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Race, Age, Gender, Income, and the Experience of Adult Intimate Partner Violence

Jacquelynn Melnita Hairston
Walden University

Walden University

College of Health Sciences

This is to certify that the doctoral dissertation by

Jacquelynn Melnita Hairston

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Review Committee
Dr. Peter Anderson, Committee Chairperson, Public Health Faculty
Dr. Sriya Krishnamoorthy, Committee Member, Public Health Faculty
Dr. James Rohrer, University Reviewer, Public Health Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
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Abstract

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MHA, University of Phoenix, 2009

BS, Florida State University, 2006

Dissertation Submitted in Partial Fulfillment

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Abstract

Intimate partner violence (IPV) is a significant public health problem that affects approximately 2.4 million individuals in the United States each year. Race, age, gender, and household income are established correlates of criminal victimization and diverge across various victimization experiences for these individuals. The purpose of this study was to investigate relationships between IPV victimization and the demographic variables of race, age, gender, and household income using race, class, and gender theory as a framework. Logistic regression analyses on data from 3,492 adult male and 3,637 adult female IPV victims obtained from the 2013 National Crime Victimization Survey showed that race was not significantly associated with IPV, while age, gender, and household income were significantly associated. Respondents 65 years or older reported less victimization and men were 2.09 times at lower odds to experience IPV than women. Respondents in the household income category of less than $7,500 were 1.62 times at higher odds to experience IPV than were those in the $75,000 or greater income category. Positive social change could result from an increased awareness of circumstances related to IPV victimization so public health practitioners can work to reduce its incidence impacting individuals, families, and communities.

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Dedication

First, I must give all the praise to my Heavenly Father and His Precious Son, Jesus Christ, who without His mercy and grace to extend my life for completing this breakthrough in my life; I would never have made it through.

To my wonderful children, Johann, Emanuel, Erika, and Erik, and my awesome grandchildren, I dedicate this masterpiece. I am extremely proud and grateful that I have all of you in my life. Your love and support for the last 17 years have sustained me to get to this monumental moment in my life. It was lonely at times, and I wondered and prayed that I would get the opportunity to pass through this challenge and find all of you here. Thank you all for the love!

To my beautiful mother, the late Barbara Randolph Vickers, whom my grandmother told me would be so proud of my achievements; I miss her dearly! My beloved grandmother, the late Melba Clyde Randolph, lived to be 93 years of age, believed in my potentials and capacities for reaching new heights in my life, and wanted the best for me; she unfortunately transitioned in May 2015.

To Stephanie Suzette Young, my beloved sister, who always encouraged me to keep going because she understood that I had to bring my truth to the world; she was my Sister Soldier, stronger that many women whom I have met who faced adversity. She transitioned in October 2014.

Because I have lost two of the most important women in my life during this passage, I have to acknowledge that my Aunt Ola Young has become the surrogate mother in the absence of my matriarchs. She has stepped up and sends encouragement

often, by any means necessary, so that I can stay focused and not fall into that space that I go to when I am grieving the loss of two relatives in just over one year.

To my brothers, Carlos Young and Sheldon Vickers, to my sisters, Angela Heard and Katrina Vickers, and their respective families; to my entire extended family; and to all my associates and friends who encouraged me whenever I got impatient, thank you for your quantifiable and unquantifiable help; without your valuable support, this journey would have been difficult to go through!

Lastly, for all the victims who have experienced or will experience intimate partner violence, whether violent or nonviolent rape or simple assault is involved, I know that God hears your cries and I know that someday He will bring the perpetrators to justice. You have nothing to blame yourselves for, and God will exact due punishment and bring peace to the world and salvation to your souls.

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Ultimately, I must acknowledge my colleague, Dr. Amelia Kemp, for guiding me to the understanding of the sacred experiences that have led me to this involvement and commitment to my contribution to social change.

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Chapter 1: Introduction to the Study

Knowledge concerning intimate partner violence (IPV) has evolved over the last several decades with a noticeable increase in awareness. Several large surveys conducted by numerous researchers have provided an overview of the nature of IPV as a public health concern (Dixon and Graham-Kevan, 2011; Renner and Whitney, 2012; Stampfel, Chapman, and Alvarez, 2010). Researchers defined *IPV* as physical or sexual harm against an individual by a current or former partner or spouse (CDC, 2012; Lewis, Milletich, Kelley, and Woody, 2012). Researchers demonstrated that the IPV victim rate among women was 12%, and the rate among men was 11% (Cho, 2012a).

Researchers reviewed data from nearly 250 articles and reported that "approximately 1 in 4 women (23.1%) and 1 in 5 men (19.3%)" were involved in physical IPV (Desmarais, Reeves, Nicholls, Telford, and Fiebert, 2012, p. 141). This data represented a "prevalence estimate of 22.4%", with the articles denoting that most of the incidents were from the United States (Desmarais et al., 2012, p. 141). In addition, researchers noted an increased prevalence among specific races/ethnicities (Stampfel et al., 2010). McCloskey (2007) found that among the intimately victimized, 62% were women while strangers assaulted 64% of the men.

Investigators reported several ill health effects stemming from IPV (Dixon and Graham-Kevan, 2011; Renner and Whitney, 2012; Stampfel et al., 2010). Every minute, 24 people suffer rape, stalking, or physical violence. According to the CDC (2012), IPV accounts for 14 % of all homicides. Abused women also experience psychiatric disorders including post traumatic stress depression (PTSD), suicidal behavior, and substance

abuse (Stampfel et al., 2010). Multiple studies conducted by different researchers indicated several risk factors for IPV, including divorced or single marital status, low-income status, urban living, history of child abuse, substance abuse, stress, marital strife, lack of employment, partner irresponsibility, and depression (Dixon and Graham-Kevan, 2011; Renner and Whitney, 2012). This array of risk factors was reported using various methodologies, definitions, and theoretical approaches (Dixon and Graham-Kevan, 2011; Renner and Whitney, 2012). These risk factors affect the ability to make accurate conclusions regarding the degree of influence each factor has on IPV occurrence, in addition to the multiplicative effects of several risk factors combined. A clear picture of IPV risks and effects is lacking.

Relevant to the subject of IPV, the literature indicated several limitations and shortcomings. One poorly investigated area related to IPV is race. Numerous researchers noted this shortcoming, and limitations existed because of grouping African Americans with other IPV victims and perpetrators (Carrillo, Carrillo, Perez, Salas-Lopez, Natale-Pereira, and Byron, 2011). Additional shortcomings include a focus on IPV rates among African American women as opposed to men.

Researchers found higher IPV rates among African Americans in comparison to other races, and an increased severity of IPV against African American women was reported as well (Stampfel et al., 2010). The limitations regarding the study of IPV and African Americans involved gender bias (Cho, 2012a; Kelly, 2011). Because of limitations in research definitions and variables, the relationship between race and

occurrence of IPV remains unknown, as do the potential reasons for the increased IPV rates among ethnic populations.

Other possible risk factors for IPV include income. Cho (2012a) identified low socioeconomic status (SES) as a risk factor for IPV perpetration among men and women in a large epidemiological survey. Other researchers found that financial hardship among women and dependency on partners for financial support likewise increases the risk of IPV victimization (Golden, Perreira, and Durrance, 2013). Raghavan, Rajah, Gentile, Collado, and Kavanagh (2009) supported this finding among males who were more likely to commit IPV when social and economic support was lacking. Despite these findings, few studies have addressed this independent risk factor in detail or the degree of impact it may have on IPV occurrence. Although there was a link between low SES and IPV perpetration, it was unclear whether low SES influenced IPV victimization.

The effect of gender on IPV occurrence was even more complicated and less understood. The influence of feminist theory on researchers over the years on the design and methodology of studies has created a bias in the literature assuming male perpetration and female victimization (Lawson, 2012). However, researchers reported recent data showing a significant percentage of IPV was bidirectional between genders (Renner and Whitney, 2012). In addition, researchers performing large-scale surveys have shown both men and women have high rates of victimization and perpetration although the types of IPV vary significantly (Cho, 2012a). Further clarification of gender-based issues related to IPV perpetrators and victims is needed for prevention and intervention (Cho, 2012a).

Age is another poorly understood risk factor for IPV occurrence. Li, Wilsnack, Wilsnack, & Kristjanson, (2010) identified that older age groups seem to have a protective advantage regarding IPV occurrence. Other researchers reported both IPV victimization and perpetration decreased as individuals aged, including a reduction in bidirectional IPV (Caetano, Vaeth, and Ramisetty-Mikler, 2008; Lanier and Dietz, 2009, 2012). However, the findings reported in many of these studies may have limitations. Love and Richards (2013), in a qualitative study of adolescents' ages 15 to 19 years, identified IPV in instances of physical abuse and noted that respondents were reluctant to report IPV to adults or authorities. These findings would support under-reporting of IPV by some age groups.

Feminist theory has dominated IPV research. This dominance has resulted in an overabundance of investigation on victimized women with much less information on men as either victims or perpetrators (Campbell, Dworkin, and Cabral, 2009; Dixon and Graham-Kevan, 2011; Hall, Walters, and Basile, 2012; Kelly, 2011; Lawson, 2012). The dominance has persisted despite evidence of high numbers of male IPV victims and the common occurrence of bidirectionality of victimization and perpetration between partners (Cho, 2012a; Lawson, 2012; Renner and Whitney, 2012). In many instances, IPV was limited in its scope of definition, failing to include emotional, psychological, or other coercive factors (Afifi et al., 2009; Cho, 2012b; Hall et al., 2012).

Background Information

In the current study, I sought to clarify the risk of IPV occurrence by examining relationships with demographic variables including race, gender, income, and age. In

examining IPV incidence, I reviewed only IPV victimization. Although IPV perpetration is an important aspect of IPV occurrence, victimization and perpetration variables differ in many respects. Therefore, the current study addressed only IPV victimization to provide more focused information and data.

Researchers have noted that most studies on IPV neglected nongender factors that may be relevant, such as race, income, and education (Carrillo et al., 2011). Age is another risk factor regarding IPV occurrence (Li, Kirby, Sigler, Hwang, Lagory, & Goldenberg, 2010). These shortcomings in the literature support the need to include the variables of, race, age, gender, and income when examining IPV occurrence. Further research was necessary to extend the knowledge regarding factors associated with IPV. Efforts to identify such factors may help to reduce the incidence of IPV and to address underlying problems leading to its occurrence.

Reviewing and analyzing secondary data from an extensive research database (United States Department of Justice [USDOJ], 2014) allowed for consideration of current definitions, common standards for methodologies, and potential risk factors. The purpose was to examine the relationship between gender, race, income, and age and the occurrence of IPV victimization. I examined possible correlations between these independent variables and the dependent variable individually to determine the relationship to IPV.

Although foundations of knowledge exist regarding IPV occurrence, significant unaddressed gaps and inconsistencies involving study design and methodology, theoretical approaches, definitions, and detailed evaluations of relevant independent

variables persist. The potential positive social change resulting from this study involves expanding the current knowledge regarding risks for IPV. The goal of this study was to reduce IPV in the United States and protect potential IPV victims. Examination of these independent variables and their role in increasing IPV victimization risk could provide key insight to assist in improving current prevention efforts and interventions.

Statement of Problem

IPV is a substantial public health problem with a fifth of the U.S. population suffering from its occurrence and effects (CDC, 2012). The costs to society include health care expenditures and reduced productivity. These costs exceed $8 billion annually according to numerous reports (CDC, 2012; Lewis et al., 2012; Stampfel et al., 2010). The risks for IPV occurrence listed in numerous studies vary, and each risk factor has an unknown weight in its overall risk effect (Dixon and Graham-Kevan, 2011; Renner and Whitney, 2012). Moreover, understanding of the influence of risk factors on IPV occurrence is limited (Fusco, 2010). Limitations among known IPV risks and their relationship to IPV occurrence hinder effective prevention, intervention, and deterrence.

The current problems within the IPV literature involve ideological biases, differences in definitions, variations in measurement scales, different contextual evaluations, and a lack of detailed explanations for causation within specific contexts (CDC, 2012; Cho, 2012b; Hall et al., 2012; Lawson, 2012). Clarification of the areas of variation regarding IPV occurrence and various risk factors involved the review and analysis of the National Crime Victimization Survey (NCVS) 2013 data (United States Department of Justice Bureau of Justice Statistics [BJS], 2013). I examined the

relationship between gender, race, income, and age and IPV occurrence using standard definitions and terms, providing information about both genders, including individual and social contexts, and using stable measurement scales.

I focused on IPV victimization rather than perpetration or both. IPV victimization likely has different risk factors than IPV perpetration (Cho, 2012a). I sought to fill existing gaps of knowledge concerning the presence and weight of risk factors in predicting IPV.

Purpose of the Study

The purpose of the current study was to expand the understanding of specific risk factors for IPV victimization occurrence. The risk factors included race, gender, income, and age. Examining the relationship between the independent variables and dependent variable involved the utilization of a secondary database. I reviewed and analyzed data from the U.S. Department of Justice's NCVS 2013 study, which included crime national statistics and 1,696 variables (BJS, 2013; Catalano, 2012). Select variables relevant to gender, income, race, and age were reviewed and analyzed regarding their potential correlation with IPV victimization. The NCVS 2013 is representative of the national population and does not impose gender, race, age, or income biases.

Through assessment and systematic analysis of secondary data collected from the NCVS 2013, I examined associations between potential risk factors and IPV victimization. Analyzing secondary data may improve understanding of risk factors for IPV, which may help direct further research. Findings may provide new insights into the links between potential risks and IPV.

Research Questions and Hypotheses

The research question and hypotheses in this study addressed risk factors for IPV victimization. Assessment of independent risk factors for IPV victimization occurred through secondary data analysis. The independent variables and dependent variable of IPV victimization involved analysis of NCVS 2013 data. This data set provided consistency in the definition of terms, data collection processes, and research methodology while providing a large sample.

Research Question 1 (RQ1): What is the relationship between race and the likelihood of experiencing adult IPV after controlling for marital status and type of attack or threat?

- $H1_0$: No relationship exists between race and IPV.
- $H1_a$: A relationship exists between race and IPV.

RQ2: What is the relationship between age and the likelihood of experiencing adult IPV after controlling for marital status and type of attack or threat?

- $H2_0$: No relationship exists between age and IPV.
- $H2_a$: A relationship exists between age and IPV.

RQ3: What is the relationship between gender and the likelihood of experiencing adult IPV after controlling for marital status and type of attack or threat?

- $H3_0$: No relationship exists between gender and IPV.
- $H3_a$: A relationship exists between gender and IPV.

RQ4: What is the relationship between household income and the likelihood of experiencing adult IPV after controlling for marital status and type of attack or threat?

- $H4_0$: No relationship exists between income and IPV.
- $H4_a$: A relationship exists between income and IPV.

RQ5: What is the relationship between age, race, gender, and income and the likelihood of experiencing adult IPV after controlling for marital status and type of attack or threat?

- $H5_0$: No relationship exists between combined factors of race, age, gender, income,, and IPV after controlling for marital status and type of attack or threat.
- $H5_a$: A relationship exists between combined factors of race, age, gender, income, and IPV after controlling for marital status and type of attack or threat.

Theoretical Framework

As noted by Kelly (2011), throughout the last several decades researchers' outlook and a preexisting history of theories have influenced the study of IPV with significant bias. Before the last two decades, feminist theory dominated research viewpoints. This issue was evident with terminology such as *wife beating*, *wife battering*, and *wife abuse* instead of IPV (Lawson, 2012). In addition, most studies addressed the effects of IPV on women and specifically on women as victims. Feminist theory has continued to dominate the literature despite many longitudinal surveys showing how IPV affects male victims as well as women and that bidirectional IPV affects nearly half of all couples reporting IPV (Renner and Whitney, 2012).

Social context theories dominated the literature and developed out of social strain theory, social disorganization theory, and social benefit theory (Lawson, 2012). Social context theories were the most commonly used theoretical frameworks in studying IPV, with feminist theory being the most prominent. In Chapter 2, I explore these theoretical models in more detail, including their various shortcomings and the bias of feminist theory limiting objective and accurate study of IPV (Kelly, 2011). Social context theories often focus on the individual in specific contexts and fail to consider broader perspectives reflecting the complex nature of social contexts (Hattery and Smith, 2012).

The theoretical framework for this study was race, class, and gender (RCG) theory, a perspective that grew out of feminist theory and is also referred to as multiracial feminism and multicultural feminism (Zinn and Dill, 2012). Several researchers were integral in developing this theory, including Dill and Collins (Hattery and Smith, 2012). Rather than considering feminine gender as the basis of inequality, RCG theory includes other socially structured systems that affect the individual. Each of these systems also affects the perception of contexts, including how gender is experienced (Hattery and Smith, 2012).

RCG theory accounts for multiple dimensions of social organization. Gender is one dimension, as are class, race, culture, and sexuality in the experiences of individuals (Zinn and Dill, 2012). The experience of being female is influenced by race and class. Being impoverished was a commonly accepted perception, with minority races being more likely to be impoverished or have lower incomes. These all reflect overlapping

categories that created socially structured inequalities (Collins, McLaughlin, Higginbotham, Henderson, Tickamyer, MacDonald, and Williams (2009).

The effects of these inequalities and overlapping dimensions include multiple sources of power and privilege as well as sources of oppression. For example, being upper class provides power and privilege, yet it also means exploitation and oppression of other groups (Collins et al., 2009). Researchers have argued that among these structures, race is the most important as it underlies how individuals experience their gender, class, and culture. However, others have argued that class and culture are just as important as race (Collins et al., 2009). RCG theory thus expands feminist theory to include these other variables in explaining how a social phenomenon occurs within a variety of contexts. These contexts place individuals in different social locations, which in turn affect social opportunities (Zinn and Dill, 2012) that can help explain individual behaviors and social phenomena more clearly by accounting for multiple sources of socially constructed inequalities, creating individual and social contexts of experience (Hattery and Smith, 2012).

In evaluating IPV victimization, the use of RCG theory allowed a more comprehensive approach to explaining etiologies and patterns of individual behaviors. Race, class, and gender affect different experiences in society and may have important implications in explaining risks for IPV victimization (Hattery, 2009). Likewise, the age of individuals may not only affect their perception and definition of IPV, but may also interact with race, class, and gender to create unique experiences and outcomes (Hattery, 2009). Rather than exploring IPV victimization from the perspective of feminist theory,

defined as too narrow by some researchers, I used RCG theory to account for differences within gender types (Hattery and Smith, 2012). RCG theory expands social context theories by considering the interplay between dominance and oppression among different structures of inequality (Hattery and Smith, 2012). This aspect of the theory may also help explain IPV victimization more fully.

RCG theory was a suitable framework for examining the relationship between the independent factors of age, class, race, and gender and IPV victimization occurrence. Examining each variable individually allowed a better understanding of the complex system of factors promoting systemic inequalities (Hattery and Smith, 2012 RCG theory has not served as a prominent theoretical framework in this study area to date. Its use could offer insights and perspectives on IPV victimization.

Nature of the Study

The purpose of this quantitative study was to examine the relationship between race, age, income, and gender and IPV victimization using secondary data from the NCVS 2013. Vanderende, Yount, Dynes, and Sibley (2012) stated that IPV studies have included data from the U.S. Census for different groups and different contextual outcomes. According to Taylor, Nair, and Braham (2013), men were found to be perpetrators of IPV in quantitative studies while women were viewed as victims.

This cross-sectional quantitative study included a nonexperimental survey. I conducted a quantitative rather than qualitative study due to the idea that a larger target population was feasible to gather reliable data (Creswell, 2009). I examined the

relationship between race, age, gender, and household income and IPV victimization risk to assess the level of risk for each factor.

The dependent variable was IPV victimization occurrence. Race, age, gender, and household income were independent variables. The statistical analyses involved testing the relationships between the independent variables and the dependent variable separately and collectively. Examining all of the potential risks for IPV victimization was beyond the scope of the study, but examining the association between specific risk factors and IPV was reasonable.

Covariates analyzed in previous studies and that existed in the NCVS 2013 database were as follows: marital status, violent victimization, serious violent victimization such as sexual assault, aggravated assault, simple assault, and weapon use (USDOJ, 2014). I used marital status and type of attack to classify some of the social contexts and understand the type of victimization the individuals have encountered. I examined the type of attack and the use of threats or weapons in attacks, in the final analysis.

Several studies addressed the association between IPV and African American women (Field and Caetano, 2004; Hattery, 2009; Stampfel et al., 2010; Swan and Snow, 2006). However, few researchers examined ethnicity and IPV from the perspective of ethnicity or ethnicity risks including both men and women. Previous IPV surveys involved large populations and addressed gender equally rather than focusing on male perpetration against female victims (Cho, 2012a; Lawson, 2012).

Race was a risk factor for IPV, with higher instances occurring among African Americans and Hispanics (Field and Caetano, 2004). This suggested racial and ethnic variations in IPV may involve cultural influences. Specific IPV rates among races, specific risks related to culture, and unique aspects of IPV character among specific ethnicities were areas where knowledge was limited and warranted further study.

Examining age may reflect not only the frequency of IPV occurrences but also the type of IPV. Some studies indicated that older women more commonly experience emotional and verbal abuse rather than physical violence (Paranjape, Tucker, McKenzie-Mack, Thompson, and Kaslow, 2007). Other studies showed different variations among adolescents concerning the understanding of IPV (Love and Richards, 2013). Interventions targeted at different ages could be appropriate if an association between age and IPV risk is established.

Regarding gender and IPV, most studies involved IPV in which victims were women and perpetrators are men (Hattery, 2009; Paranjape et al., 2007; Renner, 2009). However, some researchers examined both genders as victims and perpetrators (Cho, 2012a; Field and Caetano, 2004). Gender roles remain poorly defined in part due to the influence of ethnicity and other factors on gender roles (Field and Caetano, 2004). Bias within many studies also resulted from feminist theory (Lawson, 2012). As a result, the examination of gender as an independent risk factor in IPV occurrence was necessary.

Socioeconomic status or household income may also increase the risk of IPV. Low income and limited education have been identified as a risk for IPV (Cho, 2012a), and many studies included low-income populations when addressing IPV (Cho and Kim,

2012; Li et al., 2010a). Examination of the relative risk of low income in predicting IPV occurrence was limited. Resource theory suggests that low income can be one of many factors that provoke violence because a lack of income may offer fewer resources for individuals to cope with stressors, which increases the risk of IPV (Lawson, 2012). Quantifying the risk of income issues being a catalyst in IPV occurrence may further assist in understanding and planning interventions.

Definition of Terms

I defined terms according to existing research standards in the literature. Definitions for IPV vary within research studies. To focus on the commonly accepted components of IPV, I used a focused definition that included victimization among individuals of all races, income levels, ages, and that allowed for comparison of this study's findings to other scholarship. Other terms are listed and defined below:

Age: Age was categorized in years according to grouped categories detailed in the data set. These categories began at age 12 years and ranged from (a) 12 to 15 years, (b)16 to 19 years, (c) 20 to 24 years, (d) 25 to 34 years, (e) 35 to 49 years, (f) 50 to 64 years and (g) 65 years and older. Age was measured through self-reported responses by survey participants within the NCVS 2013.

Gender: Gender included (a) male or (b) female through self-reported demographic responses to the NCVS 2013 survey, although the survey uses sex as the variable type (USDOJ, 2014).

Income: The NCVS 2013 survey included 14 yearly household income categories: less than (a) $5,000; (b) $5,000 to $7,500; (c) $7,500 to $9,999; (d) $10,000 to $12,499;

(e) $12,500 to $14,999; (f) $15,000 to $17,499; (g) $17,500 to 19,999; (h) $20,000 to $24,999; (i) $25,000 to $29,999; (j) $30,000 to $34,999; (k) $35,000 to $39,999; (l) $40,000 to $49,999; (m) $50,000 to $74,999; and (n) greater than $75,000 (USDOJ, 2014). These categories were reduced to eight tiers of income levels for this study based on self-reported responses provided by NCVS 2013 survey participants.

IPV: IPV was defined as physical or sexual harm against an individual by a current or former partner or spouse (CDC, 2012; Lewis et al., 2012). Physical aspects of IPV involve the use of physical force causing injury, harm, or death and include a wide variety of actions through simple or aggravated assault (CDC, 2012). Sexual IPV is defined as actions in which physical force is used to engage or attempt to engage a person in a sexual act against his or her will as well as in situations where sexual acts are attempted or committed against a person who is compromised in his or her understanding or ability to act freely (CDC, 2012; Hall et al., 2012). Psychological and emotional IPV, which involves actions or threats of actions through which control or coercion of a partner's behavior is attempted through embarrassment, isolation, harassment or other negatively controlling non-physical efforts, was not included in this analysis (CDC, 2012). Stalking is often included in the category of psychological IPV and was not included (CDC, 2012; Hall et al., 2012). IPV victimization included physical and sexual aspects of abuse only and was measured through self-reported crimes of rape, sexual assault, simple assault, and aggravated assault in the NCVS 2013 survey.

Marital status: The NCVS 2013 survey defined marital status using the following classifications: (a) married, which includes persons in common-law unions and those who

are currently living apart for reasons other than marital discord (e.g., employment and military service); (b) separated or divorced, which includes married persons who are legally separated and those who are not living together because of marital discord; (c) widowed; and (d) never married, which includes persons whose marriages have been annulled and those who are living together and not in a common-law union (USDOJ, 2014). However, for the purpose of this study and as stated in the NCVS 2013 survey, marital status consisted of five categories: (a) never married, (b) married, (c) widowed, (d) divorced, and (e) separated.

Race: Race is defined according to common racial groups in the United States and consists of six categories: (a) White, (b) Black/African American, (c) American Indian/ Alaskan Native, (d) Asian, (e) Native Hawaiian/Other Pacific Islander, and (f) Other (USDOJ, 2014). Race was self-reported by participants in the NCVS 2013 survey

Type of attacks: The NCVS 2013 survey defined types of victimizations as personal or property crimes. It also characterized victimizations as attacks as threats, or use of weapons. For the purpose of this study, type of attack included (a) use of threats, and (b) use of weapons.

Assumptions

The primary assumption of this study was that survey participants would accurately and willingly complete survey questionnaires according to their history and experiences. Barriers to disclosure of IPV exist, but the survey provided anonymity for participants to encourage candid and truthful responses (BJS, 2013). Because risk factor assessment of race, gender, income, and age related to the occurrence of IPV

victimization demands accuracy in survey results of the primary data, this assumption has significant meaning concerning the current study. The assumption of anonymity as a protective factor is common to most research surveys concerning IPV (Dobrow et al., 2008; Rosenfield, 2012). An effective and valid interpretation of the NCVS 2013 data involves using the database and the statistical tools in evaluating specific data. I assumed that the data were accurate for addressing the research questions and hypotheses (see BJS, 2013).

Scope and Delimitations

Significant gaps in the literature exist in the understanding of IPV and the specific contexts and risk factors related to its occurrence. Definitions, theoretical viewpoints, and research designs are varied and offer limited objective data related to these specific issues (Maniglio, 2009). The current study was conducted to establish clarity in both social and individual contexts about IPV risk through a simpler and narrower definition of IPV and objective statistical analysis. I examined data from a secondary source including both genders, a range of ages starting from 12 years, all races, and a wide range of income levels. The reduction of bias resulted from a wide range of self-reported responses in a national survey (Maniglio, 2009).

The general population data assessed in this study included individuals age 12 years and older. Both men and women were included as well as all races and income levels. Thus, the scope of the study involved these factors. The scope was also limited to the survey respondents in the secondary database, which reflected a large pool of Americans sampled through seven interviews over a 3-year period. Data were limited to

IPV victimization crimes occurring in 2013 or earlier and may not reflect more recent trends. The NCVS data included other crimes, as well as other individuals and social factors among participants, but these variables were not included in this study.

Limitations

Limitations included internal aspects relevant to the data collected in the parent study. The validity of measurement tools used in primary data collection for examining IPV was weighed against varying definitions of IPV as previously noted. Although some measurement tools used in prior research were shown to be valid, their validity resided primarily in physical and sexual aspects of IPV (Hall et al., 2012). Psychological IPV measurement tools exist, but more recent aspects of IPV such as stalking are not included in many measures of IPV assessment and have yet to be validated (Hall et al., 2012). Researchers have argued about guaranteed greater validity and reliability of results through use of a narrower definition of IPV (Hall et al., 2012).

The database used in this study included data from interviews and surveys to examine IPV victimization and related variables as part of a larger criminal data and statistics collection process. Database definitions of IPV were limited to physical and sexual aspects of IPV defined as rape, sexual assault, simple assault, and aggravated assault by an intimate partner (BJS. 2013). These levels narrowed the definition of IPV for this study by eliminating the other categories of violent crimes and serious violent crimes. The purposes was for reliability, validity, and generalizability; however, the inability to capture all types of IPV occurrences limited data analysis and study results.

The use of large-scale randomized sampling in the primary data collection presented limitations. For example, data collection involved household interviews rather than individual interviews, possibly resulting in an underreporting of crimes. Likewise, failure to conduct survey interviews on inmates in correctional facilities or among Armed Forces personnel presented limitations (BJS, 2013).

Another limitation was the complexity of IPV and the potential for multiple confounding variables affecting IPV occurrence (Dixon and Graham-Kevan, 2011). Eliminating all possible or associated risk factors influencing IPV occurrence remains a challenge. By analyzing data with a large sample through statistical analysis, there was a reduction of the interference of other variables (Hattery, 2009), especially since there were nearly two thousand variables available I attempted to control for familiar covariates referenced in prior studies utilizing the NCVS (see Baumer and Lauritsen, 2010; Lauritsen and Hiemer, 2012; USDOJ, 2014; Yun and Lee, 2014).) Similarly, the application of RCG theory may allow a broader view of interaction among variables (Hattery, 2009).

Study limitations included potential biases that may have skewed the data. Development of traditional measures of IPV assessment through questionnaires involved feminist theory (Kelly, 2011; Lawson, 2012). Those questionnaires often injected gender biases into IPV assessments while excluding relevant issues that did not pertain to gender.

Data came from the Bureau of Justice Statistics, a criminally focused investigative research organization (BJS, 2013). A focus on criminal justice rather than on other

disciplines such as sociology and psychology may have influenced interview techniques and imposed a degree of bias. NCVS 2013 authors noted that the reliability and validity of the current instrument were comparable to other typical large-scale database surveys (Cantor and Lynch, 2005). Changes in the NCVS in the late 1990s caused no decline in reliability and validity of the test except for the category of simple assault and the factors of income and age of the victim (Cantor and Lynch, 2005). However, the possibility of reduced validity and reliability concerning NCVS variables of age and income existed in the final analysis.

Significance

The economic effects of IPV include over eight billion dollars in direct losses and lost productivity annually (Stampfel et al., 2010). Research that promotes a better understanding of the risks of IPV and provides directions leading to effective interventions has potential to influence significant change. If such links are established, subsequent investigations addressing why these independent variables increased risks for IPV can be pursued. Results may be used to develop public health policies and direct future research. Furthermore, greater objectivity in studying IPV as a public health issue can be gained through the reduction in theoretical bias.

The significance of this study regarding professional application is based on its ability to identify specific contextual risks for IPV victimization so that health and public officials may design better strategies, efforts, and policies to reduce IPV incidence. Also, this study may provide more detailed knowledge of these variables in their independent and cumulative risks so that social policy and preventative efforts may be pursued against

IPV occurrence. Findings may promote a more focused direction for quantitative and qualitative studies.

The significance of this study concerning potential social change relates to efforts to identify risk factors for IPV victimization directed toward the development of social policies. This evolution may help change individual and social behaviors that promote inequality and oppression and encourage victimization. IPV is costly to individuals and society (Stampfel et al., 2010). Therefore, research that examines risk factors offers the potential to change behaviors through enhanced knowledge. Findings may positively influence individual and social behaviors to reduce IPV and enhance quality of life and health of humanity.

Summary

Intimate partner violence is a well-recognized public health issue that affects individuals as well as society. In recent decades, numerous research investigations have identified potential risk factors for IPV occurrence (Kelly, 2011; Lawson, 2012). However, social context theories, specifically feminist theory, have limited the scope of study by focusing on female victimization and male perpetration of IPV (Campbell et al., 2008; Dixon and Graham-Kevan, 2011; Hall et al., 2012; Kelly, 2011; Lawson, 2012). Gender bias in research has continued despite several large population surveys suggesting gender equality in IPV occurrence, IPV victimization, and IPV perpetration (Cho, 2012a; Kelly, 2011). Variations in IPV definitions and research methodologies also persist, and as a result many gaps exist in knowledge of IPV factors and prevalence. Theoretical and

methodological differences in the research could limit effective prevention and intervention (Hall et al., 2012; Kelly, 2011; Lawson, 2012).

The goal of this study was to develop greater understanding of specific risk factors related to IPV victimization. Through a theoretical framework that consisted of both social and individual contextual factors, a more accurate assessment of IPV risk was pursued. Using RCG theory as a framework for study, I examined the effects of race, income, gender and age on IPV victimization using statistical analysis of secondary data from the NCVS 2013.

Race, gender, income, and age data were examined independently and cumulatively as they related to IPV victimization occurrence. Future research may target effective prevention and interventions based on findings from the current study. In addition, the theoretical approach used in this study may provide new insights about risk factors and prevention. Study findings may be used to enhance health and social policy and provide positive social change through strategies of reducing IPV. Through a clearer understanding of race, age, gender, income, as risk factors for IPV victimization, social resources may be used more effectively to change individual and social behaviors to reduce IPV incidence.

Chapter 2: Literature Review

Introduction

At least 1,200 women die each year from IPV, 12 million people have been IPV victims, and at least 600,000 men experienced injuries (Black and Breiding, 2008). According to Breiding, Chen, and Black (2014), 2.7% of women and 2.0% of men surveyed as part of a CDC study concerning IPV had suffered occurrences within the 12 months before data collection. Victims of IPV often presented in different clinical settings such as obstetrics and family practice with multiple mental, physical, and medical issues (Black and Breiding, 2011).

A considerable amount of literature exists regarding IPV, though theoretical models, measurement scales, and research methodologies vary considerably in their approach to IPV (Portwood and Heany, 2007). Predominant theories follow a social context perspective, but these are often too broad to provide useful insights. Individual aspects of behavior related to psychology, social sciences, and criminal justice omitted social theories at times (Barner and Carney, 2011; Lawson, 2012).

There have been conflicting findings regarding IPV occurrence rates, gender aspects, risk factors, and effective interventions in prior studies. Barner and Carney (2011) reviewed IPV from a historical perspective and presented how interventions and social programs have evolved over time. The current opinions of researchers offer a criminal justice viewpoint and intercessions, as well as a psychotherapeutic tradition with race and gender often at the forefront of issues (Barner and Carney, 2011). Barner and Carney argued that biases tainted the community approach to IPV, and objective

assessment of risk factors is lacking. In the current study, I sought to examine the association between IPV victimization and the variables of race, age, gender, and income, to extend the knowledge of risk factors and direct future research and interventions.

The literature addressing IPV indicated that people of African American ethnicity are at greater risk of IPV occurrence (Campbell et al., 2008; Field and Caetano, 2004; Whitaker and Reese, 2007). However, Whitaker and Reese (2007) argued that ethnic risk studies were limited. Typically, educational and economic factors contaminate the findings associating African American ethnicity with increased IPV risk (Hattery, 2009). Most researchers examining African American ethnicity and IPV focused on women and failed to include men (Grange, Brubaker and Corneille, 2011; Hattery, 2009; Paranjape et al., 2007; Swan and Snow, 2006). There has not been adequate research addressing how ethnicity and IPV victimization are connected.

Several shortcomings in the literature exist in accurately describing the link between ethnicity and IPV. Barner and Carney (2011) stated that most of the minority population data came from individuals presenting to various community shelters born out of the women's movement and legal precedence. These facilities arose out of the interventions related to the SES of primarily White populations (Barner and Carney, 2011; Taft, Bryant-Davis, Woodward, Tillman, and Torres, 2009). Ethnicity was never the primary focus for directing such interventions.

Studies involving age and income within IPV victimization are less numerous than those involving ethnicity and gender. Some researchers reported that older age increased the incidence of IPV occurrence while other researchers found older age as

protective against IPV (Caetano et al., 2008). Researchers suggested that age affects the perception of IPV as adolescents may view some forms of IPV as insignificant compared to adults (Love and Richards, 2013). Studies addressing income are likewise limited. Researchers demonstrated that economic hardship and financial dependency on a partner increases the risk of IPV victimization (Golden et al., 2013). However, there has been no extensive exploration of age or income as independent risk factors for IPV occurrence (Golden et al., 2013).

Despite differences in IPV definitions and study methodologies, researchers have listed each of the independent variables of age, income, race, and gender as affecting the occurrence of IPV (Campbell et al., 2002; Hattery, 2009; Swan and Snow, 2006). However, the researchers who supported these conclusions failed to quantify the degree of risk each variable carries in IPV victimization. Hattery (2009) explained that there were inadequate evaluations of the combined effects of these variables. The interaction between age, race, gender, and income not only demonstrates the importance of individual and social contexts in studying IPV, but it also suggests isolating single risk factors may be too simplistic. Hattery and Smith (2009) argued that the complex interaction of social and individual structures on experiences and subsequent behaviors like IPV may be more relevant. Investigating this interaction of variables likely holds promise in identifying effective strategies for IPV prevention and intervention.

Researchers have identified age, race, income, and gender as risk factors for IPV in different studies. Campbell et al. (2002) listed IPV risk factors for women's' victimization as African American, low income, and youth. Although identification of

these factors was relevant, the relative risk for each related to IPV victimization and the cumulative risk of all of these have yet to be established (Hattery, 2009; Swan and Snow, 2006). Theoretical frameworks that include feminist theory or social context theories do not allow interpretation of this interaction of variables from dominance and oppression views of societal structures (Collins et al., 2009). This study included variables within a framework of RCG theory to allow comprehensive assessments of the independent variables and evaluation of independent and cumulative risks.

The current study included secondary data analysis addressing the association between independent variables of age, race, gender, and income and IPV victimization within a framework of RCG theory. The purpose of the study was to assess individual risks between variables and IPV victimization and the cumulative risk of all independent variables. Analyzing findings using RCG theory provided new information and insights regarding IPV risks, preventions, and interventions. Findings may have professional applications in health care and social policy in reducing IPV occurrence.

Literature Search Strategy

In the following sections, I explain details of the literature search including descriptions of prevailing theories regarding IPV strengths and shortcomings. I also discuss definitions and conceptual foundations regarding IPV and other variables including race, age, gender, and household income. I provide a detailed synthesis of the current literature and a summary of where the current research stands regarding IPV.

I accessed numerous databases to perform a comprehensive review of the existing literature concerning the subject of investigation. Academic and scholarly articles were

the most reliable and provided a synopsis of the present state of understanding concerning IPV. The literature review included articles from recent dissertations, peer-reviewed journals, and other scholarly resources due to constant changes in the academic and research views concerning IPV, gender, race, income, and age-related associations with IPV. Most publication dates were within the past 7 years. I included some articles with earlier publication dates exists for additional information that contributed to a better understanding of IPV.

Search terms varied to ensure different aspects of the subject relevant to the scope of this research endeavor. Primary search terms included *IPV domestic violence*, *family violence*, *re-victimization*, *ethnic minorities*, *African American minorities*, *IPV theories*, *risks for IPV*, *African American culture*, *ethnicity*, *race*, *age factors*, *marital status*, *educational level*, *socioeconomic class*, *socioeconomic status*, *gender issues*, *gender symmetry*, *sexual risk behavior*, *stalking*, *public health*, *IPV prevention*, and *IPV treatment*. I also used combinations of these terms. I selected a mixture of articles including literature reviews, primary research, and academic presentations.

Databases accessed included EBSCO (Academic Search Premier), SAGE, ELSEVIER, ProQuest, and Pub Med/NBCI. I also used the Google Scholar search engine. Numerous journals were represented in these databases, covering academic fields that included public health, sociology, psychology, medicine, psychiatry, and others. Articles from 26 different academic peer-reviewed journals, along with one dissertation, and an array of book publications were analyzed. Peer-reviewed journals included the *Journal of Interpersonal Violence, Journal of Family Violence*, and *Violence Against*

Women. Based on the number of journals, books, and articles examined, and the consistency of findings and shortcomings, the literature review reflected a current and comprehensive evaluation of the subject matter and related theories.

Theoretical Framework

As a primary consideration regarding IPV and public health, theoretical foundations were important in understanding, conducting, presenting and interpreting research. Major dichotomies exist between psychological theories, which focus on individual reasons for behavior, and sociological theories, which identify the social context as being the primary force for human behavior (Ali and Naylor, 2013a, 2013b; Bell and Naugle, 2008). Researchers argued that a need exists for a more comprehensive theoretical approach to IPV because the condition is complex and affected by multiple variables (Ali and Naylor, 2013a, 2013b; Bell and Naugle, 2008; Campbell et al., 2008). Campbell et al. (2008) suggested exploration into the aspects of individual factors, assault characteristics, microsystems, exosystems, macrosystems, and chronosystems.

Sociological theories regarding IPV today have evolved from one of three basic sociological perspectives. The first of these includes the strain theory, which holds that social structures naturally create conflicts within society. As a result, IPV is a means by which these inherent conflicts may be resolved (Lawson, 2012). Secondly, some ascribe to benefit theories that essentially weigh the advantages and costs of violence within a social construct. As costs decline and benefits increase, violence becomes a more likely behavior (Lawson, 2012). Finally, social disorganization theory describes physical factors in social networks that favor violence through the assignment of specific values and

norms to its use and occurrence (Lawson, 2012). These three sociological concepts are commonly in either isolation or combination in current IPV theories in the literature.

The accurate review and understanding of social contexts allow opportunities to alter undesirable behaviors toward more desirable ones. Social context theories regarding IPV fall into two major categories: Feminist Theory and Family Violence Theories (Lawson, 2012; Ali and Naylor (2013b). Family Violence Theories breaks down into subcategories and different perspectives, which includes Systems Theory, Nested Ecological Theory, Social Control Theory, and Resource Theory (Lawson, 2012). Despite nuances to each, all of these focus on the social context surrounding IPV to explain why it occurs and which interventions may be relevant to effective interventions.

Much of the literature approaches IPV from the perspective of a gender framework utilizing Feminist Theory. Feminist Theory is, in fact, a social context theory and perceives the issue of IPV stemming from one of gender inequality and asymmetry in society (Lawson, 2012). Feminist Theory thus sees society as unequal due to longstanding patriarchy, and this naturally predisposes women toward victimization in IPV situations (McHugh, Livingston and Ford, 2005). However, numerous authors have reported survey results demonstrating greater gender equality regarding both IPV perpetration and victimization (Dixon and Graham-Kevan, 2011; Lawson, 2012).

Feminist Theory discounts these results stating that any degree of female violence in relationships reflects acts of self-defense. The basis for the Feminist Theory views consists multiple interviews and reports from law enforcement, victims, and health professionals (Lawson, 2012 Ali and Naylor (2013b). In addition to survey results,

female IPV perpetration in lesbian relations also discounts Feminist Theory (Dixon and Graham-Kevan, 2011). Messinger specifically noted gay women have higher perpetration rates than heterosexual men (2011). These recent findings demonstrate much of the flawed conclusions theoretically identified through a Feminist Theory approach.

Family Violence Theories have some similarities and some differences in comparison to Feminist Theory. Both are social context theories, and both perceive external influences as important in evoking violent behaviors. However, Family Violence Theories perceive IPV as being gender neutral and symmetric. Instead of gender being the relevant context, social structures are more important (Lawson, 2012). Within this category, Systems Theory describes the occurrence of violence because of feedback from existing behaviors. Behaviors that reinforce or fail to deter the use of violence encourage its presence (Lawson, 2012).

Similarly, Social Control Theory suggests violence occurs because its rewards exceed its potential penalties or costs (Lawson, 2012; Dixon and Graham-Kevan, 2011). Resource Theory sees violence as a resource in resolving conflicts; and when other resources are not available, results in violence (Lawson, 2012). Nested Ecological Theory is the only social context theory that considers the microenvironment of the individual and ontogenetic factors in the occurrence of IPV while also considering macro-environmental factors (Dixon and Graham-Kevan, 2011).

The previously mentioned social ecological theories, however, examined biogenetic factors of the individual as well as their demographic information. Campbell et al., explained the consideration given to social theories combined with family and

friend influences, interaction with community services; interactions in society; and factors unique to the IPV event in explaining causation (Campbell et al., 2008). Due to the complex nature of IPV, this approach makes logical sense. Determining the relative risks of various factors at each level of sociological perspectives could enable increased understanding as well as facilitate interventions to be more thorough and comprehensive.

Based on the theoretical review concerning IPV, objectivity can best be served by keeping an open mind in regards to social contexts while considering individual factors as well (Ali and Naylor (2013a); Ali and Naylor (2013b). Having the status of accepting greater gender symmetry in IPV occurrence enables a fresh perspective in examining triggers from other social contexts. Likewise, allowing a narrower assessment of individual responses to experiences, cultural pressures and subtypes of IPV permits a more comprehensive understanding of human behavior (Campbell, Dworkin, and Cabral, 2009). To the same extent, violence against an individual may affect self-efficacy and result in behaviors promoting future victimization (Hovsepian et al., 2010). Campbell et al. (2009) utilized the theoretical framework of Bronfenbrenner's Social Ecological Theory that offered a way to examine IPV from a wider lens and perspective.

However, in determining the theoretical framework for this study, the proposal was that the race, class, and gender (RCG) framework was a possible theoretical model (Hattery, 2009). RCG Theory represents an extension of Feminist Theory in that it considers other systems of inequality in society that influences human behaviors and choices. Each of these variables represents structures that provide forces of domination or oppression in opportunities (Hattery and Smith, 2012). At the same time, Researchers

suggested that the oppression of feminine gender by male gender systems exist in patriarchal societies (Hattery and Smith, 2012; Zinn and Dill, 2012). Similarly, minority races are subject to domination by majority races. Moreover, higher socioeconomic classes enjoy greater opportunities than lower income levels. Therefore, RCG Theory provides a perspective, which considers multiple systems and relational structures between dominance and subordination (Zinn and Dill, 2012).

RCG Theory not only extends perspectives beyond gender-based inequalities but also considers interactions among these structures in assessing individual experiences and choices. For instance, while female gender may affect how a person views their personal experiences, being an African American also influences the perception of femininity (Hattery and Smith, 2012). Low SES experiences among individuals are not the same and can differ depending on whether one is a racial minority or a male of female gender (Collins et al., 2009). Unlike other social context theories, which may consider micro and macro environments as well as individual factors, RCG Theory takes this a step further and allows a way to examine these multiple structures in combination. How these structures combine to alter experiences can determine individual experience, perspective and behavior (Collins et al., 2009). Concerning IPV, RCG Theory offers a more in-depth and comprehensive means by which variables contribute to the risk of occurrence.

Using the RCG Theory may be important to help determine how best to examine the interrelations between the variety of independent variables and IPV occurrence (Hattery, 2009). Hattery also explained that the race, class, and gender framework relates to studies conducted about child rearing, the socioeconomic status of African Americans

as a vulnerable population, as well as the issues of forms of oppression which leads to IPV (2009).

In turn, this research can guide future research efficiently while moving toward better methods of measurement, assessment, prevention and treatment. In assessing the association of race, age, gender and income with IPV victimization from the RCG Theory perspective, combinations of social contexts and individualistic factors take into consideration a more comprehensive theoretical standpoint. By studying these variables from an integrative and objective theoretical viewpoint, it was possible to gain greater insights in an area currently limited by prior theoretical constraints.

Reviewing current topics concerning IPV allowed for understanding the basis of knowledge and identification of limitations and shortcomings of the literature. This information was useful in guiding future research and methodologies. Examining demographics, risk factors, effects, social contexts and individual experiences for IPV, in addition to current working definitions, theories, scales, and methodologies provided insight. Presenting this information in correlated subject sections was relevant to the study. Summarizing literature related to IPV in general, along with current understandings of age, race, and gender as these relate to IPV victimization and occurrence was important. Lastly, synthesizing the information while assessing current limitations and shortcomings within the IPV literature allowed for insight. In doing so, it was easier to ascertain a clear perspective of the prevalent contingency of knowledge regarding IPV.

Literature Review Related to Key Variables and Concepts

Despite statistics reporting a range of occurrence rates of IPV among individuals, researchers agree that IPV presents a serious public health concern in the U.S. and other countries (Fusco, 2010; Hall et al., 2012; Renner, 2009). Cho (2012a) discussed that 11 percent of men and 12 percent of women were victims of IPV. Renner, in a study examining IPV in 1,153 low-income women, found the lifetime risk of IPV was between 40 and 60 percent while the annual rate was between 20 and 30 percent over recent years (2009). Estimated costs from the occurrence of IPV, which includes the direct costs of injury, healthcare and indirect costs from lost productivity, range between $5.8 billion and $8.2 billion annually (Stampfel et al., 2010).

IPV Risks and Effects

The risk of being either a victim or perpetrator in IPV varies considerably among different reports. Dixon and Graham-Kevan (2011) performed a literature review and found IPV risks to include marital discourse, history of emotional abuse, history of IPV, substance abuse, prior forced sex, stress, depression and traditional ideologies as risk factors. Renner and Whitney (2012) in a longitudinal study involving 10,187 young adults found IPV risks to be childhood neglect, child sexual abuse, child physical abuse, low self-esteem, suicidal ideations, and living with a significant other. Inconsistencies in definitions, methodologies, measurements and populations have accounted for the broad spectrum of risks associated with IPV (Whitaker and Reese, 2007). The only common risks accepted by most researchers as a consensus include low income, low education,

and unemployment (Cho, 2012a). These fail to provide a detailed risk representation of a very complex health problem.

Reports showed many health sequelae from IPV among individuals. In addition to direct injuries, other physical effects can include peptic ulcer disease, gynecologic pain, arthritis, back pain, migraines and insomnia (Stampfel et al., 2010). Psychiatric sequelae notably included Post-Traumatic Stress Disorder (PTSD), depression, anxiety disorder, and suicidal ideations (Cavanaugh, et al., 2012; Verduin, Engelhard, Rutayisire, Stronks, and Scholte, 2013). Equally, alcohol and substance abuse were commonly associated with IPV as both risks and effects (Cavanaugh et al., 2010). Numerous effects from IPV have been described but poorly linked to specific types of IPV experiences and other factors

IPV and Race

According to some researchers, there was limited documentation of the risk of IPV among different ethnicities or races in the literature (Ackerman and Love, 2014). The National Violence against Women Survey (NVAWS) supported higher rates of IPV occurrence and increased the severity of IPV specifically among African American women (Stampfel et al., 2010). Swan and Snow also reported an increase in IPV reporting among African American women but explained that cultural factors are in place that discourages reporting that could affect quantitative results (2006).

The racially based risk for higher IPV occurrence findings from Field and Caetano stated that male-to-female, as well as female-to-male IPV for African Americans, were 2 to 2.7 times higher than Caucasians (2004). Taft and coworkers

similarly reported African American women had higher IPV victimization rates than Whites (2008). Hattery also supported that the risk for IPV victimization was greater for African American women (2009). Based on these repeated results, it would appear African American ethnicity, at least for women, increases the risk of IPV.

West examined the literature concerning all types of violence among African American women which not only included IPV but, also childhood sexual abuse, dating violence, sexual assault and harassment (2002). The review found African American ethnicity to be a specific risk factor for IPV (West, 2002). However, specific aspects of being African American have yet to delineate which features impose higher IPV risk. In addition to economic and educational factors, longstanding racism and discrimination, mistrust of law enforcement, and diminished access to health services may be significant (Whitaker and Reese, 2007).

Within the African American culture, the perception of women is that they are vigorous and invulnerable matriarchs. Reporting IPV may undermine these roles or reinforce stereotyped dysfunctions among African American couples in society (Swan and Snow, 2006). Paranjape and colleagues (2007) also noted among older African American women suffering IPV, emotional abuse and financial abuse was more common than physical violence. Much of the literature fails to explore these areas of IPV adequately among African American couples specifically. Campbell and colleagues (2002) noted that specific issues that may be relevant to IPV among African American couples included sexual jealousy, lack of income by a partner, and lack of perceived empathy by a partner.

Overall, the literature regarding IPV and African Americans is quite diverse, focuses predominantly on African American women, fails to distinguish between specific IPV risks, and neglects specific cultural factors that may be relevant. Conducting secondary data analysis allowed for better clarification of ethnicity and race as risk factors for IPV victimization, in isolation and as related to other variables. This review of the data addressed African American women, genders, all races, and varied levels of income and age.

The current literature poorly distinguishes ethnicity from socioeconomic status to IPV risk. African Americans on average have fewer economic and educational opportunities compared to Whites (Hattery, 2009). Hinze, Lin, and Anderson conducted a stratified analysis of over 3,000 adults and found that African American women with less than a high school education had lower self-rated health status in general (2011). The authors felt strongly that ethnicity, as well as gender and education levels, were important in assessing health risks (Hinze et al., 2011).

Separating these social contexts from ethnicity alone is difficult. For example, African American men who are unable to earn a living, gain employment, or support their family have higher rates of IPV perpetration (Hattery, 2009). The effects of race, gender and class are multiplicative with IPV rather than additive, and successfully isolating one from the other in current literature was lacking (Hattery, 2009). Through the present study's efforts, both individual and multiplicative risks of race, gender and income for IPV victimization were evaluated to address these current literature shortcomings.

Clearly, the bulk of the literature between race and IPV has involved African American women. Extensive surveys such as the National Violence against Women Survey (Tjaden and Thoennes, 2000), a survey involving 16,000 men and women, have included more diverse information concerning ethnicity as well as gender in assessing IPV risk when compared to smaller studies. To the same degree, researchers presented that Native American women are more likely to be raped or stalked while Native American men are more apt to be physically assaulted (Tjaden and Thoennes, 2000). Furthermore, the survey showed Hispanic women were less likely than other races to report rape (Tjaden and Thoennes, 2000).

These findings reveal critical data that suggest underlying cultural and ethnic effects on IPV occurrence. The effect of race on community violence and social influences was shown to vary among different races (Raghavan et al., 2009). While these statistics are helpful in delineating trends, assessing specific risks among the various ethnicities for IPV occurrence is important as is identifying specific causative factors related to these risks. The investigation of the issue involved thorough research efforts in this study through the examination of all ethnicities with IPV victimization.

In addition to the risk of occurrence of IPV among different races, the response and sequelae from IPV may also differ in different racial groups. Hirth and Berenson reported that White women have higher rates of depression and post-traumatic stress disorder due to trauma when compared to other races (2012). Despite this, minority populations in intervention programs designed to help IPV victims are over-represented

(Barner and Carney, 2011). These services are not culturally sensitive which results in poor outcomes for both prevention and intervention (Barner and Carney, 2011).

Cho and Kim (2012) noted that among all ethnic groups, Asian groups had the most positive perceptions of mental health clinic services for IPV. These pieces of data provide fragmented information regarding the risk of race and IPV occurrence indicating a need for more detailed information. Once again, addressing this gap in the literature through research efforts in this study involved assessing all racial categories with IPV victimization risk through secondary data review.

IPV and Age

Among the variables considered thus far, literature investigating the relationship between age and IPV occurrence is perhaps the most limited. Studies have examined the occurrence between IPV and different age groups (Caetano et al., 2008; Li et al., 2010a; and Love and Richards, 2013). Some studies have also examined childhood events, which are age-related and result in IPV risks as adults (Roberts et al., 2010). However, no researchers have examined age-specific interventions other than addressing prevention of risk factors. Age as a risk factor for IPV thus appears to be under-evaluated in comparison to other individual contexts.

From a childhood perspective, some researchers have examined effects during childhood and adolescence, which are in respect to the current study. In an extensive study conducted by Roberts and colleagues involving nearly 15,000 subjects, 4 percent of men reported violence toward their intimate partners (2010). The data assessment showed significance according to whether these men had or had not witnessed violence as a child

and compared this information with those who had not perpetrated violence. Researchers presented results that demonstrated 2.6 times the relative higher risk for IPV occurrence among men who had witnessed violence during childhood (Roberts et al., 2010). The study that Roberts and his colleagues conducted was noteworthy because data for men in both groups matched other variables and because behavioral effects during childhood begin to mold IPV risk (2010). This, of course, has both preventative and interventional significance.

Love and Richards examined a group of 25 adolescents who were between the ages of 15 and 19 years for understanding perspectives about IPV from this age group (2013). Through a qualitative, open-ended format survey, the researchers demonstrated that adolescents viewed only physical acts as components of IPV. Additionally, teenagers were less likely to report IPV events to adults and tended avoid utilizing traditional measures of IPV prevention or intervention (Love and Richards, 2013). Though the group was primarily African American, the researchers presented how diverse age groups define IPV and behave differently to IPV events (Love and Richards, 2013). Such studies highlight how age influences IPV perspectives and support continued investigations.

Aging seems to provide some protective effects for individuals against IPV occurrence. Li and researchers in a study involving nearly 3,000 pregnant women followed individuals for four years (2010). Two key findings that reduced the risk of IPV were a greater sense of self-mastery (which occurs more commonly with aging), and an older age of initiating vaginal intercourse (Li et al., 2010a). Caetano and colleagues found similar results in research involving men and women (2008). The researchers concluded

that older individuals were less likely to be IPV victims or perpetrators, and less inclined to be involved in mutual IPV (Caetano et al., 2008).

Based on these studies, it would seem that throughout the age spectrum individuals' perception of IPV and their risk for IPV occurrence changes. However, the data in this area is limited, particularly concerning causation and intervention responses. Defining relative risk for IPV according to age would assist in allocating resources for optimal utilization while demonstrating possible varying factors of age-related causes. By examining age as an independent variable as respects to IPV victimization through secondary data analysis, efforts in the current study could help elucidate the relationship between age and IPV occurrence

IPV and Gender

Historically, much of the literature focused on women as victims in IPV situations. Feminist Theory views dominated the research. As a result, Lawson (2012) presented that terms such as wife beating and wife battering were initial conditions that skewed gender perspectives on this issue. Several surveys and some interview studies involving same-sex couples have challenged the conventional views of men as perpetrators and women as victims (Cho, 2012a; Lawson, 2012). In defense of this, supporters of Feminist Theory state direct interviews with law enforcement officials, women suffering IPV and caseworkers conflict with such survey findings. Lawson argued that the Feminist Theory hold that any suggestion of IPV perpetration on the part of women accounted for a need for self-defense (Lawson, 2012).

Despite those findings, Cho (2012b), in the Collaborative Psychiatric Epidemiological Survey of IPV Perpetrators, examining 1,058 men and 1,132 women, found prevalence, frequency, and severity of IPV varied little between genders. In fact, the research conducted by Cho (2012b) showed that women perpetrated IPV more commonly than men and initiate arguments twice as often. Renner and Whitney (2012), in another large longitudinal study of young adults, noted 47 percent of all IPV cases were bidirectional between men and women. Evidence to support male dominance in perpetration or female dominance in victimization has not been overwhelming.

Researchers have examined the issue from a different gender perspective. Messinger took data from the National Violence against Women Survey (NVAWS) involving 14,182 individuals and performed regression analyses for women in same-sex relations and bisexual relations (2011). Messinger stated the results from the NVAW Study demonstrated same-sex relationships had a high occurrence of IPV among women and involved verbal abuse, controlling behaviors, physical abuse and sexual abuse (2011). In addition, bisexual women had the highest rate of victimization for IPV among any of the participants, and gay women overall had higher IPV perpetration rates compared to heterosexual men (Messinger, 2011). These results raise questions about the degree of male dominance in IPV perpetration and gender symmetry.

Some of the discrepancies regarding gender perspectives and IPV arise from failure to delineate the types of IPV in question and from reporting variations. Dixon and Graham-Kevan reviewed the literature and found that while women were more likely to use physical aggression than men, women were also more likely to suffer an injury

during IPV (2011). Depending on the reporting of IPV, these trends could skew data. Men may also be less likely to report IPV victimization due to socialization factors compared to women (Afifi et al., 2009). In order to understand these issues within the current studies, open perspectives that consider dual victimization and perpetration for both genders provide the opportunity for objective facts without bias (Dixon and Graham-Kevan, 2011).

Gender perspectives are a mechanism by which IPV variance may occur between men and women (Saewyc et al., 2009). Golden and colleagues, in an assessment of 1,886 urban mothers, found that mothers with traditional gender beliefs concerning maternal and paternal roles were more likely to suffer IPV victimization (2013). The severity of IPV may be another factor related to gender. In a study examining 42,744 military individuals in service, both men and women participated as recurring IPV perpetrators. However, while men more commonly caused clinically significant IPV, women more common perpetrated emotional abuse and all categories of IPV combined (Foran, Slep and Heyman, 2011). These findings support that individual and social context factors may play a role concerning gender and IPV.

Social learning theorists have suggested that men may learn IPV as a standard male pattern of behavior from child activities. Contreras and colleagues, as part of the International Men and Gender Equality Survey (IMAGES), suggested that violence witnessed by male children resulted in learned behavior as a means to resolve conflicts while justifying the use of violence (2011). Similarly, when paternal figures are seen committing IPV, this behavior may be correlated with maleness in general (Contreras et

al., 2011). Indeed, this effect may be more important in some cultures than others may, but the literature does not delineate this information well.

Researchers have reviewed studies and have suggested gender is not as significant as others would propose. Prospero and Kim studied 676 male and female university students and examined for the occurrence of IPV and coercive victimization (2009). Prospero and Kim assessed mental health sequelae from IPV regarding depression, anxiety, hostility, and somatization (2009). The researchers reported that while men had higher rates of both perpetration and victimization than women did, mutual violence between genders was most common (Prospero and Kim, 2009). Besides, both genders suffered mental health effects because of reciprocal violence (Prospero and Kim, 2009). The particular risk for gender related to IPV thus remains unclear due to failure to examine objective patterns among different genders, gender-related causes for IPV variance, and respective roles of IPV among men and women, and extrapolation of IPV severity among different genders

IPV and Household Income

Golden, Perreira, and Durrance focused on how victims of IPV can suffer from issues related to household income in their communities and the opportunities afforded to them to allow them to escape IPV (2013). Golden et al. (2013) conducted a study involving nearly 2,000 urban women with young children and assessed the influence of economic hardship, economic dependency on a partner, and neighborhood disadvantage on IPV occurrence. Golden and coworkers demonstrated that all but neighborhood disadvantage significantly increased the rate of IPV with 20 percent of these women

experiencing physical assault, verbal abuse, and coercion (2013). Golden and his colleagues explained that lower economic conditions increase IPV risk, at least among young women (2013).

In examining different factors of income including income from a male perspective, Raghavan and coworkers assessed the effects of community violence and social support networks on male-to-female IPV occurrence (2009). Raghavan and colleagues identified that men who existed within communities higher in violence and who had male networks who participated in violence had higher IPV rates (2009). Other authors have also shown that individuals exposed to non-intimate violence have higher risks for IPV as well (Krebs et al., 2011). This literature supports that community plays a significant role in IPV occurrence rates as do individual factors related to economic and social environments.

Li and colleagues discussed that reducing IPV was a goal of the US Department of Health and Human Services Healthy People 2010 health objective, but they identified that further research is necessary to determine which demographic groups have an increased incidence of IPV occurrence (2010). In their study, they evaluated 2,887 prenatal women in Alabama who presented to public health clinics for care. Most were low-income, African American and eligible for Medicaid, and the IPV prevalence rate was 7.4 percent. Risks for IPV occurrence included stagnant neighborhoods without upward mobility options, women performed most or all of the household work, alcohol use, and being unmarried or uncommitted in a relationship (Li et al., 2010a).

The authors concluded that the lack of individual and social resources within these contexts raised IPV risk, and resolutions to reduce risk must target social and economic conditions at the individual and community level (Li et al., 2010a). Interestingly, these authors also noted that reversal of traditional income earning roles between men and women often served to trigger IPV (Li et al., 2010a). Therefore, while traditional male and female roles increase IPV risk on a gender basis, reversal of these roles regarding income also contributes to IPV occurrence (Golden et al. 2013; and Li et al., 2010a).

Researchers have reviewed IPV and its link to income from different ranks while also assessing findings among the various ethnicities. Taft and colleagues sought to assess IPV from a level of an African-American socio-cultural context to IPV victimization (2009). The authors stated findings from the National Violence against Women Survey showed that after controlling for income levels, African American women were twice as likely to be victims of IPV in comparison to Caucasian women (Taft et al., 2009). Nevertheless, Taft and colleagues also revealed that the National Crime Victimization Survey (NCVS) showed the contradictory findings supporting no racial risk for IPV but instead lower income being a predictor of higher IPV occurrence (2009). The results of these two studies thus make the issue of income and IPV less clear particularly when mixed with ethnic, racial and cultural variables.

Mutual IPV violence suggests both genders participate in subjecting their partners to some form of IPV, whether mild or severe as mentioned in the preceding section. The occurrence of mutual or bidirectional IPV seems to affect both men and women

regardless of income (Próspero, and Kim, 2009). Barner and Carney suggested communities could assist with economic disparities that exist and support victims with greater financial resources that would increase intervention and prevention efforts (2011). Researchers proposed that increased individual stressors in combination with reduced resource environments contributed to IPV risk, and within this light, income assumedly plays a significant role (Taft et al., 2009; Cunradi, Ames, and Moore 2008).

Based on current literature reviews conducted by researchers, income can affect the occurrence of IPV in different ways, ranging from resource-related issues to cultures of violence to individual characteristics. Income appears to be a complex social context in its relation to IPV risk as a result interacting with race, gender, and other variables, supported by RCG Theory. Assessing secondary data in the NCVS 2013 survey allowed the analysis regarding income levels of IPV victims as an independent risk factor for IPV victimization. Then, the reassessment of income allowed researchers to present its effect in combination with race, age, and gender. Through this effort, evidence will help clarify the role of income in predicting IPV occurrence

IPV and Marital Status

As referenced previously, Golden, et al., conducted research on victims of IPV issues of SES in their communities (2013). The researchers measured for marital status as a covariate and assessed the data from the level of whether the victims were married or co-habituating (Golden, et. al, 2013). The NCVS addressed several differences in cohabitation, and this study referenced them to control for the different levels in marital status (Ackerman and Love, 2014). Golden and his colleagues surmised that marital

status had an effect on whether social support and gender equity would reduce the prevalence of IPV (2013). In this study, an assessment of marital status provided data for the covariate based upon the idealization of examination of the variable in other studies (Beyer, Wallis, and Hamberger, 2015; Ackerson, Kawachi, Barbeau, and Subramanian, 2008).

IPV and Type of Attacks

As mentioned before, the NCVS presents data concerning IPV and different types of crimes that the respondents encountered (USDOJ, 2014). Sullivan, Schroeder, Dudley, and Dixon discussed that victimizations ranged from verbal abuse to sexual IPV (2010). Baumer and Lauritsen conveyed examining the perpetration of attacks on victims and used the NCVS as the instrument to show the importance of understanding how victims attacks (2010). Felson and Pare studied the NCVS by analyzing whether victims were threatened or physically assaulted and with a weapon (2010). For this study, consideration of the type of attack allowed the researcher to use it as a covariate to control for the occurrence of IPV.

Review and Synthesis of Studies

Review of a large amount of information provided a platform to synthesize the literature regarding IPV within this chapter. This information included positive contributions to knowledge concerning IPV and current understandings. However, at the same time, many limitations and shortcomings in the literature also remain. As evident in the numerous reviews and studies examined, definitions of IPV vary considerably among different studies making it difficult to compare one result to another. Some researchers

defined IPV narrowly as physical or sexual aggression only while others adopt a broader perspective, including emotional, psychological, and coercive aspects (Hall, et al., 2012).

The primary variables reviewed in the NCVS and studies derived from it were age, sex, race and Hispanic origin, marital status, education level/educational attainment, and household income. Then, researchers agreed on variables such as whether the respondents experienced a victimization and information concerning the incident such as the victim-offender relationship and the type of crime (Ackerman and Love, 2014; Golden, 2013; Baumer and Lauritsen, 2010; Lauritsen and Hiemer, 2012; USDOJ, 2014; Yun and Lee, 2014).).

The variables analyzed as covariates in this study were: marital status and type of attack as the use of threats or the use of a weapon in attack cues category. The other major variance among studies and reviews involves theoretical perspectives. Most focus on social context as the predominant factor, but extreme opinions about these circumstances such as gender and marital status differ substantially among different approaches (Capaldi, Knoble, Shortt, and Kim, 2012; Raghavan et al., 2009; Beyer et al., 2015). Similarly, few examine microenvironments of individuals, ethnic cultures and individual psychologies (Lawson, 2012). Gender, age, and marital status were variables analyzed in this study as to how they related to the social contexts.

Given these foundational differences within the literature regarding IPV, researchers have established that African American ethnicity increases the risk for IPV. Researchers through several studies have supported this blanket statement; however, most of these involved African American women only with few involving men (Hattery,

2009; Stampfel et al., 2010). The extent of the literature examining other ethnicities and the risk of IPV is much less as is the directions for culturally sensitive prevention and intervention methods. Likewise, the intersections between ethnic origin, social culture, economic conditions, gender beliefs and IPV present a complex picture for unraveling the overall patterns related to IPV occurrence.

As noted in the literature, an abundance of IPV investigations involve female victimization and male perpetration which likely results from traditional gender beliefs and a strong influence of Feminist Theory on prior research (Barner and Carney, 2011; Lawson, 2012). However, researchers have recently established greater gender symmetry among men and women regarding both IPV victimization and perpetration (Foran, et al., 2011; Golden, et al., 2013; Prospero and Kim, 2009). Some have even shown same-sex relations among women with high, if not higher, rates of IPV (Messinger, 2011). The findings regarding gender present a confusing picture regarding IPV risk, and continued research is necessary for defining the relationship.

As noted, low income is a risk factor for IPV occurrence (Cho, 2012a). Nonetheless, additional factors involving social environments besides economic ones influence IPV occurrence as well. Raghavan and colleagues (2009) indicated that violence within communities and social networks contributed significantly to IPV rates. Besides, social perceptions of gender roles may encourage IPV through the adoption of violence as a male-centered behavior pattern (Golden, et al., 2013). Economics, of course, play a role regarding available resources to address social stressors and to deter IPV risks (Barner and Carney, 2011). Barner and Carney (2011) established a clear

relation between income and economic hardship and IPV, but the causal links between the two require additional definition since the relationships are very complex and involve the interplay between culture, ethnicity, and SES. Likewise, income and IPV interventions lack cultural sensitivity and must be addressed to include assisting victims with necessary resources (Barner and Carney, 2011).

Lastly, age-related risks for IPV occurrence are among the least well-understood variables. Older age appears to reduce the potential for IPV, but causal mechanisms need concrete definitions among current studies (Caetano et al., 2008). Younger age groups also seem to define IPV differently than other age groups and react differently to experiences (Love and Richards, 2013). Researchers need to conduct supplementary studies in this area to determine risks better, identify causal relationships and their underlying processes, and help direct age-specific interventions.

Gaps in the literature concerning IPV may exist because of a lack of consistency in definition, theory, methodology, and reporting. While some research literature adopts a broad view of IPV, there is significant variation, with some works taking a narrow view. Measurement tools used in surveys and questionnaires reflect differences as well. The majority of analysis tools embrace theories of social context, but a lack of consensus regarding the importance of particular contexts indicates that use of methods beyond the social might be appropriate. To a significant degree, individual psychologies and social microenvironments such as ethnic culture are perhaps lacking in consideration in larger studies. All of these shortcomings create many gaps in IPV knowledge making it difficult to identify risk, alter behaviors and implement prevention.

The current study aimed to perform a subsequent analysis on existing research data in regards to the potential for impact on race, age, gender, income, and IPV victimization occurrence. By doing so, the assessment of relative risks for each variable in causing IPV victimization may develop increase understanding or cohesion of ideations. The hope was to add objective data to these areas of the investigation so a better understanding of the complex IPV picture can evolve. In turn, this can lead to more focused and effective preventative and interventional efforts in reducing IPV occurrence.

A theoretical model, which accommodates both individual and social contexts, provided insight into IPV risks. The use of RCG Theory provides this ability by considering not only multiple contexts and social structures in establishing power differences and inequalities, but its use also allows an examination of the interplay among several variables in causation models (Collins, et al., 2009). Based on these benefits of RCG Theory and its sparse application to IPV victimization research in general, the researchers in this study hope to provide new insights and perspectives regarding IPV victimization, its risks and directions for further study.

Having identified gaps in the existing literature, efforts through this study will seek to address these shortcomings so that positive social change and enhanced professional applications in the area of IPV can occur. By establishing a more sound understanding of risk factors of IPV victimization, advances in healthcare and social policy prevention and intervention related to IPV can evolve. Likewise, these efforts could also allow more efficient and effective utilization of resources while promoting a higher quality of life at individual and societal levels. Lastly, a realization that positive

changes in the field of public health in both strategies of care and research are possible to a better understanding of IPV risk factors.

Summary and Conclusion

Ideological biases appear to have existed regarding IPV that limited the objective study of the issue, especially when taking the literature in perspective. More effort to expand research for both genders when examining race risks for IPV is promising versus only among women. Gender biases must be set aside for identifying race as a risk factor for IPV alone. Rather than examining only larger social contexts, reviewing individual experiences and psychologies expands understanding their roles in IPV occurrence. Age and income are therefore relevant circumstances to explore as well. In the current study, the researcher scrutinized the various contexts of race, age, gender, and income, in proportion to IPV victimization utilizing RCG Theory. This effort could allow a more dynamic and comprehensive assessment of these variables independently and cumulatively. The RCG Theory could provide stronger foundations for future study, theory, prevention and intervention in the area of IPV.

As a final word regarding this study and the literature, notable shortcomings have existed in defining a causative link between potential risk factors and the occurrence of IPV. While the identification of risk factors are important, understanding the social and individual rationale linking risk with incident offers opportunities for greater understanding and intervention. In considering methodologies, structures that allow the evaluation of risk factors in isolation were critical due to the complexity of IPV as a subject area.

Additionally, a combination of subjective and objective data was helpful in elucidating explanations and new theories linking risks with IPV occurrence. The combination of data applies in particular to issues such as race, income, and gender, which are similarly complex areas. This study allowed for identifying the relative risk of the four variables outlined through analyzing secondary data and may guide future research and interventions. This study involved quantitative efforts that delved into the complexity of the content and evolved into an effective approach to expanding knowledge concerning the race, class and gender theory in IPV victimization.

The subsequent chapter discusses the design and methodological approach considered for this study in detail. Secondary data analysis utilized the NCVS 2013 survey, in addition to the particulars of the investigation itself. The topics reviewed concerned sampling strategies, variable definitions, research instruments, threats to validity, and study limitations. This information will provide a thorough overview of the survey in its ability and attempt to address the shortcomings in the literature regarding IPV victimization in this literature review.

Chapter 3: Research Method

Introduction

IPV represents a serious public health problem in the United States and throughout the world. In the United States, more than 12 million individuals experienced by 2012 IPV at an estimated annual economic cost of $8.3 billion (CDC, 2012). Although researchers have conducted a significant amount of research concerning IPV, several literature gaps exist, including details of risk factors for IPV occurrence. These gaps persist for several reasons, including variation in IPV definitions, different theoretical perspectives regarding IPV causation, and a lack of objective large-scale studies (Hall et al., 2012; Rabin, Jennings, Campbell, and Bair-Merritt, 2009). Study designs often vary, making results difficult to compare and affecting conclusions about IPV risk factors (Hall et al., 2012).

This study addressed the gaps in knowledge concerning IPV risk factors by assessing the association between demographic factors and IPV victimization through analysis of secondary data. Previous studies predominantly focused on women as IPV victims (Lawson, 2012). Extensive studies on gender risk for victimization have been limited, but some researchers found much higher rates of IPV victimization among men, suggesting male victimization reporting might have been inaccurate (Renner and Whitney, 2012).

Likewise, studies examining race and IPV victimization were limited, but the ones conducted indicated higher rates of IPV victimization among ethnic minorities (Whitaker and Reese, 2007). I examined both men and women in a large general

population sample to gain a clearer picture of the risk of race and gender in IPV victimization. In addition to race, I examined other IPV victimization risk factors. Although low income was a risk factor for IPV occurrence, no studies have addressed income levels as an independent risk factor for IPV (Capaldi et al., 2012). In addition, income was not addressed in combination with gender and race on IPV victimization (Golden et al., 2013). Age was subject to even less study as it relates to IPV occurrence. Some authors suggested older age may protect against IPV victimization (Caetano et al., 2008). Other authors suggested age affected perception and definition of IPV, which may have affected reporting statistics (Love and Richards, 2013). Each of these variables represented gaps in the literature regarding IPV victimization risks.

The theoretical foundation of the study was RCG theory, which allowed for examination of multiple risk factors as interactive components in causing higher or lower risk for IPV victimization (see Zinn and Dill, 2012). People from different races experience events differently, making IPV occurrence more or less likely according to how race, class, and gender intersect in the lives of those who report IPV (Collins et al., 2009). Differences in age, gender, and income affect the experience of race and IPV (Cho, 2012b). In a complex situation like IPV, the interaction of these factors in creating dominant or oppressive scenarios vary (Collins et al., 2009). Using RCG theory, I sought a better understanding of how multiple factors influenced IPV victimization risk. Through secondary data analysis of demographic variables and the use of RCG theory, I addressed the literature gaps concerning IPV victimization.

The design of this study involved quantitative analysis of secondary data including age, gender, income, and race. I used NCVS 2013 survey data to examine the relationship between independent variables and IPV victimization occurrence. I also evaluated the cumulative effect of the risks to determine whether effects were additive or multiplicative. The NCVS 2013 survey included crime statistics concerning various types of IPV, as well as demographic information from a large, nationally representative sample (USDOJ, 2014). Examining this data set with a focus on these subsets of variables provided new insights regarding IPV victimization risks as they relate to age, income, race, and gender.

Research Design and Study Rationale

This study was a quantitative analysis of secondary survey data to determine whether demographic variables were associated with IPV victimization risk. I compared race, age, gender, and household income against IPV victimization by analyzing a subset of data provided by the survey. The research design was a quantitative secondary analysis of a cross-sectional sample. The NCVS 2013 survey included a stratified multistage cluster sample of individuals and households based on the U.S. Census (USDOJ, 2014). The data included demographics, crime incidents, and personal information reported for the year 2013 (USDOJ, 2014). A selective focus on a portion of the variables included in this data set allowed for an analysis of possible associations between race, age, gender, and household income and IPV victimization.

Instruments used in the NCVS 2013 survey included questions that addressed crimes consistent with IPV victimization (USDOJ, 2014). Specific offenses related to

IPV included rape, sexual assault, aggravated assault, and simple assault on intimate partners (USDOJ, 2014). The current definition of IPV includes physical and sexual acts of IPV victimization but does not address psychological forms such as verbal abuse and stalking. Self-reported data in the survey included demographic information such as age, gender, income, and race obtained from survey interviews. Statistical analysis included logistic regression and multiple regression analyses (see Polit and Beck, 2012).

Examining secondary data allowed me to answer the research questions in an efficient and timely manner (see Bryman, 2012). However, analysis of secondary data potentially affected generalizability of findings (Polit and Beck, 2012). This risk was necessary to ensure a representative sample that minimized selection bias (Babbie, 2012).

Other constraints of secondary data analysis involve the accuracy and validity of the survey instrument. Researchers have utilized the NCVS survey since 1973, and the DOJ has modified it several times to enhance validity and reliability (USDOJ, 2014). Utilizing secondary data allowed me to obtain a sufficient sample for statistical analysis.

Population

The NCVS 2013 included a stratified multistage cluster sample of 160,040 participants and 90,630 households who participated in interviews every 6 months over a 3-year period (BJS, 2013). The survey addressed crimes committed by intimate partners, as well as demographic information on race, age, gender, and household income. I downloaded and analyzed data from the NCVS 2013 survey using Statistical Package for the Social Sciences (SPSS) software (Green and Salkind, 2011).

Sampling Strategies and Procedures

The NCVS 2013 survey involved stratified multistage cluster sampling (USDOJ, 2014). The survey consisted of computer-assisted interviews with randomly selected households in the United States with individuals 12 years old and older. The USDOJ applied the sampling strategy to recent U.S. Census data to identify potential households for participation (USDOJ, 2014). The NCVS organized households into primary sampling units (PSUs) and arranged them by counties, groups of counties, and large metropolitan areas.

These PSUs reflected the U.S. population as part of the first stage of selection (USDOJ, 2014). The second stage involved the division of PSUs into enumeration districts (EDs) including 750 to 1,500 participants each (USDOJ, 2014). These EDs were divided into stratified clusters that averaged four households per cluster (USDOJ, 2014). These clusters served as the basic household and participant units for interviews over a 3-year period.

The inclusion of households in the sample required an individual 12 years or older to live in the home. Armed Forces personnel and those in correctional system custody were not included in the sample (USDOJ, 2014). In total, 90,630 households and 160,040 persons participated in the NCVS 2013. The response rate for households in the study was 84%, and the individual response rate was 88% (USDOJ, 2014). Except for excluded populations and small nonparticipation rates, the sample of the NCVS 2013 survey appeared to represent the target population of the United States.

Power analysis revealed that the number of individual and household participants was sufficient to provide data for statistical analysis in testing the study's hypotheses. An a priori power analysis for multiple logistic regressions involved performing the test using a power of 95, as shown in Table 1 and Figure 1. A sample size of 4386 appeared to detect an effect size of 0.50. The power analysis was performed using G*Power 3.1.9.2. (Faul, Erdfelder, Lang, and Buchner, 2009). Previous researchers reported using a higher effect size (Farrington, Langan, and Tonry, 2004); therefore, I chose a higher effect size.

Table 1

Data Showing a Priori Power Analysis for Multiple Logistic Regression

z tests - Logistic regression			
Options:	Large sample z-Test, Demidenko (2007) with var corr		
Analysis:	A priori: Compute required sample size		
Input:	Tail(s)	=	Two
	Odds ratio	=	1.3
	Pr(Y=1|X=1) H_0	=	0.2
	α err prob	=	0.05
	Power (1-β err prob)	=	0.95
	R^2 other X	=	0
	X distribution	=	Binomial
	X parm π	=	0.5
Output:	Critical z	=	1.9599640
	Total sample size	=	4386
	Actual power	=	0.9500326

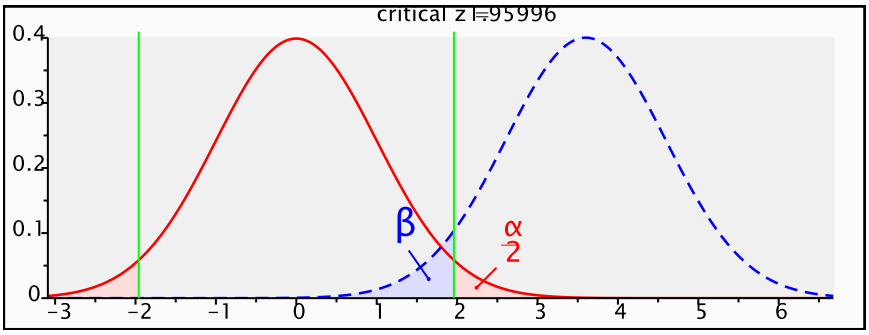

Figure 1. Graph showing a priori power analysis for multiple logistic regression.

Instrumentation

Access to Instrument

The primary survey instrument for this secondary analysis was the NCVS 2013, obtained from the U.S. Department of Justice off its website, http://www.icpsr.umich.edu/icpsrweb/NACJD/studies/35164. The NCVS 2013 report provided access to all the pertinent information used for analysis of IPV in this work. This is report is readily available information to the public for which no additional permissions were required to gain access.

As noted by some authors, current instrumentation fails to provide a comprehensive assessment of IPV from the perspective of both genders, of both victims and perpetrators, and of all categories currently considered as IPV subjects (Rabin, et al., 2009). IPV research instruments with reliability and validity exist, but some are not conducive to self-reporting questionnaires, and others are limited in scope (Cho, 2012b; Rabin, et al., 2009).

Reliability of Instrument

Reliability or validity information is available concerning the NCVS 2013 and about its redesign in the late twentieth century. Some authors concluded that the reliability and validity of the current NCVS are comparable to other large-scale database surveys (Cantor and Lynch, 2005). Changes in the NCVS that did occur over time showed no decline in reliability and validity of the test except the category of simple assault and the factors of income and age of the victim (Cantor and Lynch, 2005). Other categories of crime including rape, sexual assault, and aggravated assault were unaffected by changes in the survey tool and remained high in both reliability and validity (Cantor and Lynch, 2005).

Likewise, NCVS did not affect changes to race and gender (Cantor and Lynch, 2005). Given the fact that the USDOJ analyzed and scrutinized the NCVS since 1973 with periodic changes, the researchers believed that the instrument's validity and reliability was satisfactory (USDOJ, 2014). Cantor and Lynch (2005) discussed that with changes in the design introduced in 1992, reliability and validity in the NCVS increased crime reporting by 40%.

The actual instrument utilized by the NCVS 2013 involved two types of instruments. One involved computer-assisted telephone interviews (CATI) while the other involved face-to-face interviews (F2F). The researchers interviewed participants every six months during 2013, resulting in two interviews per household. After this term, omissions of households from further study occurred, resulting in new additional household participants to the database. This rotating panel design allowed acquisition of

continual data from changing samples over time (USDOJ, 2014). All participants received F2F interviews on the first and fifth interviews while the others were CATI. F2F interviews lasted 25 minutes on average with CATI being slightly briefer in duration (USDOJ, 2014).

The interviews of the NCVS 2013 survey consisted of three sections. The first section was a control card section that consisted of demographic questions concerning age, race, gender and income (USDOJ, 2014). The division of income levels resulted in 14 brackets ranging from below $5,000 annually to $75,000 and above (USDOJ, 2014). For purposes of the present study, seven tiers of income groups ranging from < $7,500 to > $75,000 (USDOJ, 2014). The justification for using these categories is to classify probable income specifications and reduce redundancy for the brackets. The categories from the NCVS 2013 of the race of the respondent included White, Black/African American, American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, Other (USDOJ, 2014). The merged and analyzed categories included White, Black, and Other. Similarly, age and gender were categorized according to actual age in years and male or female gender as outlined in the parent study. However, for the purpose of the current study, the researcher reviewed only data for participants 18 years or older in the category of age.

The second section of the NCVS 2013 interview consists of a basic screening questionnaire followed by the third section entitled a crime incident report. Questions in these sections identify various personal or property crimes occurring within the past six months to the individual and the household (USDOJ, 2014). Personal crimes include

rape, sexual assault, robbery, purse snatching or pickpocketing, aggravated assault, and simple assault (USDOJ, 2014). The current study focused only on rape, sexual assault, aggravated assault and simple assault if these crimes occurred with an offender who was an intimate partner. The researcher eliminated property crimes in total and personal crimes committed by a non-intimate partner from this research analysis.

As a final comment, the NCVS 2013 survey research instrument contains questions about crimes occurring in the past six months. However, the data file generated from this information included annual information about crime statistics and demographics for the year of 2013 (USDOJ, 2014). This annual data file served as the material for quantitative secondary analysis. Table 2 was created utilizing Microsoft Office 2013, and it presents formation for the dependent variables, independent variables, and covariates available in the NCVS 2013 dataset concerning this study.

Table 2

Category Information for the Variables in the Analysis

Variable	Variable Type	Measure	Scored
Dependent variable			
IPV	Continuous	Nominal	
Independent variables			
Race	Continuous	Nominal	1= White 2= Black/African American 3= Other
Gender/sex	Dichotomous	Nominal	1=Male 2=Female
Household income	Continuous	Nominal	1 - 14
Age	Continuous	Scale	18 - 65
Control variables			
Marital status	Continuous	Nominal	1 = Married 2 = Widowed 3 = Divorced 4 = Separated 5 = Never Married
Weapon used	Dichotomous	Nominal	1 = Weapon Used 2 = No Weapon Used 3 = Unknown if Weapon Used

Data Analysis Plan

The research instrument used by NCVS 2013 researchers compiled data into data files for easy access during secondary analysis. The NCVS 2013 offers various datasets that were available for download to conduct statistical analysis (USDOJ, 2014). Only the selection of data concerning race, age, gender (labeled sex in the NCVS), household income, marital status, and attack or type of threat concerning the participants identified selected IPV victims. This decision was a result of reviewing the variables that demonstrated to be relevant in past studies presented in Chapter 2.

Review of variables for the data set revealed that there are too many to analyze in this study. The NCVS Codebook listed at least 132 variables with several categories for those variables (USDOJ, 2014). The delineation of IPV victims will include any participants who acknowledge the occurrence of rape, sexual abuse, aggravated assault and simple assault during the 2013 calendar year committed by a former spouse, boyfriend, girlfriend or partner (USDOJ, 2014). The delineation represented the subset of data organized for secondary analysis.

As stated in Chapter 1, the research questions and hypotheses sought to answer in the course of study were the following:

RQ1: What is the relationship between race and the likelihood of experiencing adult IPV after controlling for marital status and type of attack or threat?

- $H1_0$: No relationship exists between race and IPV.
- $H1_a$: A relationship exists between race and IPV.

RQ2: What is the relationship between age and the likelihood of experiencing adult IPV after controlling for marital status and type of attack or threat?

- $H2_0$: No relationship exists between age and IPV.
- $H2_a$: A relationship exists between age and IPV.

RQ3: What is the relationship between gender and the likelihood of experiencing adult IPV after controlling for marital status and type of attack or threat?

- $H3_0$: No relationship exists between gender and IPV.
- $H3_a$: A relationship exists between gender and IPV.

RQ4: What is the relationship between household income and the likelihood of experiencing adult IPV after controlling for marital status and type of attack or threat?

- $H4_0$: No relationship exists between income and IPV.
- $H4_a$: A relationship exists between income and IPV.

Research Question 5 (RQ5): What is the relationship between age, race, gender, and income and the likelihood of experiencing adult IPV after controlling for marital status and type of attack or threat?

- $H5_0$: No relationship exists between combined factors of race, age, gender, income,, income, and IPV after controlling for marital status and type of attack or threat.
- $H5_a$: A relationship exists between combined factors of race, age, gender, income, and IPV after controlling for marital status and type of attack or threat.

The performance of statistical analyses involved using IBM SPSS Statistics software, Grad-Pack 21.0 (Green and Salkind, 2011). NCVS 2013 datasets are available for this software analysis (USDOJ, 2014). Utilizing this software, the researcher performed logistic regression analysis in order to determine relative risks for each of the independent variables in relation to IPV victimization as well as cumulative risks for combinations of these same variables (Polit and Beck, 2012). Table 2 shows variables and the scale identification in this analysis. Of note, the data from the NCVS 2013 survey is weighted data, which will require the use of recommended weights in analyzing the data in this current study. The DOJ provided weights with the datasets for household, personal and incident data information (USDOJ, 2014).

The organization of data results involved formal charts and graphs for visual assessment of the data, in addition to having a detailed description of the results received. Assessments of statistical significance, degree of confidence, and relative risks among the independent variables in relation to IPV victimization was performed, and data findings was presented in a detailed results section (Babbie, 2012). The researchers provided interpretation of these results in a discussion section with correlation to the study's hypotheses (Babbie, 2012). Statistical analysis was performed on this data since it is quantitative; however, objective and subjective interpretations may possibly be provided for the purpose of considering new directions and insights into further study regarding IPV (Babbie, 2012).

Threats to Validity

As with any research study, threats to external and internal validity can exist. In the current study, the predominant threats involve internal threats related to survey instrumentation (Bryman, 2012). However, external threats in terms of the generalization of the information may also be present and are worthy of consideration. Identifying potential sources of bias and assessing the degree of generalization of the data to the U.S. population are important to provide an objective analysis, interpretation and conclusion (Babbie, 2012).

Internal threats to validity of this study pertained primarily to the fact that there was no access to the participants. There was no alteration of the instrumentation developed by the parent study (NCVS 2013) available for use for this study. In this regard, secondary analysis was limited in addressing research questions since instrumentation did not contain inquiries aligned to the investigation (Polit and Beck, 2012). This was noteworthy in the current study in that the definition of IPV is limited to sexual and physical forms of IPV based on the NCVS 2013 survey instruments. Therefore, the internal validity was in danger of compromise since identification of all forms of IPV might be insufficient. Regardless, physical and sexual forms of IPV are the most commonly recognized forms and associated with the most severe outcomes on victims (Dixon and Graham-Kevan, 2011). Consequently, assessing risks within this narrowed definition of IPV may be worthwhile by the research based on limitations in the literature that currently exist. In this particular study, consideration of other testing threats to validity such as the *Hawthorne effect* and human error subsisted (Babbie, 2012).

Surveys in general have internal threats to validity regarding the degree of depth on the information provided. Self-administered questionnaires in particular do not allow detailed explanations or investigations thus rendering data in a fairly straightforward and simplistic format (Babbie, 2012). Without such detailed considerations, errant conclusions can be made and thus pose some degree of internal validity threat (Babbie, 2012). Inherent aspects and characteristics of the sample selected that may be unforeseen is always a possible internal threat to validity. By attaining a large enough sample, this threat to validity should be minimal (Babbie, 2012). Other internal threats such as maturation effects, mortality and diffusion of treatment knowledge are not relevant to this particular study (Babbie, 2012).

External threats to validity pertain predominantly to reactive arrangements, the infusion of external biases, and the ability to generalize the data (Babbie, 2012). Reactive arrangements pertain to behavioral changes in respondents by nature of the survey itself. While this is possible, using survey components with demonstrated validity reduces this threat based on prior use of such surveys (Babbie, 2012). Biases infused into the study as well as into the survey components also present threats to validity. The longstanding use of the NCVS survey and its progressive modifications for enhanced validity reduce these risks. Likewise, the use of weighted data generally reduces the threat of biases that may result from selection and sampling (USDOJ, 2014). Other biases, such as racial and cultural biases, should not be a significant threat to validity considering the data obtained information from the NCVS, which provided a sample representative of the general

population in terms of gender, age, and race. This representative sample should allow for generalization of the data to the population at large.

The same may also apply to temporal generalizations, but the inclusion of a wide range of age groups among participants, as well as an extended period of data collection for the NCVS survey should help reduce this threat as well (Babbie, 2012). In summary, internal and external threats do exist in the current study of which internal validity is the most notable. While the NCVS 2013 dataset offers many advantages, identifying IPV only through sexual and physical forms of abuse by intimate partners may underreport the number of IPV occurrences. However, the Department of Justice data reflects the efforts of a reliable source, and thus it concludes that the data will provide strong internal validity for these types of IPV events. Drawing conclusions regarding the independent variables' relation to IPV victimization, which includes only physical and sexual forms of IPV events, are important.

Ethical Procedures

Since implementation of interventional therapies or treatments as part of this study are null, many ethical considerations regarding treatment do not exist (Bryman, 2012). Similarly, the datasets provided for secondary analysis by the NCVS 2013 survey are in confidential formats without participant or household identifiers (USDOJ, 2014). Due to these factors, ethical considerations are insignificant for the current study, but addressed.

The NCVS is a cross-sectional survey study that does address sensitive subject matter related to IPV and other health and demographic variables considered as private

information for participants. The ethical concerns involve issues of confidentiality as well as how the interaction between the participants and the survey might affect well-being (Babbie, 2012). Confidential information was not a concern relevant to this current survey and addressed proactively.

Regarding confidentiality of information, anything considered, as protected information has not been included within the NCVS survey. A master sheet linking all secondary dataset information was stored under a password-protected document by the researcher. In addition to the confidentiality of the dataset information, collection and storage of all survey information involved a single computer under a password-protected file. The computer will not have public access, and only the researcher was able to access the files for data analysis. In addition, Internet access using this computer will require password verification to traverse firewall protection systems. Access to these files by other individuals is unavailable except under legal instances of following university protocol for validity or reliability verification of the data reviewed. Upon completion of the study, all materials including participant identifiers and survey data was stored under password protection until instruction is given for retention, destruction, or purging.

Summary

The occurrence of IPV victimization is significant within the United States and results in tremendous costs and secondary health concerns. To understand the risk factors involved in this complex problem, the researcher currently seeks to examine several independent variables related to IPV victimization. Theoretical biases and various definitions of IPV identified in the literature include findings that are at times

contradictory and lacking in assessing IPV risk. Specifically, researchers have incompletely characterized, race, age, gender, and household income. Some reporting of the relative risk that each variable carries in the occurrence of IPV victimization was lacking, and researchers have not addressed their cumulative effect thoroughly. Problems that reflect gaps in the literature concerning IPV was one awareness that the researcher hoped to address in this current study.

With the better characterizing of IPV risk factors, the researcher also hopes to elucidate new insights into the subject of IPV by approaching the current study under a theoretical framework using RCG Theory (Hattery, 2009). Reviewing the RCG Theory provided a scaffold by which multiple factors in IPV causation while also allowing appreciation of how variable interactions affect individual experience (Hattery, 2009). RCG Theory thus permits a more comprehensive view of IPV victimization that extends from Feminist Theory and other social contexts. Thus, the current study will consider how independent variables interact to affect IPV victimization occurrence in a new theoretical light, which in turn will lead to new directions in IPV study, prevention, and intervention.

Having identified gaps in IPV literature, and keeping in mind resource limitations, the research type of research selected in addressing these deficiencies involved a secondary analysis of existing datasets. Utilizing the NCVS 2013 survey allowed for the examination of IPV victimization approaching race, age, gender, and household income level by conducting statistical analysis. The NCVS represents a stratified multistage cluster sample of 160,040 participants and 90,630 households, which responded to serial

interviews every six months during 2013 (BJS, 2013). Data provided by the NCVS 2013 survey includes personal and property crimes reported by participants respecting crime types and detail (BJS, 2013). The dataset information relevant to the current study involves sexual assault, rape, aggravated assault and simple assault crimes committed by intimate partners, as well as demographic data regarding gender, age, race, and income. Accordingly, the researcher will focus on this subset of data from the NCVS 2013 survey to investigate study research questions and hypotheses.

The data subset was analyzed using SPSS Grad Pack 21.0 software (Green and Salkind, 2011). Performing logistic regression analysis allowed for appraisal of relative risks of each independent variable versus IPV victimization, both individually and in combination with other variables. Presentation of the results of this analysis involved text, tabular and graphic form along with a discussion of objective conclusions and study limitations.

Threats to validity are relatively small with the data providing a large representative sample for generalizability. Consistently, the NCVS survey instrument was both valid and reliable over time in measuring crime, IPV and various demographic variables (BJS, 2013). However, the limitation of IPV events to physical and sexual IPV neglects psychological forms and likely underreports IPV occurrence in the U.S. Hence, while the NCVS survey offers substantial validity for physical and sexual IPV, its internal validity is lacking in measuring all forms of IPV. In drawing conclusions from this secondary analysis of the NCVS 2013 data, this work recognizes this limitation.

The objective of this study was to refine the relative risk of age, gender, income, and race about IPV victimization, and address the shortcomings in the current literature. Evaluation of these risks involved conducting secondary data analysis of the NCVS 2013 survey, for each variable in isolation and combination. This analysis along with a theoretical approach using RCG Theory will provide information that leads to new research directions, prevention policies, and interventions.

Chapter 4: Results

Introduction

The purpose of this study was to examine the relationships between the risk factors of interest (race, age, gender, and income) and IPV controlling for marital status and type of attack. The research questions, hypotheses, and results were as follows:

Research Questions and Hypotheses

RQ1: What is the relationship between race and the likelihood of experiencing adult IPV after controlling for marital status and type of attack or threat?

- $H1_0$: No relationship exists between race and IPV.
- $H1_a$: A relationship exists between race and IPV.

RQ2: What is the relationship between age and the likelihood of experiencing adult IPV after controlling for marital status and type of attack or threat?

- $H2_0$: No relationship exists between age and IPV.
- $H2_a$: A relationship exists between age and IPV.

RQ3: What is the relationship between gender and the likelihood of experiencing adult IPV after controlling for marital status and type of attack or threat?

- $H3_0$: No relationship exists between gender and IPV.
- $H3_a$: A relationship exists between gender and IPV.

RQ4: What is the relationship between household income and the likelihood of experiencing adult IPV after controlling for marital status and type of attack or threat?

- $H4_0$: No relationship exists between income and IPV.
- $H4_a$: A relationship exists between income and IPV.

RQ5: What is the relationship between age, race, gender, and income and the likelihood of experiencing adult IPV after controlling for marital status and type of attack or threat?

- $H5_0$: No relationship exists between combined factors of race, age, gender, income, and IPV after controlling for marital status and type of attack or threat.
- $H5_a$: A relationship exists between combined factors of race, age, gender, income, and IPV after controlling for marital status and type of attack or threat.

Data Collection

Chapter 4 includes a description of the sample using the frequencies and percentages of categorical variables. I also present the preliminary analysis of Pearson chi-square cross-tabulations, examining bivariate associations between each of the variables of interest and IPV. After gaining IRB approval to open the data set, I modified some of the existing variables used by the BJS (2013) to test the hypotheses. The constructs were the same, but the variables used to test the hypotheses changed so that they could be used to answer the research questions.

The proposed covariate "type of attack" was not included in the Excel spreadsheet provided by the BJS. The variable "weapon use" was included and was considered in the analysis. The BJS created a NCVS Victimization Analysis Tool (NVAT) website to construct quick tables for analysts to use. Review of that website confirmed that the "type of attack" variable was omitted . applies only to personal victimizations where there was

contact between the victim and the offender. By definition neither simple assault. https://www.bjs.gov/index.cfm?ty=nvat

Several of the variables from the survey data required recoding. Two variables included in the EXCEL spreadsheet from the survey (Direct relationship and Serious violent) were combined to create the variable IPV. The respondents answered yes/no for these variables (BJS, 2013). The calculation of the variable IPV involved recoding it into yes/no.

The race variable was recoded into White, Black, and Other. The variable age was recoded into six age groups: 18 through 20 years, 21 through 24 years, 25 through 34 years, 35 through 49 years, 50 through 64 years, and 65 or more years. Due to having to omit age groups 12 through 17 years and to keep from having issues with SPSS output, the reference numbers for data analysis began with category three (3) and ended with category eight (8).

The variable gender remained as coded for either male or female; however, the original survey question was "Principal Person – Sex" (BJS, 2013). Household income was recoded into eight categories based on the proposed group reductions from the original 14 categories discussed in Chapter 3. These eight categories lumped income <$7,500 through Unknown (*Missing* for the analysis) and was the reported number of adults over the age of 18 years old and are listed as follows: (a) < $7,500; (b) $7,500 to $14,999; (c) $15,000 to $24,999; (d) $25,000 to $34,999; (e) $35,000 to $49,999; (f) $50,000 to $74,999; (g) > $75,000; and (h) Missing (USDOJ, 2014). Primary analysis included multivariate regression models to examine the relationships between the risk factors of interest (race, age, gender, and income) and IPV controlling for marital status

and weapon use. IPV was coded as a dichotomous indicator that represented either the presence of IPV or the absence of IPV.

Description of Sample

For gender, the largest portion of participants were female (51.0 %) compared to male (49.0 %). Most respondents were 35 to 49 years old (28.9 %) followed by 25 to 34 year olds (24.6 %). For marital status, most respondents were never married (40.3 %); the next largest group consisting of respondents who were married (31.0 %) followed by respondents who were divorced (18.2 %).

The distribution of household income was fairly even throughout the income groups, with the largest group comprising respondents who made more than $75,000 a year (15.7 %) followed by participants who made $35,000 to $49,000 per year ($10.9 %). Respondents in the sample were primarily White (78.4 %) followed by Black participants (14.1 %) and categorized as Other (7.5 %).

For the weapon use variable, most respondents reported the offender having no weapon (69.2 %), followed by respondents who reported the offender having a weapon (22.3 %) and those who reported not knowing whether the offender had a weapon (8.5 %). For the dependent variable IPV, most respondents did not experience IPV (58.3 %), while the others did (41.7 %). Table 3 presents the frequencies and percentages for the categorical variables in this study.

Table 3

Frequencies and Percentages for Categorical Variables

Categorical variable	*n*	%
Gender		
Male	3492	49.0
Female	3637	51.0
Missing	0	.0
Age		
18 to 20 years	651	9.1
21 to 24 years	818	11.5
25 to 34 years	1757	24.6
35 to 49 years	2062	28.9
50 to 64 years	1494	21.0
65 or older	347	4.9
Missing	0	.0
Marital status		
Never Married	2875	40.3
Married	2212	31.0
Widowed	198	2.8
Divorced	1300	18.2
Separated	503	7.1
Missing	41	.6
Household income		
< $7,500	612	8.6
$7,500 to $14,999	712	10.0
$15,000 to $24,999	764	10.7
$25,000 to $34,999	646	9.1
$35,000 to $49,999	777	10.9
$50,000 to $74,999	731	10.3
> $75,000	1121	15.7
Missing	1766	24.8
Race		
White	5589	78.4
Black	1005	14.1
Other	535	7.5
Missing	0	.0

Table 3 (continued)

Categorical variable	*n*	%
Reported use of weapon		
Yes	1590	22.3
No	4931	69.2
Do not know	608	8.5
Missing	0	.0
IPV		
No	4157	58.3
Yes	2972	41.7
Missing	0	.0

Data Analyses

Preliminary Analyses

I conducted Pearson's chi-squared cross-tabulations of the variables of interest with IPV. The frequencies and percentages for these preliminary bivariate analyses are presented in tables. Table 4 provides the between gender group experiences of IPV. The association was significant, χ^2 (1) = 308.94, $p < .001$, $\Phi = .208$. For men, a greater portion reported no IPV (57.8 %) compared to those who did report it (36.7 %), $p < .05$. For women, a greater portion reported IPV (63.3 %) compared to those who did not report it (42.2 %), $p < .05$.

Table 4

Frequencies and Percentages for Between Gender Experiences of IPV

	IPV						
	No		Yes				
Gender	*n*	%	*n*	%	χ^2	*p*	Φ
Gender					308.94	< .001	.208
Male	2402[a]	57.8	1090[b]	36.7			
Female	1755[a]	42.2	1882[b]	63.3			

Note. For each row category, pairs of column proportions with different superscripts differed significantly, $p < .05$.

Table 5 illustrates within gender experiences of IPV. The association within gender and IPV was significant, χ^2 (1) = 308.94, $p < .001$, $\Phi = .208$. The findings indicated that a greater portion of women (51.7 %) compared to men (31.2 %) reported IPV, $p < .05$.

Table 5

Frequencies and Percentages for Within Gender Experiences of IPV

	Gender						
	Male		Female				
IPV	*n*	%	*n*	%	χ^2	*p*	Φ
IPV					308.94	< .001	.208
No	2402[a]	68.8	1755[b]	48.3			
Yes	1090[a]	31.2	1882[b]	51.7			

Note. For each row category, pairs of column proportions with different superscripts differed significantly, $p < .05$.

Table 6 provides the between age group's experiences of IPV results. Associations between some age groups and IPV were significant, $\chi^2 (5) = 23.55$, $p < .001$, Cramer's $V = .057$. Of those participants between the ages of 35 to 49 years, a greater proportion reported IPV (30.2 %) compared to those who did not report IPV (28.0 %), $p < .05$. For individuals between the ages of 50 to 64 years, a lower proportion reported IPV (28.0 %) compared to participants who did report IPV (30.2 %), $p < .05$. Lastly, for participants who were 65 or older, a lower proportion reported IPV (4.0 %), compared to participants who did report IPV (5.5 %), $p < .05$. Not all other age groups showed statistically significant differences in reporting IPV, $ps > .05$.

Table 6

Frequencies and Percentages for Between Age Experiences of IPV

	Intimate partner violence						
	No		Yes				
Age	*n*	%	*n*	%	χ^2	*p*	Cramer's *V*
Age					23.55	< .001	.057
18 to 20 years	360[a]	8.7	291[a]	9.8			
21 to 24 years	492[a]	11.8	326[a]	11.0			
25 to 34 years	992[a]	23.9	765[a]	25.7			
35 to 49 years	1165[a]	28.0	897[b]	30.2			
50 to 64 years	919[a]	22.1	575[b]	19.3			
65 or older	229[a]	5.5	118[b]	4.0			

Note. For each row category, pairs of column proportions with different superscripts differed significantly, $p < .05$.

Table 7 illustrates within age groups' experiences of IPV. The association within some age groups and IPV was significant, $\chi^2 (5) = 23.55$, $p < .001$, Cramer's $V = .057$. The findings indicate that a greater proportion of 18 to 20 year olds (44.7 %) reported IPV compared to all other age groups. In addition, of those participants who reported IPV, the 25 to 34 year group (43.5 %) and 35 to 49 year group (43.5 %) had the next largest proportion. Lastly, of those participants who reported IPV, the age group that reported it the least was the 65 and older age category (34.0 %).

Table 7

Frequencies and Percentages for Within Age Experiences of Intimate Partner Violence

	Age											
	18 to 20 years		21 to 24 years		25 to 34 years		35 to 49 years		50 to 64 years		65 or older	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
IPV												
No	360[a, b]	55.3	492[a, b, c]	60.1	992[a, b]	56.5	1165[b]	56.5	919[a, c]	61.5	229[c]	66
Yes	291[a, b]	44.7	326[a, b, c]	39.9	765[a, b]	43.5	897[b]	43.5	575[a, c]	38.5	118[c]	34

Note. $\chi^2 = 23.55$; $p < .001$; Cramer's V = .057. For each row category, pairs of column proportions with different superscripts differed significantly, $p < .05$.

Table 8 provides the between marital status groups' experiences of IPV results. The association between some marital status groups and IPV was significant, χ^2 (4) = 268.98, $p < .001$, Cramer's $V = .195$. Among respondents who were married, a smaller proportion of them reported IPV (36.7 %), compared to respondents who did not report it (23.6 %). Conversely, of those respondents who were *Separated*, a larger proportion of them did report IPV (10.7 %), compared to respondents who did not experience it (4.5 %). A similar pattern was observed among *Divorced* participants, with more divorced individuals reporting IPV (23.6 %) than those who did not (14.6 %). The rest of the age groups did not show statistically significant differences in reporting IPV, *ps* > .05.

Table 8

Frequencies and Percentages for Between Marital Status Experiences of Intimate Partner Violence

	IPV						
	No		Yes				
Marital status	*n*	%	*n*	%	χ^2	*p*	Cramer's *V*
Marital status					268.98	< .001	.195
Never married	1700[a]	41.2	1175[a]	39.7			
Married	1515[a]	36.7	697[b]	23.6			
Widowed	127[a]	3.1	71[a]	2.4			
Divorced	602[a]	14.6	698[b]	23.6			
Separated	186[a]	4.5	317[b]	10.7			

Note. For each row category, pairs of column proportions with different superscripts differed significantly, $p < .05$.

Table 9 illustrates within marital status groups' experiences of IPV. The association within marital status and IPV was significant, χ^2 (4) = 268.98, $p < .001$, Cramer's $V = .195$. The findings indicate that a greater proportion of participants who

were “separated” (63.0 %) reported IPV compared to all other marital groups, $p < .05$. In addition, of those participants who reported IPV, those who identified as “Divorced” (53.7 %) had the next share. Lastly, of those participants who reported IPV, the martial group that reported it the least was participants who identified as “Married” (31.5 %).

Table 9

Frequencies and Percentages for Within Marital Status Experiences of IPV

	Marital status									
	Never married		Married		Widowed		Divorced		Separated	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%
IPV										
No	1700[a]	59.1	1515[b]	68.5	127[a, b]	64.1	602[c]	46.3	186[d]	37
Yes	1175[a]	40.9	697[b]	31.5	71[a, b]	35.9	698[c]	53.7	317[d]	63

Note. $\chi^2 = 268.98$; $p < .001$; Cramer's V = .195. For each row category, pairs of column proportions with different superscripts differed significantly, $p < .05$.

Table 10 provides the between household income group's experiences of IPV results. The association within some household income groups and IPV was significant, χ^2 (6) = 91.42, $p < .001$, Cramer's $V = .131$. Among respondents who were in the less than $7,500 income range, a larger proportion of them experienced IPV (15.9 %) compared to those who did not experience it (11.5 %), $p < .05$. In addition, of those participants who made $50,000 to $74,999, a smaller proportion of them reported IPV (11.4 %) compared to those who did report it (15.1 %), $p < .05$. Lastly, of those respondents who made $75,000 or greater, a smaller proportion of them reported IPV (16.8 %) compared to those who did not report it (23.7 %), $p < .05$. Not all other age groups showed statistically significant differences in reporting IPV, *ps* > .05.

Table 10

Frequencies and Percentages for Between Household Income Experiences of IPV

	IPV						
	No		Yes				
Household income	*n*	%	*n*	%	χ^2	*p*	Cramer's *V*
Household income					91.42	< .001	.131
< $7,500	303[a]	9.5	309[b]	14.1			
$7,500 to $14,999	365[a]	11.5	347[b]	15.9			
$15,000 to $24,999	430[a]	13.5	334[a]	15.3			
$25,000 to $34,999	402[a]	12.6	244[a]	11.2			
$35,000 to $49,999	445[a]	14.0	332[a]	15.2			
$50,000 to $74,999	481[a]	15.1	250[b]	11.4			
> $75,000	753[a]	23.7	368[b]	16.8			

Note. For each row category, pairs of column proportions with different superscripts differed significantly, $p < .05$.

Table 11 illustrates within household income groups' experiences of IPV. The association between household income and IPV was significant, χ^2 (6) = 91.42, $p < .001$,

Cramer's V = .131. The findings indicate that higher proportions of participants who were in the less than $7,500 income category (50.5 %) reported IPV, compared to all other marital groups. In addition, of those participants who reported IPV, the next largest proportion who reported IPV was the $7,500 to $14,999 group (48.7 %). Lastly, of those participants who reported IPV, the group that reported it the least were participants who were in the greater than $75,000 group (32.8 %).

Table 11

Frequencies and Percentages for Within Household Income Experiences of Intimate Partner Violence

	Household income													
	< $7,500		$7,500 to $14,999		$15,000 to $24,999		$25,000 to $34,999		$35,000 to $49,999		$50,000 to $74,999		> $75,000	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
IPV														
No	303[a]	49.5	365[a]	51.3	430[a, b]	56.3	402[b, c]	62.2	445[a, b]	57.3	481[c]	65.8	753[c]	67.2
Yes	309[a]	50.5	347[a]	48.7	334[a, b]	43.7	244[b, c]	37.8	332[a, b]	42.7	250[c]	34.2	368[c]	32.8

Note. $\chi^2 = 91.42$; $p < .001$; Cramer's V = .131.

For each row category, pairs of column proportions with different superscripts differed significantly, $p < .05$.

Table 12 provides the between racial group's experiences of IPV results. The association between some racial groups and IPV was not significant, χ^2 (2) = 1.66, p = .437, Cramer's V = .015. The proportion of respondents who identified as "White", "Black", and "Other" showed no significant difference in reporting IPV and not reporting IPV, ps > .05.

Table 1

Frequencies and Percentages for Between Race Experiences of IPV

	IPV						
	No		Yes				
Race	*n*	%	*n*	%	χ^2	*p*	Cramer's *V*
Race					1.66	.437	.015
White	3249[a]	78.2	2340[a]	78.7			
Black	582[a]	14.0	423[a]	14.2			
Other	326[a]	7.8	209[a]	7.0			

Note. For each row category, pairs of column proportions with different superscripts differed significantly, p < .05.

Table 13 provides the within racial groups' experiences of IPV results. The association between racial groups and IPV was not significant, χ^2 (2) = 1.66, p = .437, Cramer's V = .015. The proportion of respondents who reported IPV showed no significant difference across all racial categories, ps > .05.

Table 2

Frequencies and Percentages for Within Race Experiences of Intimate Partner Violence

	Race								
	White		Black		Other				
IPV	*n*	%	*n*	%	*n*	%	χ^2	*p*	Cramer's *V*
IPV							1.66	.437	.015
No	3249[a]	58.1	582[a]	57.9	326[a]	60.9			
Yes	2340[a]	41.9	423[a]	42.1	209[a]	39.1			

Note. For each row category, pairs of column proportions with different superscripts differed significantly, $p < .05$.

Table 14 provides the between weapon use group's experiences of IPV results. The association between weapon use groups and IPV was significant, χ^2 (2) = 244.95, p < .001, Cramer's V = .185. Among those respondents who reported that the offender had a weapon, a smaller proportion of them experienced IPV (17.7 %) compared to respondents who did not experience it (25.6 %). In addition, among respondents who reported that the offender had no weapon, a larger proportion of them experienced IPV (78.5%) compared to respondents who did not experience it (62.5%).

Table 14

Frequencies and Percentages for Between Weapon Use Experiences of Intimate Partner Violence

	IPV						
	No		Yes				
Weapon use	*n*	%	*n*	%	χ^2	*p*	Cramer's *V*
Reported use of a weapon					244.95	< .001	.185
Yes	1063 [a]	25.6	527 [b]	17.7			
No	2599 [a]	62.5	2332 [b]	78.5			
Do not know	495 [a]	11.9	113 [b]	3.8			

Note. For each row category, pairs of column proportions with different superscripts differed significantly, p < .05.

Table 15 illustrates within weapon use groups' experiences of IPV. The association within weapon use groups and IPV was significant, χ^2 (2) = 244.95, p < .001, Cramer's V = .185. The findings indicate that a higher proportion of respondents who reported IPV also reported that the offender did not have a weapon (47.3%), p < .05. In addition, of those participants who reported IPV, the next largest proportion was participants who reported that the offender had a weapon (33.1%), p < .05. Lastly, of

those participants who reported IPV, the smallest proportion were participants who reported that they did not know if the offender had a weapon (18.6%), $p < .05$.

Table 15

Frequencies and Percentages for Within Weapon Use Experiences of Intimate Partner Violence

	Reported use of a weapon								
	Yes		No		Don't know				
IPV	*n*	%	*n*	%	*n*	%	χ^2	*p*	Cramer's *V*
IPV							244.95	<.001	.185
No	1063[a]	66.9	2599[b]	52.7	495[c]	81.4			
Yes	527[a]	33.1	2332[b]	47.3	113[c]	18.6			

Note. For each row category, pairs of column proportions with different superscripts differed significantly, $p < .05$.

Primary Analyses

In order to assess the research questions and hypotheses, a series of multiple logistic regressions were conducted to assess the relationships between key predictors and IPV. Due to multiple models being used, alpha levels were adjusted using a Bonferroni adjustment such that significance was determined at the .01 level (.05/5 regression models).

H1 states that no relationship exists between race and IPV, controlling for marital status and weapon use. A multiple logistic regression analysis was conducted to test this hypothesis (see Table 16). The predictors included race, marital status, and weapon used. The overall model was significant, χ^2 (8) = 535.99, $p < .001$, Nagelkerke $R^2 = .098$. The results indicated that race was not a significant predictor of IPV, while marital status and weapon use were significant predictors, $p < .001$. Never married ($B = -.93$, $p < .001$), married ($B = -1.35$, $p < .001$), widowed ($B = -1.17$, $p < .001$) and divorced ($B = -.41$, $p < .001$) categories were all associated with a lower likelihood of IPV relative to respondents identified as separated. A respondent that reported the offender used a weapon ($B = .77$, $p < .001$) and a respondent that reported the offender had not used a weapon ($B = 1.40$, $p < .001$) were associated with a higher likelihood of IPV relative to respondents who reported they did not know if the offender used a weapon.

In terms of odds ratios, a respondent who was married was 3.89 times at lower odds to experience IPV compared to a respondent who identified as separated. Conversely, a respondent who reported the offender had used a weapon was 2.17 times at higher odds and those who reported offenders had not used a weapon was 4.07 times at

higher odds to experience IPV compared to a respondent who did not know if the offender used a weapon. This multivariate test indicates that H1 has no supporting evidence that race is predictive of IPV. Therefore, the null hypothesis for H1 is accepted and the alternative hypothesis rejected.

Table 16

Summary of Multiple Logistic Regression Analysis Using Race to Predict IPV Controlling for Marital Status and Weapon Use

Predictor	β	*SE*	*Wald*	*OR*	*p*
Race					
White	.089	.10	.85	1.093	.358
Black	.138	.11	1.47	1.148	.225
Marital status					
Never married	-.925	.10	81.96	.396	<.001
Married	-1.358	.11	165.86	.257	<.001
Widowed	-1.171	.18	43.37	.310	<.001
Divorced	-.406	.11	13.57	.666	<.001
Reported use of a weapon					
Yes	.774	.12	42.00	2.169	<.001
No	1.403	.11	161.80	4.069	<.001

Note. χ^2 (8) = 535.99, p < .001, Nagelkerke R^2 = .098.
[a]Compared to "Other" race category. [b]Compared to "Separated". [c]Compared to "Do not know if offender had a weapon."

H2 states that no relationship exists between age and IPV, controlling for marital status and weapon use. A multiple logistic regression analysis was conducted to test this hypothesis (see Table 17). The predictors included age, marital status, and weapon used. The overall model was significant, χ^2 (11) = 563.27, p < .001, Nagelkerke R^2 = .103. Age, marital status, and weapon use were all significantly associated with reported IPV, ps < .01, with the exception of the 50 to 64 year age group, p = .099.

Compared to those who were 65 years or older, being in another age category (except for 50 to 64) was associated with increased odds of IPV, *Bs* ranging from .415 to .634. Compared to those who were "Separated", those across all other marital statuses were at decreased odds of experiencing IPV, *Bs* ranging from -1.35 to -.364. Compared to not knowing if the offender had a weapon, those knowing whether or not the offender had a weapon was associated with increased odds of IPV, *Bs* = .754 and 1.84, respectively. In terms of odds ratios, a respondent who was 18 to 20 years of age was 1.89 times at higher odds to experience IPV than a respondent who was in the 65 or more age group.

Conversely, a respondent who was married was 3.89 times at lower odds to experience IPV compared to a respondent who identified as separated. Lastly, a respondent who reported the offender had used a weapon was 2.17 times at higher odds and those who reported offenders had not used a weapon was 4.07 times at higher odds to experience IPV compared to a respondent who did not know if the offender used a weapon. This multivariate test suggests that H2 has supporting evidence that age category is predictive of IPV. Therefore, the null hypothesis for H2 is rejected and the alternative hypothesis is accepted

Table 17

Summary of Multiple Logistic Regression Analysis Using Age to Predict IPV Controlling for Marital Status and Weapon Use

Predictor	β	*SE*	*Wald*	*OR*	*p*
Age of respondent					
18 to 20 years	.634	.16	16.37	1.886	<.001
21 to 24 years	.415	.15	7.59	1.514	.006
25 to 34 years	.513	.14	14.30	1.670	<.001
35 to 49 years	.426	.13	10.51	1.532	.001
50 to 64 years	.220	.13	2.73	1.246	.099
Marital status of respondent					
Never married	-1.017	.11	89.57	.362	<.001
Married	-1.348	.11	162.72	.260	<.001
Widowed	-.982	.18	28.76	.374	<.001
Divorced	-.364	.11	10.74	.695	.001
Respondent reported use of weapon					
Yes	.754	.12	39.82	2.126	<.001
No	1.384	.11	157.25	3.992	<.001

Note. $\chi^2(11) = 563.27$, $p < .001$, Nagelkerke $R^2 = .103$.
[a]Compared to "65 or older" age group. [b]Compared to "Separated". [c]Compared to "Do not know if offender had a weapon".

H3 states that no relationship exists between gender and IPV, controlling for marital status and weapon use. A multiple logistic regression analysis was conducted to test this hypothesis (see Table 18). The predictors included gender, marital status, and weapon used. The overall model was significant, χ^2 (7) = 761.56, $p < .001$, Nagelkerke $R^2 = .137$. The results indicate that gender, marital status, and weapon used were all significant predictors of IPV, $p < .001$.

Being male is associated with a lower likelihood of IPV (B = -.771, p < .001). Never married (B = -.76, p < .001), married (B = -1.20, p < .001), widowed (B = -1.23, p < .001) and divorced (B = -.31, p = .007) categories were all associated with a lower likelihood of IPV relative to respondents identified as separated. A respondent that reported the offender using a weapon (B = .84, p < .001) and a respondent that reported the offender had not used a weapon (B = 1.39, p < .001) were associated with a higher likelihood of IPV relative to respondents who reported they did not know if the offender used a weapon.

In terms of odds ratios, male respondents were 2.16 times at lower odds to experience IPV relative to females. Similarly, a respondent who identified as married was 3.31 times at lower odds to experience IPV compared to a respondent who identified as separated. On the other hand, a respondent who reported the offender had used a weapon was 2.33 times and those who reported offenders had not used a weapon was 4.02 times at higher odds to experience IPV compared to a respondent who did not know if the offender used a weapon. This multivariate test suggests that H3 does have evidence to support that gender is predictive of IPV. Therefore, the null hypothesis for H3 is rejected and the alternative hypothesis is accepted.

Table 18

Summary of Multiple Logistic Regression Analysis Using Gender to Predict Intimate Partner Violence Controlling for Marital Status and Weapon Use

Predictor	β	*SE*	*Wald*	*OR*	*p*
Gender					
Male	-.771	.05	223.50	.462	<.001
Marital status					
Never married	-.762	.10	53.55	.467	<.001
Married	-1.196	.11	123.80	.302	<.001
Widowed	-1.227	.18	46.37	.293	<.001
Divorced	-.306	.11	7.40	.737	.007
Reported use of a weapon					
Yes	.847	.12	49.09	2.332	<.001
No	1.392	.11	156.04	4.022	<.001

Note. $\chi^2(7) = 761.56$, $p < .001$, Nagelkerke $R^2 = .137$.
[a]Compared to "Female". [b]Compared to "Separated". [c]Compared to "Do not know if offender had a weapon".

H4 states that no relationship exists between household income and IPV, controlling for marital status and weapon use. A multiple logistic regression analysis was conducted to test this hypothesis (see Table 19). The predictors included household income, marital status, and weapon used. The overall model was significant, χ^2 (12) = 449.99, $p < .001$, Nagelkerke $R^2 = .109$. The results indicate that household income, marital status, and weapon used were all significant predictors of IPV, $p < .001$.

Compared to individuals who had a household income of $75,000 or greater, having incomes in the following ranges was associated with increased likelihood of experiencing IPV: < $7,500 ($B = .549$), $7,500-$14,999 ($B = .516$), $15,000-$24,999 ($B = .310$), and $25,000-$34,999 ($B = .329$). Compared to those who were separated, all other

marital status were associated with decreased odds of IPV, *Bs* ranging from -.637 to –1.363. Lastly, knowing whether the offender had a weapon was associated with greater odds of IPV, compared to not knowing if the offender had a weapon.

In terms of odds ratios, respondents who fell in the income category < $7,500 were 1.73 times at higher odds to experience IPV relative to the $75,000 or greater income category. Respondents who fell in the income category $7,500 to $14,999 were 1.68 times at higher odds to experience IPV relative to the $75,000 or greater income category. Respondents who fell in the income category $15,000 to $24,999 were 1.36 times at higher odds to experience IPV relative to the $75,000 or greater income category. Respondents who fell in the income category $25,000 to $34,999 were 1.10 times at higher odds to experience IPV relative to the $75,000 or greater income category. Respondents who fell in the income category $35,000 to $49,999 were 1.39 times at higher odds to experience IPV relative to the $75,000 or greater income category. Consequently, respondents who fell in the income category $50,000 to $74,999 were 1.00 times at higher odds to experience IPV relative to the $75,000 or greater income category.

Conversely, a respondent who identified as married was 3.90 times at lower odds to experience IPV compared to a respondent who identified as separated. Similarly, a respondent who reported the offender had used a weapon was 2.12 times at higher odds and those who reported offenders had not used a weapon was 4.11 times at higher odds to experience IPV compared to a respondent who did not know if the offender used a weapon.

Overall, these results indicate that there is a relationship between household income and IPV when controlling for marital status and knowledge of whether the offender used a weapon. Hence, this multivariate test suggests that H4 does have evidence to support that household income is predictive of IPV. Therefore, the null hypothesis for H4 is rejected and the alternative hypothesis is accepted.

Table 19

Summary of Multiple Logistic Regression Analysis Using Household Income to Predict Intimate Partner Violence Controlling for Marital Status and Weapon Use

Predictor	β	*SE*	*Wald*	*OR*	*p*
Household income					
< $7,500	.549	.11	24.75	1.732	<.001
$7,500 to $14,999	.516	.11	24.16	1.676	<.001
$15,000 to $24,999	.310	.10	9.14	1.364	.003
$25,000 to $34,999	.098	.11	.81	1.103	.368
$35,000 to $49,999	.329	.10	10.60	1.389	.001
$50,000 to $74,999	-.004	.10	.00	.996	.970
Marital status					
Never married	-1.038	.12	75.76	.354	<.001
Married	-1.363	.13	119.69	.256	<.001
Widowed	-1.264	.21	35.46	.283	<.001
Divorced	-.637	.13	24.45	.529	<.001
Reported use of a weapon					
Yes	.752	.14	28.68	2.122	<.001
No	1.414	.13	118.46	4.111	<.001

Note. $\chi^2(12) = 449.99$, $p < .001$, Nagelkerke $R^2 = .109$.
[a]Compared to "Greater than $75,000" income group. [b]Compared to "Separated".
[c]Compared to "Do not know if offender had a weapon"

H5 states that no relationship exists between race, age, gender, household income and IPV, controlling for marital status, and weapon use. A multiple logistic regression

analysis was conducted to test this hypothesis (see Table 20). The predictors included race, age, marital status, and weapon used. The overall model was significant, χ^2 (20) = 622.32, $p < .001$, Nagelkerke $R^2 = .148$.

The results indicate that household income, marital status, and weapon use were significant predictors, *p*s < .01. Though White respondents and respondents that were in the 18 to 20 year category did achieve significance at the typical alpha level of .05, they did not meet the threshold using the Bonferroni correction, $p = .01$. Compared to females, males had decreased odds of experiencing IPV ($B = -.736$). Compared to having an income of $75,000 or greater, individuals with incomes in the following areas had decreased odds of experiencing IPV: < $7,500 ($B = .481$), $7,500-$14,999 ($B = .461$), and $35,000-$49,999 ($B = .304$).

Compared to being "Separated", respondents in the following categories were all associated with a lower likelihood of IPV: never married ($B = -.95$), married ($B = -1.21$), widowed ($B = -1.22$) and divorced ($B = -.49$). Compared to not knowing whether or not the offender had a weapon, knowing the offender had a weapon or knowing the offender did not have a weapon was associated with increased odds of IPV, *Bs* = .804 and 1.378, respectively.

In terms of odds ratios, male respondents were 2.09 times at lower odds to experience IPV relative to females. Conversely, respondents who fell in the income category < $7,500 were 1.62 times at higher odds to experience IPV relative to the $75,000 or greater income category. In addition, a respondent who identified as married

was 3.34 times at lower odds to experience IPV compared to a respondent who identified as separated.

However, a respondent who reported the offender had used a weapon was 2.24 times at higher odds and those who reported offenders had not used a weapon was 3.97 times at higher odds to experience IPV compared to a respondent who did not know if the offender used a weapon. Overall, these results provide partial support for the hypothesis, given that gender and household income were associated with experiencing IPV. Lastly, age and race were not associated with experiencing IPV. Therefore, this multivariate test suggests that H5 does have partial evidence to support that gender and household income is predictive of IPV. Therefore, the null hypothesis for H5 is rejected and the alternative hypothesis is accepted.

Table 20

Summary of Multiple Logistic Regression Analysis Using Race, Age, Gender, and Household Income to Predict Intimate Partner Violence Controlling for Marital Status and Weapon Use

Predictor	β	*SE*	*Wald*	*OR*	*p*
Race					
White	.256	.12	4.85	1.291	.028
Black	.185	.14	1.80	1.204	.180
Age					
18 to 20 years	.441	.19	5.56	1.554	.018
21 to 24 years	.137	.18	.58	1.146	.448
25 to 34 years	.256	.16	2.48	1.292	.115
35 to 49 years	.155	.16	.96	1.168	.327
50 to 64 years	.043	.16	.07	1.044	.789
Gender					

Table 20 (continued)

Predictor	β	*SE*	*Wald*	*OR*	*p*
Male	-.736	.06	149.09	.479	<.001
Household income					
< $7,500	.481	.11	17.95	1.618	<.001
$7,500 to $14,999	.461	.11	18.15	1.585	<.001
$15,000 to $24,999	.260	.11	6.17	1.297	.013
$25,000 to $34,999	.036	.11	.10	1.036	.749
$35,000 to $49,999	.304	.10	8.70	1.355	.003
$50,000 to $74,999	.014	.11	.02	1.014	.897
Marital status					
Never married	-.951	.13	54.71	.386	<.001
Married	-1.209	.13	90.22	.299	<.001
Widowed	-1.224	.22	30.65	.294	<.001
Divorced	-.489	.13	13.71	.613	<.001
Reported use of weapon					
Yes	.804	.14	31.91	2.235	<.001
No	1.378	.13	110.30	3.968	<.001

Note. $\chi^2(20) = 622.32$, $p < .001$, Nagelkerke $R^2 = .148$.
[a]Compared to "Other" race category. [b] Compared to "65 or older" age group. [c]Compared to "Female". [d]Compared to "Greater than $75,000" income group. [e]Compared to "Separated". [f]Compared to "Do not know if offender had a weapon".

Conclusion

To summarize, the results revealed that the likelihood of IPV decreases if the respondent was male. Second, the likelihood of IPV decreases if the respondent's marital status was single, married, widowed, or divorced compared to "Separated". Third, the likelihood of IPV decreases as a respondent gets older and as a respondent's household income increases. Fourth, the likelihood of IPV increases if the respondent was female. Fifth, the likelihood of IPV increases if the respondent was White or if their marital status was considered "Separated". Lastly, the likelihood of IPV increases if the respondent reported an offender used a weapon or if the offender did not use a weapon (compared to if a weapon used was not known). The following chapter discusses the interpretation and implications of these findings.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

I tested the risk of IPV incidence in association with a number of independent variables. Perhaps due to the small sample of minority populations and other limitations in sample size, several findings of this study were not statistically significant. However, this study did yield some relevant findings in terms of race, age, gender, and household income. Although previous studies addressed the same variables, I used NCVS 2013 data to improve investigation of IPV by focusing on IPV victimization incidence. Although IPV perpetration was a significant aspect of IPV occurrence, perpetration and victimization variables contrasted in several ways (Cho, 2012a; Golden et al., 2013; Lawson, 2012).

The purpose of this study was to examine the relationship between the independent variables of interest and IPV victimization. The data sample was composed of U.S. crime figures and 1,696 crime-related variables (BJS, 2013). Because there were so many variables, the U.S. Department of Justice developed an Excel spreadsheet, accessible to the public, which allowed me to focus on key data for this study. The U.S. Department of Justice narrowed the variables down to 26 on the spreadsheet, and I used the following: gender (labeled sex in the survey); race (White, Black, Other); age (age categories); marital status (single, married, separated, divorced, widowed); household income (income categories); direl (Victim-offender Relationship), and weapon category (weapon used, no weapon used, unknown whether the perpetrator had a weapon, and seriousviolent (serious violent victimization). I created an IPV variable by combining the

direl (direct relationship) and seriousviolent (serious violent victimization) variables from the survey.

Respondents were recruited through computer-assisted telephone and face-to-face interviews, which allowed for improved validity and generalizability within collection methods for the sample population in the NCVS 2013. The extensive use of both methods in quantitative studies involves several advantages and disadvantages. Computer-assisted telephone interviews allow for reduction of costs and time. The researcher has telephonic access to the respondent along with automation of the process. The disadvantages of using computer-assisted telephone interviews is the possibility of bias in the sample due to a low rate of response, and whether all types of phone service are accessible (landline and cell phone) for the survey. Face-to-face interviews, allow the interviewer to develop a connection with respondents and gain their cooperation, clarify vague answers, gather follow up information as needed, and gain a higher response rate (BJS, 2013).

Data Collection

The data collection methods used in the NCVS 2013 were a significant improvement over mailed or online surveys that exhibited low response rates and were therefore vulnerable to sampling bias. Higher sampling bias can lead to selection bias or the selection of participants who contribute to systematic error in estimating effects. Sampling bias, oversampling, or under-sampling may affect generalizability to the target population (Babbie, 2012). Methods used in NCVS 2013 data collection helped me to assess the levels of IPV that the victims encountered. The interviews addressed their race,

age, gender, and household income. Covariates included in the data analysis were marital status and weapon use.

Interpretation of the Findings

Findings on IPV incidents among the study sample were as follows: out of the 7,129 respondents evaluated for this study, 4,157 (58.3%) did not experience intimate, violent incidents while 2,972 (nearly 41.7%) did experience intimate, violent incidents. There were 1766 (24.8%) respondents listed as Unknown in the household income category, and these were considered respondents with incomplete information. Analysis of the data confirmed that, after controlling for marital status and weapon use, age, gender, and household income were associated with IPV. The findings indicated a positive association between age, gender, household income, and the likelihood of the experience of IPV. However, there was a negative correlation between race and IPV. I anticipated the study to be useful in monitoring trends in the data from the perspective of the variables examined.

Relationships Between Race and IPV

The results for Research Question 1 indicated that race was not significantly associated with IPV, controlling for marital status and use of weapon, $p > .05$. There were more White respondents in the sample (78.4%) than other races. However, the cross-tabulations of IPV by race revealed that White respondents (58.1%) faced a statistically similar number of incidents as Black respondents (57.9%) and Other respondents (60.9%).

This finding contradicted research reported by Black et al. (2011) and Stockman et al. (2014) that Black women reported more incidents involving intimate partners. According to Stockman et al. (2014), the CDC reported a 40.9% occurrence of IPV in the lifetime of African American women. Stockman et al. conducted a multisite study to investigate a 2-year versus lifetime prevalence of IPV among 1,545 women of African descent in the United States and U.S. territories. Stockman et al. compared the data from their study to other population-based studies and reported that their data showed a recent higher occurrence of IPV (27%). Therefore, the finding in this study that race was not significant presented that further review is needed focusing on women that responded to the NCVS.

Black et al. (2011) reported that 43.7% Black non-Hispanic women had experienced some form of IPV while 34.6% of White non-Hispanic women had the same experience. The result was a 9.1 % difference between the two major races. Black et al.'s sample was representative of U.S. women with an estimated 5,955,000 (40.9%) Black female victims versus an estimated 25,746,000 (40.9%) White female victims. According to Truman, Langton, and Statisticians (2014), data representing the prevalence of violent crime indicated nearly 1.9 million Whites victims and 430,380 Blacks victims. This data reflected a 1.1% decrease in incidence for Whites and 1.3% decrease for Blacks. Findings from these studies represent an extreme contrast with those from my study in that the chosen population size was smaller, but aligned with the outcome of the Truman et al. study because there were more White victims than Black victims. The sample size and

composition of my study widely differed from Black et al.'s (2011), Stockman et al.'s (2014), and Truman, et al.'s (2014) because each study represented varied populations.

When controlling for marital status, I found that respondents in the single, married, widowed, and divorced marital groups were at lower odds to experience IPV than respondents who identified as separated, $p < .001$. Bernards and Graham (2013) argued that in a less patriarchal society, women might be more susceptible to IPV because of the issues that led to the separation. Other researchers (Heimer, 2008; Li et al., 2010b) have argued that cohabitation creates adverse effects in relationships, but separation appears to take relationships to a dangerous level without race being a factor.

Finally, when controlling for the type of attack or weapon use, I found that respondents who reported the offender had a weapon or had no weapon were more likely to experience IPV than respondents who did not know whether a weapon was involved, $p < .001$. In addition, the results indicated that respondents who reported that no weapon was involved were more likely to experience IPV than those who reported that a weapon was involved. Kernsmith and Craun (2008) found that weapon use was higher among Blacks than Whites, and Black women suffered higher incidents of adverse effects than White women.

Relationships Between Age and IPV

The results for Research Question 2 revealed that age was significantly associated with IPV when controlling for marital status and type of attack/weapon use. All age categories showed a positive association with IPV compared to the 65 and older reference category ($p < .01$), with the exception of the 50 to 64 year old age category. The category

50 to 64 years showed no relationship with IPV, which suggests that 50 may be a threshold age when IPV incidence begins to diminish.

According to Lanier and Dietz (2012), there was very little research on the rates of victimization in older Americans, and it is possible that this population does not report a higher incidence of IPV due to isolation and fear. Roberto, McCann, and Brossoie (2013) stated that between 1993 and 1999, at least 2% of the 7.4 million incidents were against women 55 and older from age-aggregated data. In the same year, the NCVS recorded 671,110 incidents against women age 65 and older (Roberto et al., 2013). Morgan, Statistician, and Mason (2014) reported that from 2003 to 2013, data from the NCVS showed that 65 or older participants reported the least total violent crimes (136,720; 3.6 %), and even fewer serious violent crimes (47,640; 1.3 %). Brandl (2014) reported that IPV was perpetrated against female victims by their spouses, and the abuse was underreported due to social norms and perceptions. The comparisons show there was little consistency in reporting incidence or prevalence among the elderly population.

When controlling for marital status, I found that respondents who were separated were more likely to experience IPV than respondents in the other categories. Beyer et al. (2015) argued that age and marital status were known to influence IPV because they were individual level covariates. The Beyer et al. (2015) study was conducted in Norway, and comparisons may be inappropriate due to substantial differences in target population characteristics and other sociocultural factors. Findings from the current study conflict with those presented by Bernards and Graham (2013) that younger women with risky lifestyles and who were separated or divorced were more susceptible to IPV.

However, Bernards and Graham (2013) also explained that their collecting data and information from different countries and there was contrast between higher and lower rates according to the category of the relationship. Truman et al. (2014) argued that in 2004 the highest prevalence in respondents who reported being Separated (3.9 %) while from 2012 to 2013, the prevalence remained the same (3.3 %). Therefore, separation appears to affect relationships from the perspective of younger age being a factor and older age becoming a calming influence and deterrence to IPV.

Lauritsen (2001) presented that marital status was an individual risk factor reported in the 1990s, which utilized the NCVS for to predicting IPV versus on a community basis. Capaldi et al. (2012) maintained that marital status was the strongest risk factor for experiencing IPV in studies that they examined. As a final point, when controlling for the type of attack or weapon use, the results showed that respondents who reported the offender had no weapon were more likely to experience IPV compared to respondents who did not know if a weapon was used in the incident.

Relationships Between Gender and IPV

The outcome of Research Question 3 revealed that the gender of the respondent was a significant factor in his/her association with IPV when controlling for marital status and type of attack/weapon use, $p < .001$ (see Table 18). The data analysis showed that males were at lower odds to experience IPV than females, which supports findings by several researchers (Cho and Wilke, 2010; Chan, 2011). Cho and Wilke (2010) discussed that males were more likely to be victims of severe violence while female respondents suffered significant incidence of physical violence such as pushing and shoving.

However, Chan (2011) presented a review of gender differences in IPV through empirical studies dating back to the late 1990s and stated that research was conducted utilizing the NCVS to study gender and IPV. The study revealed that 85 % of incidence involved men attacking women (Chan, 2011). One conclusion offered that men living with women perpetrated more incidence of violence against them, but fewer men reported being victims themselves. Therefore, this investigation appears to be in alignment with previous research that reviews gender as it pertains to IPV.

Next, when controlling for marital status the results showed that respondents that were "Separated" were more likely to experience IPV than respondents in the other categories. Beyer, Wallis, and Hamberger (2015) argued that age and marital status were known to influence IPV because they are individual level covariates. Meanwhile, the data from this study conflicts with the argument presented by Bernards and Graham (2013) that younger women with risky lifestyles and separated or divorced were more susceptible to IPV.

However, Bernards and Graham (2013) also explained that their data and information was gathered from different countries and there was contrast between higher and lower rates according to the category of the relationship. Therefore, separation appears to affect relationships from the perspective of younger age being a factor and older age becoming a calming influence and deterrence to IPV. As a final point, when controlling for the type of attack or weapon use, the results showed that respondents who reported the offender had no weapon were more likely to experience IPV than respondents who did not know if a weapon was used.

Relationships Between Household Income and IPV

The outcome of Research Question 4 revealed that the household income of the respondent was a significant factor in his/her association with IPV when controlling for marital status and type of attack/weapon use (see Table 19). The data analysis showed that respondents in the household income levels <$7,500 to $24,000 and $25,000 to $34,999 had a greater susceptibility to IPV ($p < .001$), compared to respondents in the $75,000 or greater household income level. These findings support previous research presented that low income was a likely risk factor for IPV occurrence (Cho, 2012a; Raghavan et al., 2009), though more research was needed to establish a causal link.

In addition, Lacey, West, Matusko, and Jackson (2016) examined that respondents that were welfare recipients or women that had a hard time maintain stable income were more likely to be victims of IPV. However, Lacey et al. (2016) conducted research outside the United States and found that there were victims of higher income who presented to health care facilities. It is important to note that Lacey and colleagues' non-U.S. sample population consisted of African Caribbean descent such as Trinidad and Haiti. The comparisons in their study consisted of reviewing different regions of the U.S., such as the South, Northeast, West, and Midwest incorporating data from the NCVS (Lacey et al., 2016).

Next, when controlling for marital status, the results showed of this study showed that respondents in the > 7,500 household income level were more likely to experience IPV than respondents in the other categories. This information aligned with the consensus that victims with minimum resources would have a difficult time navigating their lives

away from perpetrators. Lacey et al. (2016) maintained that in earlier research that they conducted in the US, they found that a consistency exists with the non-U.S. sample in that marital status or relationship status of respondents was affected by reduced economic resources and were a major factor of sexual and physical IPV, especially for African American and Caribbean women. On the contrary, Bernards and Graham (2013) presented that in North America, which includes U.S. and Canada, male to female incidence were 4.45 times higher among separated versus married respondents in high-income levels.

Finally, when controlling for the type of attack or weapon use the results showed that respondents who reported the offender had no weapon were more likely to experience IPV compared to respondents who did not know if a weapon was used. In addition, respondents who reported the offender had a weapon were more likely to experience IPV compared to respondents who did not know if a weapon was used. However, the likelihood of experiencing IPV was larger for respondents who indicated there was no weapon compared to if a weapon was used.

Relationships Between All Variables and IPV

After analyzing all the independent variables, the outcome of Research Question 5 revealed that neither the race nor the age of the respondent was a significant factor in his/her association with IPV when controlling for marital status and type of attack/weapon use (see Table 20). The data analysis showed that for this sample, the youngest age group (18 to 20 years) were more likely to experience IPV compared to respondents in the 65-year and older group. None of the other age groups showed

statistical significance controlling for all these other factors, which suggests that aside from very young individuals, age has no relationship with IPV. As for race, it was more likely that White respondents would be involved in IPV incidents compared to respondents who identified in the "Other" category in the sample as reported in the NCVS.

Again, males were at lower odds of experiencing IPV than females. Respondents making less than $15,000 a year in household income were more likely to experience IPV compared to respondents who make greater than $75,000 a year. Respondents in the Single, Married, Widowed, and Divorced marital groups were at lower odds to experience IPV than respondents who identify as Separated. Respondents who reported that the offender had no weapon were more likely to experience IPV compared to respondents who did not know if a weapon was used. Analyzing the independent variables in this investigation only produced a change in the effect for age. Lastly, the findings did not present extreme significant differences in the variables based on the few investigations conducted utilizing the NCVS series and conclusions in the literature presented in those studies.

Limitations of the Study

Research Design Limitations

There were several key limitations to this study. One of the primary limitations of this research was its non-experimental correlational cross-sectional study design. This design limits the ability of the researcher to make valid causal claims due to the many threats to internal validity. The NCVS 2013 utilized a large-scale, randomized sample in

the procedure of the primary database. Several natural restrictions occurred associated with the sampling process in this way. For instance, instead of individual interviews, the database implemented household interviews, maybe causing an underreporting of offenses (Cho and Wilke, 2010; Chan, 2011). However, household interviews present a positive limitation because individual reporting may result in a higher incidence of underreporting and skew the data.

Even though there exist associations between variables of the NCVS 2013 statistical methods and this investigation, it still lacks strong design elements that address both time order and ruling out all other confounding factors that might have an impact on IPV. However, choosing the non-experimental design allowed for the review of a larger sample of respondents; therefore maximize the generalizability of the study findings.

Sample Design and Scope Limitations

Another key limitation of this study was the sample design and the scope limitations. The NCVS 2013 researchers' methodology for sampling their data was a very robust stratified, multi-stage cluster sampling design. Therefore, sampling was not a limitation. The differences between other studies and the NCVS data could have been the execution of the survey and the original study sample size. Black (2011) reported that studies based on patients presenting at medical facilities generate a higher percentage of data than population-based surveys.

Due to the scope of race, gender, income, and age in the NCVS, the research explains the risk factors of a higher occurrence of IPV in a limited fashion for this investigation. Addington (2008) discussed that limitations occur because the NCVS is

used to measure several types of victims, such as new victims, new crimes, new places, and to further define victimization. The NCVS was redesigned nearly 24 years ago, and according to Addington, new improvements are in the form of supplemental reports (However, this investigation did not expand beyond the 2013 survey. Limitations amongst identified IPV threats and their possible association with the occurrence of IPV hamper effective prevention, intervention, and deterrence.

The scope of this study was limited to the survey respondents of the NCVS database, which reflects a large pool of Americans, sampled through seven interviews over a three-year period (BJS, 2013). Then, the data was limited to IPV victimization crimes occurring in 2013 or earlier. The data may not reflect more recent trends such as the development or advancement of useful screening tools for IPV (Hussain, Sprague, Madden, Hussain, Pindiprolu, and Bhandari (2015; Rabin, Jennings, Campbell, and Bair-Merritt, 2009).

Data Quality and Measurement Issues

Another key limitation of this study was the data quality and measurement limitations. The data reviewed and analyzed in this study was secondary and retrieved from the extensive research database of the NCVS 2013. Hussain and colleagues recently conducted a meta-analysis that showed that there were at least 33 different questionnaires that used to identify victims (Hussain et al., 2015). Rabin and fellow researchers explained that gathering information through screening tools such as surveys may be both positive and negative (Rabin, et al., 2009). The NCVS may not be an instrument to screen for IPV, which presents as another limitation, considering that there was controversy

concerning how useful this type of research was for the intervention of IPV (Hussain et al., 2015; Rabin, et al., 2009).

Despite the relationships between the different types of gender violence, this study presented a limitation in scope to addressing the problem of whether gender differences existed concerning aggression toward intimate partners (Hamel, 2007). Then, analyzing violence perpetrated toward men by women from a different perspective than male violence and aggression against women needs further review (Hamel, 2007; Raghavan et al., 2009). Hamel (2007) deliberated that women instigated as many attacks as men but that data gathered over three decades concerning this issue failed to present this information without bias.

Overall, researchers have offered that there was a greater probability that women perpetrate violence in self-defense and a possibility that women have a greater chance of experiencing an injury from their male intimate partners (Cho and Wilke, 2010). The findings for gender in this study does support that women may have had to defend themselves due to the male perpetration of IPV. It would possibly be unfounded to analyze male and female perpetrated incidents within the same context, and so my scope was limited to these variables in this analysis.

Lastly, during a final review of any additional new research involving the NCVS since I began my proposal, I found that there were still no major studies that that fully referenced the utilization of the NCVS data to reduce IPV. Missing data was an issue in this study because of missing information on 1766 (24.8%) respondents listed as Unknown in the Household Income category. It was difficult to determine how the

unaccounted for information affected the outcome of the data analysis. There was no clear explanation as to what the circumstances were that created the void during the retention period.

Theoretical Limitations

The last key limitation of this study was theory related limitations. This study focused on IPV victimization that followed the ideation of most studies that are in correlation with violent victimization creating a restriction of this research. The NCVS data investigation presented the differences between gender and the types of encounters, which connected with past studies aligned with experiences of intimate partners/sexual violence incidents for women and men. It does elaborate in detail that men are equally affected as IPV victims as women but on different platforms. It appears that victimization of the women was remarkably higher than that of the men as regards individual, social, family, and community influences (Ackerman and Love, 2014; Golden, 2013; Baumer and Lauritsen, 2010; Lauritsen and Hiemer, 2012; USDOJ, 2014; Yun and Lee, 2014). It appears that social context theories used in this type of research, such as the RCG Theory, may limit scientific and accurate study of IPV because of its convergence of race, class, and gender, which are in need of further study.

Likewise, social context theories such as the RCG Theory focus on the individual concerning particular circumstances and fail to expand into broader perspectives reflecting the complex and complicated nature of social settings, resulting in limited investigations (Hattery and Smith, 2012; Hall, et al., 2012). Perhaps more time, funding

and research will allow researchers to devote more attention to IPV causation throughout all societal systems to arrive at solutions to reduce incidences.

Recommendations

The current study presents a need to define, race, age, gender, and household income in relation to occurrence of IPV. In order to understand IPV and these variables, and an enhanced interpretation of IPV estimates derived from the NCVS, some future directions in research have been considered. These efforts will serve to diminish the incidence of IPV and address principal problems causing its prevalence by identifying and filtering these factors.

There may be a feasibly way to facilitate creating a refined survey based upon the NCVS Excel spreadsheet variables and reducing the current data collection timeframe or methods. One area for sustained research would focus on question changes made to the NCVS that could allow a researcher to differentiate between related contextual factors, such as whether the victim has sought social support systems for escaping the violence, including social media. Further use of the refined NCVS survey would be to utilize it as a longitudinal source to examine the life course of an IPV victim who has managed to escape abuse. This approach address one of the research design limitations.

Next, future research involves concentrating on improving the interpretation and measurement of IPV in the NCVS with the refined survey. Eventually, proposed pragmatic recognition of the threshold of IPV measured and combined information from other studies and IPV screening tools, such as the Partner Violence Screen (PVS), Conflict Tactics Scale (CTS), or the Abuse Assessment Screen (AAS), will allow for

expansion of quantitative comparisons (Rabin et al., 2009; Straus, and Douglas, 2004). At some point, I would recommend expanding the scope of this work to better test lingering questions evolving from this analysis. This would involve further research to determine the best surveys to adapt to improve the quality of the NCVS. I hope that this will address sample design and scope limitations.

Consequently, the theoretical basis of this study was RCG Theory, a viewpoint that was cultivated out of the Feminist Theory (Lawson, 2012; Zinn and Dill, 2012; Hattery and Smith, 2012). A third area of future research involves continuing to identify latent theoretical limitations involving the RGC Theory and where it intersects with the variables analyzed in this study and the NCVS. By the usage of RCG Theory, an enhanced explanation and understanding was pursued concerning how manifold backgrounds affect risk of IPV victimization.

Through analysis of secondary data capturing the dependent and independent variables in this study, the realization of addressing the gaps in the literature regarding IPV victimization are necessary. The gaps of knowledge concerning specific risk variables and IPV victimization require more evidence. This data must offer more constancy in theory, explanation of terms, methodology and collection of data, and an enhanced understanding the relevance of data findings. Besides social context theories, social strain theory, social disorganization theory, and social benefit theory, need further review when analyzing IPV thoroughly.

Consequently, the questionnaires should not interject gender biases into IPV assessments and should include relevant issues that pertain to gender. Then, application

of the RCG Theory requires expansion in such a way that it allows a broader view of interaction among variables. An attempt to control for familiar covariates referenced in prior studies utilizing the NCVS, allows for this expansion. Next, all potential or associative risk elements persuading occurrence of IPV should be eliminated. Finally, inmates in correctional facilities and military personnel should be included for evaluation.

Implications for Social Change

IPV is complex at best and it is important that society understands the risk involved and find ways to facilitate prevention and effective intervention. This intention of this study was to provide an enhanced understanding of the risks involved in IPV from the perspective of the independent variables chosen. This study has tested the variables and the various relationships and presented that it is important to continue to examine how they intersect. The potential for positive social change involves an increasingly contemporary awareness of individuals and social circumstantial threats for IPV are necessary to guide future research. It was noted that the aims of decreasing IPV in the United States and arming public health professionals with another way to monitor the impact of IPV on victims is important (Hamel, 2007).

Furthermore, from a research perspective, this study reinforces the use of large-scale population analyses to determine threat elements for IPV victimization. Nevertheless, a refinement of the NCVS to aid as a screening tool could be beneficial for surveillance and intervention. Additionally, the research may aid in changing the culture of social and individual constructs associated with race, age, gender, household income, which stimulate disparities. It may assist with the consideration that IPV differs among

health behaviors and risk factors. Then, understanding the severity and the type of IPV that affects men and women may present the opportunity for researchers to scrutinize the data collected in large-scale studies and use the information for improving prevention. It was important to review and address disparities in all facets of social environments, which included health care, education, and governmental entities.

Conclusion

The literature reviewed for this study has shown many risk factors that exist and are associated with IPV. Based on the data utilized for this study, race, gender, household income, and age intersected with each other and had interactional influence on victimization. Although IPV appears on the societal level as a crime against women, this study showed the effect on men also. Conducting future research concerning IPV and communities, allows researchers to learn about the societal tiers and the complexity of responses that would be useful to all victims of IPV, but always with the inclusion of male victims (Hamel, 2007).

It is imperative that we determine how to open up channels for discussion, change the perceptions of what IPV really cost us, and review it from the human perspective. It is important to note that this study reveals how women and men experience IPV over the course of different ages. Nevertheless, it cannot take into account the context of the level of abuse at individual levels that may have occurred prior to conducting the survey.

Researchers and supporters dealing with the issue agree that IPV perpetrators utilize a pattern of coercive behaviors intended to control an intimate partner; therefore, further research is necessary in order to gain a better understanding of the framework and

patterns of abusive and violent relationships (Hamel, 2007; Hussain et al., 2015; Taylor, Nair, and Braham, 2013). The findings were diverse from previous research and deliberated among social scientists, public health researchers, and practitioners.

The findings of this report underscore the seriousness of IPV in the lives of men and women. However, consistent with previous research, ignoring the impact of physical and sexual violence in the lives of women must stop. Specifically because considering that for three out of four categories of IPV examined, women suffered higher incidence. Yet, men are suffering from physical violence perpetrated by non-intimate, violent encounters which warrants a closer look and supports the ideology of reviewing IPV from a community level (Raghavan et al., 2009).

This study shows support for the literature that self-reporting IPV in large-scale surveys are reliable and necessary in gathering the information needed to make a difference in prevention and intervention. The utilization of the information provides a tool when reviewing policies and procedures when it comes to the variables examined. Then, a decision for modifications and adjustments has a foundation with entities that have the power to effect change, such as federal and state governments.

The findings suggest that at least a half of the households interviewed were affected based upon household income, but that different household income levels were affected throughout the spectrum. Then, the young and the older populations were affected, showing that it was important to be careful about assuming that having access to money and maturity will prevent or reduce incidences of IPV. In the end, this information shows that no particular level of society is immune and it will certainly affect individual

and social actions to lessen IPV and improve health of humanity, societies, communities, and continuity of life. It is clear that society, as a whole, must continue to focus on IPV and include intervention and prevention as an issue on the public agenda or platform. This study calls for us to continue to be persistent and unyielding in our pursuit of mediating solutions.

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