

# **Violent Crime and Victim's Gender 2002**

## **An Examination of Differences in Correlates of Male and Female Nonfatal Violent Victimization in the State of Illinois, 2002**

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## Executive Summary

A fundamental, yet unanswered question regarding violent victimization is whether the predictors of nonfatal violent victimization against men differ from predictors of similar violence against women. Specifically, it is unclear whether individual-, and household-level factors associated with increased risk of violence against males and females differ. The purpose of this report is to address this basic question for persons age 18 or older residing in Illinois. Three research questions are examined in this report. First, do individual- and household-level correlates of nonfatal victimization differ between males and females? Second, do these correlates differ between males and females across several types of nonfatal violence? And third, do individual- and household-level predictors of nonfatal victimization across victim and offender relationships differ for males and females?

To address these questions, Illinois Crime Victimization Survey (ICVS) data were used. The purpose of the ICVS is to ascertain the nature and extent of statewide and regional crime victimization in Illinois. Analyses were conducted using the ICVS data provided by the Illinois Criminal Justice Information Authority (ICJIA). These data were collected using the Illinois Crime Victimization Survey (ICVS) which measured the nature and extent of statewide and regional crime victimization in Illinois during 2002.

The data file was changed to a 'victimization' file for the following analyses. The converted file had an unweighted sample size of 1,474 individuals. There were 321 victimizations (unweighted) made up of 20 rape/sexual assaults, 67 robberies, 74 aggravated assaults, and 160 simple assaults. Of these, 1,461 contained gender data (842 females and 619 males) making them available for use in gender-specific regressions. Recoding and verification tasks were conducted using Statistical Software for the Social Sciences (SPSS), and correlation matrices and logistic regressions were performed using Stata (StataCorp, 2003).

Analyses offered valuable information about differences in predictors of violence for males and females, including differences by crime type and by victim and offender relationship. Key findings from this work are as follows:<sup>1</sup>

- *Overall violent victimization* (i.e., rape/sexual assault, robbery, aggravated assault and simple assault), results demonstrate that predictors of overall nonfatal violence differ substantially between males and females. Only one predictor (age) was found in common between males and females.

**Males:** Being Hispanic (compared to white non-Hispanic), black (compared to white non-Hispanic) or younger were predictors of overall violent victimization.

**Females:** Being younger, widowed, divorced, (compared to being married), having children under age 18, earning less than \$10k annually, living in a city, or having a college degree (compared to a high school education) were predictors of overall violent victimization.

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<sup>1</sup> Table VIII (shown in the text of the report) summarizes these findings in a concise fashion.

- *Total Assault* (i.e., aggravated and simple assault combined) findings suggest that predictors of total assault differ entirely between males and females.

**Males:** Being a non-Hispanic black, non-Hispanic “Other” or a Hispanic (compared to a non-Hispanic white) were predictors of total assault.

**Females:** Being younger or living in a city (versus a suburban area, rural area or town area) were predictors of total assault.

- *Aggravated Assault* analyses show that predictors of aggravated assault differ completely between males and females.

**Males:** Earning between \$10k and \$19,999 annually (compared to over \$100k) was a predictor of aggravated assault.

**Females:** Living in a city area (versus a suburban area, rural area or town area) was a predictor of total assault.

- *Simple Assault* results reveal that with one exception, predictors of simple assault differ between males and females. For both, findings suggest an apparent ‘protective’ nature of marriage against simple assault victimization.

**Males:** Being a non-Hispanic black, non-Hispanic “Other” or a Hispanic (compared to a non-Hispanic white), being divorced, separated, widowed or never married (compared to married), or earning between \$20k and \$34,999 annually (compared to over \$100k) were predictors of simple assault.

**Females:** Being divorced, separated, widowed or never married (compared to married), were predictors of simple assault.

- *Robbery* analyses demonstrate that with one exception, predictors of robbery differ between males and females. For both, having children under the age of 18 in the household was a predictor of robbery.

**Males:** Having children under age 18 living in the home was a predictor of robbery.

**Females:** Having children under age 18 living in the home, and having a college degree (compared to no more than a high school education) were predictors of robbery.

- *Rape/Sexual Assault* analyses exposed difficulties common among most victimization surveys: difficulty in uncovering or measuring an adequate sample size of rape and sexual assault. With so few cases of rape and sexual assault available in the data, analyses for male victims could not be reliably conducted. Therefore, analyses on all respondents (i.e., male and female), and analyses on female respondents only were conducted. Surprisingly missing from the list of predictors is gender of the respondent. This unexpected finding is most likely due to the sample limitations and low number of rapes/sexual assaults revealed in the data collection (n=20). For this reason, findings regarding rape/sexual assault should be considered with *extreme* caution.

**All Respondents:** Being divorced, separated, widowed or never married, having children under age 18 living in the home, and having completed some college (compared to a college degree) were predictors of rape/sexual assault.

**Females:** No predictors of rape/sexual assault were revealed.

- *Violence by a Known Offender* results reveal that predictors of violence by a known offender differ between males and females with one exception. For both, being older is associated with a greater likelihood of being victimized by someone known to them.

**Males:** Being older, having a higher annual household income, having lived in one's home five or more years, living in the suburbs or rural areas were predictors of non-stranger violence. The converse is true as predictors of stranger violence.

**Females:** Being older, having no more than a high school education (as opposed to a college education), living in a property that is owned (versus rented), having fewer kids under age 18 in the home, and living in a town (versus a city, suburban area or rural area) were predictors of non-stranger violence. The opposite is true as predictors of stranger violence.

These findings should be of value to policy makers. In general, this research demonstrates that predictors of male and female victimization differ. Outreach aimed toward reducing violence must recognize these differences. Among males, victimization prevention and services must be directed toward the young, black and Hispanic males in order to reduce overall violence against males. Among females, the story is more complex, suggesting an entirely different population targeted by outreach. Among females, it is imperative to direct services and prevention strategies toward impoverished, urban, single (i.e., widowed and divorced) women with children under the age of 18 years. An unexpected finding was that females with a college degree have a *greater* risk of violent victimization compared to females with a high school education only. This suggests the need to focus services toward females attending universities as well. Having more information on how predictors of violence differ between males and females in Illinois, how they differ by specific types of violence, and how they differ by type of victim and offender relationship allows the design and implementation of even more efficient and effective programs to further minimize victimization risks for *all* residents.

## INTRODUCTION

A fundamental, yet unanswered question regarding violent victimization is whether the predictors of nonfatal violent victimization against men differ from predictors of similar violence against women. Specifically, it is unclear whether individual-, and household-level factors associated with increased risk of violence against males and females differ. The purpose of this report is to address this basic question for persons age 18 or older residing in Illinois. Three research questions are examined in this report. First, do individual- and household-level correlates of nonfatal victimization differ between males and females? Second, do these correlates differ between males and females across several types of nonfatal violence? And third, do individual- and household-level predictors of nonfatal victimization across victim and offender relationships differ for males and females?

This research has practical importance. Current policies and programs designed to reduce victimization are based primarily on the experiences of male victims since they dominate the pool of violent crime victims. Without addressing whether the experiences of the aggregate (i.e., primarily male victims) accurately reflect the experiences of female victims, we cannot be certain current policies reduce the risk of victimization for females adequately.

Extant research clearly recognizes that gender matters, however, it has not explicitly examined the research questions posed. For example, research offers uni- or bivariate descriptions of violence in which the aggregate population was described (e.g., Rennison and Rand 2003; Rennison 2002a). This work, while important, fails to take into account the importance of gender, treating the population as a monolith. Second, other valuable research uses victim's gender as a control variable in a larger model. Such work demonstrates the significance

of gender, but it cannot tell us *how* gender matters (e.g., Rountree et al., 1994; Baumer et al. 2003; Jarjoura 1998). And finally, other significant contributions include analyses examining correlates of violence that restricts analyses to either a male or female population (e.g., Lauritsen and Schaum 2004). Without a side-by-side comparison, differences in predictors of violence between males and females is not known. In sum, current policies designed to reduce victimization likely "fit" males and not females. With greater understanding how violent victimization correlates differ based on the victim's gender, the type of crime, and the type of offender, more efficient and effective programs may be designed to further minimize victimization risks for *all* people.

## **2. RELEVANT LITERATURE**

Extant theoretical perspectives differ as to whether or how correlates of male and female victimization risk differ. Feminist theories suggest that sexism is the basis for violence against women, so offenders (who are predominantly male) are motivated to victimize females by their desire for power and control of females (e.g., Belknap, 2001; Brownmiller 1975; Koss et al., 1994). These theories argue that the causes/predictors of victimization against males and females differ considerably.

Other theories argue that violence against women is *not* based on sexism, power, or control (e.g., Felson 2002). This perspective maintains that violence against males and females differs in *quantity*, not *quality*, and that the variations in quantity stem from differential lifestyles, opportunities and routine activities of males and females (Hindelang 1976; Hindelang et al., 1978; Cohen and Felson 1979; Cohen et al., 1981). For example, at the macro-level Shaw

and McKay (1942; 1969) imply that male and female victimization share similar correlates. This work posits that when macro-level features in a community change, social organization is either strengthened or deteriorates, and crime rates vary.

Aside from theory, empirical evidence suggests that correlates of violence differ for males and females. For example, males are more likely to be victims of aggravated assault, robbery, and simple assault, while females are more likely to be victims of rape and sexual assault (e.g., Rennison and Rand 2003). In addition, findings from the National Crime Victimization Survey (NCVS) demonstrate that victimization differs between males and females in terms of the victim and offender relationship. Males are more likely to be victimized by a stranger, whereas females are much more likely to be victimized by a person known to them (e.g., spouse, boyfriend, neighbor). Nationally in 2002, 56% of all violent victimizations (fatal and nonfatal) experienced by a male were committed by a stranger compared to 31% of all victimizations experienced by a female (Rennison and Rand 2003).

Empirical research suggests other correlates that should be considered while investigating the proposed research questions (Sampson and Lauritsen 1994). Aside from gender, extant research demonstrates the importance of individual-, and household-level correlates of victimization, including victim's age, marital status, race, relationship with the offender, and annual household income (e.g., Hindelang et al. 1978; Sampson and Lauritsen 1994; Rennison and Rand 2003; Rennison 2002a; 2002b; 2001a; 2001b; Rennison and Planty 2003). Specifically, being older, being married, belonging to a non-minority group and having a relatively high income operate as protective factors for individuals. What is unclear is if and how these

protective factors differ between male and female victims of nonfatal violence.<sup>2</sup> The data and methods used to address the proposed research questions are described below.

### **3. ANALYTIC STRATEGY**

The posed research questions are designed to investigate whether an individual falls into one of two groups: victims and non-victims. Therefore, logistic regression is utilized for the analyses. Logistic regression is a flexible and powerful analytic tool and no assumptions regarding the distributions (i.e., normal distributions, linearly related, equal variances) of the independent and control variables are required (Mertler and Vannatta 2005). For the following analyses, the ICVS data provided by the Illinois Criminal Justice Information Authority (ICJIA) were used.

The data were not weighted for the analyses. Though failure to weight data leads to biased point estimates (e.g., means, percentages), this is not a concern for this report which focuses on predictors of violence estimated via logistic regression analyses.<sup>3</sup> The use of unweighted data does not substantively affect associations between variables, and calculated estimates are approximately unbiased. In other words, logistic regression findings using weighted and unweighted data generate substantively similar outcomes.

As is generally the case, the provided data required extensive recoding and verification for the proposed analyses. This preparatory work was conducted using Statistical Software for

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<sup>2</sup> Ideally, the research proposed would include community-level correlates as well. Extant research finds that community-level risk factors including percentage of poverty, mobility, racial heterogeneity and family structure (e.g., percentage of households headed by single females with children) (see e.g., Smith and Jarjoura 1988; Rountree et al. 1994; Baumer et al., 2003; Lauritsen and Schaum 2004). Areas with higher percentages of households living in poverty, higher percentages of unemployed males, and higher percentages of female-headed households are related to higher victimization risk (see e.g., Miles-Doan 1998; Lauritsen and Schaum 2004).

<sup>3</sup> See Hiselman (2005) for point estimates and other descriptives generated using weighted data.



the Social Sciences (SPSS). The original file contained 1,602 total respondents, with slightly more than 600 victims. After a thorough examination of the data, several changes were made.<sup>4</sup>

These include:

- The file was changed from a ‘victim’ file to a ‘victimization’ file. In the original data file, the unit of analysis was person. Therefore, each row contained information on the respondent, their household, and information on any number of victimizations. In the file used for the following analyses, the unit of analysis was changed to victimization. Therefore, in the new file, each row contains information on the respondent, their household, and information on A SINGLE victimization (if any). For respondents who experienced more than one victimization, a separate row for each victimization (with all respondent characteristics attached) was made.
- The analyses include only those victimizations that occurred in the state of Illinois. The purpose of the ICVS was to ascertain the nature and extent of statewide and regional crime victimization *in Illinois*. Therefore, victimizations that occurred outside the state were removed.<sup>5</sup> This was determined by examining respondent’s responses to location of the violence. In instances of missing data on this variable, the county of victimization was consulted. If a county was noted, the victimizations remained in sample.
- Some age problems were noted. Persons who were younger than 18 were selected out (e.g., a five year old). There were also some ridiculously old ages (e.g., 195) that were removed.

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<sup>4</sup> All data manipulations are clearly documented in the relevant SPSS command files.

<sup>5</sup> This is standard protocol used for other victimization analyses including the NCVS.

- New recodes were created for the type of crimes and were compared to the supplied recodes for verification. In some cases, new recodes were exactly like those provided by ICJIA. Some discrepancies did obtain. For example, some respondents who were considered victims according to ICJIA recodes, were not considered victims with the new recodes. Examination of the data did not reveal why some viewed as victims using ICJIA recodes should be considered victims. These cases were removed. Differences in robbery were also noted. It appears that the questn14 recode provided is in error. In this recode, V37 is listed twice (i.e., V37 and V37). It appears that it should be “V37 and V39.” This change affected the number of victimizations. Victimization that were nonviolent were coded as nonvictimizations (because the analyses pertain to violent victimization only). These include victims of vandalism and purse snatching and pocket picking.

Once the data were ready, they were imported to Stata (StataCorp, 2003). The file moved into Stata had an unweighted sample size of 1,474 respondents. Of those who were victims (unweighted n=321), 20 experienced a rape/sexual assault, 67 a robbery, 74 an aggravated assault, and 160 a simple assault. A total of 1,461 persons provided their gender (842 females and 619 males) making them available for use in gender-specific regressions.<sup>6</sup>

#### **4. DATA AND METHODS**

Illinois Crime Victimization Survey (ICVS) data covering victimizations in 2002 were used to examine the research questions. The purpose of the ICVS is to ascertain the nature and extent of statewide and regional crime victimization in Illinois. In addition, this survey sought to

quantify the degree to which the public was aware of and utilized victim services in Illinois. The ICVS sample was selected using a frame created by the Bronner Group, LLC. The universe came from lists of names and addresses of driver's license and identification card holders maintained by the Illinois Secretary of the State. Duplicate records (i.e., those with both driver's licenses and identification cards), persons under age 18 and institutionalized persons were removed from the list prior to the sample being drawn.<sup>7</sup> In total, 7,498 individuals were randomly selected to participate in the ICVS.

Those selected for participation received up to five pieces of mail over a three month period (January to March 2003). First, an introductory postcard was sent to all selected persons. Some cards were returned as bad addresses and those individuals were removed from the selected respondent list. Additional mailings included the survey instrument (including a cover letter), either a reminder or a thank you postcard, a second survey instrument and cover letter (if needed) and a final reminder or thank you postcard (Hiselman 2005). The response rate for the ICVS was 28 percent resulting in 1,602 completed surveys (Hiselman 2005).

The ICVS was based on the National Crime Victimization Survey (NCVS).<sup>8</sup> Like the NCVS, the ICVS elicited information on the respondent's demographics (e.g., gender, age, education, marital status) and characteristics of the household in which the respondent resides (e.g., annual income, owned versus rented). The survey instrument includes a screener questionnaire in which respondents were asked whether they experienced a personal, violent or

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<sup>6</sup> Research questions one and two were conducted using a file with no characteristics of the incident. This file is named "RQ12.dta". Research question three required information on incidents - - the victim and offender relationship. In order to include this information, a second data file called "RQ3.dta" was used.

<sup>7</sup> For more information regarding the research methods used for the ICVS, see Hiselman (2005).

<sup>8</sup> Though an important measure of crime, the NCVS cannot be used to estimate crime in the state of Illinois because it does not offer state level estimates of crime. For a full description of the NCVS, see Rennison and Rand (forthcoming) and Rand and Rennison (2002).

property crime during 2002. If a victimization was detected, additional survey questions regarding details of the incident (e.g., police reporting, victim/offender relationship, location, nature of violence), and information about the offender (e.g., age, race, gender) was gathered. The ICVS collected information on several forms of victimization that occurred during 2002. Pertinent to this proposal is the collection of detailed information on the crimes of rape, sexual assault, robbery, aggravated assault, and simple assault.

Though the ICVS was modeled after the NCVS, the two differ in many ways. First, the NCVS is administered either in-person or on the phone by trained Census workers, while the ICVS was mailed to and completed by the respondent only. A second deviation was that the ICVS included about half of the questions found in the NCVS. Even with this trimming of questions, the ICVS instrument was detailed and lengthy. In total, the ICVS included 38 screening and demographic questions and 22 incident characteristics questions. The ICVS instrument provided space for the respondent to provide information for up to four victimizations.

The ICVS offers promise for learning more about victimization experiences of Illinois residents than is currently available in official records such as arrest data and other police records which are subject to established social and bureaucratic filters (O'Brien, 1985). A substantial portion of violence is not reported to the police (Hart and Rennison, 2003), and what is reported is not representative of all violence or victims. The police are more likely to be notified in response to serious violence, violence involving injuries, when the victim is a female, and when the offender is a stranger (Hart and Rennison, 2003; Skogan, 1984). Because the ICVS goes

directly to the victim, it can inform regarding the “dark figure” of crime in Illinois – that is, estimates of crime not reflected in official records.

Arrest data are also limited in that many cases are not investigated, solved or end in an arrest. A variety of factors may be related to the inability of police to solve a case or to make an arrest, even after the incident is reported to the police. Research shows that the police may handle situations differently depending on characteristics of the offenders or victims: Some offenders may be warned while others are arrested depending on the offender’s characteristics (Hagan and Peterson, 1995; Mann, 1993).

Like all data, the ICVS are imperfect. First, the ICVS does not gather victimization information for persons under the age of 18. Nor does it gather information on the victimization experiences of persons who do not possess a driver’s license or identification card. Also, because the list of persons who obtain a driver’s license or an identification card changes constantly due to relocation, addresses of those who move and have not updated these records may be underrepresented.

The ICVS is limited in the scope of victimizations it measures. For instance, no information on violence such as kidnapping or murder is collected. Perhaps the greatest limitation of the ICVS is its low response rate. Of the approximately 5,700 persons receiving the survey, only 28% responded. A low response rate is not necessarily a problem if those who participate do not differ significantly from those who do not participate. Unfortunately it is not possible to determine the ways these groups may or may not differ (Hiselman 2005).

## 5. MEASURES

### 5.1 Dependent Variables

Three specific research questions are investigated. First, do individual- and household-level correlates of nonfatal victimization differ between males and females? Second, do these correlates differ between males and females for a variety of violence? And third, do individual- and household-level predictors of nonfatal victimization differ for males and females across different victim and offender relationships?

Because each research question examines whether an individual becomes a victim of violence or not, dichotomous dependent variables that distinguish between the two states are used. For the first research question posed, the respondent is coded as a zero if they were not a victim of any violence, and a one if they were a victim of any violence during 2002. This aggregated violence category includes threatened, attempted and completed rape/sexual assault, robbery, total aggravated assault and simple assault.<sup>9</sup>

The second research question is investigated via several models – each considering a specific form of violence: rape/sexual assault, robbery, total assault, aggravated assault, and simple assault. The dependent variable for each of these models is coded as a zero if the respondent was not a victim of that specific type of violence, and coded a one if they were a victim of that form of violence during 2002.

The third research question considers whether an individual becomes a victim with a focus on the victim and offender relationship. To address this question, a model predicting

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<sup>9</sup> Specific coding decisions made to generate the dependent and independent variables are outline in the command file.

overall violence is presented for each of the victim/offender relationships available.<sup>10</sup> One model distinguishes between victims of stranger violence (coded as a one) and those known to the victim (coded as a zero). Another model examines the correlates of family violence coded as a one, and those who were not family members. If the offender was a family member (parents, siblings, children and intimates), the dependent variable is coded a one, and if the offender was not a family member, the dependent variable is coded a zero. The final model considers victimization by an intimate partner. If the offender was an intimate partner (i.e., current and former spouses, boyfriends and girlfriends) the dependent variable is a coded a one. If the offender was not an intimate partner, the variable is coded a zero.

## **5.2. The Independent Variable**

The independent variable for all proposed research questions is the respondent's gender (*Gender*). *Gender* is coded a "one" for male respondents, and "zero" for female respondents. In some instances, models are presented in which *Gender* is included. In most instances however, separate models for males and females are presented. Though separate models sample size and power of the analyses, this approach enables a comparison of the predictors of violence for males and females.

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<sup>10</sup> In incidents including multiple offenders, the victim and offender relationship is coded based on the closest relationship to the victim of any of the offenders.

### 5.3. Control Variables

Several victim and family/household characteristics related to violent victimization are included. It is important to control for these relevant variables to avoid model misspecification and misleading findings. These variables are described in detail below.

#### 5.3.1 Respondent Characteristics

Race and Hispanic origin of the victim is measured using a series of dichotomous variables: *Hispanic*, *White*, *Black* and *Other*. *Hispanic* refers to respondents who were Hispanic and include persons of any race. *White* refers to non-Hispanic whites, while *Black* refers to non-Hispanic blacks. “*Other*” refers to respondents who self-described themselves as American Indian, Aleut, Eskimo, Asian, Pacific Islander, Multi-Racial or other. *White* serves as the reference group in the analyses.<sup>11</sup> Age of the respondent is measured as a continuous variable ranging from 18 years of age to a maximum of 95 years of age.<sup>12</sup> An additional respondent characteristic controlled for is the respondent’s marital status. This characteristic is captured using a set of five dichotomous variables: *Married*, *Never Married*, *Widowed*, *Divorced* and *Separated*. Marital status is coded based on the respondent’s marital status during the majority (six months or more) of 2002. *Married* serves as the excluded reference category.<sup>13</sup> Educational attainment, describing the highest level of education completed, is measured via a series of

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<sup>11</sup> In analyses for specific victimization types, further coding was necessary to account for smaller sample sizes. Race and Hispanic origin was measured using a dichotomous variable in which “non-Hispanic white” was coded as a one, and “all others” was coded as a zero. “All others” was an aggregation of non-Hispanic blacks, others and Hispanics.

<sup>12</sup> Only those 18 or older were eligible respondents in the ICVS. Persons age 95 or older are included in the “95” category. Additional decisions made in coding of these variables are outlined in detail in the command file.

<sup>13</sup> In analyses for specific victimization types, further coding was necessary to account for smaller sample sizes. Marital status was coded as a dichotomous variable in which “married” was coded as a one, and “unmarried” was coded as a zero. “Unmarried” was an aggregation of divorced, separated, widowed and never married.



dichotomous variables: Less than high school diploma completed (*Less HS*), High school graduate or GED earned (*HS GED*), Some college completed (*Some College*), and Bachelors degree or more (*Bachelor*). *Bachelor* serves as the reference category. The employment status of the respondent during at least “most of 2002” was captured using a variable called *Employed*. A code of one indicated that the respondent was employed in either part- or full-time. A code of zero indicates that the respondent was not employed during most of 2002. If a respondent was a student for any time during 2002, they were coded as a one on the variable *Student*. If the respondent had not been a student, they were coded as a zero.

### **5.3.2 Household Characteristics**

Whether the household was owned or rented is measured using three dichotomous variables: *Owned*, *Rented* and *Other*. *Other* refers to situations where the respondent lives somewhere they neither own nor pay rent (e.g., living rent free with a friend or family member). *Owned* serves as the excluded category in the analyses. Another household characteristic describes the type of dwelling in which the respondent resides. This variable, *Dwelling*, distinguishes between a single family household (coded as one), or any other type of dwelling (coded as a zero). Other types of dwellings include apartment buildings, condominiums, duplexes, farms, mobile homes or trailers, or town homes. To account for the number of children under age 18 living in the household during most of the year 2002, the variable *Kids* is utilized. This ordinal variable, treated as measuring an underlying continuum, offers the categories: 0 children, 1 child, 2 children, 3 children, 4 children or 5 or more children. The tenure of the residence – that is, how long the respondent has resided at their current residence - is measured

using three dichotomous variables: *Less than 1 year*, *1 to 5 years*, and *5+ years*. *Less than 1 year* serves as the reference category. Annual household income is measured using a set of dichotomous variables: *Less than \$10,000*, *\$10,000 to \$19,999*, *\$20,000 to \$34,999*, *\$35,000 to \$49,999*, *\$50,000 to \$74,999*, *\$75,000 to \$99,999*, and *More than \$100,000*. *More than \$100,000* income annual serves as the reference category. And finally, a variable describing the status of the respondent's residence is included via a series of dichotomous variables: *City*, *Suburban*, *Town* and *Rural*. *Urban* is the excluded category.<sup>14</sup>

## 6. RESULTS

### 6.1 Research Question #1: Gender and Overall Violence

The first research question investigates whether individual- and family/household-level correlates of nonfatal victimization differ between males and females. Table I presents the results from a logistic model evaluating that question.<sup>15</sup> Results reveal that predictors of nonfatal violent

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<sup>14</sup> In analyses for specific victimization types, further coding was necessary to account for smaller sample sizes. MSA was coded as a dichotomous variable in which "city living" was coded as a one, and "other than city" was coded as a zero. "Other than city" was an aggregation of suburban, town and rural.

<sup>15</sup> Logistic regression output includes regression coefficients ( $b$ ), standard errors (SE), and Z-scores ( $Z$ ). The  $b$  – the unstandardized regression coefficient - represents the effect of the independent variable on the *log odds* of the dependent variable. A positive regression coefficient for a significant variable means that the higher the score on the variable, the higher probability of violent victimization. A negative coefficient suggests that the lower the score on the dependent variable, the higher the probability of violent victimization. For example, the  $b = 1.30$  for blacks in Table 1, Panel A suggests that a black male (0=white; 1=black), the greater the risk of victimization (0=non victimization; 1=victimization). Similarly, the  $b = -0.03$  for age in the same table suggests that as age declines one year, the probability of violent victimization increases. The SE is the standard error of  $b$ . And  $Z$  reflects a measure of significance and the ability of each variable to contribute to the model. Because the regression coefficients are unstandardized (i.e., based on different scales), it is inappropriate to compare regression coefficients across variables. Suffice it to say that logistic regression statistics are highly unintuitive. For that reason, Odds Ratios are presented for all variables in each model.

An Odds Ratio of greater than 1.0 describes the increase in the odds of being classified as a victim of violence when the independent or control variable increases by one unit. Conversely, an Odds Ratio of less than 1.0 describes the decrease in the odds of being classified as a victim of violence when the independent or control variable of interest increases by one unit. For example, in Table 1 in Panel A for males, Hispanic is characterized by an Odds Ratio of

victimization differ between males and females. Panel A shows that for male respondents, black, Hispanic origin and Age are significantly related to violent victimization. Specifically, blacks and Hispanics are *significantly* more likely to become a victim of nonfatal violence compared to non-Hispanic whites ( $b=1.30$  and  $1.04$ , respectively).<sup>16</sup> Age is also significantly related to overall violent victimization ( $b=-0.03$ ). The higher the age of a male, the less likely a male is to be a victim of overall violence.

Panel B demonstrates that males and females share only one predictor of violence: Age. Like males, a female's age is negatively related to the risk of violent victimization ( $b=-0.04$ ). The remaining predictors of violence for females were not predictors for males. For females only, being widowed or divorced compared to being married increases the risk of violent victimization ( $b=0.99$  and  $b=1.05$  respectively). Having a high school education (or GED) compared to a college degree was significantly related to *less* violent victimization ( $b=-0.76$ ). An additional significant predictor is that the greater the number of children under age 18 living in the home, the greater the likelihood of becoming a victim of violence ( $b=0.41$ ). Income is also related to victimization for females. For females, living in a household with an annual income of less than \$10,000 is significantly related to *less* overall violent victimization ( $b=1.16$ ). Finally, females

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2.84. This suggests that the odds of a Hispanic male becoming a victim of violence is 184% higher than the odds of a non-Hispanic white male. Also, in Table 1 in Panel A for males, Black is characterized by an Odds Ratio of 3.68. This suggests that the odds of a black male becoming a victim of violence is 268% higher than the odds of a non-Hispanic white male becoming victimized.

<sup>16</sup> All reported significant regression coefficients are characterized as having  $p<0.05$ . “*Significantly*” has special meaning in data analyses. Researchers draw a sample with the express purpose of using results to generalize back to the population. As hard as one may try, sampling error in samples is unavoidable. So, when a difference in estimates between two groups is noted, we must ask whether this difference reflects a true difference between the two groups, or whether it is a result of unavoidable sampling error or chance. It is standard practice that when one states that an estimate is “significantly” different from another, it means that there is less than a 5% chance that this difference would obtain due to chance alone.

who live in a suburban area, town, or rural area are victims of overall violence less frequently than those in urban areas ( $b=-0.57$ ,  $b=-0.97$  and  $b=-0.95$  respectively).

**Table I. Logistic Regression Model Predicting Overall Violent Victimization.**

Variables	Panel A: Male Respondents				Panel B: Female Respondents			
	b	SE	Z	Exp(b)	b	SE	Z	Exp(b)
Race/Hispanic Origin								
White (reference category)								
Black	<b>1.30</b>	0.46	2.83	3.68	-0.38	0.37	-1.03	0.68
Other	0.26	0.59	0.43	1.29	-0.61	0.58	-1.05	0.54
Hispanic	<b>1.04 *</b>	0.42	2.48	2.84	0.16	0.41	0.40	1.18
Age	<b>-0.03 *</b>	0.01	-2.14	0.97	<b>-0.04 *</b>	0.01	-3.69	0.96
Marital Status								
Married (reference category)								
Widowed	0.60	0.85	0.70	1.82	<b>0.99 *</b>	0.46	2.16	2.70
Divorced	0.32	0.42	0.76	1.38	<b>1.05 *</b>	0.33	3.17	2.86
Separated	-0.08	1.35	-0.06	0.93	0.49	0.84	0.59	1.63
Never Married	0.22	0.41	0.55	1.25	0.38	0.35	1.10	1.46
Educational Attainment								
Less HS	-0.99	0.62	-1.60	0.37	-0.26	0.52	-0.50	0.77
HS GED	-0.07	0.32	-0.21	0.93	<b>-0.76 *</b>	0.31	-2.44	0.47
Some College	0.03	0.30	0.09	1.03	0.04	0.24	0.17	1.04
College or greater (reference category)								
Employed	-0.26	0.34	-0.77	0.77	-0.18	0.24	-0.75	0.84
Student	-0.07	0.42	-0.18	0.93	-0.41	0.29	-1.42	0.66
Owned or Rented								
Owned (reference category)								
Rented	0.16	0.42	0.38	1.17	0.17 *	0.30	0.57	1.19
Other	-0.35	0.55	-0.65	0.70	-0.39	0.43	-0.92	0.67
Dwelling	-0.28	0.31	-0.88	0.76	-0.19	0.26	-0.73	0.83
Kids	0.02	0.12	0.15	1.02	<b>0.41 *</b>	0.10	4.20	1.50

Tenure									
Less than 1 year (reference category)									
1 to 5 years	0.38	0.45	0.85	1.46	0.11	0.36	0.31	1.12	
5+ years	0.18	0.43	0.42	1.20	-0.21	0.37	-0.57	0.81	
Annual Household Income									
<\$10k	0.56	0.64	0.88	1.75	<b>1.16 *</b>	0.52	2.24	3.20	
\$10k-\$19,999	0.42	0.58	0.72	1.52	0.88	0.48	1.83	2.41	
\$20k-\$34,999	-0.89	0.52	-1.71	0.41	0.51	0.41	1.24	1.67	
\$35k-\$49,999	-0.43	0.44	-0.97	0.65	0.37	0.39	0.95	1.45	
\$50k-\$74,999	-0.25	0.39	-0.63	0.78	-0.09	0.39	-0.24	0.91	
\$75k-\$99,999	-0.20	0.43	-0.47	0.82	0.22	0.41	0.54	1.24	
\$100,000 or more (reference category)									
MSA									
Urban (reference category)									
Suburb	-0.24	0.29	-0.83	0.79	<b>-0.57 *</b>	0.24	-2.40	0.57	
Town	0.21	0.34	0.63	1.24	<b>-0.97 *</b>	0.32	-3.08	0.38	
Rural	-0.39	0.46	-0.85	0.68	<b>-0.95 *</b>	0.41	-2.32	0.39	
Constant	-0.37	1.49	-0.25	0.69	0.64	1.35	0.47	1.89	

Unweighted n=524

Pseudo R2 = 0.1081

-2 log likelihood= 487.3006

Unweighted n=727

Pseudo R2 = 0.1429

-2 log likelihood= 658.9648

Note: Dependent variable is Overall Violent Victimization coded as (0,1) where 0 represents a nonvictim, and 1 represents a victim.

\*p < .05 (two-tail tests)

## 6.2 Research Question #2: Gender and Specific Types of Violence

Because overall violence is an aggregation of rape/sexual assault, robbery, aggravated assault and simple assault, a logical question is whether findings that predictors of violence differ substantially for males and females is true for specific types of violence. This is precisely the second research question posed. Tables II through VI present results from analyses addressing whether predictors of violence differ between males and females for specific forms of violence.

### 6.2.1 Assault

Predictors of overall assault differ between males and females. Panel A in Table II shows that race/Hispanic origin is significantly related to overall assault victimization for males. Specifically, non-Hispanic white males are significantly less likely to be a victim of assault compared to Hispanic, non-Hispanic black and non-Hispanic “Other” males ( $b=-0.84$ ).

Panel B suggests that predictors of assault for females are entirely different. Age is a significant correlate of total assault for females. Specifically, as a female ages, the risk of becoming an assault victim declines significantly ( $b=-0.03$ ). And a female living in an urban area is significantly more likely to be a victim of overall assault compared to a similar female in a suburban, rural or town area ( $b=0.60$ ).

**Table II. Logistic Regression Model Predicting Total Assault (Aggravated plus Simple Assault)**

Variables	Panel A: Male Respondents				Panel B: Female Respondents			
	b	SE	Z	Exp(b)	b	SE	Z	Exp(b)
Race/Hispanic Origin								
All other race/Hispanic origin								
Non-Hispanic white	<b>-0.84 *</b>	0.30	-2.85	0.43	0.22	0.28	0.78	1.25
Age	-0.02	0.01	-1.75	0.98	<b>-0.03 *</b>	0.01	-2.75	0.97
Marital Status								
All other marital categories								
Married	-0.40	0.32	-1.25	0.67	-0.50	0.28	-1.78	0.61
Educational Attainment								
Less HS	-1.45	0.74	-1.95	0.23	-0.39	0.58	-0.68	0.68
HS GED	-0.30	0.35	-0.87	0.74	-0.24	0.32	-0.76	0.78
Some College	0.07	0.31	0.22	1.07	0.04	0.26	0.17	1.04
College or greater (reference category)								
Employed	-0.31	0.35	-0.88	0.73	0.02	0.25	0.08	1.02
Student	0.13	0.42	0.30	1.14	-0.14	0.31	-0.45	0.87
Owned or Rented								

Owned (reference category)								
Rented	0.13	0.44	0.30	1.14	0.04	0.33	0.12	1.04
Other	-0.53	0.57	-0.93	0.59	-0.43	0.45	-0.96	0.65
Dwelling	-0.04	0.33	-0.12	0.96	-0.07	0.28	-0.26	0.93
Kids	-0.15	0.14	-1.10	0.86	0.19	0.10	1.82	1.20
Tenure								
Less than 1 year (reference category)								
1 to 5 years	-0.06	0.50	-0.13	0.94	0.06	0.37	0.17	1.06
5+ years	-0.28	0.48	-0.57	0.76	0.08	0.38	0.20	1.08
Annual Household Income								
<\$10k	-0.47	0.73	-0.65	0.62	0.78	0.55	1.42	2.19
\$10k-\$19,999	1.04	0.58	1.79	2.84	0.26	0.53	0.48	1.29
\$20k-\$34,999	-1.12	0.57	-1.95	0.33	0.32	0.45	0.72	1.38
\$35k-\$49,999	-0.35	0.46	-0.76	0.70	0.41	0.42	0.98	1.51
\$50k-\$74,999	-0.14	0.40	-0.34	0.87	-0.12	0.43	-0.28	0.88
\$75k-\$99,999	-0.42	0.45	-0.93	0.66	0.35	0.44	0.80	1.43
\$100,000 or more (reference category)								
MSA								
Suburban, rural and town areas								
Urban	-0.09	0.28	-0.31	0.92	<b>0.60*</b>	0.23	2.57	1.82
Constant	1.74	1.65	1.05	5.69	-1.14	1.38	-0.82	0.32

Unweighted n=534

Pseudo R2 = 0.0915

-2 log likelihood= 442.48630

Unweighted n=735

Pseudo R2 = 0.0721

-2 log likelihood= 588.48630

Note: Dependent variable is Total Assault coded as (0,1) where 0 represents a nonvictim, and 1 represents a victim.

\*p < .05 (two-tail tests)

## 6.2.2 Aggravated Assault

Males and females do not share a single significant predictor of aggravated assault. Panel A in Table III shows that annual household income plays a small but significant role in the risk of aggravated assault victimization for males. Specifically, males in households with an annual household income of between \$10,000 and \$19,999 are significantly more likely to be a victim

of aggravated assault compared to males in households with over \$100,000 annual household income ( $b=2.48$ ).

As shown in Panel B, income is not related to aggravated assault violence against females. Instead, age is significantly related to aggravated assault victimization for females. As age increases, the risk of becoming a victim of aggravated assault decrease among females ( $b=-0.03$ ). In addition, living in an urban area compared to suburban, rural and town areas is associated with greater risk of aggravated assault for females ( $b=0.81$ ).

**Table III. Logistic Regression Model Predicting Aggravated Assault**

Variables	Panel A: Male Respondents				Panel B: Female Respondents			
	b	SE	Z	Exp(b)	b	SE	Z	Exp(b)
Race/Hispanic Origin								
All other race/Hispanic origin								
Non-Hispanic white	-0.75	0.50	-1.49	0.47	-0.19	0.40	-0.49	0.82
Age	-0.04	0.02	-1.86	0.96	<b>-0.03 *</b>	0.02	-2.05	0.97
Marital Status								
All other marital categories								
Married	0.64	0.62	1.03	1.90	0.11	0.45	0.25	1.12
Educational Attainment								
Less HS	-0.87	0.99	-0.88	0.42	0.27	0.76	0.35	1.31
HS GED	-0.59	0.62	-0.96	0.55	-0.11	0.51	-0.22	0.89
Some College	-0.24	0.58	-0.41	0.79	-0.07	0.42	-0.16	0.93
College or greater (reference category)								
Employed	-0.01	0.62	-0.02	0.99	0.00	0.40	0.01	1.00
Student	-0.57	0.88	-0.65	0.56	0.19	0.45	0.43	1.21
Owned or Rented								
Owned (reference category)								
Rented	0.47	0.80	0.60	1.61	0.20	0.50	0.39	1.22
Other	-1.09	1.12	-0.98	0.33	-0.20	0.70	-0.28	0.82
Dwelling	0.83	0.65	1.27	2.28	-0.20	0.43	-0.46	0.82



Kids	-0.32	0.25	-1.28	0.73	0.12	0.16	0.74	1.12
Tenure								
Less than 1 year (reference category)								
1 to 5 years	0.74	0.75	1.00	2.11	0.23	0.54	0.42	1.25
5+ years	0.52	0.70	0.74	1.68	0.15	0.57	0.26	1.16
Annual Household Income								
<\$10k	0.78	1.49	0.52	2.17	0.90	0.91	0.99	2.45
\$10k-\$19,999	<b>2.48*</b>	1.11	2.23	11.99	0.16	0.93	0.17	1.17
\$20k-\$34,999	0.44	1.06	0.41	1.55	0.76	0.75	1.01	2.14
\$35k-\$49,999	0.24	1.00	0.24	1.27	0.67	0.72	0.94	1.96
\$50k-\$74,999	0.50	0.89	0.56	1.64	-0.26	0.80	-0.33	0.77
\$75k-\$99,999	0.59	0.92	0.64	1.80	0.36	0.79	0.45	1.43
\$100,000 or more (reference category)								
MSA								
Suburban, Rural and Town areas								
Urban	0.36	0.48	0.76	1.43	<b>0.81*</b>	0.35	2.31	2.26
Constant	-3.97	2.65	-1.50	0.02	-2.76	2.08	-1.33	0.06

Unweighted n=534

Pseudo R2 = 0.1253

-2 Log likelihood = 176.5996

Unweighted n=735

Pseudo R2 = 0.0885

-2 Log likelihood = 283.1752

Note: Dependent variable is Aggravated Assault coded as (0,1) where 0 represents a nonvictim, and 1 represents a victim.

\*p < .05 (two-tail tests)

### 6.2.3 Simple Assault

Males and females share one significant predictor of simple assault: Marital status. Panels A and B in Table IV show that being married is associated with a lower risk of becoming a victim of simple assault for males and females ( $b=-0.72$  and  $b=-0.79$  respectively). Similarities in correlates of simple assault for males and females end with marital status. Among males, non-Hispanic whites are significantly less likely to be a victim of simple assault compared to males in

any other race/Hispanic origin categories ( $b=-0.71$ ). And like aggravated assault, one category of annual household income is a significant predictor of simple assault for males. Males in households with an annual household income of between \$20,000 and \$34,999 are significantly *less* likely to be a victim of simple assault compared to males in households with over \$100,000 annual income ( $b=-1.54$ ). Panel B shows that aside from marital status (described above), no other variables were significantly related to simple assault victimization for females.

**Table IV. Logistic Regression Model Predicting Simple Assault**

Variables	Panel A: Male Respondents				Panel B: Female Respondents			
	b	SE	Z	Exp(b)	b	SE	Z	Exp(b)
Race/Hispanic Origin								
All other race/Hispanic origin								
Non-Hispanic white	<b>-0.71 *</b>	0.34	-2.12	0.49	0.48	0.36	1.34	1.61
Age	-0.01	0.01	-0.84	0.99	-0.02	0.01	-1.72	0.98
Marital Status								
All other marital categories								
Married	<b>-0.72 *</b>	0.36	-1.99	0.49	<b>-0.79 *</b>	0.33	-2.35	0.46
Educational Attainment								
Less HS	-1.87	1.11	-1.69	0.15	-1.01	0.83	-1.22	0.36
HS GED	-0.17	0.39	-0.44	0.84	-0.32	0.39	-0.81	0.73
Some College	0.17	0.34	0.48	1.18	0.09	0.30	0.31	1.10
College or greater (reference category)								
Employed	-0.43	0.40	-1.07	0.65	0.01	0.30	0.03	1.01
Student	0.34	0.46	0.73	1.40	-0.34	0.39	-0.88	0.71
Owned or Rented								
Owned (reference category)								
Rented	-0.08	0.50	-0.17	0.92	-0.06	0.40	-0.15	0.94
Other	-0.27	0.61	-0.43	0.77	-0.48	0.54	-0.88	0.62
Dwelling	-0.29	0.36	-0.80	0.75	0.02	0.33	0.05	1.02

Kids	-0.07	0.15	-0.45	0.93	0.20	0.12	1.67	1.22
Tenure								
Less than 1 year (reference category)								
1 to 5 years	-0.52	0.62	-0.84	0.59	-0.09	0.45	-0.19	0.92
5+ years	-0.65	0.60	-1.08	0.52	-0.02	0.47	-0.04	0.98
Annual Household Income								
<\$10k	-0.67	0.79	-0.85	0.51	0.62	0.65	0.96	1.86
\$10k-\$19,999	0.26	0.65	0.40	1.30	0.27	0.61	0.44	1.31
\$20k-\$34,999	<b>-1.54*</b>	0.68	-2.27	0.21	0.01	0.54	0.02	1.01
\$35k-\$49,999	-0.46	0.50	-0.91	0.63	0.19	0.49	0.39	1.21
\$50k-\$74,999	-0.29	0.43	-0.66	0.75	-0.05	0.49	-0.09	0.95
\$75k-\$99,999	-0.70	0.51	-1.37	0.50	0.32	0.51	0.62	1.37
\$100,000 or more (reference category)								
MSA								
Suburban, Rural and Town areas								
Urban	-0.24	0.32	-0.74	0.79	0.36	0.28	1.26	1.43
Constant	2.75	2.03	1.35	15.65	-1.38	1.69	-0.82	0.25

Unweighted n=534

Pseudo R2 = 0.0838

-2 Log likelihood = 365.9989

Unweighted n=735

Pseudo R2 = 0.0551

-2 Log likelihood = 453.5985

Note: Dependent variable is Simple Assault coded as (0,1) where 0 represents a nonvictim, and 1 represents a victim.

\*p < .05 (two-tail tests)

## 6.2.4 Robbery

Table V reveals one shared predictor of robbery for males and females: Age. The greater the number of children under the age of 18 living in the household, the more likely one will become a robbery victim (male:  $b=0.53$  and female:  $b=0.60$ ). Though shared with females, this is the only significant predictor of robbery for male respondents.

As shown in Panel B, education is a second significant correlate of becoming a robbery victim for females. Females with no more than a high school education (or GED) were *less* likely to be robbed than were females with a college degree or more ( $b=-1.89$ ).

**Table V. Logistic Regression Model Predicting Robbery**

Variables	Panel A: Male Respondents				Panel B: Female Respondents			
	b	SE	Z	Exp(b)	b	SE	Z	Exp(b)
Race/Hispanic Origin								
All other race/Hispanic origin								
Non-Hispanic white	-0.32	0.58	-0.55	0.73	-0.45	0.45	-1.01	0.64
Age	-0.04	0.02	-1.47	0.96	-0.02	0.02	-1.16	0.98
Marital Status								
All other marital categories								
Married	0.07	0.73	0.09	1.07	-0.90	0.52	-1.74	0.41
Educational Attainment								
Less HS	0.75	0.99	0.76	2.12	-0.03	0.85	-0.04	0.97
HS GED	0.67	0.65	1.03	1.95	<b>-1.89*</b>	0.82	-2.29	0.15
Some College	-1.09	0.89	-1.23	0.34	-0.26	0.44	-0.57	0.77
College or greater (reference category)								
Employed	-0.11	0.76	-0.15	0.89	-0.79	0.48	-1.62	0.46
Student	-0.33	0.91	-0.36	0.72	-0.92	0.69	-1.34	0.40
Owned or Rented								
Owned (reference category)								
Rented	0.83	0.93	0.89	2.29	0.11	0.56	0.20	1.12
Other	0.02	1.00	0.02	1.02	-1.06	0.93	-1.13	0.35
Dwelling	-0.05	0.72	-0.07	0.95	-0.56	0.48	-1.17	0.57
Kids	<b>0.53*</b>	0.24	2.21	1.69	<b>0.60*</b>	0.16	3.68	1.82
Tenure								
Less than 1 year (reference category)								
1 to 5 years	1.38	0.81	1.69	3.97	0.43	0.70	0.61	1.53
5+ years	0.78	0.78	1.01	2.18	-0.76	0.70	-1.09	0.47
Annual Household Income								
<\$10k	1.43	1.25	1.14	4.17	0.48	1.10	0.44	1.62
\$10k-\$19,999	-2.21	1.66	-1.33	0.11	0.62	0.87	0.72	1.87
\$20k-\$34,999	-0.33	1.10	-0.30	0.72	0.20	0.78	0.26	1.22
\$35k-\$49,999	-0.83	1.10	-0.76	0.43	0.19	0.73	0.25	1.20

\$50k-\$74,999	-1.07	1.08	-0.99	0.34	-0.71	0.77	-0.92	0.49
\$75k-\$99,999	0.02	1.01	0.02	1.02	-0.02	0.76	-0.02	0.98
\$100,000 or more (reference category)								
MSA								
Suburban, Rural and Town areas								
Urban	1.01	0.52	1.93	2.76	0.13	0.43	0.30	1.14
Constant	-5.65	2.90	-1.94	0.00	0.20	2.54	0.08	1.22
	Unweighted n=534				Unweighted n=735			
	Pseudo R2 = 0.2441				Pseudo R2 = 0.1898			
	-2 Log likelihood = 133.8429				-2 Log likelihood = 218.2042			

Note: Dependent variable is Robbery coded as (0,1) where 0 represents a nonvictim, and 1 represents a victim.

\*p < .05 (two-tail tests)

### 6.2.5 Rape/Sexual Assault

Investigating correlates for rape/sexual assault exposed difficulties common among victimization surveys. Specifically, it is difficult to uncover an adequate sample size of relatively rare forms of violence such as rape and sexual assault. With so few cases of this violence in the data, analyses for male victims could not be reliably conducted and are not presented. Instead, Panel A in Table VI offers results from a logistic regression using *all* respondents. Several correlates of rape/sexual assault were significant. First, the findings demonstrate the protective nature of marriage against rape/sexual assault violence ( $b=-1.39$ ). That is, compared to persons who are not married, married people are less likely to become a victim of rape/sexual assault. A second significant predictor pertains to educational attainment. Individuals with some college completed are significantly more likely to become victims of rape/sexual assault than are persons who have completed a college degree ( $b=1.87$ ). And finally, the results suggest that the greater the number of kids under 18 living in the household, the more likely one will become a victim of

rape/sexual assault ( $b=0.43$ ). Notably missing from this list of predictors of rape/sexual assault is gender.

A logistic regression could be conducted for female respondents only. These results are presented in Panel B. Findings suggest that none of the variables were predictors of rape/sexual assault against females. This unexpected finding is likely due to the sample limitations and low number of rapes/sexual assaults uncovered. For this reason, findings regarding rape/sexual assault should be considered with extreme caution.

**Table VI. Logistic Regression Model Predicting Rape/Sexual Assault**

Variables	Panel A: All Respondents				Panel B: Female Respondents			
	b	SE	Z	Exp(b)	b	SE	Z	Exp(b)
Gender								
Male (reference category)								
Female	-0.53	0.61	-0.87	0.59	n/a	n/a	n/a	n/a
Race/Hispanic Origin								
All other race/Hispanic origin								
Non-Hispanic white	0.58	0.63	0.92	1.78	0.06	0.66	0.09	1.06
Age	-0.05	0.03	-1.88	0.95	-0.04	0.03	-1.48	0.96
Marital Status								
All other marital categories								
Married	<b>-1.39 *</b>	0.70	-2.00	0.25	-0.86	0.80	-1.07	0.42
Educational Attainment								
Less HS	0.55	1.42	0.39	1.73	0.55	1.44	0.38	1.73
HS GED	0.61	0.99	0.62	1.85	0.04	1.09	0.04	1.04
Some College	<b>1.87 *</b>	0.80	2.33	6.48	1.32	0.83	1.58	3.75
College or greater (reference category)								
Employed	-0.10	0.62	-0.16	0.91	-0.14	0.68	-0.20	0.87
Student	-0.54	0.79	-0.68	0.58	-0.28	0.87	-0.33	0.75
Owned or Rented								
Owned (reference category)								

Rented	-0.19	0.76	-0.25	0.83	-0.39	0.90	-0.44	0.67
Other	-0.35	0.91	-0.38	0.71	0.07	1.05	0.07	1.07
Dwelling	0.14	0.63	0.22	1.15	0.05	0.71	0.07	1.05
Kids	<b>0.43 *</b>	0.21	2.07	1.54	0.42	0.23	1.83	1.51
Tenure								
Less than 1 year (reference category)								
1 to 5 years	-0.40	0.86	-0.46	0.67	-0.63	1.16	-0.54	0.53
5+ years	-0.14	0.91	-0.15	0.87	-0.54	1.23	-0.44	0.59
Annual Household Income								
Treated as a continuum	-0.18	0.19	-0.94	0.83	-0.30	0.23	-1.34	0.74
MSA								
Suburban, Rural and Town areas								
Urban areas	0.92	0.51	1.79	2.51	0.95	0.60	1.58	2.59
Constant	-1.98	3.51	-0.56	0.14	-0.18	4.60	-0.04	0.83

Unweighted n=1269

Pseudo R2 = 0.2114

-2 Log likelihood = 149.0082

Unweighted n=735

Pseudo R2 = 0.1948

-2 Log likelihood = 111.6315

Note: Dependent variable is Rape/Sexual Assault coded as (0,1) where 0 represents a nonvictim, and 1 represents a victim.  
\*p < .05 (two-tail tests)

### 6.3 Research Question #3: Gender, Violence and Victim-Offender Relationship

The final research question investigates whether individual- and household-level predictors of nonfatal overall violent victimization across different victim and offender relationships differ for males and females. Originally, it was hoped to perform regressions on several victim and offender groups: stranger violence, violence by intimates, and violence by family members (excluding intimates). Because too few cases of intimate violence, family violence or even a combination of the two are available in the data, only models for non-stranger

violence are presented.<sup>17</sup>

Table VII reveals almost no commonalities between the correlates of non-stranger violence between males and females. The only similar correlate is that as an individual ages, the likelihood of becoming a victim of non-stranger violence increases significantly ( $b=0.03$  and  $b=0.04$  respectively). Aside from age, females and males share no correlates of non-stranger violence.

Among males as shown in Panel, compared to persons with a college degree, obtaining less than a high school education is positively related to becoming a victim of nonfatal violence at the hands of a person known to them ( $b=1.84$ ). In addition, compared to persons who have lived in their homes for less than one year, having lived at their residence for more than five years is significantly related to a higher chance of becoming a victim of violence by a person known to them ( $b=1.01$ ). Finally, compared to urban dwellers, a male living in a suburban area or a rural area are significantly more likely to be victimized by a person known to them ( $b=0.63$  and  $b=1.35$  respectively).

Panel B shows that in addition to age, there are several significant correlates of nonfatal non-stranger violence against females. First, compared to college graduates, females with no more than a high school education are more likely to become a victim of violence by a person known to them ( $b=0.64$ ). Females living in homes that are rented as opposed to homes that are owned are significantly less likely to be a victim of non-stranger violence ( $b=-0.70$ ). The fewer the number of children under age 18 living in the household, the less the likelihood of non-stranger violence for females ( $b=-0.21$ ). And finally, living in a town versus an urban area is a significant predictor of nonfatal violence by a known offender for females ( $b=1.17$ ).

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<sup>17</sup> By changing the sign of the regression coefficient, one has the coefficients for Stranger Violence.



**Table VII. Logistic Regression Model Predicting Violence by an Offender Known to the Victim**

Variables	Panel A: Male Respondents				Panel B: Female Respondents			
	b	SE	Z	Exp(b)	b	SE	Z	Exp(b)
Race/Hispanic Origin								
White (reference category)								
Black	-0.75	0.47	-1.59	0.47	0.30	0.39	0.77	1.35
Other	0.10	0.57	0.18	1.11	0.01	0.50	0.02	1.01
Hispanic	-0.41	0.44	-0.94	0.67	-0.49	0.37	-1.31	0.61
Age	<b>0.03 *</b>	0.01	2.24	1.03	<b>0.04 *</b>	0.01	3.60	1.04
Marital Status								
Married (reference category)								
Widowed	-0.61	1.13	-0.54	0.54	1.62	1.06	1.53	5.04
Divorced	-0.63	0.43	-1.45	0.53	-0.51	0.33	-1.53	0.60
Separated	n/a	n/a	n/a	n/a	-1.31	0.84	-1.57	0.27
Never Married	-0.36	0.41	-0.90	0.70	-0.28	0.32	-0.90	0.75
Educational Attainment								
Less HS	<b>1.84 *</b>	0.75	2.45	6.31	-0.21	0.47	-0.44	0.81
HS GED	0.63	0.33	1.89	1.87	<b>0.64 *</b>	0.32	2.00	1.90
Some College	0.42	0.31	1.36	1.52	0.36	0.25	1.42	1.43
College or greater (reference category)								
Employed	-0.03	0.29	-0.12	0.97	-0.42	0.26	-1.59	0.66
Student	0.10	0.38	0.27	1.11	0.53	0.30	1.75	1.70
Owned or Rented								
Owned (reference category)								
Rented	-0.03	0.43	-0.07	0.97	<b>-0.70 *</b>	0.32	-2.17	0.50
Other	-0.05	0.47	-0.11	0.95	0.56	0.39	1.42	1.75
Dwelling	0.03	0.33	0.10	1.03	-0.18	0.28	-0.67	0.83
Kids	-0.27	0.13	-2.15	0.76	<b>-0.21 *</b>	0.10	-2.09	0.81
Tenure								
Less than 1 year (reference category)								
1 to 5 years	0.67	0.40	1.69	1.95	0.64	0.35	1.84	1.90
5+ years	<b>1.01 *</b>	0.39	2.60	2.75	-0.22	0.35	-0.61	0.81
Annual Household Income	0.05	0.09	0.54	1.05	0.03	0.08	0.35	1.03

MSA									
Urban (reference category)									
Suburb	<b>0.63 *</b>	0.31	2.07	1.89	0.44	0.24	1.83	1.55	
Town	-0.16	0.33	-0.50	0.85	<b>1.17 *</b>	0.35	3.34	3.21	
Rural	<b>1.35 *</b>	0.64	2.10	3.86	0.91	0.45	2.02	2.49	
Constant	-0.65	0.96	-0.67	0.52	0.02	0.77	0.03	1.02	

Unweighted n=609

Pseudo R2 = 0.1366

-2 Log likelihood = 455.3265

Unweighted n=864

Pseudo R2 = 0.1336

-2 Log likelihood = 645.9430

Note: Dependent variable is Overall Violence by a Known Offender coded as (0,1) where 0 represents a nonvictim, and 1 represents a victim.

\*p < .05 (two-tail tests)

## 7. CONCLUSION

The purpose of this research was to investigate the individual- and household-level predictors of nonfatal violence and how these predictors differ between males and females residing in the state of Illinois. Models were analyzed for overall violence, robbery, assault, aggravated assault, simple assault and rape/sexual assault. In addition, results addressing how predictors for stranger and non-stranger violence differ between males and females were presented. Findings clearly show that predictors of nonfatal violence for males and females differ. Table VIII presents a summary of the predictors for males and females.



basis for violence against women, it does support the contention of feminist theories that causes/predictors of victimization against males and females differ considerably. These analyses offer no support of others who maintain that violence against males and females differs in *quantity*, not *quality*, and that the variations in quantity stem from differential lifestyles, opportunities and routine activities of males and females (Hindelang 1976; Hindelang et al., 1978; Cohen and Felson 1979; Cohen et al., 1981).

The marked differences in predictors of violent victimization between males and females revealed in this work offers suggestions into ways that victimization prevention policy and services can be focused more efficiently and effectively. Findings demonstrate that higher risk of violent victimization is associated with younger males, black males, and with Hispanic males even when other theoretically important individual- and household-level factors such as annual household income, number of children present and length of residence are controlled. To reduce overall violence against males, greater victimization prevention and services must be directed toward the young, black and Hispanic males. With these target groups identified, services can be efficiently directed.

Among females, the story is more complex as several variables are associated with higher risk of overall violent victimization. Females who are widowed or divorced (versus married), have more children under age 18 in the household, earn less than <\$10,000 annually, have college degrees (versus a high school education) and live in urban areas are more likely to be victimized. Given that several theoretically relevant variables are associated with greater violence against females, programs and services will need to be directed to an entirely different population. For instance, the results suggest that it is imperative to direct services and prevention

strategies toward impoverished, single (i.e., widowed and divorced) women with children under the age of 18 years of the age living with them. Further, the results suggest that greater efficiency can be gained by directing programs toward females living in urban areas. One unexpected finding was that females with a college degree have a greater risk of violent victimization compared to females with a high school education only. This suggests services should focus on females at universities as well.

In conclusion, policies designed to reduce victimization can be more efficiently focused on those with the highest risk of violence. While the findings offer greater insight, much remains to be explained. Only through additional research can the remaining differences in risk of violent victimization for males and females not accounted for by these models be explained.

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