissed, and cases returned with a verdict of not guilty. Next, each demographic characteristic was transformed using the “recode into different variables” procedure in SPSS. This allowed for subsequent numeric recoding of the variable without corrupting the original data. Next, each demographic characteristic was transformed using the “recode into same variables” feature, which allowed for the

assignment of the reference category. Additionally, variables were labeled in the variable view with descriptors, assisting with the final data analysis by providing explicit definitions of each variable. Lastly, “recode into same variables” was utilized again to change all value labels of “NC” or “not collected” to “system-missing” values, which was more accurate and stopped SPSS from treating “NC” as a data point.

RQ1: Do relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status influence the act of strangulation in intimate partner violence?

$H_0$1: Relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status do not influence the act of strangulation in intimate partner violence.

$H_1$1: The act of strangulation within violent relationships is influenced by the demographic characteristics of relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status.

RQ2: Are perpetrators with a history of violence, either general violence or intimate partner violence, more or less likely to commit an act of strangulation than those perpetrators without a history of violence?

$H_0$2: Perpetrators with a history of prior violence are equally likely to commit acts of strangulation as those without a history of prior violence.

$H_1$2: Perpetrators with a history of prior violence are more likely to commit acts of strangulation in violent relationships compared to those without a history of prior violence.

Data Analysis Plan

Logistic regression was employed to analyze both research questions, enabling predicting outcomes based on a dependent variable (Field, 2024). This technique also allowed for examining the relationship between a dependent variable and one or more independent variables (Laerd Statistics, n.d.).

To determine the adequacy of the model, the Hosmer and Lemeshow goodness-of-fit test was used (Laerd Statistics, n.d.). The Nagelkerke R^2 test was also used to determine how much variation in the dependent variable can be explained by the model (Laerd Statistics, n.d.).

Logistic regression was selected for this study because it is well-suited for analyzing binary outcome variables, making it an appropriate method for examining the presence or absence of an act of nonfatal strangulation in intimate partner violence cases. This statistical approach allowed for the assessment of relationships between multiple independent variables—such as race, indigency status, relationship type, and prior convictions—and the likelihood of strangulation occurring within intimate partner violence incidents. Unlike linear regression, which assumes a continuous outcome, logistic regression effectively models dichotomous dependent variables and provides insights into the strength and direction of associations through odds ratios. Additionally, logistic regression can accommodate both categorical and continuous independent variables (Field, 2013), making it a flexible and robust method for evaluating potential patterns in demographic and criminal history characteristics among intimate partner violence perpetrators. This approach aligned with the study's objectives by enabling an

examination of whether specific factors are associated with an increased likelihood of an act of strangulation in intimate partner violence cases while controlling for potential confounders.

Threats to Validity

Threats to External Validity

External validity generally refers to inferences about the strength or extent of a relationship between variables despite variations in cases, individuals, or settings for the study population (McEwan, 2020).

Because this data set was archival and participation is non-voluntary, some common threats to external validity, such as volunteer bias, were not assumed (McEwan, 2020). However, because this data set is representative of a particular subsection of the population who interacted with the criminal justice system, population validity (McEwan, 2020) may be challenged because this data set was not representative of the greater population. Temporal validity may also pose a challenge, as this data set was partially collected during the global pandemic of COVID-19, the effects of which on intimate partner violence reporting are not yet fully understood.

Lastly, the specificity of variables was a potential threat to external validity, as some of the variables were partially collected or not collected in the original data reviewed, thus creating some missing values.

Threats to Internal Validity

Internal validity examines whether the conclusions of a research study are trustworthy and generalizable (Andrade, 2018) and can be interpreted as a causal relationship (Andrade, 2018; McEwan, 2020).

Because this data set did include values that had not been collected, Andrade (2018) noted that this may represent a threat to internal validity, as it could skew or corrupt the results.

Instrumentation also threatened internal validity as the researcher hand-coded this data set. While every effort was made to control for instrumentation by using a strict set of guidelines for data coding, this was still considered a potential threat to internal validity. This threat was also somewhat mitigated because only one researcher coded the entire data set, which limited the likelihood of interrater variability.

Additionally, this data set straddled the years of the COVID-19 pandemic. This major world event caused a backlog in court processing and changes in procedures for how perpetrators were processed, arrested, and continued through the criminal justice center. This may have impacted how some demographic data was collected, representing a threat to internal and external validity.

Ethical Procedures

The main ethical concern for this study was upholding the privacy of perpetrators and alleged perpetrators. The study author was initially exposed to non-redacted records that contained sensitive information regarding the perpetrators of intimate partner violence, strangulation, and their victims. Because privacy was the most significant

concern, this information was not included in any database associated with the study. Instead, as cases were processed for inclusion in the study population, they were assigned a 7-digit randomized identification code. Only the study author could access the original key in a password-protected document. Additionally, case material was maintained only during the initial collection of data to ensure that the privacy of the individuals being studied was upheld. Anonymized data was retained for publication of study results but will not be released in any published form to ensure the utmost privacy and dignity for the perpetrators studied.

Data access was agreed upon between the study author and the lead attorney for the Sex and Domestic Crimes unit within the Prosecutor's Office. Formal agreements were submitted for approval by the Institutional Review Board (Appendix).

Summary

In summary, this chapter was used to delineate data collection and methods, including an explanation of how sample size was determined, how data was collected, organized, and cleaned, and how ethical procedures were maintained. Data was entered and analyzed using a combination of Microsoft Excel and SPSS, and the interpretation of data followed stringent and typical measures of statistical significance to ensure the compliance and generalizability drawn from the conclusions.

Chapter 4 will include a discussion of the results of the study. The data collection process will be highlighted, and more detail on data cleaning and manipulation will be discussed. Binary logistic regression will be explained, including the assumptions for logistic regression and how they are met in this study.

Chapter 4: Results

Introduction

The purpose of this quantitative study was to explore the demographic characteristics of intimate partner violence perpetrators who engage in strangulation. The first research question was whether relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status influence the act of strangulation in intimate partner violence. The experimental hypothesis was that the act of strangulation within violent relationships is influenced by the demographic characteristics of relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status.

The second research question was whether perpetrators with a history of violence, either general violence or intimate partner violence, were more or less likely to commit an act of strangulation than those perpetrators without a history of violence. The experimental hypothesis for this research question was that perpetrators with a history of prior violence were more likely to commit acts of strangulation in violent relationships compared to those without a history of prior violence.

The goal was to identify factors or patterns that may influence an act of intimate partner violence strangulation. The dependent variable was the presence or absence of an act of strangulation, while the independent variables included the relationship status between the perpetrator and the victim, the race of the perpetrator, prior acts of violence, and prior acts of intimate partner violence committed by the perpetrator, and the indigency status of the perpetrator.

Chapter 4 will be a discussion of the method of data collection and threats to external validity presented by the data set by comparing the demographic characteristics of the sample to those of the general population. Then, the data cleaning and manipulation procedure will be discussed, followed by an introduction to binary logistic regression and a discussion of the assumptions that were met before conducting the analysis. Then, the results of the binary logistic regression that was used to analyze the data will be presented and discussed.

Data Collection

Data Collection Method

The data for this study were obtained from a Superior Court system in Washington State. A list of all cause numbers and perpetrator names of those charged with Assault 1, 2, 3, and 4 during 2018-2023 was provided. The total number of cases received was 4,755 across all years. This total number of cases was inclusive of all assault cases, both intimate partner violence and general assault cases. Once the cases were received, each was manually reviewed for inclusion. Exclusion criteria are listed and presented in Table 1. Open cases were observed to be most often related to perpetrators who had fled and remained at large.

Race and ethnicity were coded based on the predominant value present in cases where the individual was of a mixed race. The primary relationship with the victim was coded based on the perceived dominant relationship and the linearity of the relationship. For example, if a victim and perpetrator were dating and had children together, the primary relationship was the dating relationship, and the co-parenting relationship was

the secondary relationship. If a victim and perpetrator had dated previously and were now platonic roommates, ex-dating was the primary relationship, and roommate was the secondary relationship. After excluding non-relevant cases, 1,543 cases were deemed relevant and included in the final analysis.

Table 1

Exclusion Criteria

Exclusion criterion	Reason for exclusion
Failure to be intimate partner violence	Not within the described bounds of the study.
Case dismissed	Not enough demographic characteristics to add value.
Case found not guilty	Not confirmed to be an act of violence.
Case still open (no resolution)	Not enough demographic characteristics to add value.
Female perpetrator	Research is focusing on male perpetration demographics.

Data Cleaning and Manipulation

Some data manipulation and recoding were performed to prepare the data for analysis. First, variables that had initially been labeled “NC” for “not collected” were recoded using the recode into the same variables feature as “system-missing.” This identified them as missing values, preventing them from being used as a separate category during analysis.

For independent variables, a reference category was then chosen. For the independent variable race, White was selected as the reference category because it was the largest racial group (44.7%); for a primary relationship with the victim, married was chosen as the reference category because it is the only formal relationship status (i.e., supported by court documents and licenses). All other independent variables (prior act of violence, prior act of intimate partner violence, and indigency) were dichotomous, and N (no) was the reference category. To create the reference category, the variable view values column was first changed to reflect the desired changes (i.e., for primary relationship with victim, Married was set as baseline). After these labels had been changed, recode into different variables was used to create a new column of recoded data. These new columns were labeled systematically, first as Category Label_R and then as Category Label_RR, which were the final values to be used. Descriptive frequencies are included in Tables 2 through 6.

Table 2

Descriptive Statistics: Relationship Between Perpetrator and Victim

	Frequency	Percent	Valid percent	Cumulative percent
Married	192	12.4	12.4	12.4
1st degree relative	170	11	11	23.5
2nd degree relative	52	3.4	3.4	26.8
Casual current	14	0.9	0.9	27.7
Co-parenting	5	0.3	0.3	28.1
Dating	797	51.7	51.7	79.7
Ex-dating	256	16.6	16.6	96.3
Ex-married	24	1.6	1.6	97.7
Roommate	33	2.1	2.1	100
Total	1543	100	100	

Table 3

Descriptive Statistics: Race of Perpetrator

	Frequency	Percent	Valid percent	Cumulative percent
White	690	44.7	44.7	44.7
American Indian / Alaska Native	44	2.9	2.9	47.6
Asian / Pacific Islander	75	4.9	4.9	52.4
Black	568	36.8	36.8	89.2
Hispanic	166	10.8	10.8	100
Total	1543	100	100	

Table 4

Descriptive Statistics: Prior Acts of Violence

	Frequency	Percent	Valid percent	Cumulative percent
No prior act of violence	554	35.9	45.2	45.2
Prior act of violence	673	43.6	54.8	100
Missing system	316		20.5	
Total	1543	100		

Table 5

Descriptive Statistics: Prior Acts of Intimate Partner Violence

	Frequency	Percent	Valid percent	Cumulative percent
No prior act of intimate partner violence	605	39.2	49.6	49.6
Prior act of intimate partner violence	615	39.9	50.4	100
Missing system	323		20.9	
Total	1543	100		

Table 6

Descriptive Statistics: Indigency Status of the Perpetrator

	Frequency	Percent	Valid percent	Cumulative percent
Perpetrator not indigent	311	20.2	24.6	24.6
Perpetrator indigent	951	61.6	75.4	100
Missing system	281		18.2	
Total	1543	100		

This data were collected from a non-representative sample of individuals who interacted with the Superior Court System within the prescribed time frame, 2018-2023.

For that reason, the demographic statistics of the general population are represented in Table 7. This demonstrates that White is the predominant race for both the population studied and the general population, with Black individuals being disproportionately represented (36.8% of the study population but only 6.76% of the general population) and Asian / Pacific Islander individuals are underrepresented in the study (4.9% of the study population but 7.96% of the general population), and Hispanic and American Indian / Alaska Native are approximately similar in proportion. Values on criminal acts in the general population were understandably not collected, as the study population is largely representative of these individuals.

Table 7

County Demographics

	County	
	n	%
Characteristic		
Race		
Caucasian (White)	586,000	63.7
American Indian / Alaska Native	7,500	0.82
Asian / Pacific Islander	73,200	7.96
Black	62,100	6.76
Hispanic	109,000	11.9
Indigency	77,900	9.8

Results

Research Question 1

RQ1: Do relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status influence the act of strangulation in intimate partner violence?

$H_0$1: Relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status do not influence the act of strangulation in intimate partner violence.

$H_1$1: The act of strangulation within violent relationships is influenced by the demographic characteristics of relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status.

Data Analysis Plan for Research Question 1

A binary logistic regression analysis was conducted to investigate research question 1, whether demographic characteristics influence the likelihood of committing the act of strangulation within violent relationships. The outcome of interest was the act of strangulation. The possible predictor variables were relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status.

Assumptions for Research Question 1

Binomial logistic regression has seven assumptions that must be met before analysis. These assumptions and how they were met for this research question are listed below (Field, 2024; Laerd Statistics, n.d.).

Assumption 1: There is one dichotomous dependent variable. The dependent variable is the act of strangulation, which was collected as an act of strangulation or no act of strangulation. This was converted to a binary numeric value. The absence of an act of strangulation (Strangulation = N) was coded as 0.00. The presence of an act of strangulation (Strangulation = Y) was coded as 1.00 (Laerd Statistics, n.d.). This assumption was met.

Assumption 2: There is one or more than one categorical, continuous, or nominal independent variable. The independent variables were relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status. As five total independent variables are being studied, all categorical, this assumption was met (Laerd Statistics, n.d.).

Assumption 3: There should be independence of observations and the categories of any dependent variables, and all nominal independent variables should be mutually exclusive and exhaustive. The independence of observations means that there is no relationship between any category of any variable and no relationship between the categories (Laerd Statistics, n.d.). This assumption is met because none of the variables allowed for multiple selections.

Assumption 4: There should be at least fifteen cases per independent variable. As noted in the descriptive statistics in Table 3, this assumption is met after the initial exclusion of non-relevant cases (Laerd Statistics, n.d.). There are two categories (co-parenting, 5 instances; casual current, 14 cases) in which this assumption is not met, but because they represent the minority, the analysis continued.

Assumption 5: There should be a linear relationship between the continuous independent variables and the logit transformation of the dependent variable (Laerd Statistics, n.d.). Because there are no continuous independent variables, this assumption was met.

Assumption 6: There must be no multicollinearity. Multicollinearity is demonstrated when there are two or more continuous independent variables that are highly correlated with each other. Because there are no continuous independent variables, testing for multicollinearity was not performed, and this assumption was met (Laerd Statistics, n.d.).

Assumption 7: There should be no significant outliers. Outliers were tested for using the casewise list generated during a binomial logistic regression. No cases had a standardized residual (ZResid) of greater than 2, which is generally considered the threshold for consideration as an outlier (Laerd Statistics, n.d.). Therefore, this assumption was met.

Data Analysis for Research Question 1

The Hosmer-Lemeshow goodness-of-fit was not significant ($p > 0.05$), indicating the model is correctly specified. Additionally, the -2 log likelihood = 1431.535 and the Nagelkerke R squared = .169. Nagelkerke R squared is measured on a scale of .00 to 1.00, with values approaching 1.00 indicating a moderately strong performance of the logistic regression model to be able to predict the dependent variable (Laerd Statistics, n.d.).

The model showed the independent variables of *Race*, *Prior General Acts of Violence*, *Prior Acts of Intimate Partner Violence*, and *Indigency* as not significant ($p > 0.05$), but the independent variable of relationship status between the victim and the perpetrator was found to be overall significant ($p < 0.05$) and several subcategories were found to be significant: *1st Degree Relative* ($p < .001$), *2nd Degree Relative* ($p = .01$), *Dating* ($p = .017$) and *Roommate* ($p = .011$). For *1st Degree Relative*, the unstandardized $B = -1.805$, $SE = .289$, $Wald = 39.095$. The estimated odds ratio favored a negative relationship of almost 84%: *Exp (B)* = .164, 95% CI (.093, .290), indicating that *1st Degree Relatives* are much less likely to commit an act of strangulation when compared to the reference category of *Married*. For *2nd Degree Relative*, the unstandardized $B = -.976$, $SE = .380$, $Wald = 6.587$. The estimated odds ratio favored a negative relationship of 62%: *Exp (B)* = .377, 95% CI (.179, .794), indicating that *2nd Degree Relatives* are much less likely to commit an act of strangulation when compared to the reference category of *Married*, although slightly more likely than *1st Degree Relatives*. For dating, the unstandardized $B = .465$, $SE = .195$, $Wald = 5.676$. The estimated odds ratio favored a positive relationship of almost 60%: *Exp (B)* = 1.592, 95% CI (1.086, 2.334), indicating that individual perpetrators in a *Dating* relationship are much more likely to commit an act of strangulation when compared to the reference category of *Married*. For *Roommates*, the unstandardized $B = -1.247$, $SE = .491$, $Wald = 6.436$. The estimated odds ratio favored a negative relationship of 71-fold: *Exp (B)* = .287, 95% CI (.110, .753), indicating that *Roommates* are much less likely to commit an act of strangulation when compared to the reference category of married.

Based on the results of this binary logistic regression, the null hypothesis that relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status do not influence the act of strangulation in intimate partner violence is rejected. While not all categories were correlated with the presence or absence of strangulation, several categories of relationship status were significant, allowing for the rejection of the null hypothesis.

Research Question 2

RQ2: Are perpetrators with a history of violence, either general violence or intimate partner violence, more or less likely to commit an act of strangulation than those perpetrators without a history of violence?

$H_0$2: Perpetrators with a history of prior violence are equally likely to commit acts of strangulation as those without a history of prior violence.

$H_1$2: Perpetrators with a history of prior violence are more likely to commit acts of strangulation in violent relationships compared to those without a history of prior violence.

Data Analysis Plan for Research Question 2

A binary logistic regression analysis was conducted to investigate research question 2, whether perpetrators with a history of violence, either general violence or intimate partner violence, are more or less likely to commit an act of strangulation than those perpetrators without a history of violence. The outcome of interest was the act of strangulation. The possible predictor variable was any prior acts of violence or prior acts of intimate partner violence.

Assumptions for Research Question 2

Binomial logistic regression has seven assumptions that must be met before analysis. These assumptions and how they were met for this research question are listed below (Field, 2024; Laerd Statistics, n.d.).

Assumption 1: There is one dichotomous dependent variable. The dependent variable is the act of strangulation, which was collected as an act of strangulation or no act of strangulation. This was converted to a binary numeric value. The absence of an act of strangulation (Strangulation = N) was coded as 0.00. The presence of an act of strangulation (Strangulation = Y) was coded as 1.00 (Laerd Statistics, n.d.). This assumption was met.

Assumption 2: There is one or more than one categorical, continuous, or nominal independent variable. The independent variables were prior acts of violence and prior acts of intimate partner violence. As two total independent variables are being studied and both are categorical, this assumption was met (Laerd Statistics, n.d.).

Assumption 3: There should be independence of observations and the categories of any dependent variables, and all nominal independent variables should be mutually exclusive and exhaustive. The independence of observations means that there is no relationship between any category of any variable and no relationship between the categories (Laerd Statistics, n.d.). This assumption is met because none of the variables allowed for multiple selections.

Assumption 4: There should be at least fifteen cases per independent variable. As noted in the descriptive statistics in Table 3, this assumption is met after the initial

exclusion of non-relevant cases (Laerd Statistics, n.d.). There are 554 cases of no prior acts of violence, 673 of prior acts of violence, 605 of no prior acts of intimate partner violence, and 615 of prior acts of intimate partner violence, more than satisfying this assumption.

Assumption 5: There should be a linear relationship between the continuous independent variables and the logit transformation of the dependent variable (Laerd Statistics, n.d.). Because there are no continuous independent variables, this assumption was met.

Assumption 6: There must be no multicollinearity. Multicollinearity is demonstrated when there are two or more continuous independent variables that are highly correlated with each other. Because there are no continuous independent variables, testing for multicollinearity was not performed, and this assumption was met (Laerd Statistics, n.d.).

Assumption 7: There should be no significant outliers. Outliers were tested for using the casewise list generated during a binomial logistic regression. No cases had a standardized residual (ZResid) of greater than 2, which is generally considered the threshold for consideration as an outlier (Laerd Statistics, n.d.). Therefore, this assumption was met.

Data Analysis for Research Question 2

The Hosmer-Lemeshow goodness-of-fit was not significant (p = 1.000), indicating the model is correctly specified. Additionally, the -2 log likelihood = 1644.854 and the Nagelkerke R squared = .011. Nagelkerke R squared is measured on a scale of

.00 to 1.00, with values approaching 1.00 indicating a moderately strong performance of the logistic regression model to be able to predict the dependent variable (Laerd Statistics, n.d.). The model resulted the independent variables of *Prior General Acts of Violence* (p = .257) and *Prior Acts of Intimate Partner Violence* as not significant (p = .917).

Based on the results of this logistic regression, the null hypothesis is not rejected, as there was found to be no correlation between prior acts of intimate partner violence or general violence and the likelihood of committing an act of strangulation.

Summary

The research questions for this study ask whether relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status influence the act of strangulation in intimate partner violence. Based on the outcome of the binary logistic regressions that were conducted on this data set, there is no relationship between a perpetrator's race, prior acts of violence, prior acts of intimate partner violence, or indigency, and the potential likelihood of committing an act of strangulation. There is a limited correlation between the type of relationship that exists between the perpetrator and the victim and the possibility of committing an act of strangulation for several subcategories of relationship status: first-degree relatives, second-degree relatives, dating, and roommates. All of these are strongly negative relationships except for dating relationships, which are positively associated with the likelihood of committing an act of strangulation.

These findings challenge some previously established knowledge of risk factors for the perpetration of strangulation, which will be discussed in depth in Chapter 5. In addition to this discussion, conclusions from this preliminary data are explored, limitations of the data set and research study are discussed, and recommendations for utilization of this research study are examined.

In the next and final chapter, likely conclusions from this preliminary data are explored, limitations and recommendations for the next steps are discussed, and considerations for future use of this data set or other data are examined.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative study was to explore the demographic characteristics of male intimate partner violence perpetrators who commit acts of strangulation. The goal was to identify factors or patterns, such as relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status that may influence an act of intimate partner violence strangulation. This was a retrospective study examining data from criminal activity that had already occurred and was correlational, seeking to establish a connection between variables or identify a lack of connection between variables. It was conducted as there is little research that examines the demographic factors of intimate partner violence perpetrators who strangle, which was identified as an area of research weakness during the literature review.

RQ1: Do relationship status, race, prior acts of violence, prior acts of intimate partner violence, and indigency status influence the act of strangulation in intimate partner violence?

RQ2: Are perpetrators with a history of violence, either general violence or intimate partner violence, more or less likely to commit an act of strangulation than those perpetrators without a history of violence?

The study results indicate a negative correlation between the reference category of Married and the relationship status of Roommate, first-degree relative, and second-degree relative, indicating that these relationship statuses are less likely to commit an act of strangulation when compared to Married individuals. There was a positive correlation

between dating relationships and the reference category of Married, indicating that dating individuals were more likely to commit an act of strangulation than Married individuals. There was no significant correlation found between the other demographic factors studied, which were the indigency status of the perpetrator, the prior historical acts of violence committed by the perpetrator, and the race of the perpetrator.

Interpretation of Findings

Based on the outcome of the binary logistic regression that was conducted on this data set, there is no identified relationship between a perpetrator's race, prior acts of violence, prior acts of intimate partner violence, or indigency, and the potential likelihood of committing an act of strangulation. There is a limited correlation between the type of relationship that exists between the perpetrator and the victim and the possibility of committing an act of strangulation for several subcategories of relationship status: first-degree relatives, second-degree relatives, dating, and roommates. All of these are strongly negative relationships except for dating relationships, which are positively associated with the likelihood of committing an act of strangulation when compared to the reference category of being married to the victim. This indicates that for the study population, being a first-degree or second-degree relative of the victim or being roommates with the victim reduces the chances that the perpetrator will commit an act of strangulation against that person when compared to the reference category of being married to the victim.

There is no statistical significance in the logistic regression analysis for the second research question, whether perpetrators with a history of violence, either general

violence or intimate partner violence, are more or less likely to commit an act of strangulation than those perpetrators without a history of violence. While this may indicate a very weak relationship or interaction between the dependent variable of acts of strangulation and the criminal histories of the perpetrators, it also may suggest that there is not a relationship between these variables, a finding that is oppositional to prior research knowledge indicating that perpetrators with a history of violence are more likely to commit acts of strangulation in violent relationships.

Discussion of Research Question 1

Intimate partner violence in the United States is a widespread and serious social problem, affecting 1 in 4 women and 1 in 7 men over their lifetime (CDC, 2021). Among the various forms of intimate partner violence, nonfatal strangulation, defined as an episode of strangulation that does not result in the homicide of the victim, has been identified as a dangerous behavior due to its association with increased lethality and the spectrum of coercive control (Patch et al., 2018; Stark, 2023). Despite a research background on intimate partner violence perpetrators in general, comparatively little is known about those who commit strangulation in intimate relationships. While this body of research provides a broad understanding of intimate partner violence perpetration, there appears to be a gap in knowledge regarding individuals who engage specifically in strangulation, which this study attempted to explore.

The findings of this study do contribute to the research on intimate partner violence perpetrators of strangulation, both by providing some correlations and by identifying new areas of inquiry or additional exploration. This study identified a

correlation between certain types of relationships that were more likely to experience acts of strangulation than the reference group. To date, there are limited available research studies that explore specifically the interaction between the type of relationship present between the victim and the perpetrator and the type of violence that is present in that relationship. However, Stansfield and Williams (2021) acknowledge that this and other demographic analysis of perpetrators of strangulation is a needed area of research. Parekh et al. (2024) evaluated nonfatal strangulation cases when compared to general assault cases. They found that, like this study, most perpetrators of nonfatal strangulation were male (95%), as cases with female perpetrators were excluded from this study due to their rarity. They also examined the type of relationship between the perpetrator and the victim. They found that the most common types of relationships were partners (62%), ex-partners (21%), or family members (10%; Parekh et al., 2024). The classifications of partners in Parekh et al. differ from those used for this study, specifically that partners are not separated into types of partnership (married, dating, etc.). The degree of relative is also not elucidated further. The general demographic breakdown is very similar to this data set, with partners, ex-partners, and family members occupying the bulk of the data set.

Typology theory of perpetration is an area that also approaches this study, with Alexander and Johnson (2023) describing family-only perpetrators, who tend to control their victims through psychological and sexual abuse, and the dysphoric-borderline perpetrator displaying violence that is very focused on the intimate partner, with little to no violence occurring outside of the relationship. Typology theory may help explain why

dating relationships are more likely to experience strangulation than other types of relationships and why there is a negative association between relatives and roommates and the likelihood of experiencing strangulation; dating relationships, viewed through the framework of Alexander and Johnson's typologies would be a more likely place for family only, dysphoric-borderline, and low-level antisocial offenders to display violence such as strangulation. However, typology research does not fully explain the findings from this study, as one would expect other family relationships, such as first and second-degree relatives and married relationships, also to experience a positive correlation with strangulation.

In several qualitative studies, the authors noted a connection between societally acceptable behavior within cultural subgroups, the likelihood of perpetrating violence, and the subsequent justification of that violence. For example, as noted by one perpetrator interviewed by McGinn et al. (2017), "My jefe used to tell me that sometimes you have to hit a woman to keep her in line or she will disobey you." This perpetrator was Hispanic, a culture often associated with machismo, a hypermasculine societal model that has been linked to higher rates of intimate partner violence (Ayubi & Satyen, 2024). Although the initial area of inquiry for this study was whether there was a connection between the racial background of the perpetrator and the likelihood of perpetrating nonfatal strangulation, what emerged from the data analysis was less about specific racial backgrounds, as this was not found to be significantly correlated in any way with the act of strangulation, and more aligned with the observations of authors like Sileo et al. (2022), who noted an overall impact on criminal behavior due to masculine discrepancy

stress, which is defined as the internal psychic distress at failing to meet socially idealized constructs of masculinity. These observations are certainly aligned with this study, which was restricted to male perpetrators because of the rarity of female perpetrators. Although no racial subgroup was more strongly associated with strangulation than any other in this study, it would be reasonable to examine broader populations and population subgroups to validate this finding.

In this study, indigency status was used as a correlate for poverty, as the data available did not disclose the income level of the perpetrators. In this case, indigency was defined as an inability to pay legal fees or retain private counsel, two qualities that would imply a higher income level. This assumption has certain limitations, as it was quite possible that individuals lacked the income reserve to pay legal fees but were employed or above the federal poverty level. A stronger variable would be the individual income level of the perpetrator or the socioeconomic score of the perpetrator, but these were not values that were provided by the available data. Studies like Zharima et al. (2024) and Schumann et al. (2023) demonstrate a correlation between economic hardship and the likelihood of general intimate partner violence perpetration, which is also supported by the general strain theory, one of the theories used for this study. However, the study results do not demonstrate a connection between indigency and the likelihood of strangulation within intimate partner violent relationships. Given the challenges associated with the use of indigency status as a correlate for poverty or low socioeconomic score, further inquiry is needed in this area, specifically for nonfatal strangulation and within the United States, as Zharima et al. (2024) and Schumann et al.

(2023) surveyed populations in South Africa and Germany respectively. There is comparatively little modern research in the United States examining the connection between perpetration and poverty level, although several studies demonstrate a connection between low socioeconomic status and victimhood (Reyal et al., 2024; Teufel et al., 2021).

In conclusion, while some conclusions are drawn from the relationship status between the perpetrator and the victim in this study, further research is needed to demonstrate these associations' strengths and verify the lack of correlation between the other variables. As Stansfield and Williams (2021) noted, further evaluation of demographic factors associated specifically with perpetrators of strangulation is still needed, and while this study contributes to this body of knowledge, broader and more comprehensive studies are still needed.

Discussion of Research Question 2

The second research question of this study asked if perpetrators with a history of violence, either general violence or intimate partner violence, are more or less likely to commit an act of strangulation than those perpetrators without a history of violence. According to the results of the logistic regression, which examined the dependent variable of strangulation against a history of any act of violence or a history of an act of intimate partner violence, there is no correlation between a history of any kind of violence and an act of strangulation, and the null hypothesis was unable to be rejected. This is a conclusion that is oppositional to prior research on intimate partner violence. As concluded unanimously by other researchers who have examined risk factors associated

with intimate partner homicide, prior history of intimate partner violence increases the lethality risk of violent relationships, as does committing the act of strangulation within a violent relationship (Campbell et al., 2009; Graham et al., 2021; Johnson et al., 2022). There are several important points to consider when comparing the results of this study to prior research knowledge. One of these points is that, despite a unanimous conclusion that these individual factors can all contribute to raising the lethality risk in a relationship, no studies examine the interplay between the individual factors. For example, it is acknowledged that strangulation raises the lethality risk in a relationship, and so does a prior history of intimate partner violence. However, what is unknown is which factors amplify this risk even further when combined.

Additionally, Campbell et al. (2009) noted that both a prior history of intimate partner violence and avoiding being arrested for intimate partner violence were significant risk factors for increased lethality. Examining this from the perspective of this study, it is possible that this study is mostly seeing sentinel cases of violence that involve strangulation, have avoided being arrested for intimate partner violence in the past, and are likely to commit additional acts of violence or homicide in the future.

Another area of potential concern with the results of this study was prosecutorial decision-making regarding charges and the completion of cases. Wagers et al. (2022) noted that there were three areas of concern regarding prosecutorial decision-making for intimate partner violence cases: blameworthiness of the offender, protection of the community, and practical considerations for the system. Considering these factors and the data set and time frame used for this study raises some potential areas requiring

additional inquiry. First, the data used in this study was collected from 2018-2023, including the COVID-19 pandemic. During this time, much of the court system was complying with stay-at-home orders from the Washington State government, resulting first in a complete cessation of prosecution and then a slow resumption of virtual cases for intimate partner violence. As Wagers et al. noted, concern for the burden on the system factored into prosecutorial decision-making, which may have impacted the number of cases that the prosecutor's office dismissed during the data collection period for this study. Additionally, this data set excluded cases that were returned with a verdict of not guilty or remained open due to either the perpetrator fleeing the case or the victim refusing to cooperate. While there is no way to determine whether perpetrators who were found not guilty did commit some or all the acts they were accused of, the point remains that this may have skewed the data collected for this research.

While not specific to perpetrators of nonfatal strangulation, there are multiple studies about the impact of childhood and young adulthood experiences on the likelihood of perpetrating violence. Nikulina et al. (2021) and Jung et al. (2019) both note that there is a correlation between those who experience high numbers of ACEs and the likelihood of becoming a perpetrator as an adult. This is echoed by Petreca et al. (2023), who studied homicidal strangulation cases and found that well over half of them had an ACE score of 4 or higher. This is also confirmed by Barnert et al. (2023), who found that parents with high ACE scores had children who were more likely to display criminal behaviors and become involved with the criminal justice system, illuminating the theory of intergenerational transmission of violence. Given the preponderance of studies that

describe criminality as a series of acts, as opposed to a single episode, it is likely that the results of the second research question are representative of an aberration, perhaps a combination of the data analysis technique and the time from which the data was collected, as opposed to an oppositional finding. Regardless of the reason for the aberrant finding, further research is warranted to either confirm or deny the findings of this research.

In conclusion, this study does contribute to the research surrounding specifically perpetrators of intimate partner violence who commit acts of strangulation, an area of research that is deficient. This research demonstrates that there are potential correlations between relationship type and the likelihood of committing an act of strangulation. It raises the question of whether the established findings on factors increasing lethality in violent relationships require additional research for perpetrators who utilize strangulation specifically.

Positive Social Change

Positive social change moves society closer to ideals of equity, equality, health, and safety. This study examines a subcategory of violence that is a continually evolving area of inquiry within intimate partner violence. Intimate partner violence carries a burden of impact, from mental and physical health sequelae for the victim to the financial impact on childcare, lost wages at work, lost productivity, medical expenditure (Snyder, 2020), and even intergenerational transmission of trauma.

While this study did not directly examine the lethality risk associated with nonfatal strangulation, it did contribute to the body of knowledge about perpetrators of

nonfatal strangulation. This potentially contributes to positive social change because it enhances the research understanding of these perpetrators and could help highlight additional areas of research inquiry. Improving research knowledge and understanding can help make the detection and management of strangulation within intimate partner violence stronger, which then contributes to preventing or intervening in these cases prior to increased lethality.

Perpetrator treatment and intervention programs, as well as perpetrator prevention programs, remain in relative infancy, especially when compared to victim services. This research could contribute to positive social change by helping to highlight the qualities of perpetrators of nonfatal strangulation or their relationships. With a stronger understanding of these relationships and these individual perpetrators, interventions can be tailored specifically towards perpetrators of nonfatal strangulation when that is identified as either a risk factor or an element of a violent relationship. Targeted interventions are helpful around resource utilization, as they are more efficient than broader interventions, and thus, they can allow for better distribution of resources and more effective intervention.

Theoretical Frameworks Discussion

Three theoretical frameworks were used to ground this research: general strain theory, power and control theory, and social learning theory.

General strain theory, proposed by Robert Agnew, posits that noxious stimuli, identified as strain, could produce an environment where criminality is a possible solution to relieve discomfort or stress (Agnew, 2001). While this theory aligns well with

overarching themes in intimate partner violence and perpetration, it is ultimately not directly aligned with the conclusions of this study. Indigency, the correlate used to identify poverty in perpetrators for this study, was not found to have a relationship with the likelihood of committing an act of strangulation. This study does not elucidate other factors that could contribute to general strain in these cases. For example, had the perpetrators or victims been interviewed, perhaps there would have been a stronger relationship between objective factors, increasing strain, and level of violence.

Power and control theory, conceptualized by Hagen in the mid-1990s, encourages viewing of intimate partner violence as a fundamentally patriarchal problem, in which societal expectations create opportunities to utilize violence to enhance those beliefs, as noted in the Male Role Belief System (Snyder, 2020) or theories about masculine discrepancy stress, which attribute intimate partner violence to a perceived failure on the part of the perpetrator to meet masculine ideals (Sileo et al., 2022). This theory is appropriate mainly for this study as one of the results of the research demonstrated that certain relationship types appear more likely to produce acts of strangulation than other relationship types, which may be related to how the male perpetrators in those relationships thought they were supposed to act.

Social learning theory, first theorized by Bandura and enhanced for the study of deviancy by Akers, indicated that intimate partner violence was a learned social behavior for both victims and perpetrators; they learned how to occupy their respective roles in violent relationships by either familial relationships and observations or societal observations. This theory helped to ground the background of this research. However, it

was not directly applicable to the study population, especially considering that there was no identified correlation between prior criminal behavior and strangulation.

Limitations

Sampling Bias, Validity

The data for this study was created from individually reviewing and coding case reports of intimate partner violence within a single county in Washington State. While every opportunity was taken to ensure the accuracy and objectivity of the analysis of individual case files, this relied upon the accuracy and objectivity of the initial case report and the strength of the observations gathered. Additionally, some areas required subjectivity, such as defining primary and secondary relationships. Sampling bias was reduced as much as possible in these areas by introducing a framework and rules that could be used to define relationships and code accurately.

Replication and Reproducibility

This study gathered data from individuals who interacted with a Superior Court system within a specific time frame. As previously identified, the prosecutorial rate of intimate partner violence is relatively low, although notably, recent research in this area is limited, as Garner and Maxwell (2009) offered the last direct study in this area. Based on this limited data, one of the limitations of this study is that it looks exclusively at those who reported an incident to law enforcement and were placed into the criminal justice system for prosecution. This limits the generalizability of the study as decision-making for victims, law enforcement, and prosecutors may vary depending on the community and area in which they reside.

Interaction Effects

Like concerns about reproducibility, this data was gathered from a single area of Washington State. This study population, while mostly aligned with the overall demographics of the county at large, could have implicit interaction effects that change how the data interact with each other and produce results. Certain aspects of the study population were not evaluated for this research, such as the perpetrator's age, which could impact the applicability of this study. Additionally, the overall socioeconomic status of the area in which data was gathered may impact or change how the data is examined and evaluated.

Historical or Temporal Limitations

This study utilized data that was gathered during the COVID-19 pandemic. This was a period of historical upheaval and societal changes, and the impacts of this pandemic on intimate partner violence reporting and perpetration are still being elucidated (Smith-Clapham et al., 2023). The data gathered for this study during this period could potentially be impacted in ways that are not fully understood, and that may limit not only the temporality of the data but also the generalizability, as different parts of the United States had different levels of restriction on movement and work during the COVID-19 pandemic.

Publication Bias

As defined by van Aert et al. (2022), publication bias refers to some research conclusions being more likely to be published than others and are, therefore, less likely to be included in research studies such as meta-analyses. In the area of intimate partner

violence perpetration, many of the studies come to the same conclusion about risk factors increasing lethality in intimate partner violence, which is not demonstrated in this research. Further research will be needed to determine whether this is related to the individual data collected and used or representative of an issue such as publication bias.

Recommendations

Political Leaders and Policy

One of the most substantial pieces of legislation for intimate partner violence is that of the VAWA (Congress.gov, n.d.), which is an omnibus of laws and policies that help provide funding and guidance for crimes of gendered violence, specifically sexual assault and intimate partner violence. Given the existing research on the likely risk of lethality in violent relationships with strangulation, VAWA could be amended to criminalize strangulation as a distinct offense. Some states have already done this, as evidenced by Washington State, in which strangulation is an enhancement to the crime of assault and automatically requires a person to be charged with Assault 2 (Wa.gov, n.d.). However, completing this recommendation at a federal level would ensure consistent enforcement across all states and allow for the provision of federal mandatory minimum sentences for perpetrators found to have committed an act of strangulation.

Federal agencies could help establish data-sharing agreements and federal data tracking of strangulation, including mandating that states report strangulation data to federal databases. This would help establish a substantial data repository for future research and help to direct future funding and programs. This may also include requiring

strangulation screening in federally funded healthcare programs, such as the Indian Health Service or Medicaid.

Federal agencies could also establish federal forensic guidelines for documentation in strangulation cases, which would increase the universality of reported findings and require federal judges and prosecutors to undergo specialized training on the impacts of strangulation, enhancing the national detection and intervention rate for cases of strangulation. Federal agencies could also establish a pool of forensic expert witnesses to enhance evidence-based testimony in strangulation cases.

Lastly, because indigency status and race were not significant predictors of strangulation within this study, further national studies are needed to determine whether this finding is accurate and to help guide national efforts to focus prevention on relationship dynamics and behavioral risk factors.

Regional and Local Law Enforcement and Judicial Recommendations

Many strangulation cases are not prosecuted on the federal level, which adds value to regional and state-level recommendations. Like federal-level recommendations, states could mandate the use of expert witness testimony in court, which may help enhance jury and judge knowledge and understanding of the crime of strangulation.

States could also require mandatory arrest and prosecution for cases of strangulation, which may help reduce bias in prosecutorial decision-making and limit the impact of misconceptions regarding strangulation injury.

States could mandate specialized training for law enforcement and state health agencies, enhancing the detection and intervention rates for strangulation cases.

Regional and Local Prevention, Education, and Awareness Recommendations

Dating relationships were more likely to experience acts of strangulation than the reference category of Married. Suppose this research finding is duplicated across broader research. In that case, intimate partner violence prevention programs should be targeted to provide early intervention and awareness education for dating relationships, such as local educational programs, screening in healthcare, and screening in law enforcement settings.

From a data-gathering perspective, requiring healthcare organizations and law enforcement organizations to gather specific data about strangulation cases would enhance the accuracy and reach of further research into nonfatal strangulation.

Recommendations for Individuals With Risk Factors for Perpetration

As noted by Singh et al. (2022), healthcare professionals are often on the front lines of detection and disclosure of strangulation, both for victims and for perpetrators. However, providers often feel ill-prepared to intervene, especially when communicating with perpetrators of intimate partner violence who may disclose their behavior in the hope of obtaining help or resources. Providing a central hub for information regarding prevention and intervention programs for perpetrators and victims could help increase help-seeking behavior, reduce recidivism, and decrease providers' and law enforcement's sense of powerlessness in providing resources.

Additionally, providing specialized intimate partner violence intervention programs for strangulation offenders that address power and control dynamics in relationships and the impact of strangulation on victims may be helpful.

Recommendations for Future Research

Enhancing national data collection on intimate partner violence strangulation would be most helpful for future research targeting nonfatal strangulation. This would allow for broad, national studies that were not prohibitively expensive or time-consuming, as in research such as this study, where data collection was accomplished by manually extracting relevant data from individual case reports.

From this study, there is a potential correlation between relationship status and committing an act of strangulation that bears additional inquiry. There are minimal other studies examining relationship status in intimate partner violence; therefore, this is a correlation that encourages additional inquiry. There is also an opposing finding for a prior history of violence that is not supported by prior research. Further inquiry is necessary here, including studies that establish the temporality of strangulation episodes: For how many perpetrators is strangulation a sentinel act or the first arrest for violence versus a culminating act at the end or near the end of a series of violent encounters? This study is also limited from a temporal perspective, with a small range of years that were studied and the inclusion of a period of global unrest in the form of a pandemic. It would be interesting to conduct longitudinal studies for strangulation perpetrators, identifying how many of them are recidivists and what childhood and lifetime events contribute to the likelihood of strangulation, which may further integrate general strain theory as a foundational theory for nonfatal strangulation.

The risk factors studied in this research were limited by the access to demographic factors that were readily available. There is some research on risk factors

for perpetrators of intimate partner violence, although there is minimal research on perpetrators of strangulation. Expanding this understanding of risk factors to include mental health disorders, substance use, ACEs, and others would be valuable for helping to design and deploy intervention and prevention programs that were useful and directed.

Lastly, it would be revealing to have more comprehensive qualitative studies on perpetrators of strangulation. How aware are perpetrators of strangulation? Do they willfully deploy strangulation as an act of coercive control, or is it more often related to a loss of control, overwhelming anger, or other factors? Additionally, studies on dating individuals specifically may reveal psychosocial and emotional triggers that increase the likelihood of strangulation. However, all studies like these must be controlled for environmental and cultural influences and confounding factors.

Summary

This study demonstrates that some relationship statuses are potentially important to understanding nonfatal strangulation. However, because of this research's temporal, regional, and other limitations, further elucidating studies are needed before conclusions can be drawn. Similarly, this study is somewhat oppositional to existing research understandings about the relationship between prior episodes of violence, prior episodes of intimate partner violence, and increased lethality in relationships. While there are no direct studies correlating the exact interaction between prior intimate partner violence and the act of strangulation, the lack of a relationship in this study between prior episodes of violence and the act of strangulation bears further inquiry.

The study of intimate partner violence is complex, nuanced, highly variable, and entirely individual. While conclusions can be drawn from groups of individuals, no case is alike. However, what is most notable about the study of intimate partner violence is that despite the vast theoretical underpinning, multiple contributing factors, and regional and universal variation in experiences, some traits and patterns are demonstrated across numerous studies. This alone is motivation to continually strive to understand this type of violence from as many perspectives as possible, including those of the perpetrator. Perpetrator studies have now demonstrated that the state of being a perpetrator is just as complex as that of being a victim and, thus, requires an equal research presence, including qualitative studies that explore the mindset and awareness of perpetrators or those at risk of becoming perpetrators.

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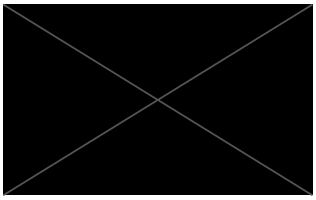
Appendix: Letter of Permission From Prosecutor's Office



April 3, 2024

Katherine Thompson

Re: Publicly accessible data

Dear Ms. Thompson:

This letter is to confirm that we are able to provide you publicly available data for your upcoming research. In particular, we can provide you a list of cases where the defendant was charged with Assault in the Second Degree within a specific date range. The information will include the defendants name and cause number. The charge of Assault in the Second Degree includes defendants who are charged with strangling a victim. You can use this information to access the [redacted] publicly accessible court records system, Linx. Through this system, you will be able to access documents filed in court, to include the probable cause statement. The probable cause statement will include a description of the underlying assault. If you need further information, please let me know.

Very truly yours,

Coreen E. Schnepf
Chief Criminal Deputy Prosecuting Attorney