

## ABSTRACT

Title of Dissertation: AFTER HE HITS HER...CONSEQUENCES OF  
INTIMATE PARTNER VIOLENCE

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In this dissertation, I examine the associations between intimate partner violence and changes in a woman's household composition, employment, and risk of subsequent assault, using the National Crime Victimization Survey. I also consider the ways in which the aftermath of assault may be influenced by injuries resulting from the violence and by the victim's reaction to the assault (self-defense and help-seeking behaviors).

Recognizing competing predictions, exposure reduction versus retaliation, I assess whether women who attempt to reduce their exposure to violence are more or less likely than other victims of partner violence to be revictimized. Victims' experiences and characteristics are compared to non-victims and other types of crime victims. I provide a detailed descriptive analysis of all intimate partner victims and consider the factors associated with self-defense, injury, and help seeking for all crime victims. I pay particular attention to racial and class (education and income) differences, given that women of different races and economic situations often face very different choices and are treated differently by service providers. Intimate partner violence is most heavily concentrated among women age 16-49, women more likely partnered with men than

those younger or older. Analyses focus on this age group. Findings reveal that minority women are less likely to report an assault by an intimate than are White women. Lower household income is associated with higher risk of assault. Further results suggest that victims of intimate partner violence are more likely to move out of their homes than are other women (both victims of other types of crime and non-victims). Victims of intimate partner violence look remarkably similar to non-victimized women in terms of transitions into and out of the labor force. Despite being more likely than other victims to sustain an injury and to contact the police following an assault, results suggest that help seeking and self-defense are only sometimes associated with the primary outcome variables. Finally, analyses suggest that seeking medical help for injuries and acting in self-defense are associated with an increased risk of repeat assault, while exiting the labor force corresponds to lower risk of repeat assault.

AFTER HE HITS HER...CONSEQUENCES OF INTIMATE PARTNER VIOLENCE

by

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## **DEDICATION**

This dissertation is dedicated to those in violent relationships. May we one day find the answers that will end cycles of abuse.

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## *Chapter 1: Introduction*

In the past, intimate partner violence was largely condoned. People pretended it did not happen, felt it was a ‘family matter’ and they should not interfere, or blamed the victim’s supposedly provocative behavior for its occurrence. Although this still happens, these reactions are far less common today. There is greater censure of the behavior with much public discourse. Yet we still know relatively little about how intimate partner violence affects women’s subsequent work and family life. Many have attempted to document the prevalence of intimate partner violence, as described in Chapter 2.

Although rates vary across data sets, all estimates suggest a substantial number of women will experience violence at the hands of an intimate during their lifetime. Scholars have looked at some of the short-term challenges and consequences victims face (see discussion in Chapter 2). However, little has been done to assess longer term consequences in the months and years following assault, the role played by intervening authorities and what, if any influence a woman’s own actions at the time of assault have on her likelihood of divorce or residential mobility, labor force trajectory and the risk of subsequent assault. This project takes a first step toward filling this void.

### **Research Agenda**

Using the National Crime Victimization Survey (NCVS), a nationally representative and longitudinal data set, I examine the divorce, residential mobility and labor force outcomes for women victimized by their partners. Given findings that show a high proportion of divorced women previously experienced marital violence (see Bowlus



and Seitz 2002), and studies revealing that violent partners interfere with women's employment, it is crucial to consider how intimate partner violence is associated with household disruption and changes in a woman's employment trajectory. The influence of intimate partner violence on each of these outcomes has largely been ignored in social demographic research. Thus, this dissertation represents a significant contribution to the research literature.

Although society has begun to recognize the issue of male violence against their intimates, research suggests that the institutions battered women are likely to first encounter, the legal and medical systems, have typically been insufficiently responsive (or outright neglectful). I outline this research below and seek, in this dissertation, to understand better whether seeking help through these channels improves the victim's work and family life and reduces the likelihood of a subsequent assault. My findings have important policy implications and suggest potential ways of better assisting battered women.

This study compares the outcomes of women violently victimized by an intimate to those experienced by other victimized and non-victimized women. Thus, while this research focuses on intimate partner violence, it also illustrates the consequences women experience after being victimized by non-intimates.

Before addressing the aftermath of intimate partner violence, I begin with a detailed descriptive analysis of the victims of intimate partner violence. First, I consider the factors associated with being violently victimized by an intimate. Then, I explore the factors associated with self-defense, injury and help-seeking for all crime victims. These analyses allow me to situate my later findings within the context of a broader

understanding of intimate partner violence and the immediate experience of being a crime victim.

Figure 1.1 illustrates the main relationships I test. By linking responses to key questions over time, I estimate how reported incidents of intimate partner violence (A) relate to important changes in women's lives: 1) residential mobility and/or marital dissolution and 2) employment consequences resulting from victimization, specifically labor force status changes (entry into/exit from the labor force) (B). Additionally, I consider how these outcomes are affected by women's self-defensive actions, injuries and help-seeking behavior at the time of the incident (C). Finally, I address how victims' characteristics and family and employment consequences affect the likelihood of a subsequent act of partner violence (D). Throughout, I consider differences by race/ethnicity and class and control for the role of other demographic variables.<sup>1</sup>

**[Figure 1.1 About Here]**

### **Scope: Focus on Intimate Partner Violence Against Women**

Despite the interrelationships between the different types of family violence, this study is limited in scope to men's aggression toward their female partners. Women's violence toward men should be understood differently from male violence, as women's aggression toward men is qualitatively different from men's violence against women.

Although some find similar rates of perpetration by men and women or higher rates of female perpetration (see, for example: Moffitt, Caspi, Rutter, and Silva 2001;

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<sup>1</sup> Although the NCVS allows race/ethnicity to be broken down into White, non-Hispanic; Black, non-Hispanic; Asian, non-Hispanic; Native American, non-Hispanic; and Hispanic, there are not always sufficient cases to analyze intimate partner violence separately for each racial group.

Morse 1995; Straus and Gelles 1990; Morse 1995; Straus and Gelles 1990), not all research supports the finding that men and women engage in violence similarly.<sup>2</sup> Tjaden and Thoennes (2000a), using the National Violence Against Women Survey conducted in 1995-1996, find that women were more likely than men to report having experienced rape, physical assault, and stalking by a husband or opposite sex cohabiting partner.

Even in cases where women are aggressive towards their intimate partners, research suggests women are more likely to act in self-defense (see Kurz 1993:258). Additionally, Morse (1995) found that both women and men were more likely to report that either both partners or men, rather than women, initiated fights among couples who reported violence. She also found that women who had been assaulted were more likely than men to live in fear of their partners. These findings suggest that perhaps women, more often than men, act in self-defense when they are violent toward their intimate partners. Note, however, that some research challenges this claim. Specifically, work done by Moffitt, et al. (2001) on the Dunedin Longitudinal Study out of New Zealand finds very high rates of both male and female violence and suggests that women respond violently to male violence, but that an antisocial history is also predictive of female (and male) violence net of their partner's violence. Further, factors such as individual attitudes toward aggression and involvement in other crime are predictive of violence. Thus there is some evidence that self defense is not the only explanatory factor in female perpetrated violence.

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<sup>2</sup> There is an interesting debate in the literature regarding women's violence toward their male intimates. Moffitt, et al. (2001) argue that women's violence may be more easily forgotten by men and thus less often reported than is male violence unless specific probes are included in the survey. This could explain why some studies show higher rates of male perpetrated assault. On the other hand, Morse (1995) contends that women's violence goes against the role expectations for women and so even minor aggression is likely to be remembered as violence, thus inflating the rates of female perpetrated violence in some surveys.

The consequences of intimate partner violence are more severe for female victims. Women reporting that they were physically assaulted were more likely than men to “report that they had been injured, received medical treatment, received mental health counseling, lost time from work, and sought justice-system interventions as a result of their most recent victimization” (Tjaden and Thoennes 2000a:155). This is echoed in Brush’s (1990:63) analysis of the National Survey of Families and Households. She finds that although men and women were about equally likely to engage in violence, when women were aggressive toward their husbands they “were more likely than men to report that they were injured in the course of disagreements with their partners” (see also Zlotnick, Kohn, Peterson, and Pearlstein 1998). Morse (1995) also found that women were more likely to incur injuries from their partner’s violence than were men, a finding supported by the National Family Violence Resurvey (Kantor and Straus 1990).

In sum, because of the greater likelihood that women’s violence is perpetuated in self defense and because of women’s greater chance of experiencing an injury at their partner’s hand, men’s violence against their female intimate partners is different from women’s violence against male intimates. It would thus be unwise to analyze male and female perpetrated assaults within the same framework and so my scope is limited to violence perpetrated against women.<sup>3</sup> History and culture have allowed and even

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<sup>3</sup> Initially, I had planned to also examine intimate partner violence committed against a woman by another woman. Although the power dynamic is different (see 1997 who highlights the role of economic independence/dependence and how societal homophobia can be used to control a same sex partner), I think it is worth considering this type of assault, particularly given how little is known about violence among same sex couples. However, data limitations precluded such an analysis. There were only 13 cases of possible female-to-female intimate partner violence, and it was not entirely clear that I was capturing same sex intimate relationships and not friendships.

encouraged the violent victimization of women by their male partners and gender inequities continue to enable men to assault the women in their lives.<sup>4</sup>

### **Intimate Partner Violence as a Lens for Understanding Gender Inequality**

America is characterized by persistent gender inequality and violence is but one means some men use to control women and maintain their dominance. For example, Van Natta (2001) views the normative gender system as a factor in all types of intimate violence since it sets the stage for inequitable power dynamics (see also Schechter 1982). Van Natta elaborates that ending domestic violence is linked to adjusting these relationships: “As long as individuals are unable to obtain the means to live, some of us will be profoundly vulnerable to abuse, we will have few options to escape violence if we are victimized, and we will be more likely to be oppressed as human property.” (2001:32) Empirically, Felson and Messner (2000) find that violent husbands are more likely to use threats to control their wives than are other perpetrators of violence, including female perpetrators of violence against their male partners. They suggest this as evidence of the husbands’ attempts at controlling their wives. This is echoed by Morse (1995) who finds that women who had been abused were more likely than such men to live in fear of their partner.

Feminists typically see spousal violence as an expression of the inequality that exists between men and women. They believe that violence is used as an instrument of male control over women and that it will continue so long as women maintain a lower status within society (Kurz 1993: 253, 257-261). Further, "feminist researchers point out

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<sup>4</sup> For an opposing viewpoint, see Felson (2002).

that both historically and recently, major institutions have permitted and condoned the use of physical abuse by husbands to control wives" (Kurz 1993:259). There is abundant, recent evidence that the state has often supported or overlooked spousal abuse.

Sheffield's (1999) discussion of sentences imposed on male batterers illustrates how attitudes infringe upon judicial decisions:

In 1981 a Kansas judge suspended the fine of a convicted assailant on the condition that he buy his wife a box of candy. In 1984 a Colorado judge sentenced a man to two years on work release for fatally shooting his wife five times in the face. Although the sentence was less than the minimum required by law, the judge found that the wife had "provoked" her husband by leaving him. In 1987 a Massachusetts trial judge scolded a battered woman for wasting his time with her request for a protective order. If she and her husband wanted to "gnaw" on each other, "fine," but they "shouldn't do it at taxpayers' expense." The husband later killed his wife, and taxpayers paid for a murder trial.

In the first two examples, the severity of a male's perpetrated violence against his wife is minimized by the justice system that is supposed to protect her. In the last example, a judge dismisses a woman's concerns for her safety at home, implicitly supporting her husband's right to assault her. Ford's (1983) work on Marion County, Indiana suggests there were systematic problems within the criminal justice system in cases involving battered women. Women assaulted by their husband could not rely upon the criminal justice system for protection.

While dramatic changes have since taken place within the criminal justice system, many women are still not receiving the help and support that they need, and the men from whom they have sought protection are still revictimizing women. A severe recent example occurred in March of 2002 when a woman in Maryland was killed by her partner "24 hours after second-degree assault and threatened arson charges against him were dropped when he promised in County District Court that he would stay away from

his wife” (Family Violence Prevention Fund 2003). In this case, the offender had a history of domestic assault. Feminists implicate a larger society that condones and accepts violence in general, violence against women in particular, in the prevalence of intimate partner violence.

While male violence against intimates represents one extreme of male control, it is both a result and indicator of a society that supports women’s lesser status. Cultural factors implicitly (and sometimes explicitly) promote men’s use of violence. For example, Crenshaw (1993) suggests that media portrayals of violence against women legitimize such violence. There is also empirical evidence supporting the idea that violence in the media may increase men’s acceptance of violence against women. Malamuth and Check (1981) showed that exposure to films showing positive consequences of violence against women increased men’s acceptance of such violence.

In sum, it is clear that intimate partner violence is linked with gender issues. I next situate my work within the broader field of sociology, indicating linkages to the broader arena of research on gender, work and family. Although the present work does have an important place within any study of gender, its relevance to sociology is far broader. I detail its place within the wider sociological literature below.

### **Employment Outcomes**

Within the sociological literature, there is a large body of research on women’s employment, the gendered nature of the labor market, and the effects of female employment on the family. Research efforts include examining the gender wage gap (see, for example: Blau and Kahn 1992); considering the nature and extent of occupational sex

segregation and the “glass ceiling” (see, for example: Cotter, DeFiore, Hermsen, Kowaleski, and Vanneman 1997; Jacobs 1989; Petersen and Morgan 1995); evaluating maternal labor force participation, including the wage penalty of motherhood (see, for example: Bianchi 2000; Budig and England 2001; Klerman and Leibowitz 1999); and studying the division of household labor as women’s time is increasingly devoted to market work (see, for example: Bianchi, Milkie, Sayer, and Robinson 2000; Brines 1994; Lennon and Rosenfield 1994; South and Spitze 1994). Others have examined the role of female labor force participation in expanding women’s autonomy and power within the household (see, for example: Blumstein and Schwartz 1991). As Blau, Ferber and Winkler (1998), for example, recognize, economic dependency within marriage often means divorce is not a viable option for women. This is the research most relevant to my current project. While my dissertation does not compare women and men’s labor force experiences, it addresses women’s labor force changes coincident with incidents of intimate partner violence. Further, I explore how women’s employment trajectories are associated with their own actions at the time of assault and how their employment influences their likelihood of marital dissolution, residential mobility and subsequent assault.

### *Marital Dissolution*<sup>5</sup>

Divorce has not always been as easy to obtain as it is today, and historical evidence suggests that it was quite difficult for abused women to exit violent

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<sup>5</sup> The NCVS does not provide information to determine if a woman is in a non-marital cohabiting union. Thus, I must treat cohabiters as unmarried, like other single women.



relationships in the past (see Sievens 2003). Despite the increased availability and acceptance of divorce, many women today opt to stay in violent marriages, often because they are dependent upon their abuser.<sup>6</sup> Bowlus and Seitz (2002) found that spouses in violent marriages have very different characteristics from those in nonviolent marriages and are much more likely to divorce. They also found that women with higher educational attainment and without children are both more likely to work and more likely to divorce, suggesting the importance of constraints and opportunities. In this dissertation, I explicitly examine factors that are associated with marital disruption.

### **Residential Mobility**

There are several possible reasons why a victimized woman would choose to leave her home. Most directly, a woman may move if she is being violently victimized in her home. Or, perhaps the entire family may relocate to protect a daughter from a violent boyfriend. Additionally, if a marriage dissolves, both partners may be forced to move since the marital household could be too costly for either to maintain independently. Few scholars have addressed the role of intimate partner violence in women's residential mobility. By considering this outcome, I hope to better understand some of the complex factors that may result in a move. However, intimate partner violence is only one of a nexus of factors associated with mobility. Victims may move for other reasons (even to stay with an abusive partner who needs to move for a job). As discussed in Chapter 3, the NCVS does not follow movers. Hence, I am unable to address the trajectory of violence after a household moves out of the sample.

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<sup>6</sup> Also, exiting a violent marriage does not necessarily end the violence perpetrated by the husband (Browne 1995; see: Sev'er 1997).

In sum, my research will help sociologists better understand some of the circumstances associated with marital dissolution and may provide clues to some of the ways employment is used by women as a means of enhancing their power within relationships or enabling them to exit abusive marriages. Further, this project illuminates how interactions with key community resources, specifically legal and medical services, affect victims and suggests ways of improving interventions to better a victim's chances for positive life outcomes. Because this work identifies ways in which diverse women are affected by violence, future research can be better designed to target specific intervention points.

### **Outline of this Dissertation**

This dissertation continues with a chapter (Chapter 2) discussing the relevant research literature. I first describe prior research on the extent and prevalence of intimate partner violence to familiarize the reader with this issue and to provide a backdrop for integration of my findings. This is followed by a discussion of prior work addressing the marital, mobility and employment consequences of intimate partner violence. I then review the literature that considers the intervening variables I explore: self-defense, injury and help seeking. Following this is a discussion of the research addressing race and class differences in the aftermath of intimate partner violence. I discuss my expected findings as I present each of these topics. The chapter concludes with a discussion of two competing hypotheses, exposure reduction and retaliation, for how the intervening

variables will influence the likelihood of repeat assault. Finally, I conclude chapter 2 by elaborating the specific research questions explored in this dissertation.

In Chapter 3, I describe the data and methods used in this dissertation. In addition to familiarizing the reader with the NCVS, I explain which women are included by my analytic sample and I provide descriptive statistics for all women represented in my sample. I then describe in detail the modeling techniques used to analyze each research question and describe each of the dependent and independent variables.

I explicitly outline the data limitations of the NCVS in Chapter 3. I discuss the biases presented by excluding women living on military bases and women who are incarcerated, as well as left censoring (we do not know the woman's victimization history over her entire life course) and right censoring due to residential mobility and sample attrition. Additionally, I elaborate the implications of underreporting, discuss the small number of victims of intimate partner assault in the NCVS, and outline unique concerns inherent in using the NCVS to study intimate partner assault.

Chapter 4 presents the descriptive foundation for the primary issues addressed in this dissertation. It begins by presenting descriptive statistics comparing all women, victims of any violent crime, and women violently victimized by an intimate. It then discusses regression models that reveal the characteristics associated with women's reports of violent victimization by a male intimate. I then discuss the nature of intimate partner assaults, and examine the factors associated with the intervening variables: self-defense, injury, seeking medical help for injuries, and notifying the police of assault.

In Chapter 5, I present findings on marital dissolution and residential mobility. I discuss differences between victims of intimate partner violence, other crime victims, and

non-victimized women. Further, for those who were crime victims, I compare the role of self-defensive actions, injury and help-seeking behavior in influencing the likelihood of a divorce or separation, individual move, or household move. This chapter concludes with a discussion of these results, situating them within the extant research literature.

Findings on women's labor force status trajectories are also presented in Chapter 5. I include comparisons between victimized and non-victimized women, addressing multiple victimization categories and consider the role intervening variables play in influencing the employment trajectories of victimized women. I also compare my findings to the employment outcomes suggested by the current literature.

In Chapter 6, I consider the factors associated with an increased risk of experiencing a subsequent intimate partner assault. These analyses are limited to victims of intimate partner violence who remain in their home. After providing a description of protective and risk factors, I consider whether the intervening variables show support for the exposure reduction or retaliation hypotheses.

Chapter 7 summarizes the key findings from this dissertation and synthesizes the results from chapters 4-6. I also discuss the potential policy implications of my findings, situate the findings within the field of sociology and suggest paths for further research to expand our understanding of how women's lives are affected by violence.

## ***Chapter 2: Literature Review***

In this chapter, I describe previous research that has addressed the extent of intimate partner violence. Then, this chapter explores the literature that is relevant to each of the key outcomes: marital dissolution, mobility and employment status change. I also discuss the literature that is relevant to each intervening variable: self-defense, injury, seeking medical care for injuries, and a victim's decision to contact the police following assault. This is followed by discussion of work suggesting differences by race and ethnicity and then proceeds to discuss repeat assaults. I conclude by presenting my research questions.

### **Research Findings on the Extent and Nature of Intimate Partner Violence**

Table 2.1 describes previous studies that have examined the prevalence of intimate partner violence using nationally representative data. It shows information on the sample, the time frame, the study design/methods and the prevalence rates.

[Table 2.1 About Here]

Klaus and Rand (1984) found very low rates in the 1973-1981 waves of the National Crime Survey. Several factors are cited as reasons. For instance, the context of a crime survey makes it unlikely that incidents not normally considered criminal, are reported. Interview privacy, though desired, was not always attainable; and shame may prevent many from disclosing their experiences. It is also worth noting that this study took place prior to the redesign which added better probes about assaults by an intimate (see Bachman and Taylor 1994).

Rennison (2000) computed more current rates using the redesigned National Crime Victimization Survey (NCVS). The 2001 NCVS rates are presented in Table 2.1. Although these rates are much higher than those found by Klaus and Rand, they are still substantially lower than those found by other surveys. Note, however, that these studies did not link a woman's interviews to assess victimization over the entire three-year interview period. Rather, all of the interviews in a twelve-month period were analyzed. Hence, the rates represent a snapshot of victimization in a fairly narrow window and often include two interviews with the same respondent. If a woman interviewed twice reported intimate partner victimization at only one of her interviews, her other interview would appear to be reported by a non-victim (despite her victimization within the year surrounding that interview), inflating the proportion of non-victims. Alternatively, a woman reporting victimizations during both interviews in the twelve-month period would be counted twice. In general, because it is highly unlikely that a woman reports being victimized during each interview, the actual proportion of women who were victimized will be higher than the proportion of interviews in which the respondent discloses an incident. Finally, these rates were computed using bounded NCVS interviews. That is, the interviews were all "bounded" by an earlier interview 6 months ago, which provided a concrete time referent (see ICPSR 2001). Thus, it is not surprising that the rates are lower than those found in other, unbounded surveys.

Morse (1995) analyzed data from four waves of the National Youth Survey collected at the University of Colorado, Boulder. Her results for heterosexual married or cohabiting couples indicate high prevalence of intimate partner assault within the past year: ranging from a rate of 54.5% of couples when respondents were between 18-24

years old (and a smaller proportion were in married/cohabiting relationships) to 32.4% by the time respondents reached their late twenties to early thirties. Morse attributes this change (as well as the discrepancy between the rates she found and rates from other studies) to the age range of the sample, varying from one in which violence peaks to one at the start of its decline (Other studies in Table 2.1 included women of younger and older ages; such women are less likely to have intimate partners). Another factor that may contribute to her higher rates is that the conflict tactics scale was administered in structured, face-to-face interviews, rather than by telephone as were many of the other studies cited in Table 2.1. Morse found that rates for severe violence were drastically lower, ranging from 25.5% in the first wave analyzed to 15.8% in the last wave (Data Not Shown in Table 2.1). In the Morse data, rates of any female perpetrated violence and of severe female perpetrated violence were higher than those of male perpetrated violence across the years. However, Morse (1995) carefully addresses gender differences in the nature, context and consequences of assault.

Straus and colleagues found that in 1975, 16% of all married/cohabiting couples in the National Family Violence Survey (NFVS) reported one or more assaults during the year. In a 1985 follow up study, the rate was similar at 15.8% (Straus and Gelles 1990). Straus and Gelles claim that partner violence is underreported and conclude that their numbers represent a lower bound on actual incidence of assault.

Despite this claim, Straus and Gelles (1990) find higher rates of intimate partner violence than do most other researchers, the dramatic exception being Morse (1995) (see Table 2.1). However, their numbers are not directly comparable because they refer only

to those currently residing with an intimate partner, the group most “at risk” of intimate partner assault.

Tjaden and Thoennes (2000b) used similar survey techniques to examine the prevalence of intimate partner assault among all adults. They found much lower rates, 1.5% of women and 0.9% of men reported violent victimization by an intimate in the past year. When analyses were restricted to married/cohabiting couples of the opposite sex (Tjaden and Thoennes 2000b:151), findings were similar: 1.4% of women and 0.8% of men “reported being raped, physically assaulted, and/or stalked by a current or former marital/opposite-sex cohabiting partner in the 12 months preceding the survey.” Tjaden and Thoennes (Tjaden and Thoennes 2000a) discuss how their findings differ from those of Straus and Gelles (1990) and highlight the possibility that differences in survey presentation and analytic categorization explain the differential rates found in each study.<sup>7</sup> Additionally, Tjaden and Thoennes use a modified version of the Conflict Tactics Scale employed by Straus and Gelles, as well as other survey instruments.

Lower rates are also found by Zlotnick, et al. (1998), who studied married and cohabiting couples in the National Survey of Families and Households (NSFH), suggesting that Straus and Gelles (1990) have relatively unique findings and that actual rates are either much lower or people are generally far more reticent about this topic. The context or presentation of the Straus and Gelles survey may have invited greater disclosure.

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<sup>7</sup> If a male or female respondent reports a victimization in the National Family Violence Resurvey, it is also counted as a perpetration for the opposite sex when rates are tabulated in Straus and Gelles’ analyses (Tjaden and Thoennes 2000a). However, given findings that men and women report differently (See, for example: Bohannon et al. 1995), it may not be valid to combine these reports, as doing so may inflate estimates. This would partially explain why Straus and Gelles (1990) find much higher prevalence rates among married and cohabiting couples than do other researchers.



Regardless of which study is considered, there is no doubt that intimate partner violence against women remains a social problem. Although prevalence estimates are quite low, when the rates are applied to the entire U.S. population, it is clear that a large number of women are being victimized at home. For example, if the sex-specific rates found by Rennison (2003) are applied to the population of women and men represented in the 2000 census, over 66 million victims are calculated (9.6 million male victims and nearly 57 million female victims) (United States Census Bureau 2005). Additionally, it is worth noting that intimate partner violence has declined at a slower rate than other types of violence (Rennison and Welchans 2000; see also Rennison 1999) (see also: Rennison 1999). I anticipate that, like other studies of victimization data, my findings will show lower rates of reporting violent victimization by an intimate than do studies using other types of survey instruments (e.g., the conflict tactics scale). However, when I compute the rate of women victimized, that is when I consider the number of women *ever* reporting victimization, rather than the number of interviews with a report of intimate partner assault, I anticipate finding higher percentages of women reporting intimate partner assault than the other studies of crime victimization data.

### **Previous Work on the Consequences of Intimate Partner Violence**

Little research has addressed the consequences of intimate partner violence experienced by women. Exceptions are studies of injury (see Brush 1990; Dobash, Dobash, Wilson, and Daly 1992; Morse 1995; Tjaden and Thoennes 2000a; Zlotnick et al. 1998), and the long-term effects of violence on mental health (e.g., Saunders 1994; Gleason 1993). Limited research examines family and employment changes resulting

from intimate partner violence. The existing studies are typically plagued by at least one of three primary shortcomings: first, they rely on non-representative samples of women; second, they examine only victims of intimate partner violence without a comparison group; and/or third, they measure only one point in time.<sup>8</sup> By using the longitudinally linked National Crime Victimization Survey (NCVS), I overcome these problems, as the NCVS is a nationally representative sample of victims and non-victims. It is constructed from repeated interviews, every six months, over a three-year period. Below I describe the relevant research that has been done and discuss its limitations.

## **Marital Dissolution or Household Disruption**

### *Marital Dissolution*

Research evidence suggests that across time and place, women have used divorce as a nonviolent means of ending threatening relationships (Erchak and Rosenfeld 1994; Gillis 1996; Levinson 1996). Sievens (2003) found that women in violent marriages faced great obstacles in obtaining divorce in colonial America even as laws were changing to allow such marital dissolution at the woman's request. As divorce becomes more prevalent and socially acceptable, it is likely that this option becomes increasingly viable in the eyes of victims. Indeed, Bowlus and Seitz (2002) found that the likelihood of divorce was substantially higher in violent marriages than nonviolent marriages (74% of marriages with high severity abuse, 30% of marriages with low severity abuse and 14% of nonabusive marriage) ended in divorce. Sanchez and Gager (2000) also found that nonviolence is associated with lower odds of marital dissolution in their study of the

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<sup>8</sup> The relevant research that accounts for victims and non-victims and uses nationally representative data studies only intimate partner homicide, but does not address what happens in cases that *do not* end in death.

National Survey of Families and Households. DeMaris (2001) finds that while intense male violence is associated with lower relationship happiness for women, there is no relationship between intimate partner violence and male happiness, perceived stability or sexual frequency. Yet, male violence that is more severe than their female partner's violence increases the likelihood that a cohabiting couple will separate, female violence is associated with decreases in the rate of marriage.

Zlotnick, Kohn, Peterson, and Pearlstein (1998) use the National Survey of Families and Households to show that those in unmarried, cohabiting couples are more likely to have been physically victimized than are those in married couples. This could suggest that violent cohabiters are less likely to transition into marriage. Perhaps as more violent marriages dissolve, the pool of potential dating partners includes more violent individuals. This is suggested by Dugan, Nagin, and Rosenfeld (1999:192), who discuss the possibility that declines in the rate of first marriage may be linked to "greater selectivity among would-be spouses."

One of the few studies that directly address marital dissolution following violence found a positive relationship. Using the three waves of the National Women's Study, a national study that included an over sample of women aged 18 to 34, Byrne, Resnick, Kilpatrick, Best, and Saunders (1999) found that those women experiencing rape or physical assault were more likely than their peers to divorce between the first and third waves of the survey. This study is only suggestive because it combines violent victimization by intimate partners with other types of violent events. Thus, caution must be taken before drawing conclusions about the effects of marital violence on marital dissolution. Further, the study only examines bivariate relationships and therefore fails to

control for important demographic characteristics that could be related to both violence and separation.

A recent study by Dugan and Apel (2005) addressed the ways individuals might avoid being crime victims. Their findings suggest that spousal violence is a strong predictor of a marital dissolution and call for the use of longitudinal data to examine the relationship more closely.

#### *Household Disruption Through Residential Mobility*

Dugan (1999) makes a compelling case to consider residential mobility as a response to recent criminal victimization. Her findings show that individuals victimized within a mile of their homes are more likely to move than others. However, these findings are not generalizable to victims of partner violence as her study intentionally excludes those cases. It is likely that the moving decisions of victims of intimate partner violence are very different, given the danger within rather than outside of the home and their interdependence with the perpetrator. Since Dugan (1999) only investigated household moves instead of also considering individual moves, her methods failed to detect victims who moved while the rest of the household remained.

## **Expectations**

I anticipate that victims of intimate partner violence divorce or separate more often than other women, including other victims. They are also expected to move more frequently both alone and with the household. Since it is often problematic for one person to maintain a household if the other leaves, a household move often indicates marital dissolution. Individual moves may also represent separation from the spouse. Since respondents in the NCVS are not followed when they move, I cannot determine with certainty if such moves indeed represent marital dissolutions. A victimized woman who moves may have simply established a new home with her abusive partner. This could represent a husband's attempts to control a woman further by isolating her from her community and social networks. Thus, I am cautious about the conclusions drawn from the models predicting residential mobility.

While it is tempting to consider separation or divorce and mobility following intimate partner violence as a consequence of the violence, I recognize that family violence and household disruption are complex processes that may not have a direct causal link. Rather than assessing causality, this study examines whether intimate partner violence is associated with these outcomes, and whether victims of such violence are more likely than other victims and non-victims to move out of their homes. My findings are discussed in terms of these differences in likelihood and the relevance for policy formation is discussed.

## **Effects on Employment**

Another area where women's lives may be directly influenced by intimate partner violence is employment. In addition to short-term implications such as missing work, there may be longer-term career consequences. These can take two opposite forms: enhanced or diminished labor market activity.

Some scholars have linked violent victimization to negative employment outcomes. For example, Lloyd (1997) examined the effects of intimate partner violence on women's employment and found that rather than curtailing employment, women experience downward occupational mobility. Her work shows the importance of considering consequences beyond the short-term losses in days of work and pay after a violent incident. She concludes that intimate partner violence is associated with a higher likelihood of unemployment, more jobs (of shorter duration), and more health problems. Lloyd (1997:157) also found evidence that violent partners often played a role in women's employment outcomes: "Some women detailed men's attempts to influence whether they worked, and recounted their partners' efforts to control and intimidate them."

Similarly, Riger, Ahrens, and Blickenstaff (2000) found that women whose partners attempted to prevent them from going to work were more likely to quit or lose their job. Also women whose partners interfered with their participation at work were more likely to miss workdays. Forty-six percent of the women in their sample were explicitly forbidden to work by the abuser (although the vast majority of these women did work). Eighty-five percent of the employed women missed work because of intimate

partner violence or psychological abuse and 52% had to quit or were fired because of it (Riger et al. 2000:167).

Both the Riger, et al. (2000) study and the Lloyd (1997) study are limited, as they focuses only on shelter residents or low income residents in the Chicago area. It is likely that victims who are not in shelters have different experiences from those in the shelter population and there may be geographical variations. It is unclear whether Lloyd's findings can be generalized to women at higher income levels (who may have more resources to exit violent relationships). Her analysis is also limited to bivariate associations making it difficult to conclude that the abuse "caused" work displacement net of other factors. Both sets of findings are, however, suggestive.

Byrne, Resnick, Kilpatrick, Best, and Saunders (Byrne et al. 1999) also found evidence that violent victimization may negatively influence a woman's career trajectory. They (1999:364) examined changes in women's employment status after a violent crime and found that "women who experienced a new [post Wave 1] assault were more likely to be unemployed [at Wave 3] than women who did not experience a new assault." This suggests a link between victimization and exit from the labor force; however, their analysis only considers movement from being employed to not employed. It is also limited by the aggregation of all violent crimes. Other research also suggests a linkage between violent intimate partner victimization and labor force participation. Using nationally representative data from Canada, Bowlus and Seitz (2002) found that women previously victimized by an intimate were less likely to be employed; yet, they find no evidence that employment is directly linked to abuse and suggest the difference is

because of other differences between victimized and non-victimized women. For example, non-victimized women tend to be better educated.

Dugan et al's (1999) premise that female victims seek employment to finance the departure from violent relationships suggests an alternative hypothesis. This research supports the possibility that violent victimization could actually enhance a woman's commitment to the labor force. Victims may seek employment after the onset of violence, as a means to gain both financial and social independence from an abusive partner. Similarly Rogers' (1999) analysis of nationally representative 1980 and 1988 longitudinal data which suggests that increased marital discord (measured through three items including marital instability, relationship problems and marital conflict) increases the likelihood that unemployed wives will enter the labor force. Even if abused women stay in the relationship, such resources could provide them with greater bargaining power. Indeed, Farmer and Tiefenthaler's (1997) findings suggest that increased income decreases violence experienced by women in abusive relationships.

Other scholars reverse the order of causality, examining how female labor force participation may affect violent victimization. Parker and Toth (1990) found that states with higher rates of female labor force participation also have higher rates of intimates killing one another, suggesting that women's employment may increase partner violence. This conclusion may be vulnerable to ecological fallacy, as the statewide statistics do not reveal linkages at the individual level. Further, they rely on cross-sectional data possibly confounding the direction of causality. Without knowing the temporal ordering of events, they cannot assess whether intimate partner violence induces women to work more often to escape their partner, or whether women are killed because they work.



Avakame (1999) suggests that women's labor force participation may increase the rate at which women are killed by their intimate partners. Avakame links this to the backlash (retaliation) hypothesis noting that males in a context of declining gender inequality will resort to violence to assert power over women. Note that this study too relies on aggregate rates from community characteristics. Thus, the linkage between woman's own employment and her individual experience of intimate partner violence is not assessed. This result may simply reflect a broader dynamic related to places with high female labor force participation. For instance, such places may share other common characteristics that increase the risk of partner violence for women. In this project, I directly examine how an individual's own experiences relate to the likelihood that she is re-victimized.

Other studies find that the role women's employment plays in her chances of being victimized by her partner is related to her partner's work status. MacMillan and Gartner (1999) show that women's employment lowered their risk when their partners were also employed, but increased their risk when their partners were unemployed.

I expect that victims of intimate partner violence transition into and out of the labor force more often than other victimized and non-victimized women. Since employment may be one road to economic independence, some victims of intimate partner violence may seek work as part of a longer-term strategy for exiting the relationship. Partner violence could also force employed women to exit the labor force, either because of lost time at work, a partner's interference or his demands that a woman quit.

Note that without the full nexus of employment history, family backgrounds, and explanations for the changes, it is impossible to determine whether any observed labor force status changes are a direct result of intimate partner violence. Indeed, it is plausible that both the violence and labor force change were precipitated by other non-measured life events. Using longitudinal data to at least establish temporal sequencing provides more compelling evidence than cross sectional analyses for a causal relationship.

### **Intervening Factors**

This dissertation explores the roles of injury, self-defensive actions at the time of assault, and contact with the legal and medical systems immediately following assault. In fact these characteristics may influence the relationships between intimate partner violence and a) marital dissolution, b) residential mobility and c) employment changes.

#### *Injury*

Past research on injury has typically used injury as a dependent variable to show how men and women suffer differently from intimate partner violence(see Brush 1990). These studies firmly establish that women are more likely than men to be hurt when assaulted by an intimate partner. It also justifies analyzing women and men separately. Yet, it does not consider the consequences injuries have on women's lives (e.g., effects on employment) or the relationship between sustaining an injury and experiencing a subsequent incident of intimate partner violence.

Injury is likely related to both employment and marital dissolution. Injury may motivate labor force changes for victims of intimate partner violence, either by causing lost time from work resulting in labor force exits, or motivating a woman to find a job to

increase her options and decrease dependency upon the abuser. Injury could increase dependency upon and fear of the perpetrator. For example, Dugan and Apel (2005) discuss the likelihood that some victims stay in violent marriages for fear that their partners would retaliate if they tried to leave. Such feelings would decrease the likelihood of divorce or separation and individual mobility (i.e., the injured victim could be less likely to separate from her partner). Alternatively, the injury can serve as a “wake-up call” leading women to exit the relationship. Browne (1987) found that victims of intimate partner violence who killed their partners often did so after escalation in violence, to levels that had not been experienced before. Further, because of the greater likelihood that they are victimized at home, in private, and because the motivation is likely not a robbery, I anticipate that victims of intimate partner violence victims may be injured more often than other victims.

### *Self-Defense*

Prior research on self-defense considers who precipitated the violence. Scholars have found that women are more likely than men to assault their intimates in response to male violence (see Kurz 1993; Morse 1995). However, the extant research does not explore how a woman’s self-defensive actions influence change in her family, employment, or risk of future assault.

### *Help Seeking*

Earlier research on help seeking behavior following an assault by an intimate has examined the problems victims encountered with medical and legal services. The medical system has historically treated women’s injuries without intervening or identifying women experiencing intimate partner violence and the legal system does not always offer

desired protection and intervention (see Dworkin 1993; Martin 1995; Warshaw 1993; Stark, Flitcraft, and Frazier 1979).

Stark, et al. (1979) discuss how the medical establishment “fails” battered women. In their study of women at a large urban hospital, they find that the battered woman did not fit into the model of diagnosable diseases: “...the patient’s persistence, the failure of the cure, and the incongruity between her problems and available medical explanations lead the provider to label the abused woman in ways that suggest she is personally responsible for her victimization” (461). Indeed, the researchers found that many doctors do not even ask women how they were injured and whether they have injuries that are less obvious. Further, the treatment battered women received for their injuries was often inappropriate. Such concerns were echoed in Warshaw’s (1993) research at an urban emergency room in a training hospital. She reviewed female charts for a two-week period and searched for indications of abuse. The sample includes 52 cases where women were obviously purposefully injured. Warshaw found detection and intervention lacking and that personnel were not receptive to the special needs of battered women. For example, victim’s clues often went ignored and doctors failed to elaborate on information collected by the nurses. Additionally, in most cases (78%), doctors did not ask about the relationship to the perpetrator. Stark et al. (1979) view the system as contributing to the problem. They see radical change as essential for advancing women’s position in society and ending domestic abuse. Among their ideas are woman-centered networks that empower her in times of need.

Other research considers how police intervention might affect women victimized by intimates. Some recognize inherent race and class biases within the legal system

(Ferraro 1993). In fact, findings by Dugan, et al. (2003) strongly suggest that both the criminal justice system and domestic violence services may systematically treat cases of partner violence differently depending on the victim's race. For example, they find that marital status and race are important determinants of how policy influences homicide rates.

Another theme is that the legal system does not adequately consider the gendered nature of assault. Ferraro (1993) notes that gender-neutral language ignores the differential context in which male and female violence tends to take place. She cites incidents where women who phoned police wound up being the ones arrested, since officers do not always see the gendered nature of family conflicts and notes: "When police arrest women for defending themselves against battering, the abusers are provided social support for initiating and justifying violence" (169).

Many express concern that an individual victim's needs are not adequately considered. Bowman (1992) critiques making it mandatory for the police to arrest in domestic violence cases since there is no evidence that such policies deter future violence, or that it is necessarily the response that women want. Ferraro (1993:173) also questions the effectiveness of mandatory arrest policies and emphasizes that "...women are the best experts on their own lives" and cites evidence that allowing victims to drop charges actually decreases recidivism.<sup>9</sup> Bowman emphasizes the importance of the entire response to domestic assault, beginning with a call to police and extending through prosecution and aid to victims. While she realizes some women may find it empowering to have their abusers arrested, others may not want this response, favoring a different

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<sup>9</sup> It is, however, possible that dropping charges reduces the likelihood not of assault, but of reporting assault to the police.

response from police, and may be reluctant to call the police if they fear their spouse will be arrested (see Dugan 2003). Bowman clearly indicates the need for more research that considers women's needs. She ultimately calls for a response that will prosecute offenders and provide support for their victims.

Researchers have specifically addressed the influence of arrest policies on intimate partner violence. The most notable are a series of arrest experiments beginning with one by Sherman and Berk (Sherman and Berk 1984) who examined spouse assaults in Minneapolis. Their findings suggest that arrest was more effective in decreasing the prevalence of assault than were either offering advice or ordering the perpetrator away for eight hours. Similarly, Berk and Newton (1985) examine the police records of a county in Southern California. Their results also suggest that arrests are associated with fewer new incidents of wife assaults, particularly among those most likely to be arrested. They cannot determine if this is because assaults go down or reporting declines. Further, evidence regarding the effectiveness of arrest is mixed and some replication studies found opposite results, particularly when looking at the unmarried and unemployed (see, for example: Berk, Campbell, Klap, and Western 1992; Pate and Hamilton 1992). However Dugan (2003), using the yearly (not longitudinally linked) files of the NCVS data finds evidence to suggest that laws may actually reduce the number of spousal violence assaults (and have little influence on assaults by boy/girlfriends).

Many of these studies show inadequate consideration of victims' needs by service providers. Yet, they are limited to small geographic areas and/or consider only those who seek help. Further, they do not consider the role these interventions play in victims' lives after the violent act.

Finally, there is empirical evidence to suggest that women victimized by an intimate partner have different help-seeking patterns than those assaulted by non-intimates. In her study of the 1993 Canadian Violence Against Women Survey, Kaukinen (2002) found that those assaulted by a spouse or cohabiting partner were more likely than those victimized by a dating partner, another known offender, or a stranger to either seek little or no help or to seek substantial help (by telling family and friends *and* notifying a formal agency). Such victims were least likely to disclose to personal networks alone. Kaukinen's findings suggest that assault by a spouse or cohabiting partner may most often be concealed but "once the process of disclosure is initiated, women victimized by spousal offenders may no longer be able to conceal or normalize the violent actions of their abuser" (Kaukinen 2002:28-29). Dugan and Apel (2005) compared victims of severe spousal violence to victims of severe stranger violence and generally found that those victimized by strangers are more likely to contact the police. While Felson and Pare (2005) find that victims are least likely to report the assault to the authorities when the offender is known and when the assault is sexual.<sup>10</sup> They also examined reasons given by victims for not contacting police and found: "If the offender was a partner, victims were more likely to fear reprisal and think that the police could not do anything to help" (2005). Further, third parties are least likely to contact the authorities when the dispute is between intimates. Given these findings and the shame that is often involved, I think intimate partner violence victims will be less likely to notify the police or seek medical help than other victims.

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<sup>10</sup> However, victims of intimate partner violence are not more or less likely to contact the authorities than victims of other violence by a known offender.

Self-defense and help seeking are likely indicative of willingness to make change and thus I expect they are associated with increased divorce or separation and increased mobility.<sup>11</sup> Self-defense and help seeking may be associated with continued commitment to the labor force or the decision to enter the labor force, as such actions may indicate women's motivation to protect themselves and have resources independent of the assailant. However, such actions could also incite retaliatory responses by the perpetrator, forcing labor force exits or inhibiting entries. These factors are not anticipated to have as strong an effect upon the marital and mobility outcomes of other crime victims.

### **Variations by Race/Ethnicity and Social Class**

Relatively little research has examined whether the effects of intimate partner violence differs for women across racial or ethnic backgrounds, or for women with different levels of education and income. Many scholars have called for such research, drawing attention to societal factors that may inhibit some minority women from fully accessing resources and services available in their communities. For example, Crenshaw (1993) addresses macro level processes that influence the services needed by Black battered women: "... the burdens of illiteracy, responsibility for child care, poverty, lack of job skills, and pervasive discrimination weigh down many battered women of color who are trying to escape the cycle of abuse" (Crenshaw 1993; see also Kanuha 1996; Mama 1989; Rasche 1988; Crenshaw 1996).(see also "; Kanuha, 1996; Mama, 1989; Rasche, 1988Crenshaw 1996)

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<sup>11</sup> Although it cannot be determined if self-defense represents a conscious decision to defend oneself or is reactive to the perpetrator's actions, women who respond in this way are actively engaging and are thus viewed as proactive.



One recent study addresses the differential violent crime rates for women of diverse racial and ethnic origins. Dugan and Apel (2003) use NCVS data to compare the violent victimization experiences of non-Hispanic White, non-Hispanic Black, Hispanic, Native American, and Asian/Pacific Islander women.<sup>12</sup> Their findings not only suggest that victimization rates differ, but also that risk and protective factors for violence depend upon a woman's race or ethnicity. For example, they found that living in public housing is only an important risk factor for Hispanic and Black women. In light of their findings, I feel strongly that to understand fully the consequences of violence and risk of repeated victimization, a woman's race or ethnic identity must be explicitly considered.

The decision to seek help likely depends on a woman's previous experiences with the legal and medical systems, as well as her perceptions of these institutions. These experiences and perceptions likely vary with race. Peterson (1999) explains that women of color and/or low economic status may perceive barriers to legal protection, and thus be less willing to rely on the police. Crenshaw (1996) echoes this concern, noting the hostility many women of color perceive from the police and the desire many have to keep their private lives out of the public domain. Thus, minority women likely experience the legal and medical establishments very differently as a result of discrimination and stereotypes as well as cultural differences in the meaning of help seeking and the expectations of the establishments.

There is some historical evidence to suggest that Blacks may be less willing to notify the police after an assault than Whites (Block 1974). However, this finding is for all assaults, not just those by intimate partners and disappears once income is statistically controlled.

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<sup>12</sup> Their study investigated all violent victimization, not just violations by an intimate partner.

In a more recent study of attitudes about the acceptability of calling the police after 49 distinct crime types, Greenberg and Ruback (1992:121) found: “In general, the Latinos and the Koreans were less approving of calling the police than were Blacks and Whites.” However, most items did not include the victim-offender relationship and the one measure asking about the acceptability of calling the police after “A man beats his wife with his fist. She requires hospitalization” did not yield racial differences. Further, generally calling the police was viewed as acceptable.

Also worth noting is that minority respondents may be less willing to report crimes, or certain crimes on surveys than White women. If so this may be due to differences in interpretation or definition, or simply differences in willingness to disclose such incidents to an interviewer. Although this is difficult to test directly, there is some evidence that Black, Asian and Hispanic women report less sexual harassment than White women (Kohlman 2000). While it is possible that the experiences differ by race, it is also realistic that the true difference may be in reporting.

However, there is also some evidence to suggest that Black victims of intimate partner violence may be more likely than White victims to report their assaults to the police. Bachman and Coker (1995) found that Black women victimized by a Black male intimate were significantly more likely to report the assault to the police than were White women victimized by a White intimate. Further, Black perpetrators were more likely to be arrested than were White perpetrators. Thus there are mixed findings on the importance of race in reporting to the police. My results contribute to this debate and may provide further suggestive evidence on the role of race.

Although I do expect to find race differences in marital dissolution/household disruption, it is not entirely clear specifically what the race and class differences in household disruption and employment outcomes will be. Black women have lower marriage rates than White and Hispanic women (Casper and Bianchi 2002), and the pool of eligible Black men is often quite limited. Spain and Bianchi (1996) (see also Blau et al. 1998) show that Black men have historically had lower labor force participation rates than White men and that Black women's labor force opportunities improved while Black men's declined. Thus, it is possible that Black women will be less likely to divorce following an incident of intimate partner violence than White women. Further, intimate partner violence may be more culturally acceptable among some minority groups. Hence the propensity for divorce may be lower.

Black women historically have been more active in the labor force than White women (Amott and Matthaei 1991; Blau et al. 1998; Bianchi and Spain 1996). Thus it may be easier for them to enter the labor force if they are not employed. However, controlling partners may seek to prevent this, regardless of race. Poorer and less educated families may be most dependent upon the woman's income. Thus, women from such families may be less likely to miss days at work or lose wages, given greater need for the income.

A woman's social class is also an important consideration, given that those with more economic resources and social capital likely have greater choices when faced with a violent partner. Indeed, Block's (1974) work suggests that those with higher income are less likely to report assaults to the police than are those with lower income. Lower income women, particularly those without the social capital afforded by higher education,

may face greater obstacles in leaving their violent partners than women with greater resources, hence divorce rates may be lower for such women. Similarly, their employment options may be more limited and I anticipate that these women have fewer transitions into and out of the labor force.

It is important to consider how race and class come together to determine what a woman does when she is assaulted and how they affect the consequences. The experiences of poorer minority women are likely quite different from those with greater resources, who may have more options if their needs are not initially met and may have found ways of dealing with racism or gaining confidence in authorities. Further, poor Black women and poor White women likely have very different experiences and attitudes. Further, public housing residence may play a role. My analyses address these effects by testing interactions between a woman's race and class variables.

### **Repeat Assault**

One of the most severe consequences a woman may experience following intimate partner assault is re-victimization. Johnson's (1995) categorization of intimate partner violence indicates that severe male violence used to control women is linked to future assaults escalating in severity. It is important to examine the extent of repeat assault given the potential consequences (injury, death) and to identify the factors that increase or decrease risk. By linking NCVS respondents over time, I am able to detect later assaults by an intimate.<sup>13</sup>

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<sup>13</sup> While I am able to detect whether the respondent was once again violently victimized by an intimate, I am unable to conclude whether it was the same perpetrator as the initial incident since partners may change over time.

Previous research using 1978-1982 data from the National Crime Survey found a high rate of repeat partner assault within six months of the first (Langan and Innes 1986). Further, 37% of the married, divorced and separated victims who reported the incident to police cited concerns about future violence. Lower rates of repeat assault were found by Rand and Saltzman (2003) who analyzed recurrent intimate partner violence in the 1992-1999 NCVS. Most victims (72%) reported only 1 intimate partner victimization in the six months prior to interview.<sup>14</sup> Note, however, that both of these studies are limited because they ignore the repeated interviews of each woman. Thus, for example, if a woman reported being victimized during the first interview and then again during the third, their findings would report the content of those interviews as victimizations of two different women without repeated incidents. By using longitudinally linked files, I am able to link women over multiple interviews and capture recurrent victimization over a longer period of time.

Johnson (2003) analyzed data from a nationally representative sample of Canadian women. Her findings “suggest that a continuation of assaults on wives is predicted by the frequency of previous assaults, the youth of male perpetrators, living in a common-law relationship, the duration of the union [shorter unions imply greater risk], and higher education for female victims” (Johnson 2003:75). Further, she found that a male partner’s attempts to limit the woman’s access to family income and restrict access to social networks elevated the risk of later assault. This might suggest that if a male partner wants to limit a woman’s access to income and thus forces her to leave the labor force, her risk of repeat assault may be elevated.

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<sup>14</sup> Note that series victimizations were counted as only 1 victimization in the Rand and Saltzman study (2003). Thus, they inherently under count repeated incidents of violence.

By using longitudinal data, I examine how exposure reducing behaviors and employment outcomes relate to reporting further violence. If a victim's actions successfully reduce her contact with the perpetrator, it is likely that her risk of subsequent assault will decrease. However, a victim's help seeking, and life-changing behavior (e.g., divorce or separation and labor force status changes<sup>15</sup>) could actually increase her chances of re-victimization by retaliation. Further, since I do not know the reasons behind observed labor force status changes, it is not clear if they are related to increased or decreased repeat assault. Note that since I am analyzing the woman's reports alone, I examine whether or not victims report any further intimate partner violence, although subsequent acts may be by different offenders.

### **Competing Hypotheses: Exposure Reduction or Retaliation**

This dissertation expands upon a key premise of prior research that states that policies and resources designed to decrease exposure to violent partners will most effectively reduce the rate at which intimates kill their partners (Dugan, Nagin, and Rosenfeld 2003). If this "Exposure Reduction Hypothesis" were true, I would expect that women who seek help through the medical and police establishments to have reduced chances of subsequent assault, *if* these establishments responsibly responded to the victims (i.e., by inquiring about injuries, providing referral services, etc.).

Dugan, Nagin, and Rosenfeld (2003) also raise the competing "Retaliation Hypothesis" which states that a victim's help-seeking behavior could actually entice her abuser to retaliate. They find empirical support that suggests that women who seek

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<sup>15</sup> Since the NCVS tracks addresses, not individuals, it is impossible to analyze assaults following mobility.

intervention may face retaliation, particularly if their exposure to violence is not entirely reduced. Further, several scholars have indicated that men intensify their violence when women attempt to exit relationships (Browne 1987, Ellis 1992, and Mahoney 1991, see also Riger, Ahrens, and Blickenstaff 2000).

In this project, I examine whether non-lethal partner violence could be related to victims' attempts to reduce their exposure to subsequent violence through residential mobility, separation/divorce, and by seeking financial and social autonomy by increasing their commitment to or entering the labor force and consider whether such efforts are associated with a lower likelihood of reporting a repeat offense.<sup>16</sup> The exposure reduction and retaliation hypotheses provide competing predictions about the role of a victim's attempts to escape the violence in her life.

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<sup>16</sup> Note that the data do not allow me to know the motivation behind observed actions/consequences and thus I cannot establish definitive causality. I can, however, discern patterns that may shed light on processes and illuminate data needs for future research.

## Research Questions

Having reviewed the above literature, it becomes immediately apparent that data limitations confine knowledge in this area. The data set I constructed allows me to address questions whose answers require information on the same women over time.

There are four primary research questions that are addressed in this project:

1. What is the prevalence of intimate partner violence against women as reported in the National Crime Victimization Survey? How does this compare to other national estimates?
  - a. How do the rates of injury, self-defense and help-seeking behavior compare to those of other crime victims?
  - b. What factors influence a victim of intimate partner violence to act in self-defense? to seek help? What characteristics are associated with injury?
2. Are intimate partner violence victims more likely than other women (victims and non-victims) to divorce or move out of their home within six months of a reported assault?
  - a. Do injury, self-defense, and help seeking influence the chances that a victim divorces or separates, moves alone, or that her household moves?
  - b. How do race and class influence the likelihood of divorce or separation, individual mobility, or household moves?
3. Are victims of intimate partner violence who remain in their home more likely to miss work and lose pay following the crime incident than are other victims and are they more or less likely than other women to move into or out of the labor force within six months of a reported assault?
  - a. Do injury, self-defense, and help seeking affect the likelihood of changes in victims' labor force status?
  - b. How do race and class relate to entering/exiting the labor force?
4. What factors are associated with reports of repeat assault?



### *Chapter 3: Methodology*

This chapter describes the data used in this project, the methods employed to address each research question, and details each of the variables used in the analyses. It concludes with a brief discussion of how the data were manipulated to construct analytical data sets.

#### **Data**

This study uses data from longitudinal version of the National Crime Victimization Survey (NCVS), which is the largest nationally representative data set on criminal victimization in the U.S. It is to the study of victimization what the Current Population Survey (CPS) is to employment – the gold standard. The NCVS is administered to a nationally representative sample of addresses by the U.S. Census Bureau, and is sponsored by the Bureau of Justice Statistics.<sup>17</sup> Its purpose is to gather information about criminal victimization directly from the victims. Thus, the data include incidents both reported and not reported to the police.

The NCVS is a collection of individual interviews conducted with the residents of a sample of roughly 50,000 housing units that are interviewed every six months for three years. The interview points are referred to as “t” throughout this dissertation and range from t0-t6. The first interview (t0) and fifth (t4) interview at the housing unit are conducted in person, while the other interviews are generally done over the telephone. If a household moves, the new occupants of the housing unit are interviewed in subsequent waves. That is, like the CPS, the NCVS is a longitudinal sample of housing units rather

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<sup>17</sup> Note that “institutionalized” populations and the homeless are excluded, as discussed in the data limitations section.

than a longitudinal sample of individuals or households who are followed when they move.<sup>18</sup>

Although data collection began in 1973, additional probes were added in 1992 to better elicit responses about violence perpetrated within the family, thus making the survey better suited to study intimate partner violence. (For discussion of the redesign, see Bachman and Taylor 1994). I use data collected from the second half of 1995 through the end of 1999 and linked longitudinally by Marshall DeBerry of the Bureau of Justice Statistics.<sup>19</sup> In this file, I only have addresses that were in the sampling frame for the full seven interviews. Census Bureau changes in the survey design and sampling procedure preclude construction of a longitudinal file prior to this time (Bureau of Justice Statistics 2002) and longitudinally linked data are not available past 1999. Since there are currently no plans to release future waves of the data in longitudinally linked format, these data offer a unique opportunity to examine the consequences of intimate partner violence.

Because the NCVS is a general crime survey, it is well suited for comparing victims of intimate partner violence to victims of other types of crime. The survey gathers detailed information on all recent criminal victimizations reported by each household member over the age of 12. Because the NCVS provides information about the relationship of perpetrator to victim, and the circumstances following the event, it is possible to distinguish intimate partner violence and to estimate how the victim's behaviors influence future consequences. Further, by linking respondents over time, I am

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<sup>18</sup> As discussed in the data limitations section, I am unable to assess the outcomes for victims who move away from the sampled address.

<sup>19</sup> These data are available from the Bureau of Justice Statistics upon request, but are not archived at ICPSR.

able to compare responses from earlier interviews with those in later interviews to determine how victimization shapes changes in women's lives.

For the analyses, I include all female respondents age 16-49 at their first interview with a valid weight value for at least one interview period.<sup>20</sup> This results in a sample size of 27,765 women. Table 3.1, shows the number of women and average number of interviews by victimization status. It also shows the distribution of women by the number of interviews completed. Table 3.2 displays the percentage and number of women interviewed each interview period by victimization status. Note that the percentages in this table are not weighted, as the weight value is zero or missing for those women who are not interviewed. Recall that each address represented in the data was visited seven times (therefore I do not have addresses entering or leaving the sample during the survey period). Table 3.1 shows that the mean number of interviews is 3.13 for all women age 16-49, slightly higher for victims of any crime except intimate partner violence. Table 3.1 also reveals that many women were interviewed only once. Yet, crime victims were less likely than other women to be interviewed only one time (note, however, that intimate partner violence victims have patterns more similar to non-victims than to other crime victims). The distribution is heavily concentrated such that most women complete 1, 2 or all seven interviews. According to Table 3.2, fewer than half of the women were interviewed at each time period after the initial visit to the household when just over half of all women were interviewed. The rates are higher for victims of violent crime by a non-intimate and victims of nonviolent crime and lower for both non-victims and victims of intimate partner violence. Finally, Table 3.2 shows that responses generally decline

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<sup>20</sup> The age restriction is discussed further in chapter 4, when I show rates of victimization by age.

with interview period.<sup>21</sup> However, attrition is such that women may exit and reenter the sample, or exit and be replaced by other women moving in. Sample attrition is discussed further below when I address the data limitation posed by attrition.

[Tables 3.1 and 3.2 About Here]

## **Methods**

Figure 1.1 illustrates the conceptual model for this project. The statistical models are designed to assess the ways incidents of intimate partner violence (A) affect exiting the relationship (divorce or separation or residential mobility) and employment consequences (B). Included in the definition of intimate partner violence are any violent crime incidents (see the classification of crimes in Appendix 3.1) and burglary including burglary without forcible entry, break-ins and intended break-ins by an intimate partner (given that these crimes represent likely intentions of threat or violence). Finally, I examine how the consequences of intimate partner violence (B) relate to the likelihood of repeated violence (D).

Parameters are estimated for the dependent variables characterized in Boxes B and D of Figure 1.1. Table 3.3 lists the dependent variables, the model and sample used to model each outcome and the intended modeling structure. Following is a brief description of these models. For each of these models, there is a record for each 6-month period a woman is in the sample.

[Table 3.3 About Here]

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<sup>21</sup> Also note that despite the use of face to face interviewing at time 0 and time 4, there is not always a larger response at time 4.

Analyses run for all women age 16-49 compare victims of intimate partner violence to four other groups of women: 1) victims of violence by a non-intimate, known offender, 2) victims of stranger violence, 3) victims of non-violent crimes, and 4) non-victims. Thus, the effects of a violent victimization by an intimate can be distinguished from those of victimization, more generally. Further, because I link interviews of the same woman over time, I can distinguish ongoing patterns of violence from “one-time” incidents by examining each woman’s reports of violence across interviews. The models include both a count of current victimizations and an average of prior victimizations. This allows me to investigate whether the extent of violence is an important predictive dimension across outcomes. Models run on all women and those limited to violent crime victims include all of the victimization variables to discern whether there are different patterns for victims of different crime types. Models limited to intimate partner violence victims only include intimate partner victimization history.

All analyses also consider variations by race/ethnicity and social class, as well as other demographic and interview characteristics. In models where only victims are investigated, I also control for incident characteristics such as whether a weapon was used. I estimate parameters for the dependent variables characterized in Boxes B and D of Figure 1.1. Table 3.3 lists the dependent variables (outcome), the key predictors, the specific sample, and the modeling structure. Following is a brief description of these models.

In the first step of this project, I describe women reporting intimate partner violence. I explore who is victimized by an intimate, the nature of victimization(s) and how women respond to victimization(s). I then control for other factors in a multivariate

analysis of the factors associated with being violently victimized by an intimate (Table 3.3, Model A). Note that I adjusted the standard errors in these models to account for cluster sampling in the NCVS. This is customary when using the NCVS to predict victimization outcomes. However, it is less feasible for the other outcomes, which are run on select samples<sup>22</sup>. I also consider the factors associated with self-defense, injury and help-seeking among those women recently victimized (models predicting self-defense, injury and seeking medical help, if injured, are restricted to violent crime victims and injured violent crime victims, respectively) and separately for those violently victimized by an intimate (Table 3.3 Models B-E).

The most direct way a victim may seek to reduce her exposure to partner violence is by leaving the abuser. The temporal dimension of the longitudinal NCVS makes it possible to test how intimate partner violence relates to the likelihood of divorce or separation and moving. However, the dissolution of non-marital unions cannot be examined, as the requisite information is unavailable in the data. To model household disruption, including marital dissolution or residential mobility, I estimate models separately for those married and those who are not married at each interview because outcomes vary by marital status. Model 1 in Table 3.3 shows the specifications for the married respondents. I run competing risks models to simultaneously examine the likelihood of four outcomes: the woman remains in the household but her marital status changes (i.e., separates or divorces), she moves out of the household, the entire household moves, or no change occurs in the six months following interview (between the current time  $t$  and time  $t+1$ ). Thus, the discrete time event history models are estimated using

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<sup>22</sup> It is more difficult to calculate the adjusted standard errors when the sample is reduced to analyze other outcomes, as there must be representation from the pseudostratum code and the standard error computation unit code. Further, the selection reduces clustering.

multinomial regressions run on files with person interviews (i.e., 6-month time intervals) used as the units of analysis. They include predictors such as the woman's victimization history, demographic descriptions, and interview characteristics (as collected at time  $t$ ). Since there is no information after the survey period ends, all models are right censored.

The NCVS data provide no information on whether unmarried and unrelated persons who live together are also intimately involved. Also, many women reside apart from their intimate partners. Therefore, it is not possible to accurately predict relationship dissolution for unmarried women. Also, since many unmarried women live alone, an individual move is also a household move. Thus, for these women I use a discrete time hazard model with person interviews as the unit of analysis to estimate the odds of moving during the six months following an interview. I chose the discrete-time model over a continuous model because the specific dates of household disruption are not included in the NCVS. Covariates in model 2 (bottom panel of Table 3.3) are the same as those in model 1.

An additional means by which a victim might seek to reduce her exposure to intimate partner violence is by entering the labor force. Since employment may be one road to economic independence, some victims of intimate partner violence may seek work as part of a long-term strategy for exiting the relationship.<sup>23</sup> Employment can introduce battered women to both financial and social resources, thus providing more support if they choose to leave their partner. In the short-term, by committing to the labor force, women are able to reduce time at home with a violent partner. Conversely, exiting

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<sup>23</sup> Increased employment hours may be another means of enhancing one's labor force activity; however, the NCVS data do not include information on work hours. It is also possible that a woman would seek a better job; however, occupational categories are very limited so this can only be addressed in a qualitative way, when I carefully examine intimate partner violence victims' labor force changes.

the labor force could isolate the victim and cut her off from economic and other resources that would assist her in leaving the relationship.

I use discrete-time event history models to examine the effects of violence on transitions into and out of work: entry into and exit from the labor force (Table 3.3, Models 3 and 4). I limit the sample to include only those women who are not employed at the interview for the entry model and employed at the interview for the exit model. A woman transitions from one model to the next after her employment has changed.

As described above and in Figure 3.1, respondents' employment status is measured at the time of the incident for victims and during interview  $t$  for non-victims. Using those definitions, entry into the labor force is a transition from being not employed at that measurement to being employed in time  $t+1$ . Similarly, exit from the labor force is coded when an employed respondent at measurement reports not being employed at time  $t+1$ . Also estimated in these models are the associations between a woman's victimization status, demographic and interview characteristics, and the employment outcomes. While most of these variables remain constant over interview periods, I follow the measuring schema shown in Figure 3.1. Because these data are only collected in reference to the status at interview (and not at the time of the incident) and because nearly 60 percent of all victims were interviewed for the first time after their first incident, I measure these other variables for victims and non-victims at time  $t+1$ .<sup>24</sup>

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<sup>24</sup> This is discussed further below, in the data limitations section.



Since the survey does not include the dates when employment changed, discrete-time event history modeling is appropriate. The data are censored at both ends, since there is no information on employment prior to time 0 or after time 6. Hazard models account for right censoring and left censoring is discussed further below.

To address the role of intervening variables in household composition and labor force models, I re-analyzed models 1 through 4 on the sub-set of violence victims and, to discern whether independent variables are differently related to the outcomes for women victimized by an intimate, I also ran models on the smaller group of women victimized by an intimate partner.<sup>25</sup> I estimate how the ramifications of partner violence are influenced by self-defense, help-seeking behavior, and injuries. The models also control for important incident characteristics that likely influence the outcomes (e.g., weapon use, drug/alcohol use by the perpetrator). I compare estimates between victims of intimate partner violence, victims of violence perpetrated by another known offender, and victims of stranger violence.

Finally, models predicting subsequent violence by an intimate (Table 3.3, Model 5) are estimated for all women reporting at least one incident of intimate partner violence.<sup>26,27</sup> The perpetrator of the subsequent attack may be different from the earlier offenders. Due to data limitations, in most cases, I am unable to verify whether the second partner is the same as the first. Thus, I estimate the probability that a victim was

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<sup>25</sup> For analyses run on violent crime victims, I include all woman-interviews for crime victims from the time of first violent crime victimization on. Thus, a woman reporting her first violent crime victimization at time 3 is included from time 3 on even if no further victimization is reported. (Prior to time 3, I have no evidence that she is a victim.) The same strategy was used for determining the sample of intimate partner violence victims.

<sup>26</sup> The subsequent assault models include victims of intimate partner violence from the interview when they first report an assault until they exit the sample.

<sup>27</sup> Since these models are restricted to those who report at least one incident of intimate partner violence, I do not compare these estimates to those for victims of other crime types or non-victims.

violently attacked by a partner during the current interview period, provided that she has already been assaulted by a partner while participating in the survey. A subsequent assault is also noted if a woman reports multiple intimate partner violent victimizations during the survey period. The victimization history, race, class, intervening, and control variables are similar to those in the above models. Since details are reported for each incident (including the date), I am able to discern the characteristics that distinguish the initial victimization from the subsequent assault. However, this level of detail is missing if the incident is part of a series. Because 8.5 percent of the victims report at least one set of series events, I rely on the discrete time event history modeling to predict the likelihood that a victim of intimate partner violence was assaulted again by an intimate within the six months prior to interview and assign the incident characteristics of the most recent series incident to the set of series incidents. This model also includes divorce or separation and labor force status changes as independent variables to test whether these outcomes influence a victim's likelihood of being violently victimized again by an intimate.

All models in Table 3.3 are weighted with the person weight provided by the Bureau of Justice Statistics. Also, due to competing predictions, all statistical tests are two-tailed. As noted above, I restrict the analytic sample to those women between ages 16-49.<sup>28</sup> This results in a sample of 27,765 women. This restriction allows a focus on those women most at risk of victimization (see Rennison and Welchans 2000). I also examine interactions between race and class variables to disentangle whether discrimination and economic hardship come together to shape women's experiences. Note that some

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<sup>28</sup> Preliminary analyses revealed substantively similar outcomes when the full sample of interviews with women age 12-90 was used.

independent variables had to be omitted from specific models due to small cell sizes. This is indicated in the results tables with a “†” symbol.

## **Variables**

Following is an overview of the variables I use in the analyses. Below is a summary of the variables used for my analyses. Appendices 3.2 and 3.3 provide specific details on the survey questions and variable construction. Descriptive statistics, across woman-interviews, on each of the variables, are provided for each analytic sample in Appendices with each regression model.

### *Dependent Variables:*

*Exiting the Relationship* is captured through a series of variables. *Divorce* is measured for women who remain in the household as a transition from being married to being divorced or separated at the following interview.<sup>29</sup> *Individual residential mobility* represents a move by an individual woman since the previous interview, while other members of the household remain at the address, which suggests marital or union dissolution for married women but is more ambiguous for unmarried women. They may be moving to escape a violent relationship, to cohabit with a violent partner, or for another reason. This is indicated when a household is interviewed, but an individual woman is not and it is reported that she has moved. A more ambiguous indicator of a break-up is a *household move* between interview period t and interview t+1. A fourth option is that there is no indication of divorce or household disruption. These four

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<sup>29</sup> I combined divorced and separated women since I am only looking at a narrow window of time and separation is often a precursor to divorce.

categories are combined into one categorical dependent variable for many analyses. A version of the marital dissolution variable is included in a model predicting subsequent assault. It refers to a marital dissolution since last interview and is coded (0) for those unmarried or missing at t-1. There are too few cases to include a dummy coded variable to indicate a missing value on marital dissolution.

*Employment Consequences* are captured through several variables. Figure 3.1 shows collection of employment information for victims and non-victims. If a woman was victimized between the interview at time t and the interview at time t+1, her labor force change status is coded based upon whether or not she reported being employed at the time of the first crime incident reported at t+1 (occurring between time t and time t+1) and comparing that to whether or not she was employed at time t+1. Non-victims are coded according to their employment status at time t and time t+1. Victims' status at incident is used because 60 percent of intimate partner violence victims were not interviewed prior to their first reported assault, but their (retrospective) report of employment status at the time of assault is available. For those moving from not being employed to being employed, I assume entry into the labor force. For those employed and later reporting they are not employed, an exit from the labor force is coded. Both of these variables are also included as predictors in the subsequent assault model. For this model, those whose most recent report is employed are coded (0) for the entering the labor force variable in these models, while those not employed are coded (0) on leaving the labor force. Missing values on each are coded (0); however there are not sufficient such cases to include missing indicators in the model.

[Figure 3.1 About Here]

*Subsequent Intimate Partner Violence* is an indicator of whether or not a subsequent intimate partner assault occurred during the interview period. It is coded (1) for any interview period with more than 1 reported assault and for interviews with any reported assault after previously reported assault(s).

*Primary Independent Variables:*

*Recent and previous victimizations* capture all reported crime incidents during or prior to the current interview. For each interview period, I construct variables to tally the number of reported victimizations over the past six months for four types of offenses: 1) violence perpetrated by an intimate, 2) violence by a known offender, violence by an unknown offender, and 4) nonviolent crime (see Appendix 3.1). I construct two indicators for each crime type, recent and previous victimization. A recent victimization refers to the number of victimizations in the past 6 months as reported in the current interview. Previous victimization refers to the average number reported at each previous interview (i.e., during the 6 months reference period for each interview).<sup>30</sup> Figure 3.2 provides a hypothetical example of how each is constructed. The first line shows the actual number of reported victimizations. This hypothetical woman reported two intimate partner victimizations at her first interview (t0), none at her second interview (t1), was not interviewed at t2, reported one intimate partner victimization at her third interview (t3), none at t4, one at t5 and none at t6. The lower two lines show how I measure the recent and previous victimization of this hypothetical woman. The upper of these two lines reflects her reports at interview. Note that this woman is assigned 0 incidents at t2 when she was not interviewed. Her average prior intimate partner

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<sup>30</sup> I use the average previous victimization rather than the sum as some woman-interviews occur later in the interview cycle than others and would reflect more reporting opportunities.

victimization is 0 at t0 (this will be the case for all women at t0 since there are no data prior to that collected at t0), 2 at t1 (2 prior incidents/1 prior interview), 1 at t2 and t3 (2 total prior incidents/2 prior interviews at each time point), 1 at t4 (3 prior incidents/3 prior interviews), 0.75 at t5 (3 prior incidents/4 prior interviews), and 0.80 at t6 (4 prior incidents/5 prior interviews). Note that since she was not interviewed at time 2, this interview is excluded from analyses. The non-intimate partner victimization variables are used to test differences between victims of different crime types. Thus, they are excluded from the models predicting intimate partner violence (Table 4.6, chapter 6) and models run only on victims of intimate partner violence.

[Figure 3.2 About Here]

As discussed above, sometimes multiple incidents are collected under one incident. These are termed series incidents and the NCVS collects information about them collectively. Such incidents represent a minimum of 6 incidents of similar type for which a respondent cannot recall sufficient information detail to describe individual events, as noted above. To be conservative, I assign series incidents a value of 6 in the tally of incidents, given the extreme range of reported series events (the minimum, by definition, is 6, the maximum reported is 200).

*Race* is coded into five indicator variables by examining responses to race and Hispanic origin questions on the survey. The five categories available are White, non-Hispanic; Black, non-Hispanic; Asian, non-Hispanic; Native American, non-Hispanic; and Hispanic. Respondents are assigned the race reported during their first interview. Due to small cell sizes, a *minority* indicator is also constructed. It is coded (1) for non-White

respondents, (0) for those who are White, or missing on race. Missing values are assigned to a separate category, race missing, which is included in regression models.

*Class* is captured in three variables: household income, educational attainment and public housing residence, *Income* is collected in a series of categories. Each is converted to the midpoint and Pareto estimation is used for each year to estimate the midpoint of the top, open-ended category. Dollars are then adjusted to 1999 values using the consumer price index. Women who fail to report their family income during any given interview may have reported income in an earlier or later interview. In these cases I assign the average reported income across the prior and subsequent interview periods. An imputation flag indicates these cases. Remaining missing cases are assigned the median value and recorded as (1) for a dummy variable indicating *missing income*. *Educational attainment* is collected in years through grade 12 and there is a category for college. It is recoded into three categories: less than 12 years, 12 years, and more than 12 years. Missing values are assigned the value at the preceding interview if it matches the value at the subsequent interview. Remaining missing cases are classified as zero for both education measures and dummy coded as *missing education* in the model. High school graduates with no college education form the reference group. Those in *public* housing during the first interview are coded (1) for all interviews. Missing values on public housing residences are coded (0) and missing indicators are constructed.

*Intervening Variables:*

*Self-Defense* during the course of a crime incident is recorded through responses to two survey questions: “Did respondent use or threaten to use physical force against the offender?” and “Who was the first to use or threaten to use physical force - you, the

offender, or someone else?” It is coded (1) if the respondent used or threatened physical force and the perpetrator was the first to do so during any crime incident prior to interview. For the subsequent assault models, this variable is coded (1) for any reported use of self-defense during an intimate partner assault prior to a current, subsequent assault. That is, I allow for the possibility that the initial and subsequent assaults occurred during the same reference period. Thus, for these models, self-defense is coded (1) in cases where self-defense was used during an incident reported in a prior interview, or if there were no prior assaults, during the first assault reported at current interview.

*Injury* following violent crime is captured by responses to the survey question: “What were the injuries you suffered, if any? Anything else?” asked about all crime incidents reported. It is a binary variable coded (1) if a respondent experienced any injury as a result of violent victimization prior to interview. For the subsequent assault models, this variable is coded (1) for any reported injury during an intimate partner assault prior to a current, subsequent assault.

*Seeking medical attention* is a binary variable coded (1) if a woman injured during any violent incident reported to date and received medical attention for any of her injuries. Victims were asked: “Were you injured to the extent that you received any medical care, including self treatment? Where did you receive this care? Care received at the scene of the incident or at home/neighbor’s/ friend’s is excluded so that this variable represents actually seeking help from a medical establishment. This variable is coded (1) for any reported medical attention for injuries incurred during an intimate partner assault prior to a current, subsequent assault for the subsequent assault models.



*Victim notifying the police* is an indicator variable coded (1) if a victim reports that she herself (not a third party) contacted the police following at least one victimization during or before the interview period. For the subsequent assault models, this variable is coded (1) if she notified the police after an intimate partner assault prior to a current, subsequent assault.

*Control Variables:*

Multivariate models include controls for several *demographic characteristics*. *Age* is measured in years. I assign the woman's age recorded at her first interview and increment it by 0.5 year (six months) each following interview.

*Marital status* is measured by three indicator variables: married, divorced or separated, and other (never married or widowed).<sup>31</sup> Those missing on marital status are assigned the value reported at the prior interview if that value matches the value at the subsequent interview and coded (1) on an imputation flag. This imputation is done after the dependent divorce or separation variable is coded so that there is no imputation on that dependent variable. An indicator is included for those whose marital status is unknown and cannot be determined by the surrounding interviews. Marital status is excluded from the models predicting union dissolution/mobility. However, the models control for the *proportion of prior interviews married/unmarried*.

Indicators are also included to capture whether or not a respondent was *employed* during the two weeks prior to interview. Missing values on employment status are assigned to (0), if a respondent reported that she had not worked at all in the past six

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<sup>31</sup> Note that 20.6% of all divorced or separated women reported being separated, as did 26.8% of all divorced or separated violent crime victims and 37.7% of divorced or separated intimate partner violence victims.

months (a separate survey question). Otherwise, those missing information on employment status are assigned the value at the prior interview if it matched the value at the next interview. Note that the latter imputation is done after the dependent employment change variables are constructed so that it does not affect the dependent variables. An indicator is included for those whose employment status is unknown and cannot be determined by the surrounding interviews. This variable is omitted from the labor force status models. However, those models include controls for the *proportion of prior interviews employed/not employed*.

*Student status* is an indicator variable coded (1) if a respondent reports that he/she was attending school at the time of interview. Missing values for student status are assigned the value at the prior interview if it matched the value at the next interview. Remaining missing cases were assigned (0) and a missing flag was created. This variable is used as a control in models predicting employment status changes.

In models predicting residential mobility, I include four additional relevant controls. *Tenure* is an indicator of the number of months a respondent reports having lived at the address. It is calculated by assigning the months at residence recorded at a woman's first interview and incrementing it by six months each following interview. Missing values are assigned the mean value for the sample of all women and an imputation flag is created. *Home Ownership* is coded (1) if a respondent reported that the household owned or was in the process of purchasing the home. Missing values are imputed to the value at the prior interview if it matches the value at the subsequent interview. Respondents living in *multiple unit dwellings* during their first interview are coded (1) for all interviews. Missing values on multiple unit dwelling are coded (0) and missing indicators are

constructed. If a residence was considered *urban* at first interview, that value is assigned for all subsequent interviews.

*Household composition* is captured through four variables. *One adult* households contain only one person over age 12 in the home; *two adult* homes have exactly two adults residing in them; *many adult* households are comprised of at least three adults; and *number of children* is a count of those under age 12. I use these variables instead of a continuous measure, as a single adult household, two adult homes, and homes with many adults are qualitatively different.

Models also control for three *interview characteristics*. First, the household's *interview period*, which indicates how long the address has been in the sample. Second, it is noted whether or not the interview was conducted by *proxy*, (i.e., someone other than the respondent).<sup>32</sup> And finally, in models predicting the intervening variables and subsequent assault, where "telescoping" bias is likely, models control for the first, *unbounded* interview.<sup>33</sup> Five incident characteristics are also included in models run on victims only. *Police notification* is an indicator variable coded (1) if someone other than the victim contacted the police following any victimization prior to interview. *Arrest* is coded (1) if the respondent reports that she knows of any arrests or charges brought as a result of any crime incident prior to interview. *Weapon use* is coded (1) for affirmative responses to the question: "Did the offender have a weapon such as a gun or knife, or something to use as a weapon, such as a bottle or wrench?" for any incident occurring

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<sup>32</sup> While proxy interviewing may raise concerns about data quality, fewer than 2.2% of the interviews in my analyses were conducted via proxies.

<sup>33</sup> In an unbounded interview, respondents do not have a prior interview to use as a reference point, thus it is often more difficult to bound incidents occurring within the past six months. For example, a woman may report incidents that occurred 7 or 8 months ago. Hence estimates tend to be inflated for the unbounded interview. This is referred to as telescoping (see Biderman and Cantor 1984; Gray 1955; ICPSR 2001; Neter and Waksberg 1964).(Gray 1955; ICPSR 2001; Neter and Waksberg 1964)

prior to interview. A perpetrator is considered being *under the influence* if a victim says s(he) was using drugs or alcohol at the time of any reported assault. Finally, a *series* flag is created to indicate if any of the victim's recent or prior victimizations were part of a series incident. The NCVS defines incidents as a series if there are 6 or more similar incidents and the respondent cannot recall enough detail about each to report on them individually. For these incidents, information is collected on the entire series. For the subsequent assault models, these variables refer to any of these characteristics prior to interview if the woman has a history of intimate partner violence. If there was no prior assault by an intimate, these variables refer to the first recent intimate partner incident.

### **Constructing Analytic Data Sets**

The NCVS is a hierarchical data set with four levels: address, household, respondent, incident. Beginning with the highest level, the address can have several households (i.e., when one household moves it may be replaced by a new one). Subsequently, the household can have several respondents, and the respondent can have several, or no, incidents. To conduct the analyses, several levels of data manipulation were required. Appendix 3.4 outlines the process of transforming each level into the final working data set. Many of the programs had to be iterated in many ways in order to produce the specific data sets needed to address each of the research questions. I started with a hierarchical ASCII file. From that, I input data at the incident, person-interview and household-interview levels for all households comprised of at least one female over age 12. I aggregated across incidents and across individuals to create a person level file and used this file to create a person-interview file that includes information reported at

prior interviews. Some bivariate statistics were calculated at the person level, but most analyses were conducted using the person-interview file.

## **Data Limitations**

### *Left Censoring*

Since I have very little information about women's lives prior to the first interview, the data are inherently left censored. Thus, women who were victimized before the survey period—but not during the survey period—appear as non-victims in the data.<sup>34</sup> Left censoring *never* makes non-victims appear as victims. Left censoring will create the most bias early in the survey period for women who were victimized just before entry. If intimate partner victimization does, indeed, affect marital, moving, or employment outcomes, these women appear to be non-victims with these consequences. Therefore, any true impact is biased toward zero.

### *Sample Constraints*

Although the NCVS is a nationally representative sample of U.S. addresses, some populations are excluded from the survey. These include the homeless and institutionalized populations including incarcerated individuals and those living on military bases. Evidence suggests that incarcerated women have more violent histories with their intimate partners compared to women in general. For example, Dugan and Castro (2005) found that women incarcerated in Baltimore, MD (urban, mostly Black) had a substantially higher rate of violent victimization (47.08% for six months) than did

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<sup>34</sup> However, 60% of intimate partner violence victims report an incident at first interview, suggesting telescoping such that they show up as victims at first interview.

women in the NCVS (1.40% for six months). Also, they found that the risk and protective factors are quite different for these two groups. For example, for women in general, intimate partner assaults are more common by husbands within the general population, yet incarcerated women are more often assaulted by a non-marital partner. Additionally, Richie (1996) studied a group of women incarcerated at Riker's Island and found that battered women often resorted to violence either directly or indirectly as a result of their assault. African American battered women's criminal activities "were seen by them as responses to violence or the threat of violence in their intimate relationships" (1996:127). While Black women were often trapped in a cycle of criminal activity *and* in violent relationships, the White battered women in her sample often used criminal activity as a means of exiting a violent relationship. If intimate partner violence victimization is associated with criminal activity and increases the risk of incarceration, national surveys that exclude incarcerated populations *will* produce deflated estimates of the prevalence of such violence. However, this population is very small relative to the total population of U.S. women.

Without direct empirical evidence, some prior research strongly suggests that women living on military bases also have a higher risk of intimate partner violence (McCarroll, 1999; Brannen and Hamlin, 2000, Miller and Veltkamp, 1993). According to McCarroll et al. (1999:81), enhanced risk factors among this population include "separation from family, frequent moves, unexpected deployments, and the dangers of military life, including the possibility of service-connected death or injury through accidents, and other causes of morbidity and mortality." Hence, the unique stressors of military life likely increase the risk of domestic violence. In fact, Brannen and Hamlin

(2000:169) indicate: "Several studies have suggested that military families experience higher levels of aggression than families in the civilian sector because the military either attracts aggressive men or that the culture and training promote aggression." Similarly, Miller and Veltkamp (1993:767) assert that both "the family and a multigenerational transfer of abuse experienced prior to service" and "the exposure to violence within the military" are risk factors among military personnel. Shupe, et al. (1987:67) describe "a heavy emphasis on the masculinity and aggressiveness that research on civilians has found to be an important component of male violence toward women ." They link the military culture, generating and reinforcing these ideals, to prior research, but do not detail specific findings.

Other studies have directly measured the extent of intimate partner violence in the military. While the rates are not always directly comparable with those of other studies, they tend to produce higher rates than those found for their civilian samples (Heyman and Neidig 1999; Murdoch and Nichol 1995; see also Cronin 1995) (Murdoch and Nichol 1995; see also: Cronin 1995).<sup>35</sup> Heyman and Neidig (1999) critique studies (i.e., Bohannon, Dosser, and Lindley 1995; Cronin 1995; Griffin and Morgan 1988; Cronin 1995; Griffin and Morgan 1988) comparing military and civilian rates of spousal violence claiming that these studies are not always representative of the civilian and Army families, and do not typically control for demographic differences between the two populations. Their study is an attempt to remedy this. Heyman and Neidig focus exclusively on abuse perpetrated by husbands against their wives. In the early 1990s, the Conflict Tactics Scale was administered to a random sample of military personnel at 47

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<sup>35</sup> Studies of the military are often limited to the current partner or only to spousal assault and not other contexts of intimate partner violence.

Army posts. Heyman and Neidig compared prevalence rates in the sample of Army respondents to comparable civilians in the 1985 Family Violence Survey.<sup>36</sup> Controlling for age and race (factors demonstrated to affect the likelihood of abuse), they found insignificant differences in men's reports of moderate husband-to-wife assault, but significantly higher rates of severe husband-to-wife assault in the Army sample. Women in the Army sample reported higher rates of both moderate and severe assault victimization. When comparing the Army sample to the general sample, the Army has consistently higher rates. The authors suggest this may be due to selectivity into the Army: those with risk factors for spousal abuse may be more likely to volunteer for service.

While the evidence is not definitive, there are convincing reasons to believe that those incarcerated or living on military bases experience more intimate partner violence than the general population. Thus, the NCVS omits at least two very important, albeit small (relative to the total population of U.S. women), populations with above average victimization rates.<sup>37</sup> Therefore, I can only generalize the findings to non-institutionalized U.S. population who live in addressed residences.

### *Underreporting*

A large problem with any survey data is the respondents' failure to disclose specific incidents. This may be exacerbated here because terrorized women may be likely to hide the assaults out of shame or fear. Schwabe and Kaslow (1984:128) explain:

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<sup>36</sup> Their sample varied across demographic variables from 30,426 to 31,157. The civilian sample they determined was comparable (they excluded unmarried and unemployed persons) was 3,044 respondents.

<sup>37</sup> I contacted several individuals (scholars, employees at research organizations, etc.) to try to determine the proportion of U.S. women residing on military bases. Although I was unable to obtain an estimate, I was consistently assured that the proportion is quite small. The number of incarcerated women also represents a very small proportion of U.S. women (see Bureau of Justice Statistics 2002).



Even if we had a reliable objective definition and a consensus on how to measure violence, we still would face the problem of getting family members to report the incidents. No one likes to talk about unpleasant or embarrassing private events.

There is also the fear that the identified abuser will retaliate with further assaults.

Further, some victims may hide their experiences out of fear of being blamed. Dworkin (1993:238) describes the experiences of some women: “If you try to say you have been hurt and by whom and you point to visible injuries and are treated as if you made it up or as if it doesn’t matter or as if it is your fault or as if you are worthless, you become afraid to say anything.”

While all surveys suffer from disclosure bias, other data sets produce much higher rates of intimate partner violence than those reported in the NCVS (see Table 2.1). These differences are likely due to the following reasons. First, the NCVS is a general crime survey that is collected in a formal, rapid manner by government officials. Thus specific probes encouraging respondents to disclose acts perpetrated by an intimate are likely to be lost in the barrage of questions. The context of discussion about crime more broadly may not trigger responses about acts that are seen as very personal in nature and may not be viewed as crimes (see, for example: Tjaden and Thoennes 2000a). Second, while many studies of intimate partner violence ask about the history of violence over the life course, the NCVS refers only to a maximum of three and a half years. Thus, one would expect rates to be lower. Finally, the denominator or the intimate partner violence rate includes all women regardless of whether they are intimately involved with a potential perpetrator—thus deflating the true rate. It is not possible to determine the number of women who were truly at risk (since the NCVS only has detailed information on marriage, but not dating relationships). However, by restricting my analytic sample to

ages 16-49, I omit those women aged 12-15 and those in the older years who are less likely partnered.

Since the data include women who were truly victimized but appear as non-victims, this type of measurement error results in estimates biased toward zero.

### *Response Error*

Related to underreporting is the issue of response error. This is a concern if there is non-random non-disclosure of intimate partner violence. If the most minor assaults are not reported, effects found in this project would be overstating the effect of intimate partner violence on marital and employment outcomes. Conversely, if the most severe cases are underreported, due to shame, fear, or absence from the survey, the effects would likely be understated.

In this study, I find that few intimate partner violence victims are married. It is possible that married respondents are less likely to report intimate partner assaults. They may forget more readily or see the violence as normative.

Another potential source of error is respondent fatigue. Most victims only report victimization during their first interview. While this may reflect telescoping and attrition from later interviews, it is also possible that respondents know they will be led through a long and detailed series of questions if they report victimization. They may thus opt not to disclose incidents during later interview periods.

### *Severity of Violence*

Johnson (1995) distinguishes two types of intimate partner violence: patriarchal terrorism and common couple violence. Patriarchal terrorism describes the type of

violence identified by feminists that is perpetrated by men to control women. This violence is frequent and escalates in severity and is almost exclusively perpetrated by men on women who typically do not fight back. He terms this type of violence against women “patriarchal terrorism.” Johnson also explains that patriarchal terrorism only describes a small subset of partner violence. Common couple violence is described by the research of those working from the family violence perspective. Their work illustrates that in many relationships, the violence is as equally likely to be perpetrated by the female as the male. Unlike patriarchal terrorism, common couple violence does not tend to escalate over time. Johnson contends that national surveys are more likely to uncover the more frequent common couple violence while shelter and agency based studies are more likely to reveal the more rare patriarchal terrorism.

The NCVS is designed to record all incidents of attack, regardless of how inconsequential it may seem to the respondent. In fact, the survey explicitly probes the respondent to recollect incidents committed by someone they know such as a relative or family member and asks for reports of all incidents even if the respondent does not consider it a crime (Bureau of Justice Statistics 2002). Because women with the most severe assaults may be less willing to report them, out of fear or denial, as discussed above, the data used here is likely to disproportionately represent more “common couple violence.” Such violence may be less likely to lead to changes in marital status, residence, or employment.<sup>38</sup> Therefore, anticipated biases due to this issue are towards zero.

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<sup>38</sup> Minor acts that respondents do not consider assaults are likely excluded.

### *Mobility*

Since the NCVS samples addresses rather than individuals or households over time, non-random residential mobility may affect the findings. For instance, a woman might be victimized and then move immediately after the incident but before the next interview. This would appear as if a non-victim moved, biasing the estimates toward zero. Further, when victims of intimate partner violence move and leave the sample, it is impossible to record their marital or labor force outcomes. If these women have the most extreme labor force outcomes or are most likely to divorce, findings are biased toward zero. Finally, mobility limits my ability to track subsequent assaults, censoring the data prematurely.

### *Small Number of Victims*

Of the 42,765 women, 1.08 percent or 458 report at least one assault by an intimate partner. The small proportion of victims raises at least one concern. Any measurement error has a magnified effect upon findings. That is, if a woman misreports being violently victimized by an intimate when she was not, the estimates would be inflated (see Cook and Ludwig 1998). However, over-reporting is unlikely given the nature of the survey. Also, each victim is asked a series of detailed questions making it difficult to elaborate on a false report. The greater issue here is underreporting. In sum, for reasons expressed above, I am fairly certain that the nature of any bias is towards zero, thus the magnitudes of significant findings are conservative estimates.

### *Attrition and Telescoping*

Most women aged 16-49 (84 percent) did not complete the entire round of seven interviews. Women may initially enter the sample but later be unavailable or refuse to be interviewed (56 percent exit the sample—due to mobility or refusal—prior to the address' last interview period). Scholars have noted issues with respondent fatigue, whereby respondents become less engaged as the interview period progresses (see, for example: Biderman and Cantor 1984). The survey may become less interesting and respondents, knowing what to expect, may be unwilling to spend the time answering questions. Additionally cultural changes may be such that respondents are becoming increasingly unwilling to discuss their personal information. Such technological advances as caller ID may assist respondents in avoiding NCVS interviewers. Some of these women may become available or change their minds at subsequent interviews and re-enter the sample (14 percent miss one or more interviews between their first and last valid interviews). Some attrition can be attributed to mobility away from the address. While very few (n=6) women age 16-49 move away from their homes while the family remains, nearly 35 percent of women aged 16-49 move with their households at some point during the survey period. Additionally, the data show that only 52 percent of women were interviewed at the address' first interview. Any women who move into the address would not have the opportunity to complete the full range of interviews (and may additionally be reluctant to enter the survey after the initial, in person interview was missed). There may also be a gap such that a new household does not immediately replace the former one. Such sample attrition limits generalizability to women who remain at one address and are willing to participate in surveys such as the NCVS. However, it is also worth

noting that victims of intimate partner violence are about as likely as non-victimized women to be missing interviews (see Table 3.1).

Because nearly 60 percent of intimate partner violence victims report an incident at their first interview, there are concerns that I am capturing incidents that occurred prior to the six-month reference period for the first interview. It is plausible that some women victimized outside of the reference period are captured as victims. This would not make a true non-victim appear as a victim but would inflate the estimate of victimization within the past six months. To account for such “telescoping”, I include a control for first interview in the regression models.

While each of these constraints limits the generalizability and reliability of the estimates, this project is still important. Very little is known about the consequences of intimate partner violence. This is the first analysis of a nationally representative data set that follows victims over time, which has the potential to yield findings that lead to important routes for further investigation. Additionally, I carefully interpret findings, in tandem with what has already been shown in the literature, to inform policy and research debates about how violence affects women’s lives.

#### *Chapter 4: Description of Intimate Partner Violence Victims*

This chapter begins by analyzing which women are most likely to be victimized by an intimate. It then presents descriptive statistics about the nature of victimization. It concludes with regression models predicting a woman's actions at the time of assault.

##### **Who is victimized?**

The NCVS includes women age 12 and older. In Table 4.1, I show the prevalence of intimate partner violence by age group for all women. The overall prevalence is 11.6 intimate partner victims per 1,000 women. However, the prevalence is highest among those aged 16-49, the group selected for analyses. Prevalence varies in this sample from 11.7 victims of intimate partner violence per 1,000 women age 16-19 years old to 21.5 per 1,000 women 20-24 years old. Females under age 16 have a much lower rate of intimate partner violence (2.3/1,000 women), as do those 50-64 (2.9/1,000) and those 65 and over (0.4/1,000). Females under age 16 are most likely to have close parental supervision and awareness of their intimate relationships. Older women are less likely to be partnered given higher rates of male mortality. Additionally, prior research has shown that intimate partner violence is concentrated among this age group (see Rennison and Welchans 2000).

[Table 4.1 About Here]

In order to further describe the victims of intimate partner violence, I examined the prevalence of reporting an intimate partner assault by race and class. I present the prevalence of intimate partner assault for all women and by race and class for the entire sample of women and for those in the 16-49 age range in Table 4.2. The sample size is

listed to illustrate small samples in some categories, justifying the combination of race categories into a minority status indicator for multivariate analyses. Once I select on victimization or other criteria, there are often insufficient cases to analyze each racial group.

[Table 4.2 About Here]

Of the 27,765 women age 16-49 in the sample, 433 report at least one assault by an intimate partner. Note that this represents a prevalence (16 intimate partner violence victims per 1,000 women) that is somewhat higher than that found in earlier crime studies that did not link women over time (Klaus and Rand 1984; Rennison 2003). However, it probably still represents a lower bound on actual intimate partner violence, given underreporting and given that the denominator includes women not partnered with men (partner status cannot be determined for unmarried women as non-marital relationships cannot be identified in the NCVS). Table 4.2 shows that for all women, all racial groups, all income and education levels, and regardless of public housing residence, prevalence of intimate violence are greater among those in the 16-49 age range. This illustrates that my focus on women age 16-49 is warranted. Note, however, that the magnitude of the difference differs dramatically by race and class characteristics. For example, whereas prevalence for low-income women aged 16-49 are nearly 1.5 times the prevalence for low-income women aged 12 and up, the risk for high-income women is only slightly elevated in the age restricted sample.

Table 4.2 also reveals that Asian women are the least likely to have been victimized by an intimate, while Native American women are far more likely than any other women to have been recently assaulted by an intimate. However, little can be made



of this finding given the very small number of women of Asian and Native American descent. Large sampling variability could account for the differences. Indeed, the confidence intervals for these groups are large (data not shown). The prevalence of victimization is also low for Hispanic women, while similar percentages of Black and White women experience intimate partner assaults. This table reveals that prevalence of intimate partner victimization decline with increased education and income. Finally, prevalence for public housing residents are higher than those for the full sample. Overall, this table suggests that there are race and class differences in the prevalence at which women report intimate partner assault. This is tested below in multivariate analyses, where interactions between race and class are also considered. Note that these findings may indicate the actual prevalence do differ by race and class, or may simply refer race and class differences in reporting. Kohlman found lower prevalence of reporting sexual harassment by Blacks, Asians and Hispanics, yet it is unclear if this pattern applies to intimate assaults (2000). However, as discussed in Chapter 2, evidence suggests *higher* rates of police reporting by Blacks following intimate assault (Bachman and Coker 1995), which may suggest a greater willingness to disclose assault.

Finally, in Figure 4.1, I show the distribution of women by victimization status. Of all women age 16-49, 1.6 percent report at least one assault by an intimate during at least one NCVS interview. Prevalence are similar for other violent crime victimization (1.9% report any violent victimization by another known offender and 2% ever report being violently victimized by a stranger), but dramatically higher for nonviolent crime victimization; over 17 percent of women report one or more nonviolent crime victimizations. Note that many women are represented in more than one category; 730

women (2.6 percent of all women age 16-49; 11.4 percent of victims) report multiple types of crime victimization.

[Figure 4.1 About Here]

### **What is the Nature of Intimate Partner Assault?**

Table 4.3 is restricted to victims of intimate partner violence. I show the relationship between intimate partner victim and offender and the type of crime(s) reported. Since a woman can report multiple victimizations, the percentages can sum to more than 100 percent.

[Table 4.3 About Here]

Nearly sixty percent of intimate partner violence victims report that their boyfriend or former boyfriend was the assailant during one or more incidents of partner violence. Almost thirty percent report that their husband assaulted them and just over fifteen percent report assaults by a former spouse. Thus, it appears that victimization is split between the context of formalized, committed relationships and less committed ones.

Table 4.3 shows that the bulk of victimizations were concentrated in four crime categories: simple assault with injury (33.1%), assault without weapon or (21.7%), verbal threat of assault (18.8%) and completed aggravated assault with injury (13.2%). This table shows that the incidents spanned across severity (with heavy concentration in both verbal threats and completed assaults), but were less often sexual assaults. (Fewer than nine percent of intimate partner violence victims report completed rape, attempted rape,

or sexual assault (without injury, minor injury, or serious injury), and none report the verbal threat of rape.)

### **How do Victims of Intimate Partner Violence React?**

In Figure 4.2, I show the distribution of experiences during and following reported violent crime victimization(s). This figure was constructed using women (rather than woman-interviews) as the unit of analysis. For this figure and for Tables 4.4 and 4.5 below, I constructed mutually exclusive victimization categories. If a woman ever reported an incident of intimate partner violence, she is classified as a victim of intimate partner violence. Women who did not report any intimate partner violence, but did have one or more violent victimizations by another known offender are categorized as victims of such violence and so on. Thus a woman with multiple victimizations appears only as a victim of the first type of violence in the hierarchy (intimate partner violence, violence by another known offender, stranger violence victim, nonviolent crime victim) and her experiences and actions refer only to those during or following that type of victimization. All comparisons are to intimate partner violence victims. Those with no reported victimizations are coded non-victims. To be sure this categorization did not distort my findings, I constructed a figure where I allowed women to fall into more than one victimization category. Although I could not conduct t-tests for differences on this figure, the distributions nicely mirrored those on Figure 4.2 (data not shown).

[Figure 4.2 About Here]

Intimate partner violence victims are more likely than those assaulted by a stranger to act in self-defense. Nearly thirteen percent of women reporting at least one intimate partner victimization indicate that they acted in self-defense at the time of an

intimate partner assault. Figure 4.2 also suggests that intimate partner violence victims may be more likely to suffer an injury during assault than are other violent crime victims. Over half of intimate partner violence victims report at least one injury; fewer than a third of victims violently assaulted by another known offender report any injury and less than a quarter of victims assaulted by a stranger do so. However, among injured victims, the rates of seeking medical attention are similar for those victimized by an intimate or other known offender; about one fifth sought medical care for injuries. The rate for those injured by an unknown offender is slightly higher; nearly thirty percent of such injured victims seek medical help. Intimate partner violence victims are also more likely than any other crime victims (violent or nonviolent) to contact the police. More than half of the intimate partner violence victims notified the police of their assault.<sup>39</sup> These differences suggest that intimate partner violence victims do have different experiences from other crime victims. There is thus, suggestive evidence that women victimized by their partners are proactive in ending the violence and trying to improve their situation (engaging in self-defensive actions and contacting the police), perhaps because they are more likely to be injured (except Native Americans).

In Figure 4.3, I present the percentage who act in self-defense, sustain an injury, seek medical attention and notifying the police for all intimate partner violence victims by race and ethnicity. There are few statistically significant differences. This is not unexpected given that sample sizes for minority groups, particularly Asians and Native Americans, are small. However, two marginally significant findings emerge. Black victims of partner violence are more likely than White victims to notify the police and Asian victims of partner violence are more likely than White victims to act in self-

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<sup>39</sup> It is likely that police are contacted more often by a third party when the assailant is a non-intimate.

defense. Recall that because the sample sizes for many minority groups are so small, subsequent analyses include a minority status indicator instead of the full detail by racial category.

[Figure 4.3 About Here]

### **Comparison of Women by Victimization Status**

Although the multivariate models are run using the sample of women-interviews (to determine the relationship between both recent and previous assault, as well as variables that change over time and outcomes), descriptive statistics for all women, and by victimization status are presented at the woman level in Table 4.4 (dependent variables) and Table 4.5 (independent variables). This is so that comparisons can be made across groups of women.

[Tables 4.4 and 4.5 About Here]

According to Table 4.4, the samples differ markedly on dependent variables designed to assess potential exits from the relationship. Intimate partner violence victims are significantly more likely to divorce or separate from their partner than any other women. While nearly 8 percent of victims of intimate partner violence report a marital dissolution during the survey period, fewer than two percent of women in other crime victimization categories do so; for victims of violence by a known, non-intimate and non-victims, the rate is under one percent. Further, intimate partner violence victims experience household moves more often than victims of stranger violence, nonviolent crime victims and non-victims though the difference is less dramatic.

While victims of intimate partner violence do not report labor force status changes more often than do other victims, they are significantly more likely to enter and exit the labor force than are non-victims. While it is possible that victimization and labor force trajectories are causally linked, as suggested in some research (e.g. Lloyd 1997), it is also possible that other factors account for the observed differences. Since intimate partner violence victims represent a select group of women (and those reporting such violence on surveys are an even more select group than the actual number of victims—there may be more shame for those perceived to have more options (e.g., higher human capital, income), and those in extremely violent homes may be too fearful to disclose the violence), it is unclear if other shared characteristics account for observed differences or if the differences truly are a result of victimization.

Indeed, victims of partner violence may be a select group, with other common characteristics that motivate labor force status changes. Table 4.5 reveals that although victims of intimate partner violence are more often white than are non-victims, intimate partner violence victims report lower levels of educational attainment than other women. Women victimized by an intimate also report the lowest average household income, \$30,384. Finally, women victimized by an intimate are significantly more likely to reside in public housing than are non-victims. These findings suggest that race and class differentiate victimization by an intimate from other victims and non-victims. These relationships are explored in Table 4.6 and interactions between race and class are also considered in Table 4.7. To further explore whether observed differences in labor force trajectories are a result of victimization or of other shared characteristics, multivariate analyses in chapter 5 that address labor force status changes include controls for such

relevant factors as educational attainment, income and public housing--factors that may impede labor force participation.

Victims of intimate partner violence tend to be younger than other women, are less often married, more often divorced or separated, and more often attending school. They are also more transient as evidenced by their lower rates of home ownership and fewer average months at the present address. A higher proportion of victims of intimate partner violence live in one adult households, while fewer live in two adult households; however, the mean number of children in these homes is significantly larger than in the other samples.

Finally, police notification by someone other than the victim is less common after intimate partner violence than after other violent crimes. Conversely, arrests are more common following intimate partner assaults than after any other crime. Perhaps the police are notified for more serious intimate partner assaults, while they are notified following less severe victimizations by other offenders. Victims of intimate partner violence reported that the perpetrator was under the influence of drugs or alcohol in nearly forty-five percent of the cases; the percentages for other crime victims are significantly and dramatically lower. Note however, that intimate partner victims are the most likely to be aware of the perpetrator's drug/alcohol use. Intimate partner violence victims less often reported the use of a weapon than did other victims of violent crime. Finally, victims of intimate partner violence are more likely than any other crime victims to report serial victimization; that is, they are most likely to report more than six similar acts. There is therefore suggestive evidence that violent victimization by an intimate is different from other types of victimization.

## **Multivariate Analyses**

To test these relationships and to understand the other factors associated with being recently victimized by an intimate, I modeled the probability of reporting an intimate partner victimization among all women age 16-49 using logistic regression. These findings are presented in Table 4.6. Descriptive statistics for all woman-interviews used in this model are presented in Appendix 4.1.

[Table 4.6 About Here]

Not surprisingly, Table 4.6 reveals that a history of intimate partner assault is associated with a greater likelihood of a recent assault, net of demographic and interview controls. The odds that women who had reported an intimate partner assault in a previous interview is recently victimized by an intimate 1.6 times the odds of those with no history of intimate partner assault.

Minority women are significantly less likely than White women to report that they had recently been assaulted. Education and public housing residence do not differentiate women's odds of being recently victimized by an intimate but the likelihood of reporting a recent victimization by an intimate decreases as household income increases. To consider the ways race and class may jointly influence a woman's risk of intimate partner violence, I tested interactions between race and class variables. Results from these models are presented in Table 4.7. The negative association between household income and intimate partner violence is stronger for minority women than for white women. There is also an interaction effect between minority status and low educational attainment, such that minority women with low educational attainment have significantly lower odds of reporting intimate partner violence than do such white women or minority



women with higher educational attainment.

[Table 4.7 About Here]

Turning to the demographic characteristics, older women are significantly less likely to report a recent assault, a finding that is consistent with previous research (see Rennison and Welchans 2000; Zlotnick et al. 1998; Zlotnick et al. 1998). Married respondents are less likely than single women to have experienced a recent intimate partner assault, while the odds that divorced or separated women are assaulted is nearly four times that for single women. Women living alone *and* women living with more than one other adult are significantly more likely than those living in homes with 2 adults to report that they were recently assaulted by an intimate. Each child in the home also increases a woman's risk of assault by nearly thirty percent.

The interview characteristics reveal that intimate assaults are less often reported in proxy interviews. During such interviews someone else responds on behalf of the respondent. Such proxies may not be aware of the assault or may have reasons to deny them. Finally, a woman is far more likely to report a recent intimate partner assault during her first interview, unbounded by a prior one to mark the time frame.

In order to consider differences in the experience and response to victimization by crime type, race and class net of control characteristics, I ran logistic regression models predicting each intervening variable (self-defensive actions, injury and help-seeking).<sup>40</sup> The sample is restricted to recent victims of any violent crime age 16-49 for models predicting self-defense injury, and a victim's police notification; and to recent, injured

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<sup>40</sup> Since temporality is unknown, I include injury in the model predicting self-defense and self-defense in the model predicting injury. Similarly, seeking medical care is included in the notifying police model and notifying the police is included in the seeking medical care model. Thus, my findings for these suggest associations but are not reflective of a direction of causality. The associations may be inflated due to simultaneity.

victims of violent crime age 16-49, for the model predicting seeking medical help (see Table 4.8). (Descriptive statistics for each sample of woman-interviews are presented in Appendix 4.2.) For ease of presentation, this table is limited to odds ratios and significance levels. Appendix 4.3 provides the coefficients and standard errors for each model. Some independent variables were omitted from specific models due to small cell sizes, as indicated on the tables with a “†” symbol.

[Table 4.8 About Here]

Odds ratios are above 1 for using self-defense for intimate partner violence victims and other victims of violent crime, though the results are not statistically significant for victims of intimate partner violence and are only marginally significant for other victims of recent violence. Each recent violent victimization by an intimate is associated with increased odds (odds ratio=1.59) of injury. This reinforces earlier research suggesting that women are at greatest risk within the home (see Straus and Gelles 1990). Type of violent victimization is not predictive of seeking medical care, although the sample for this model is much smaller, as it only applies to injured victims of violent crime. While not statistically significant, rates of medical help seeking are particularly low for victims of previous intimate partner. This perhaps suggests that a history of violence in an intimate relationship may reduce a woman’s likelihood of doing something about it; further research is necessary to determine the meaningfulness of this difference that is not statistically significant. Finally, the odds were high that all recent violent crime victims (intimate partner violence victims, as well as others) contacted the police.

Race and class generally have little effect on self-defense, injury and help seeking. The only statistically significant difference to emerge is that violent crime victims with more than a high school degree are less likely to sustain an injury than are those with only a high school degree. Race and class interactions (Table 4.9) reveal that the only statistically significant interaction in the model predicting self-defense is between minority status and public housing residence. The interaction suggests that minority women living in public housing are less likely to act in self-defense than are white public housing residents and minorities who do not reside in public housing. However, it is unclear how important this is, given that the main effects are not significant in the additive or the interactive model.

None of the race by class interactions are significant predictors of injury or seeking medical help (if injured). In the model predicting police notification, the minority by low education and minority by public housing residence are both significant. Minorities with low educational attainment are less likely to alert the police of their assault than are white women or minority women with a high school diploma. Minority victims of violent crime who reside in public housing are more likely to contact the police than are white women or minority victims residing outside public housing.

[Table 4.9 About Here]

Turning to the intervening variables, I find that injured victims are 2.7 times as likely to have acted in self-defense than are those violent crime victims who did not sustain an injury. Similarly, results suggest that those who acted in self-defense were more than twice as likely as those who did not to sustain an injury. While the NCVS does not specify the temporal ordering of defensive actions and injury (that is I do not know

whether the victim was injured first or first tried to defend herself), this is a striking finding. It either suggests that injuries prompt women to counterattack *or* that women who act in self-defense tend to incur more violent reactions or both. While this finding is not surprising, it suggests women may be proactive in trying to stave off their offenders but seem to pay a price for doing so. More research, with explicit temporal information is necessary to disentangle this.

According to Model 3 of Table 4.8, which is limited to injured victims of violent crime, neither having acted in self-defense nor having contacted the police predicts an injured victim's decision to seek medical help. Further, those injured victims who seek medical help, are more likely to have contacted the police. It is sensible that injured women would be more likely to contact the police, since injury, particularly injury severe enough to require medical treatment, provides tangible evidence that indicates a certain level of severity. However, one would also expect self-defense to be positively associated with seeking medical care and contacting the police, given that each of these actions demonstrates help seeking initiative. Further, I would have expected contact with the police to increase the odds that an injured victim of violent crime would seek medical treatment, either to document her injuries or as a result of police intervention. However, it is possible that the police did call for help on the victim's behalf more often than suggested by this model. Care provided at the scene, at a neighbor or friend's home, or at the victim's home is not included in this variable. Many injured victims of intimate partner violence (n=51, data not shown) did receive care at such places, but it is impossible to determine whether it was self care or care by a paramedic.

The models include controls for demographic and incident characteristics. Briefly, married women are less likely to act in self-defense. None of the characteristics relate to injury. Children decrease the odds that an injured, violently victimized woman seeks help through the medical system. Divorced violent crime victims, those who are the only adult in the home, and those residing with children are more likely to contact the police.

Findings for the incident characteristics are worth discussing as they bear relevance to this project. A perpetrator's weapon use surprisingly has little influence on a violent crime victim's decision to act in self-defense; however, his use of drugs or alcohol is associated with significantly higher odds that a violent crime victim acted in self-defense.

Weapon use does not influence a violent crime victim's risk of injury; however, a perpetrator's substance use is associated with significantly higher odds that the victim is injured. Series incidents indicate a lower likelihood of injury.

If someone other than the victim notified authorities or if an arrest was made, the victim is significantly more likely to seek medical attention. This is not surprising; others are more likely to intervene and arrests are more likely in incidents with more severe violence. A perpetrator's weapon use significantly elevates the likelihood of seeking medical care if there were injuries.

In order to examine victims of partner violence more closely, I ran logistic regression models predicting the likelihood that a woman recently victimized by an intimate acts in self-defense, is injured, seeks medical attention for injuries, and contacts the authorities on her own behalf. Appendix 4.3 shows descriptive statistics for the independent variables for all interviews with reported intimate partner victimization and

for such interviews where an injury was reported (the sample in model 3) for women age 16-49 at their first interview. In Table 4.10, I show odds ratios and statistical significance for models run on woman-interviews with women age 16-49 with recent reports of intimate partner violence. Appendix 4.5 displays coefficients and odds ratios for these models.

[Table 4.10 About Here]

The characteristics associated with the intervening variables among women victims of intimate partner violence differ in some important ways from those associations among all female crime victims (Table 4.10). Note that while the models in Tables 4.6 predicted any self-defense, injury or help seeking in the past 6 months, this table predicts intervening variables that reflect characteristics of intimate partner violence victimizations only. Thus, a woman reporting multiple victimizations, who reported self-defense only during violent victimization by a stranger, is not considered as having acted in self-defense for the purpose of this model.

It is notable that a history of intimate partner violence has no significant bearing on the nature of current assault. A woman's likelihood of acting in self-defense, sustaining an injury, and seeking medical help are unaffected by whether or not she has previously been victimized by an intimate.

There are no significant differences by race or education in the models run on intimate partner violence victims. However, higher income victims of intimate partner violence are more likely to have responded to intimate partner violence by acting in self-defense, yet they were not significantly different in their reports of injury or help seeking. Tests for race by class interactions, shown in Table 4.11, do not offer many further

important explanations. None of the race by class interactions are significant in models predicting self-defense or help seeking. In interactive models predicting injury, the minority by low education and minority by high education are both significant. Minorities with low or high educational attainment are more likely to be injured than minority high school graduates and White women.

[Table 4.11 About Here]

The only significant associations among the intervening variables in this sample are that injury predicts self-defense and vice versa. Divorced women victimized by an intimate are less likely to act in self-defense but more likely to contact the police than single women and married victims of recent intimate partner violence are more likely than single victims to report an injury. Intimate partner violence victims who do not live with any other adult (including unmarried, non-cohabiting victims) and those residing with one or more children are more likely to contact the police following assault.

Those intimate partner violence victims whose perpetrators used a weapon have double the odds of victims whose perpetrator did not use a weapon of acting in self-defense. Surprisingly, a perpetrator's drug/alcohol use and serial victimization have little relationship with self-defensive actions.

Weapon use and a perpetrator's drug or alcohol use significantly and dramatically increase the odds that a woman victimized by an intimate sustains an injury. A perpetrator's arrest is associated with an injured intimate partner violence victim's decision to seek medical care, while a perpetrator's drug or alcohol use decreases the odds that an injured victim seeks care for her injuries.

Finally, weapon use is positively associated with a victim's decision to contact the authorities and serial victimization has a negative relationship with her decision to notify the police. These relationships are not surprising, but what is striking is that many only emerge when the sample is restricted to victims of intimate partner violence, suggesting that being victimized by an intimate is somewhat unique and policies that apply to victimizations more broadly may not be appropriate when the offender is an intimate.

## **Summary**

In this chapter, I first described how other victims and non-victimized women differ from victims of intimate partner violence. Next, I presented characteristics of intimate partner victimization. I then discussed what women do in response to the victimization during, or immediately following the assault (self-defensive actions, help-seeking). Then I described the characteristics associated with reporting a recent incident of intimate partner violence. Finally, I showed the characteristics associated with self-defense, injury and help-seeking.

Although I find low rates of intimate partner victimization, rates for other violent crimes are similarly low. However, many more women report nonviolent victimization. Among those victimized by an intimate, assaults are concentrated among women age 16 to 49 and hence the sample for all further analyses is restricted to this age range. Many race-ethnic groups have very small samples. This necessitated collapsing race-ethnic variation into a minority status indicator in the regression models.

Women victimized by an intimate partner report a variety of assaults that span from less to more severe. Strikingly, rates of injury are higher for them than for any other



victimized women, suggesting either that intimate assaults tend to be more severe, or that only the more severe intimate assaults are reported. Although violent crime victims rarely act in self-defense or seek medical care for their injuries, those victimized by an intimate are most likely to do so. Victims of intimate partner violence are also the victims most likely to contact the police. More than half of such victims seek police intervention. This suggests that the legal response is extremely important, given that police are likely to encounter a victim shortly after assault. Help seeking variables do not capture all of the police and medical responses to violence. The distribution does not reflect police contact initiated by someone other than the victim. Further, I excluded medical care received at the scene, at home, or at the home of a friend or neighbor. Likely omitted is care from non-traditional sources such as traditional healers.<sup>41</sup> Thus, my results represent a lower bound on help seeking.

Bivariate comparisons reveal important distinctions between victims of intimate partner violence and both other victims and non-victimized women on dependent and independent variables. Notably, victims of partner violence more often divorce or separate from their husband, have higher rates of household mobility, and more labor force transitions than nonvictimized women. On average, they are also less well educated, have lower income, and are less often married. Later chapters address whether or not the observed differences in outcomes can be attributed to differences in the independent variables (i.e., intimate partner violence victims have many similarities).

Multivariate models considering the factors associated with intimate partner violence reveal that a history of violence by an intimate is associated with recent intimate

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<sup>41</sup> There is likely variation by race and class in the use of traditional versus contemporary medical help and in the ability to seek such help (some cannot afford to pay and do not have health insurance).

partner violence. Further, minority women are *less* likely to report intimate partner violence, while those of low income are *more* likely to do so. It may be that income provides a means of escaping relationships before or shortly after violence begins.

The multivariate analyses of the intervening variables reveal that across both samples (recent violent crime victims age 16-49 and recent intimate partner violence victims age 16-49), there are strong positive associations between injury and self-defense. It is unclear whether sustaining an injury motivates women to respond so that they are not hurt further, or if self-defensive actions escalate the level of violence and lead to injury. This finding merits attention and further research. It is important to disentangle what is going on so that causality may be determined and policy designed accordingly.

It also appears that while a victim's own calls to the police have little bearing on her decision to seek medical help at a traditional establishment, or vice versa—a victim's decision to seek help for injuries has no influence on her odds of calling the police—it is striking that others' calls to the police and arrests are both associated with higher odds that a crime victim seeks medical attention for her injuries. This is either very good or very bad news. It could indicate that the medical establishment is effectively intervening and the authorities are taking action when a woman is hurt by her partner. Alternatively, it could indicate that arrests are only made when a woman is so severely injured that she needs medical attention.

Finally, associations between serial victimization and both injury and police notification cause concern. Intimate partner violence victims reporting serial assaults are no less likely than other victims of partner violence to sustain an injury. However, they are less likely to contact the authorities than are those without serial victimization.

Perhaps the victim has become desensitized to the violence and developed a more extreme definition of “injury.” This raises concerns about the severity of repeat assault. An understanding of the mechanisms behind the statistical associations is important for determining the causal mechanisms at work so that policy interventions are effective. Perhaps nuanced qualitative data would allow such analyses. Such data could explore the nature of relationships where violence is normative. Questions to address include the role of violence in the relationship, and in the lives of each partner.

## ***Chapter 5: Marital dissolution/Residential Mobility and Employment Consequences***

I begin this chapter by presenting findings for marital dissolution and residential mobility. I then proceed to discuss entry into and exit from the labor force.

### **Marital Dissolution/Residential Mobility**

I estimated four sets of competing risks models to analyze household disruption. Recall that some independent variables had to be omitted from specific models due to small cell sizes. This is indicated on the tables with a “†” symbol. Table 5.1 presents the relative risk ratios from three multinomial regression models run on women married at the time of the interview. The first set of results (columns 1 and 2) is from the sample of all married women, while the second is restricted to married violent crime victims (columns 3 and 4), and the third (columns 5 and 6) includes only married victims of intimate partner violence. Means and standard deviations or percents for each independent variable, for each sample are presented in Appendix 5.1. The corresponding coefficients and standard errors for each model are presented in Appendix 5.2. The models are broken down into two contrasts: 1) becoming divorced or separated *or* moving out of the household (subsequently referred to as marital dissolution) within six months of the interview relative to remaining married and living in the same home and 2) the entire household moving versus staying in the home for at least 6 months. I combined the lone movers with those women whose marriage ended because it seems more likely that victims who move without their households (i.e., their husbands) make better proxies for troubled marriages than those who move with the entire household.

[Table 5.1 About Here]

Looking first at the primary independent variables: victimization history, I find that those married women who have recently been assaulted by an intimate are more likely than other married women to move the entire household (but not necessarily together).<sup>42</sup> This finding holds when the sample is restricted to married victims of violent crime (columns 3 and 4), indicating that intimate partner violence victims do have different mobility patterns than victims of other violent crime. While it is tempting to view this as suggesting that married victims of intimate partner violence may attempt to reduce their exposure to violent husbands, I must caveat that household moves could represent mobility with the violent spouse, instead of a family break-up. Additionally, while this finding is net of other observable characteristics such as time at residence and home ownership, other, unobserved factors might be influencing both violence and move and thus the associations do not necessarily imply causality.

Victims of non-violent crime have a higher risk of ending their marriage or moving their household. It is surprising, however, that non-intimate violent victimization is not significantly associated with mobility, given previous research suggesting victimization does influence household moving decisions (Dugan 1999). However, the second set of results indicates that among violent crime victims, those recently victimized by a non-intimate are significantly less likely to experience a marital dissolution within six months of interview. Thus, victims of recent intimate partner violence *are* different from other recent violent crime victims. Causality cannot be firmly established, however, by controlling for other factors associated with mobility, I hold constant some selectivity effects. Thus, while victims with other perpetrators may be protected from a marital

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<sup>42</sup> Note that there is no excluded category of crime victimization because the crime types are not mutually exclusive. Indeed many women report victimizations of more than one type.

dissolution (at least for six months), victims whose perpetrator is an intimate are no less likely to divorce. Further, the magnitude of the odds ratio suggests that those with a history of partner violence are more likely to experience a marital dissolution, although this effect is not statistically significant.

Examining the series of variables representing race and class, I find that minority status does not significantly differentiate the mobility patterns of violent crime victims (Table 5.1, columns 3, 4, 5 and 6). The direction of effect does suggest that minority victims of violent crime may be less likely to experience a marital dissolution and minority victims of intimate partner violence may be more likely to do so than white victims. Small sample sizes may inhibit significant findings. I attempted to model race\*class interactions, as shown in Table 5.2. In the sample restricted to violent crime victims the interactions between minority and education are significant. Low and high educated minority violent crime victims are less likely to experience a household move than are other violent crime victims, though the difference is greatest for those with low education. There is too little variation and too few cases to model any of these interactions for the sample restricted to those victimized by an intimate.

[Table 5.2 About Here]

The models for violent crime victims and victims of intimate partner violence include variables to capture a victim's experiences and actions at the time of assault. Only seeking medical help has a significant effect upon household disruption, suggesting that whether a victim is injured, if she acts in self-defense, or if she seeks help through the police has no bearing on whether she leaves her partner or moves away from her

home. Violent crime victims who sought medical care for injuries are significantly less likely to reside in households that moved.

The demographic variables demonstrate that the models are producing reasonable findings. Older married respondents are less likely to end their marriage or move away from their home. Employed, married women are more likely to end their marriage. Since these women are more financially able to support themselves independent of their husband's income, it makes sense that they are more likely than others to divorce. The longer a woman has resided in her home, the less likely she is to move away. Additionally, those who own their homes, rather than rent, are less likely to move the entire household, while those in multiple unit dwellings are significantly more likely to move with their households. The incident characteristic controls included in the second and third models (Table 5.1, columns 3, 4, 5 and 6) have no significant bearing on marital dissolution or mobility.

Table 5.3 presents odds ratios from logistic models predicting whether unmarried respondents (at interview) moved by the following interview for the full sample of respondents, the subset of violent crime victims, and the small population of victims of intimate partner violence. Descriptive statistics for the independent variables for each sample are shown in Appendix 5.3. Coefficients and odds ratios can be found on Appendix 5.4. I combined individual moves with household moves since many unmarried women live alone, blurring the distinction between the two.

[Table 5.3 About Here]

Table 5.3 shows that recently victimized unmarried women are more likely to move within six months of the incident report than are non-victimized women. Those

recently victimized by an intimate partner have a significant increase in the odds of moving per incident relative to those not recently victimized by an intimate. Each intimate partner violence incident is associated with a 20 percent increase in the odds of residential mobility. Perhaps unmarried victims of partner violence use mobility as a method to reduce their exposure to violence. However, this finding must be interpreted with caution since it is also plausible that other underlying factors precipitated both the violence and the mobility. For example, a death in the family could be a stressor leading to violence and necessitating a move to care for surviving kin. Table 5.3 also reveals that having a prior history of nonviolent crime victimization increases the chance that a single woman will move. This finding is more consistent with Dugan's (1999) results that found a pattern of moving after crime victimization.

Turning to the second model, restricted to victims of violent crime, I find little to distinguish the mobility patterns of unmarried crime victims. (Note, however, that the sample size, while still large, is reduced dramatically, making it more difficult to achieve statistical significance.)

Examining the race and class variables, I find that unmarried minority women are less likely to move than their White counterparts. High educational attainment is associated with higher odds of a household move. This relationship did not show up in the victim models, but that may be a consequence of small sample size. Net of other factors, the odds of moving decline as income increases and public housing residents are less likely to move than those residing elsewhere. Table 5.4 presents the results of race and class interactions. The only significant finding is that among violent crime victims,



the negative effect of income on an unmarried woman's odds of moving is smaller for minority women than it is for white women.

I do not find any effect of a victim's own actions or injury among unmarried victims of violent crime. This suggests that what a woman does during and immediately following assault has little effect upon her mobility decision.

Considering the results for the demographic characteristics I find that many have the anticipated effects. For example, age, months at residence, and home ownership are associated with lower odds of moving among the unmarried. Additionally, unmarried women who live in a multiple unit dwelling—who may be considered less stable—have higher odds of mobility.

### **Employment Consequences**

Table 5.7 presents the odds ratios for the discrete hazard models predicting entry into the labor force. Descriptive Statistics for the independent variables are presented in Appendix 5.5. Coefficients and standard errors are presented in Appendix 5.6. On both Table 5.7 and Appendix 5.6, the “†” symbol indicates that there was insufficient variation for inclusion of the independent variable in the model. The first model is run on all interviews where women previously reported that they were not employed (at prior interview, or at first reported crime incident for victims). The second model repeats the first on victims of violent crime. In addition to all of the variables from the first model, it includes the intervening measures and incident specific controls. The third model is run on the sample of intimate partner violence victims.

[Table 5.7 About Here]

I first consider my key predictors: victimization history variables. Despite bivariate findings (Table 4.4) that victims of intimate partner violence enter the labor force more often than non-victims, this model provides no evidence that being victimized by an intimate partner, in and of itself, is significantly related to the likelihood of entering the labor force. This non-finding is especially intriguing because the table also shows that when a non-working female is violently victimized by another offender (Models 1 and 2) (or is the victim of nonviolent crime (Model 2)) she is highly unlikely to enter the labor force. Thus, whatever prevents victims who are not employed from entering the labor force within six months of the incident appears to have no impact if the perpetrator was an intimate.

Results suggest that non-working minority women are less likely than non-working White women to enter the labor force. Not surprisingly, I find that women who are not employed and have less education are less likely to enter the labor force, while those with at least some college are more likely. Many employers use education as a hiring standard and the jobs available to those with more education are generally more lucrative. Similarly, lower income violent crime victims, women who are not employed and those women who are not employed and reside in public housing are less likely to enter the labor force than those of moderate means. Race and class interactions, presented in Table 5.6, suggest, however, that education, income and public housing residence do not matter differently for women of different races, regardless of whether or not a woman was violently victimized.

[Table 5.6 About Here]

Turning to the intervening variables in the victim models, I find that having ever acted in self-defense is associated with significantly higher odds of a labor force entry. This is particularly true for victims of partner violence: among women age 16-49 ever assaulted by a partner, those who acted in self-defense during at least one intimate partner assault have over 3.7 times the odds of entering the labor force than do those who have never acted in self defense. It is plausible that victims who engage in self-defensive actions during an assault share several common characteristics. The self-defense may indicate a willingness to stand up for oneself and make necessary changes. Entering the labor force may be the first step to gaining independence from the abuser. Having been injured enough to seek medical attention (and therefore seeking that attention) is associated with nearly double the likelihood of entering the labor force among all violent crime victims (Model 2).

The control variables do not reveal surprising findings. Older women are less likely to enter the labor force. This estimate is likely capturing the patterns of retired older women who are unlikely to re-enter the labor market. Also, non-working married women are less likely than their single counterparts to start working. Since married women can often rely on their spouse's income for support, employment is less crucial than to the single women. Attending school is associated with lower odds of a labor force entry; students likely do not have time or inclination to work if they are not doing so already.

In Table 5.7, I display the odds ratios generated from the models for exiting the labor force. Like Table 5.5, it contains three models: one using the sample of all women employed at the time of interview (first incident for victims), one using the sub-sample of

violent crime victims, and one using the sub-sample of intimate partner violence victims. Descriptive statistics for each sample are presented in Appendix 5.7. Coefficients and Odds ratios from each model are shown in Appendix 5.8.

[Table 5.7 About Here]

Findings strongly suggest that a working woman's history of violent victimization has no effect upon her odds of exiting the labor force. Thus, it appears that victimization type does not account for variations between victims' and non-victims' labor force exits (Table 4.5).

Turning to the race and class variables, I find little difference by race in the odds that an employed woman exits the labor force. Not surprisingly, employed women with less education more often stop working. As income rises, the odds of exiting the labor force decline. Employed women living in public housing are more likely to leave their job. While race and education were more important in the victim models for entering the labor force, as shown above, they are generally irrelevant to a working victim's decision to exit the labor force. Finally, tests for interactive effects of race and class, presented in Table 5.8, reveal that highly educated minority women are less likely to exit the labor force than minority women with only a high school degree, as are minority women with higher education (OR=1, but coefficient is very slightly negative). However, these race by class differences do not show up when the sample is restricted to victims. This suggests that race and class may operate independently in the transition of employed women out of the labor force among violent crime victims.

Examining the models restricted to violent crime victims and considering the effects of intervening variables, it appears that any self-defensive actions are associated

with higher odds of stopping work. Among victims of intimate partner violence, seeking medical help for injury is associated with lower odds of stopping work. Further research is necessary to disentangle the nature of these relationships, and whether they are causal or spurious. I find no influence of injury (without medical help) or police notification on the odds of a labor force exit.

The findings for the control variables are generally consistent with those for labor force entries shown in Table 5.3. For example, older, employed respondents are more likely to exit the labor force (i.e., retire). Married, employed women are more likely than single women to exit the labor force. Employed students are more likely to stop working. While I also found that children increase a woman's likelihood of entering the labor force, the findings are not mutually exclusive.

## **Summary**

This chapter presented findings on the likelihood that women exit their marriages, move, or change labor force status following victimization. Key findings include that married victims of intimate partner violence are more likely than other married women to experience a household move. I also found that unmarried victims of partner violence are indeed more likely than other unmarried women to move fairly quickly after their boyfriend attacks them. Although, more detailed data are required to disentangle causality, these findings are consistent with the possibility that women who are victimized by a male intimate are trying to escape the violence. It is also plausible that the violence and the household disruption are both associated with another, unmeasured variable such as a new stress on family life (e.g., partners' job loss). A woman is also

more likely to move if she is violently victimized by a non-intimate or even if she is a victim of property crime.

I also find that very few actions that a married victim takes during or immediately after the incident influence her choice to move. This suggests that mobility may be a decision that is made independent of the nature of assault and is a different type of decision than is the one to act in self-defense or to seek help. Indeed, mobility represents a longer-term strategy; whereas actions taken at the time of or immediately following assault may be more reactionary.

I find no evidence that employed women victimized by an intimate are any more or less likely than other employed women to leave their jobs after violence. I do, however, find evidence that victims of *crime other than intimate partner violence*, who are not employed, are less inclined to find a job within six months of the incident. In fact, the labor force patterns for victims of intimate partner violence look more like those for non-victims. Although the reasons behind this are not clear, there are several possibilities. If intimate partner violence is a chronic problem in the relationship, the women may have already found ways of coping with the violence while remaining in or out of the labor force. Alternatively, they may have already altered their labor force status prior to their participation in the NCVS. Future research might explore this possibility and consider whether such changes may have affected the level of violence in the relationship. Indeed it is possible that the violence reported in the NCVS reflects a decreased, increased, or constant frequency of violence following a labor force transition.

The victim only models did not reveal anything unique about the labor force status changes of victims of partner violence. However, I found that when the non-

employed victim of intimate partner violence acted in self-defense, she was more likely to subsequently find a job. Both acting in self-defense and entering the labor force could represent a victim's agency toward reducing her exposure to violence. While I did find interesting effects of race and class, they generally did not differ for victims of violent crime or victims of intimate partner violence.

In sum, I find that violent crime victimization and intimate partner violence, in particular, are sometimes associated with changes in household composition and employment status. While I speculate that these changes were done to reduce the victim's exposure to violence, further research is needed to more specifically examine the reasons behind these changes.

## *Chapter 6: Predictors of Subsequent Intimate Partner Assault*

The final set of analyses address how different intermediate behaviors and characteristics at earlier intimate partner assault(s) affect the likelihood that an intimate partner victim is re-victimized while her household remains in the NCVS sample. Table 6.1 displays the distribution on the four primary intermediate variables: self-defense, injury, medical care, and police contact; of employment consequences and marital dissolution within 6 months of initial assault; and the incident characteristics associated with the first assault. Over a quarter of all victims of intimate partner violence age 16-49 report at least one repeated assault. Comparing the distribution of characteristics for victims who only suffered from one assault with those who were re-victimized, reveals little difference. The only distinguishing feature is that those with only one assault are more likely to have contacted the police (53% versus 39%). This suggests that police notification might reduce the chances of a subsequent assault. However, there could also be a selection effect whereby those who respond against the violence (i.e., call the police) are also more likely to get themselves out of harm's way.

[Table 6.1 About Here]

The general distributions of the remaining characteristics are as follows. Relatively few victims, 10% of one time victims and 15% of those violently victimized by an intimate, acted in self-defense during the first assault. Nearly half of the victims reported an injury following the first reported assault. Roughly a fifth of those injured sought medical help.



Although the difference in labor force entry is not significantly different between the two groups of women (approximately 20% of victims enter the labor force following the first assault), those who reported a subsequent intimate partner assault are significantly less likely to have left the labor force after their first assault. Perhaps by leaving the labor force a woman is forced into a more traditional role, with greater economic dependency. This may offer violent partners an alternative way of controlling their mates. Alternatively, it could signify a short-term strategy to change her life so that she can better escape a violent relationship. Finally, the difference in odds of marital dissolution is not significant.

Examining the incident characteristics reveals that the only significant difference is that those whose perpetrator at first assault was under the influence of drugs or alcohol are more likely to report a subsequent assault. *If* it is the same perpetrator, this could indicate a pattern of substance use and violent behavior.

Additionally, the findings in Table 6.1 compare victims regardless of when they first reported an assault. Since those who report their first assault in a later interview have relatively less time before the sequence of survey interviews end to be re-victimized compared to those who report one earlier, one might expect higher prevalence of subsequent assault for those reporting a first assault earlier. Thus, multivariate models also include a control for the interview period.

In Table 6.2, I present the coefficients, standard errors and odds ratios from the multivariate logistic model predicting a subsequent assault within six months prior to interview. The sample for this analysis is all interviews reporting or following a first incident of intimate partner assault. Note that some independent variables had to be

omitted due to small cell sizes. This is indicated on the tables with a “†” symbol. The model includes race and class; self-defense, injury and help seeking during/following earlier incident(s) of intimate partner violence; labor force status changes and marital dissolutions; all of the controls and incident characteristics (regarding earlier incident(s) of intimate partner violence).

[Table 6.2 About Here]

Findings for race and class suggest little variation in the risk of subsequent assault by minority status, educational attainment, household income, or public housing residence. Race by class interaction effects were tested and results are displayed in Table 6.3. Only the interaction between minority and high educational attainment was significant. It was positive, indicating that well-educated minority women are at a higher risk of repeat assault than other minority women.

[Table 6.3 About Here]

Both acting in self-defense and seeking medical help (if injured) during or following an earlier intimate partner assault are significantly associated with the risk of reporting a subsequent assault. Women who acted in self-defense during an earlier intimate partner assault have more than double the odds of reporting a repeat assault. This is somewhat disturbing as one would hope self-defense would deter future violence, or that women acting in self-defense would be willing to make the life changes necessary to escape violent relationships. Those who seek medical attention also have double the likelihood of subsequent assault. Seeking medical help may be an indicator of severity. Injuries requiring medical treatment may signify that violence has already escalated.

Injury and a victim's police notification at the time of or immediately following assault have virtually no influence on whether or not she is assaulted again by an intimate.

Turning to employment and marital consequences of intimate partner violence, the bivariate findings hold up. Victims who leave the labor force have decreased odds of being re-assaulted. Exiting the labor force could signify movement as part of the life changes a victim makes in order to end the violence in her life. Specifically, it may represent attempts to appease the abuser. Alternatively, another life event may have triggered both the continued violence and the change in labor force status. I find that by entering the labor force a victim does not significantly alter her risk of being assaulted again by an intimate. Those victims who recently ended their marriage are not significantly more likely than other women to be re-assaulted.

The demographic controls reveal that the risk of repeat assault declines with age, is more than double for divorced or separated women (relative to single women), is higher when more than two adults reside in the home. None of these findings is surprising. The research literature has shown declines in intimate partner violence with age and suggested that women are at risk when they attempt to leave their partners--it would not be surprising if violent husbands continued their actions even after a woman left the relationship. Also, as expected, those reporting during a bounding interview were more likely to report repeated assaults.

Finally, the findings for the incident control variables indicate that the chances of re-assault are reduced if the police were previously contacted by a third party following an earlier intimate partner assault. This finding suggests that contact with the police can protect the victim. Yet, this raises an important question as to why the police seemed to

have no effect when the victim calls the police herself. There are several possibilities including that others may only call police after more severe incidents or that the police may take calls from others more seriously.

If the perpetrator was under the influence of drugs or alcohol during an earlier incident, the woman is nearly twice as likely to report at least one subsequent assault. This is consistent with literature that links alcohol and drug dependency with the perpetration of intimate partner violence (see Crowell and Burgess 1996).

## **Summary**

This chapter builds upon the work done in earlier chapters. Selecting on having been victimized by an intimate partner, I used a woman's experiences and actions (self-defense, injury and help-seeking, employment status change and marital dissolution) during and following earlier incidents of intimate partner violence as independent variables in regression models predicting the likelihood of sustaining a later incident of intimate partner violence.

It is important to remember that the NCVS captures only a narrow window of a woman's victimization history. Since there are not retrospective accounts of intimate partner violence prior to the survey reference period, it is entirely likely that many of the initial victimizations revealed on the NCVS actually represent repeat victimizations. There are no doubt cases where the victim was assaulted previously either by a different partner or through a different type of assault. Thus, it is not entirely clear that those classified as one-time victims are not occasionally victimized. What I do know, however, is that those identified as being victimized repeatedly are chronic victims.

The most striking findings are that acting in self-defense and seeking medical help for injuries are associated with increased odds of sustaining a repeat assault and that exiting the labor force corresponds to a decline in the odds of reporting another violent victimization by an intimate. Caution must be used in thinking about any type of causal relationships. While the longitudinal files of the NCVS do allow me to discern the temporal ordering of events, it is entirely possible that earlier events, or unmeasured concurrent activities precipitated both the initial and later violence. However, earlier research does suggest important relationships and theories. It is worth thinking about the potential implications of my work in these terms, while acknowledging that further research is necessary to determine the underlying mechanisms of causality.

It is very likely that those women with an injury severe enough to need outside help are in relationships where violence has already escalated and become the norm. However, it is also plausible that violent men are retaliating against women's external help seeking. This would only be true if the same offender victimized the woman later. The NCVS data do not allow me to disentangle this, as there is no way to discern if unmarried women are victimized by one or multiple intimates. Future surveys could be designed to better illuminate whether women with serial intimate partner victimizations are trapped in violent relationships or migrate from one violent partner to another. Such information would be valuable in designing policies to intervene.

Regardless of the reason for the association between seeking medical help for injuries and sustaining a repeat assault, my findings indicate potential intervention points. Perhaps if medical establishments put more resources into identifying and assisting women victimized by an intimate repeat assault would go down. The same can be said for

the null findings for a woman's own police notification. It is striking that the risk of repeat assault declines when someone else notifies police, but not when a victim herself contacts them. This work suggests that police need to be more vigilant when a woman victimized by an intimate calls for help if they are to make a difference in her risk of being assaulted again. It is unclear whether women's efforts to seek help are ineffective because she is unable to reduce her exposure to the assailant or because he retaliates.

Somewhat surprisingly, women who acted in self-defense during a previous assault are significantly and substantially more likely to report being assaulted again. It may be that such women are in violent relationships and have learned to match the perpetrator to protect them during each incident. Alternatively, their attempts to protect themselves could incite later, retaliatory responses. Further work exploring the nuances behind this relationship is necessary to determine the best policy actions.

It is unclear why exits from the labor force are associated with decreased odds of repeat assault. One possibility is that women who exit the labor force are making dramatic changes in their lives of which the exit is only one part. They may be preparing to separate from the abuser by ending the relationship or moving away. This is consistent with the exposure reduction hypothesis. As discussed earlier, this hypothesis suggests that actions taken to reduce exposure to a violent partner effectively reduce a woman's victimization (Dugan et al. 1999). Data that followed those who move out of their homes could test if labor force exits were high among those women. Alternatively, it is also plausible that women who exit the labor force assume a more traditional gender role. Their partners no longer need to "do gender" (see: West and Zimmerman 1987) by doing violence and have other means of controlling their partners (i.e., financial, social).

## *Chapter 7: Conclusions, Discussion and Policy Implications*

This project contributes substantially to our understanding of how intimate partner violence influences women's lives. I began by describing the basic characteristics associated with women's victimization and actions at the time of assault. Because to date, most of what we know about the experiences of women victimized by an intimate relies on cross-sectional or localized, non-representative studies, my project takes the first step toward understanding the patterns of changes women generally experience after violence.

I guided this research by using theory about the extent and nature of intimate partner violence to craft hypotheses addressing whether victims are inclined to reduce their exposure to the intimate perpetrator after an incident. I then considered whether those choices actually lead to reduced violence (hypothetically, because they worked), or whether they enticed more violence (hypothetically, because the perpetrator retaliated against her actions). I approached these general concepts by asking four specific, questions:

1. What is the prevalence of intimate partner violence against women as reported in the National Crime Victimization Survey?
2. Are intimate partner violence victims more likely than other women to divorce or move out of their home within six months of a reported assault?
3. Are intimate partner violence victims more or less likely than other women to leave or enter the labor force within six months of a reported assault?
4. What factors are associated with reports of repeat assault?

I also considered which victims were injured, acted in self-defense, or sought help and how a victim's injuries and actions at the time of (or immediately following) assault influenced her outcomes.

In response to the first research question, I find that 1.6 percent of American women age 16-49 reported at least one violent victimization by an intimate in the longitudinally linked NCVS. This is somewhat misleading, however, as it is calculated based on all women, not only those with partners, a sub-sample that cannot be identified in the NCVS (although the age restriction does focus on those women in the ages most likely to be partnered). I also found variation in this prevalence by race and class, as well as by age. Asian and Hispanic women are far less likely than white women to report violent victimization by an intimate; Black women have similar prevalence and Native Americans are most likely to report such violence. Additionally, lower income is correlated with higher prevalence of violence. Older women within the 16-49 age range are less likely than younger women age 16-49 to report being violently victimized by an intimate.

After addressing the prevalence of victimization, I considered the factors associated with each of the intervening variables: self-defensive actions at the time of assault, sustaining an injury during the course of assault, seeking medical help for such injury, and contacting the police following assault. Bivariate results suggest that victims of intimate partner violence have higher rates than other violent crime victims on all of these variables except seeking medical attention for injuries. The only interesting racial difference is that Black women violently victimized by an intimate are more likely than



white victims of partner violence to contact the police following assault (consistent with prior research (i.e. Block 1974)).

The most striking thing about the intervening variables, revealed in multivariate models, is the strong association between injury and self-defense. While the temporal ordering is unknown, it is of concern. If women's actions precipitate injury, it would be worth knowing so that victims could be better educated on how to protect themselves. On the other hand, if injury precedes the defensive action, women might be instructed to remove or defend themselves before violence escalates to the point of injury.

These findings suggest that women victimized by an intimate are at greatest risk, as compared to other victims: they are most likely to be hurt and least likely to seek medical help when they are. However, the findings also indicate that intimate partner violence victims are a unique group of victims, who do try to stave off their attackers and seek help from the authorities. It appears that, on average, they are a group of victims who is willing to take steps to ensure their safety. These descriptive findings provide documentation heretofore unavailable and represent a contribution to our understanding of intimate partner violence in American women's lives.

Findings for my second research question, addressing whether or not victims of intimate partner violence are more likely to experience a marital dissolution or move out of their home are mixed. Among married women, victims of intimate partner violence are more likely than other women and more likely than other crime victims to move with their households. However, they are no more or less likely to experience a marital dissolution or move independent of the rest of the household. I also find that among unmarried women, victims of partner violence are more likely than non-victims to move

fairly quickly (within 6 months) after their boyfriends attack them. This appears to be a common strategy for the unmarried woman, because she is also more inclined to move if she is violently victimized by a stranger or even if she is a victim of property crime, than if she is not victimized. I also find that a victim's injury, self-defensive actions and help seeking during or immediately after the incident have little relationship with residential mobility.

Although I cannot determine the causal mechanism behind the observed relationships between intimate partner violence and residential mobility, the relationship is interesting. Another stressor may cause both the violence and the mobility, but it is likely that that same stressor would also cause other women to move without the violence. Further research is needed to tease this out. For example, a life history approach might enable researchers to identify events that trigger family change. Individuals' experiences with partner violence could be compared to see what may have pushed one couple to violence while leaving another at relative peace.

The third research question considers whether victims of intimate partner violence are more likely than other victimized and non-victimized women to move into or out of the labor force. My findings fail to provide a clear-cut answer to this research question. In considering labor force exits, I restricted analyses to women employed at the last report of labor force status. I find no evidence that working women assaulted by their intimate partner are any more or less likely than employed non-victimized women to leave their jobs after violence.

To address labor force entry, I restricted analyses to those who were not employed at the previous report of labor force status. I do find evidence that non-employed victims

of crime other than intimate partner violence are less inclined to find a job within six months of the incident than are non-victims who are not employed. The patterns for non-employed victims of intimate partner violence look more like those of non-victims. I also found that when the non-employed victim acted in self-defense or was injured to the extent that she sought medical care, she was more likely to find a job. Self-defense and entering the labor force could both index a woman's desire and willingness to improve her life. Both seeking medical help and entering the labor force could represent a victim's agency toward reducing her exposure to violence.

Finally, my fourth research question was designed to determine whether exposure reduction leads to less or more violence. The results are mixed. It appears that if a victim seeks medical help or if a victimized woman acts in self-defense at an earlier intimate assault, she may be setting herself up for later attacks. While I cannot be certain that the latter attacks are from the same perpetrator, if they are, this would be strong evidence that he is retaliating against her self-defensive actions (although the NCVS does not allow me to get at the perpetrator's motives). I unexpectedly found evidence that some victims who *increase* their exposure to their partner could actually be *decreasing* their chances of further perpetration. It seems that those employed women who leave the labor force after an attack are protected from further attacks. I clearly cannot draw strong conclusions about this method of protection without knowing the specific contexts of those women who leave their jobs. I have no idea whether the victim is, indeed, spending more time with her perpetrator, or whether she is preparing to make a larger break from home.

While I find no direct evidence that a victim's own exposure-reducing behavior affects her chances of re-victimization, when others act to reduce her exposure, specifically when others call the police, her chances of re-victimization drop. This suggests that policies implemented to reduce a victim's exposure to the perpetrator may improve her safety. However, it also indicates that the police may need to take victims' own calls more seriously. Finally, my results suggest that a perpetrator's drug or alcohol use predicts further assault.

Finding from this project suggest that intimate partner violence may exert a long-term influence on a woman's life. While the data do not concretely address this issue, findings are consistent with the possibility that many women's lives change in dramatic ways when an intimate assaults her. Mobility appears to be a strategy employed by many victims of partner violence. However, I do not find that it has any influence on their risk of repeat attack. Given other research suggesting a woman is at great danger during the time when she tries to leave, it is important to understand my null findings. It may be that some victims successfully reduce their exposure to violent partners, while others experience retaliatory assaults. Many women move relatively soon after an intimate partner assault. Moving itself is a stressful event and likely causes other changes such as altering social support (often isolating her from family, friends and other resources), inducing job change and increasing financial burden. Additionally, many women experience assaults following the initial incident. This suggests either chronic or occasional relationship dysfunction that can have profound effects upon a woman's physical and emotional well-being.

Questions remain, however, about what trajectory a woman's work and family life takes beyond the three and a half year window examined:

- How does her longer-term history of intimate partner violence influence her employment and family trajectories?
- Are there longer-term influences on her transitions into and out of the labor force, and what type of job changes does she experience?
- Does the violence ultimately push married victims, who initially stayed married, out of their relationships?

In addition to identifying areas where further research is needed, this dissertation speaks to research in the areas of gender, demography and criminology. My experiences offer insights that will be of use to many scholars in these areas as they seek to understand persistent gender inequalities, factors associated with transitions at work and at home, and the ways victimization influences individual lives. The findings have implications for data collection, contribute to our understanding of gender relationships and are of policy relevance.

### **Implications for Data Collection**

While a major contribution of this project is a unique, nationally representative, longitudinal data set that will allow innovative analyses of crime victimization, one of the things that this dissertation highlights is the need for better data to study intimate partner violence.

The small number of victims makes it difficult to examine relationships closely and precludes definitive conclusions. For example, I did not find a consistent story about the interactive effects of race and class. Further, I had to collapse minority categories for multivariate analyses. Data that over sample victims might allow disaggregation of racial categories and other important variables so that such relationships could be more fully explored. This is crucial to do because there are cultural differences across racial and ethnic groups within American society and structural barriers that prevent some groups, more than others, from accessing resources and opportunities.

With detailed racial categories, I anticipate that differences would emerge. It is unlikely that findings for the group “minority” are homogenous. I anticipate that violence is more acceptable among some racial groups while others are less tolerant. Further, when race and class come together, I expect researchers would find that lower income and education are associated with higher violence. Some racial groups may be doubly disadvantaged while other racial groups may only show up as disadvantaged when class is brought into the picture. Not only are there likely variations in the rates of violence by race and class, women of different backgrounds are likely to respond in very different ways. Low education and income coupled with discrimination may make labor force and family status changes more challenging for poor minority women, and such women may be less likely to escape the violence in other ways.

While the NCVS allows innovative analyses that have not previously been possible, it lacks contextual, historical and temporal detail that would allow further understanding of the processes driving the observed associations. Longer-term data, or life history work would enable researchers to better understand what happens beyond the

narrow window of observation provided in the NCVS. Data with more detailed information about the ordering of events during an incident (i.e., drug/alcohol consumption, assault, self-defense, injury, help-seeking, employment and family outcomes), background information (e.g., what precipitated the violence, did the violence lead directly or indirectly to any life changes? How?), and a detailed history of a woman's experiences with violence (e.g., other offenders, this offender's history) might offer better opportunities for disaggregating causality and understanding how partner violence interrupts women's lives, or is a part of their lives. This data could be collected in a large scale survey, specifically designed to address violence in women's lives. Such data would allow for the development of more specific policy recommendations.

Another limitation of the NCVS data is that it does not follow women who move. Future data collections that attempt to track women's lives even if they move residence would allow for a better understanding of the relationship between partner violence and mobility and would avoid the loss of data concurrent with residential moves in the NCVS. Such data would also allow researchers to track other outcomes among victims who move. Do they also experience work and family changes? Do they continue in violent relationships or are they successfully able to escape them?

The omission of institutionalized women, women residing on military bases, and homeless women weakens my ability to generalize to the entire U.S. population. Given the research evidence suggesting differences, at least among the military and incarcerated women, it would be worthwhile for future data to include samples from these populations to determine how their experiences compare to those of other victimized and non-victimized women.

Although many of my findings invite further questions and suggest avenues of further research, one is particularly striking. What is the story behind self-defensive actions and medical help? That is, why does acting in self-defense or seeking medical attention for injuries increase the likelihood of repeat assault? Do these characteristics simply indicate severity or is there something that happens when a woman defends herself or encounters the medical profession? Studies that follow victims as they encounter doctors and emergency room staff would allow for elaboration of this finding.

### **Gender Relationships**

While my research does not directly examine gender roles and power within relationships, it suggests what might happen when men manifest an extreme form of power over women. The numbers show low prevalence of victimization, nearly twelve women out of a thousand women age 12 and up report victimization. However, if the prevalence rate for all women age 12 and up is applied to Census counts of women age 15 and up this translates to over 1.3 million American women victimized by an intimate partner.<sup>43</sup> Clearly this is a gender issue that needs further attention and resources.

Perhaps most relevant to our understanding of gender is my finding that dropping out of the labor force is associated with lower odds of repeat intimate partner victimization. Although it is not clear what happens after a woman stops working, it is possible that men could be substituting financial control for violence.

It would push our understanding of gender and power if data included violence among same sex couples and examined the specific types of control exerted by each

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<sup>43</sup> The U.S. Census Bureau reports 71,779,895 women aged 15 and up in 2000 (United States Census Bureau 2005).



partner. This would require data collections that targeted same sex couples to allow for sufficient sample sizes. Questions about the nature of the relationship and trajectory of violence might enable researchers to better understand what power dynamics precede violence and how assaults change the nature of the relationship. Comparisons could be made to heterosexual couples to better understand how gender is related to power in violent relationships.

### **Policy Recommendations**

While this work does not offer clear-cut policy recommendations, it suggests important intervention points. There is evidence that what others do matters, that is, when someone else call the police on a victim's behalf, she is less likely to report future assaults by an intimate. Arrest following an intimate partner assault also reduced the likelihood that an intimate later victimizes a woman. However, there appears to be no association between a woman's own calls to police and her chances of repeat assault. Further work should examine the nature of association and consider how police might better respond to a victim's own calls for help. Once understood, public awareness could be raised so that people realized how to help women victimized within their intimate relationships. It is clear that medical establishments need more refined methods of identifying and intervening when injured women seek help, given that those seeking medical help for injuries are more likely to be assaulted again. Since self-defensive actions are linked to sustaining later assaults, programs could consider working with and educating potential victims to elaborate escape plans that might not necessitate such actions (i.e. strategies to get away from the perpetrator before escalation of violence).

Finally, strong associations with perpetrators' drug and alcohol use suggest that programs working with male batterers need to make drug and alcohol treatment an integral part of their treatment plans.

In sum, my research represents an important contribution to the existing literature and suggests interesting avenues of further research and policy development. It is likely that societal factors are complicit in sustaining intimate partner violence. Therefore, it is essential for sociologists to continue pursuing an understanding of the mechanisms behind assaults by an intimate and suggesting policy interventions.

Figure 1.1: Analytical Model

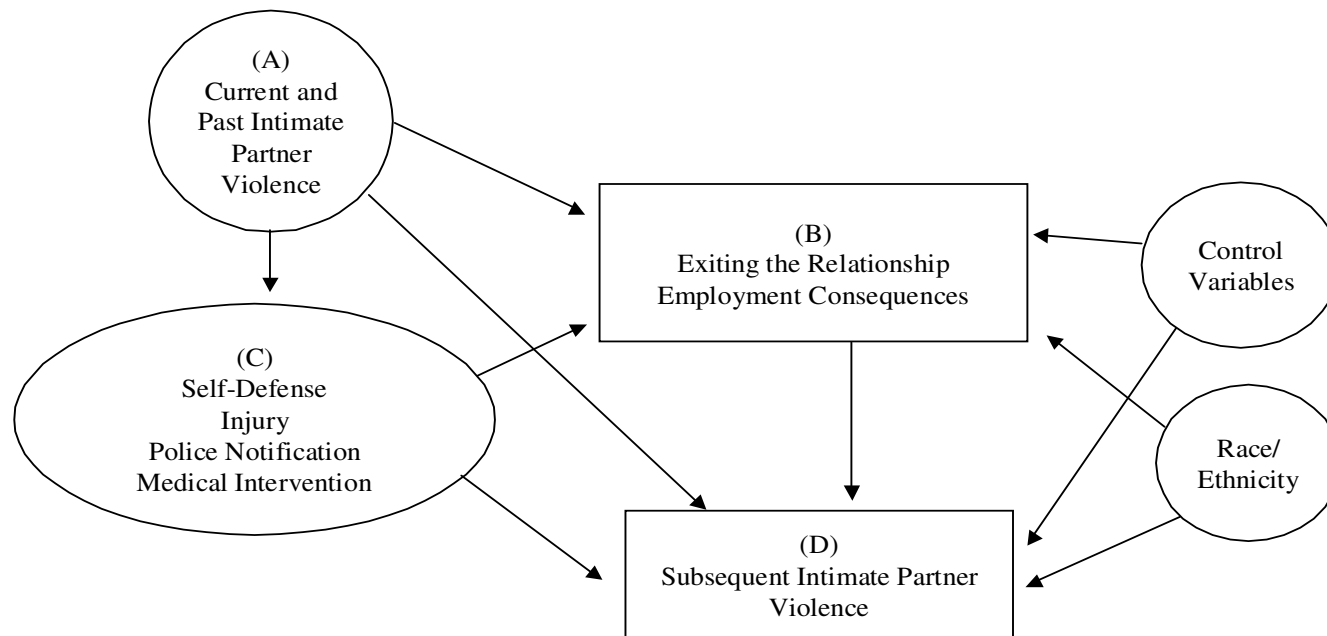


Figure 3.1: Coding of Employment Status Change

	<u>Interview</u>		<u>Interview</u>
Victim between t and t+1	<u>t</u>	<u>Incident</u>	<u>t+1</u>
	+	<b>X</b>	<b>X*</b>
Non-victim between t and t+1	<b>X</b>		<b>X*</b>

**X** = Collect Employment Status

\*=Collect Race, Class, Demographic Characteristics, Interview Characteristics

+Note that nearly 60% of intimate partner violence victims are missing information at t because they report an assault during their first interview.

### Figure 3.2: Coding of Recent and Previous Assault

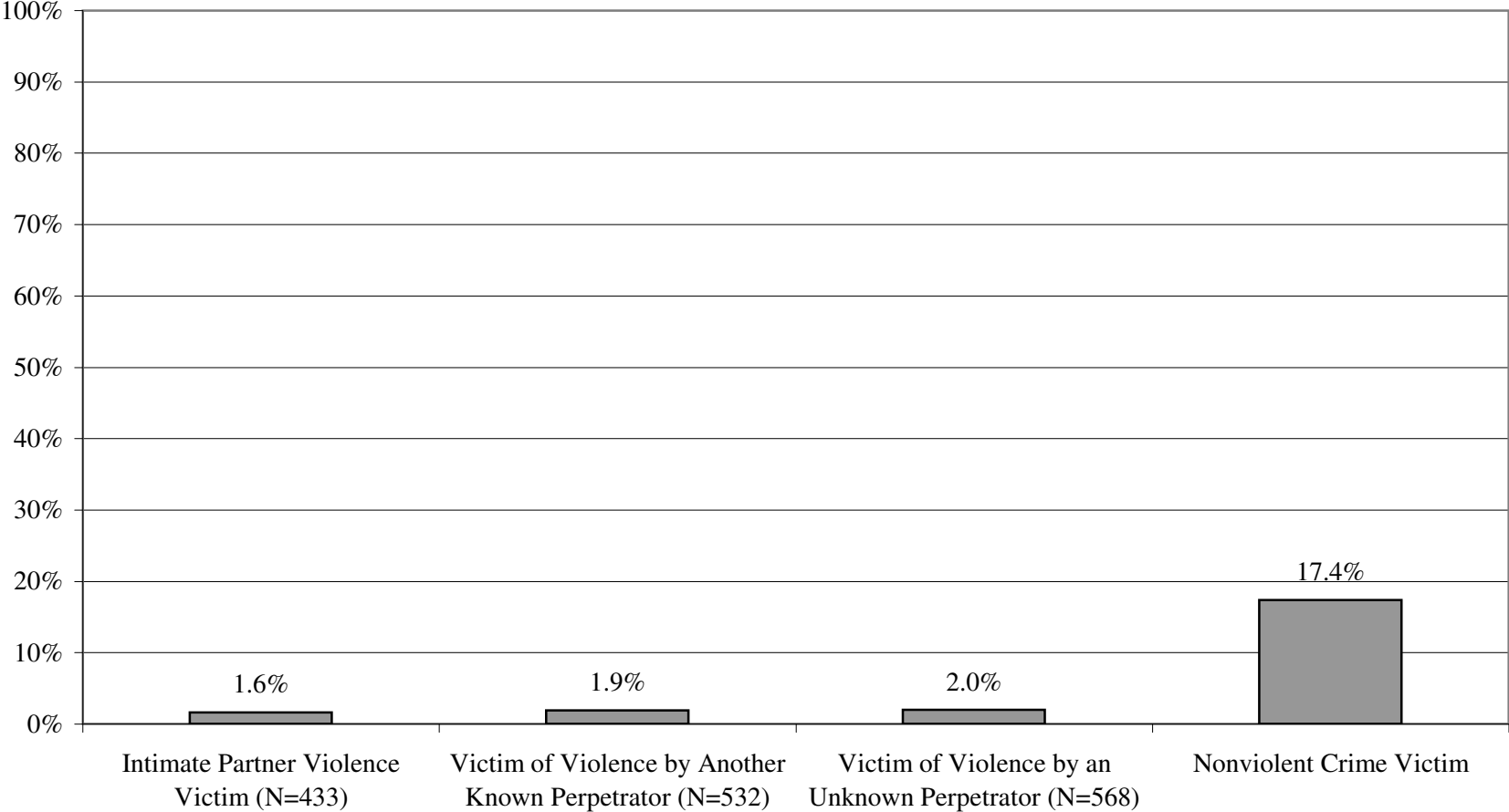
Example: Coding of Intimate Partner Victimization for a Hypothetical Victim

Number of IPV Incidents Reported	Interview	<u>t0</u>	t1	t2	t3	t4	t5	<u>t6</u>
			2	0	.	1	0	1

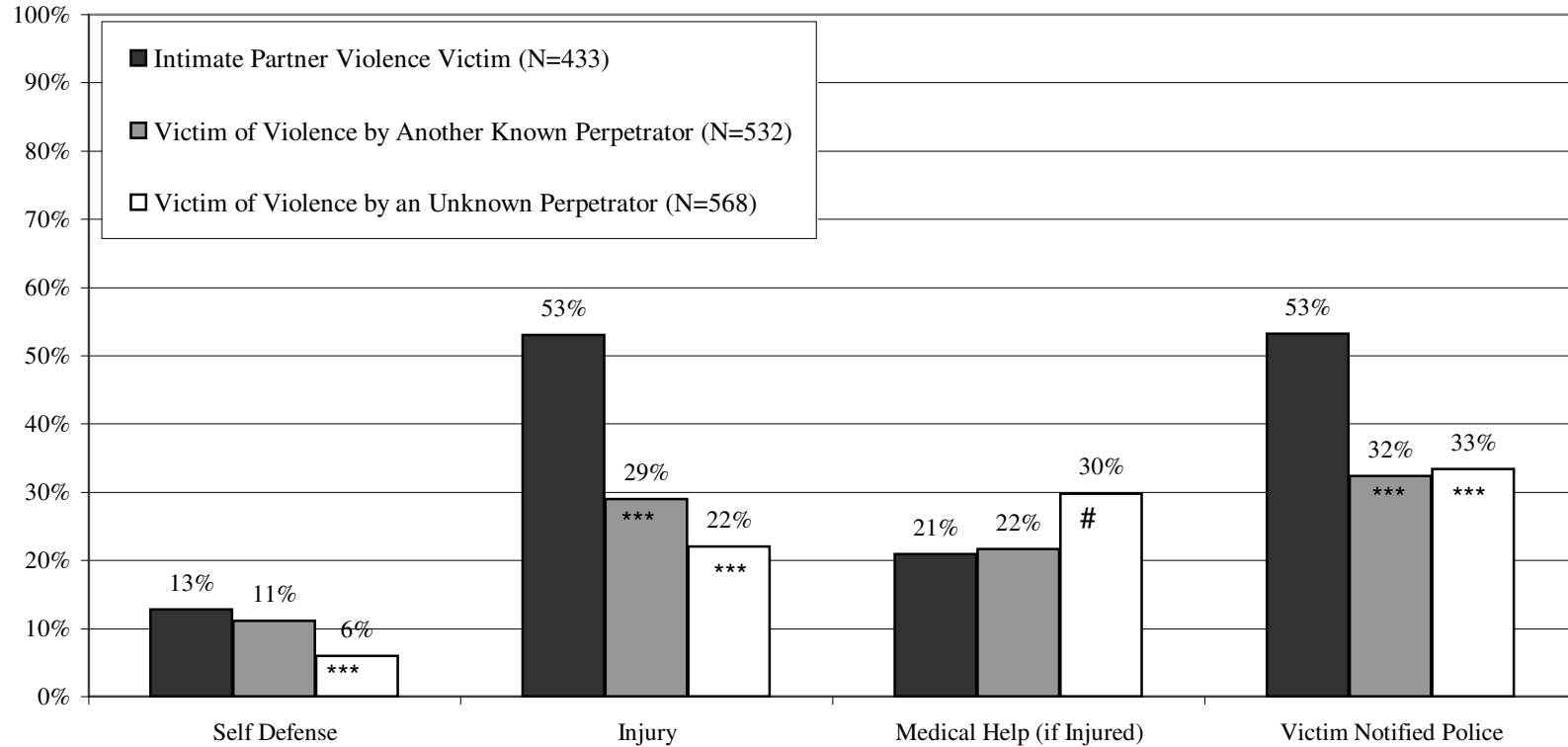
  

Coding of Recent and Previous IPV	Interview	<u>t0</u>	t1	t2	t3	t4	t5	<u>t6</u>	
	<u>Recent:</u>		2	0	0	1	0	1	0
	<u>Previous:</u>		0	2	1	1	1	0.75	0.80

**Figure 4.1: Percent of All Women Age 16-49 Ever Reporting Victimization by Crime Category**



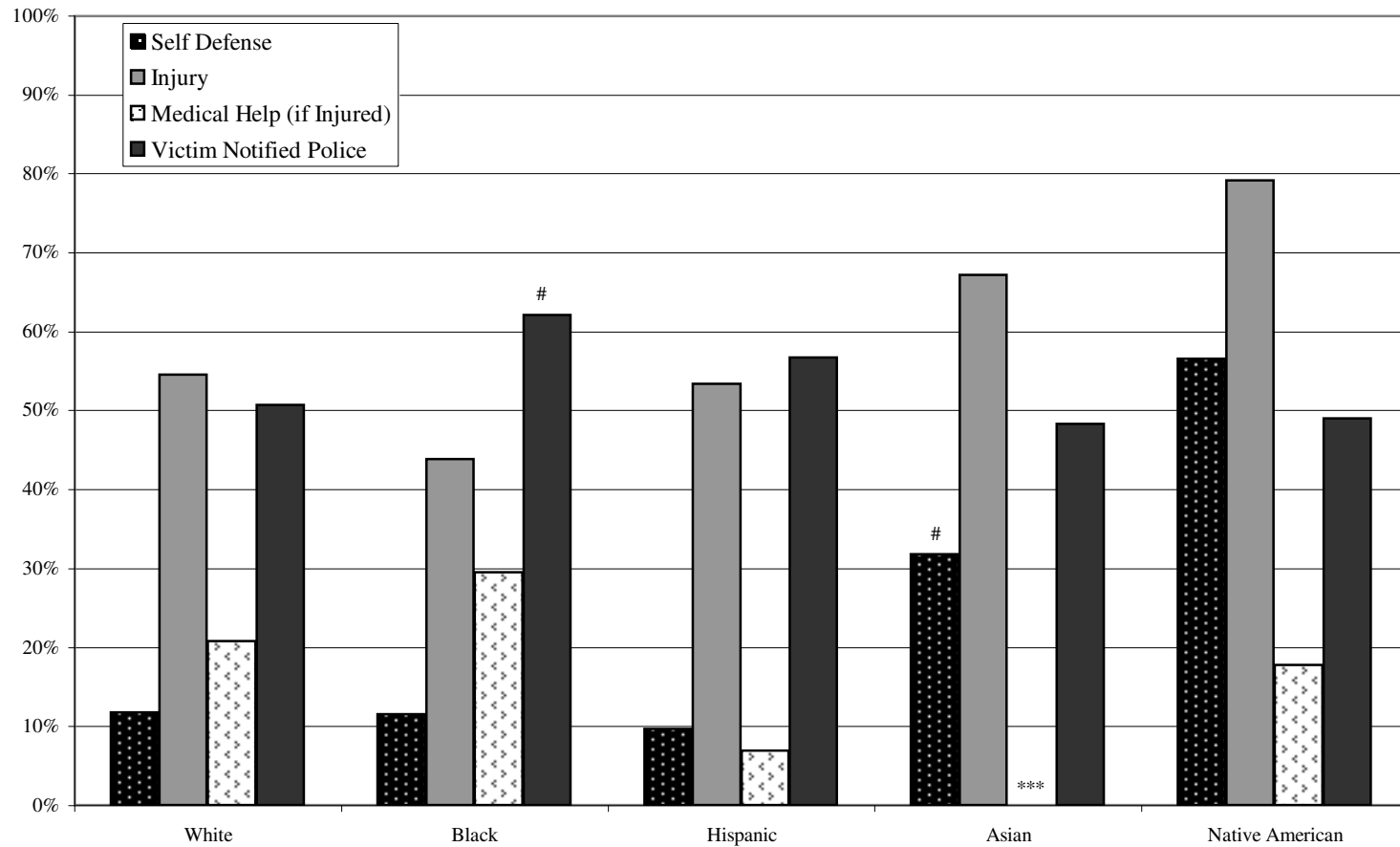
**Figure 4.2: Percentage of Violent Crime Victims Age 16-49 Ever Reporting Self-Defensive Action, Injury, Seeking Medical Help and Notifying the Police by Victimization Type**



# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note that all tests of significant difference are in reference to victims of intimate partner violence.

Figure 4.3: Percentage of Intimate Partner Violence Victims Age 16-49 Ever Reporting Self-Defensive Action, Injury, Seeking Medical Help and Notifying the Police by Race



# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note that all tests of significant difference are in reference to white victims of intimate partner violence.



Table 2.1: Previous Findings from Nationally Representative Samples on the Prevalence of Intimate Partner Violence

Researchers	Study	Sample
Klaus and Rand (1984)	1973-1981 National Crime Survey (nationally representative) collected by the U.S. Census Bureau for the Bureau of Justice Statistics.	All Interviews with Householders age 12 and over.
Morse (1995)	1983, 1986, 1989 and 1992 waves of the nationally representative National Youth Survey (longitudinal) currently collected by the Institute for Behavioral Science and the Institute for Behavioral Genetics at the University of Colorado, Boulder. (see <a href="http://www.colorado.edu/ibs/NYSFS/index.html">http://www.colorado.edu/ibs/NYSFS/index.html</a> )	Married or cohabiting men and women. In 1983, n=477 (177 men, 300 women) 18-24 year olds; in 1986, n=723 (321 men, 402 women) 21-27 year olds; in 1989, n=959 (453 men, 506 women) 24-30 year olds; in 1992, n=1,001 (490 men, 511 women) 27-33 year olds. Respondent reports on perpetration and victimization so that rates are calculated for couples based on one partner's reports.
Rennison (2003) <sup>a</sup>	2001 National Crime Victimization Survey (nationally representative) collected by the U.S. Census Bureau for the Bureau of Justice Statistics.	All Interviews with Householders age 12 and over.
Sraus, et al. (1980)	1975 National Family Violence Survey (nationally representative); collected by Response Analysis Corporation for the Family Research Laboratory at University of New Hampshire (see: Straus and Kantor 1994).	Rates based on responses by 2,143 married/cohabiting adults age 18 and up.
Straus and Gelles (1990) <sup>b</sup>	1985 National Family Violence Resurvey (nationally representative); collected by Louis Harris Associates for the Family Research Laboratory at University of New Hampshire (see: Straus and Kantor 1994).	Rates based on responses by 3,520 married/cohabiting adults.
Tjaden and Thoennes (2000)	1995-1996 National Violence Against Women Survey (nationally representative); co-sponsored by the National Institute of Justice and the Center for Disease Control through a grant to the Center for Policy Research.	16,000 (8,000 men and 8,000 women aged 18 or older)
Zlotnick, et al. (1998)	1987-1988 National Survey of Families and Households (nationally representative); jointly funded by the National Institute of Child Health and Human Development and the National Institute on Aging; collected at the Center for Demography and Ecology, University of Wisconsin-Madison (see: <a href="http://www.ssc.wisc.edu/nsfh/">http://www.ssc.wisc.edu/nsfh/</a> ).	7,506 Married/Cohabiting Respondents (50.1% female; 49.9% male; mean age: 44.83 years (std. error: 0.346).

<sup>a</sup>Rennison's report presents rates for 1993-2001. In 1993, the overall rate of intimate partner violence was 0.58% (0.16% of men and 0.98% of women reported violent victimization by an intimate. In 1994, the overall rate was 0.55% (0.17% for men and 0.91% for women). In 1995, the overall rate was 0.49% (0.11% for men and 0.85% for women). In 1996, the overall rate was 0.47% (0.14% for men and 0.78% for women). In 1997, the overall rate was 0.43% (0.10% for men and 0.75% for women). In 1998, the overall rate was 0.48% (0.15% for men and 0.78% for women). In 1999, the overall rate was 0.35% (0.11% for men and 0.58% for women). In 2000, the overall rate was 0.28% (0.08% for men and 0.50% for women).

<sup>b</sup>Rates presented for the 1985 survey are based upon computations by Straus and Gelles (1990) that are based upon a subsample that is comparable to the 1975 sample. Divorced/separated respondents are excluded as are cases from state, Black and Hispanic oversamples. Further cases of violence measured in 1985 but not 1975 are excluded. However, the rates for the 6,002 married/cohabiting households included in 1985 are similar without these exclusions: 16.1% of couples report any violence in the past year; 11.6% of husbands were violent as were 12.4% of wives.

Table 2.1: Previous Findings from Nationally Representative Samples on the Prevalence of Intimate Partner Violence (continued)

Researchers	Reference Period	Study Design/ Methods	Prevalence Findings
Klaus and Rand (1984)	Past 6 Months	Crime Survey (In person/Telephone)	Average yearly victimization rates calculated for violence perpetrated by a spouse or ex-spouse. Overall rate: 0.15% (0.02% for men and 0.27% for women).
Morse (1995)	Preceding 12 Months	"Structured, face-to-face, confidential interviews"	Percent of married or cohabiting respondents reporting any couple violence: 1983: 54.5% (Male Perpetrated: 36.7%, Female Perpetrated: 48.0%), in 1986 : 45.9% (Male Perpetrated: 31.4%, Female Perpetrated: 41.4%), in 1989: 39.8% (Male Perpetrated: 27.9%, Female Perpetrated: 35.0%), in 1992: 32.4% (Male Perpetrated: 20.2%, Female Perpetrated: 27.9%).
Rennison (2003) <sup>a</sup>	Past 6 Months	Crime Survey (In person/Telephone)	0.3% of U.S. population aged 12+ reported at least one incident of intimate partner assault: 0.5% of women and 0.09% of men.
Sraus, et al. (1980)	Past Year	Conflict Tactics Scale (face-to-face survey)	16.0% of married/cohabiting couples experienced violence; 12.1% of husbands were violent and 11.6% of wives were violent.
Straus and Gelles (1990) <sup>b</sup>	Past Year	Conflict Tactics Scale (telephone survey)	15.8% of married/cohabiting couples experienced violence; 11.3% of husbands were violent and 12.1% of wives were violent.
Tjaden and Thoennes (2000)	Lifetime and past 12 months	Telephone Survey About "Personal Safety"	Lifetime: Nearly 25% of women, 7.6% of men raped/physically assaulted; Past 12 months: 1.5% of women, 0.9% of men raped/physically assaulted.
Zlotnick, et al. (1998)	Past Year	Survey (personal interview; portions self-administered)	3.2% of couples reported physical victimization without injury (3.4% of women, 2.9% of men); 1.1% of couples reported physical victimization with injury (1.6% of women, 0.6% of men).

<sup>a</sup>Rennison's report presents rates for 1993-2201. In 1993, the overall rate of intimate partner violence was 0.58% (0.16% of men and 0.98% of women reported violent victimization by an intimate. In 1994, the overall rate was 0.55% (0.17% for men and 0.91% for women). In 1995, the overall rate was 0.49% (0.11% for men and 0.85% for women). In 1996, the overall rate was 0.47% (0.14% for men and 0.78% for women). In 1997, the overall rate was 0.43% (0.10% for men and 0.75% for women). In 1998, the overall rate was 0.48% (0.15% for men and 0.78% for women). In 1999, the overall rate was 0.35% (0.11% for men and 0.58% for women). In 2000, the overall rate was 0.28% (0.08% for men and 0.50% for women).

<sup>b</sup>Rates presented for the 1985 survey are based upon computations by Straus and Gelles (1990) that are based upon a subsample that is comparable to the 1975 sample. Divorced/separated respondents are excluded as are cases from state, Black and Hispanic oversamples. Further cases of violence measured in 1985 but not 1975 are excluded. However, the rates for the 6,002 married/cohabiting households included in 1985 are similar without these exclusions: 16.1% of couples report any violence in the past year; 11.6% of husbands were violent as were 12.4% of wives.

Table 3.1: Number of Women, Mean Number of Interviews, and Distribution of the Number of Interviews Completed for Women Age 16-49 by Victimization Status; Percentage and Number of Respondents Age 16-49 Interviewed During Each Interview Period by Victimization Status<sup>a</sup>

	Number of Women <sup>a</sup>	Mean Number of Interviews	Percent and Number of Women with 1-7 Valid Interviews							
			1	2	3	4	5	6	7	
All Women Age 16-49	27,765	3.13								
Percent	--	--	34.5	18.3	11.0	8.0	6.6	7.5	14.1	
Number of Interviews	--	--	9,102	4,929	3,043	2,219	1,888	2,217	4,367	
Victims of Intimate Partner Violence	433	3.10								
Percent	--	--	31.6	20.6	11.5	10.2	6.8	6.9	12.4	
Number of Interviews	--	--	129	90	50	39	30	33	62	
Victims of Violence by a non-Intimate, Known Offender	567	3.54								
Percent	--	--	24.5	18.3	13.5	9.4	8.8	8.4	17.2	
Number of Interviews	--	--	129	98	75	53	52	50	110	
Victims of Stranger Violence	643	3.72								
Percent	--	--	18.7	18.3	16.1	12.4	6.6	9.4	18.5	
Number of Interviews	--	--	115	113	98	81	43	65	128	
Victims of Nonviolent Crime	5,674	3.88								
Percent	--	--	19.7	17.2	12.4	10.0	8.9	10.8	21.0	
Number of Interviews	--	--	1,049	931	695	556	510	628	1,305	
Nonvictims	21,244	2.93								
Percent	--	--	38.5	18.5	10.5	7.4	6.0	6.7	12.3	
Number of Interviews	--	--	7,809	3,836	2,236	1,581	1,319	1,525	2,938	

Note: The means and percentage values are weighted, but the number of women and number of interviews are not.

<sup>a</sup>Women may be victims of more than one crime type. Therefore the sum of women in each victimization category plus those categorized as nonvictims exceeds the total number of women.

Table 3.2: Percentage and Number of Respondents Age 16-49 Interviewed During Each Interview Period by Victimization Status<sup>a</sup>

	Percent and Number of Women for each Interview Period						
	t0	t1	t2	t3	t4	t5	t6
<b>All Women Age 16-49</b>							
<i>(Total n=27,765)</i>							
Percent of Women Interviewed	51.5%	48.6%	46.6%	45.1%	44.8%	44.4%	44.2%
Number of Women Interviewed	14,295	13,491	12,947	12,530	12,432	12,316	12,265
<b>Victims of Intimate Partner Violence</b>							
<i>(Total n=433)</i>							
Percent of Women Interviewed	52.0%	49.0%	46.0%	46.7%	48.7%	41.8%	38.6%
Number of Women Interviewed	225	212	199	202	211	181	167
<b>Victims of Violence by a non-Intimate, Known Offender</b>							
<i>(Total n=567)</i>							
Percent	59.4%	56.6%	56.4%	51.3%	53.8%	48.0%	43.4%
Number of Women Interviewed	337	321	320	291	305	272	246
<b>Victims of Stranger Violence</b>							
<i>(Total n=643)</i>							
Percent of Women Interviewed	58.6%	59.9%	56.5%	56.1%	52.9%	50.2%	48.4%
Number of Women Interviewed	377	385	363	361	340	323	311
<b>Victims of Nonviolent Crime</b>							
<i>(Total n=5,674)</i>							
Percent of Women Interviewed	60.1%	60.8%	59.6%	58.2%	55.9%	54.4%	50.7%
Number of Women Interviewed	3,408	3,447	3,384	3,303	3,173	3,084	2,874
<b>Nonvictims</b>							
<i>(Total n=21,244)</i>							
Percent of Women Interviewed	49.1%	45.3%	43.1%	41.6%	41.7%	41.8%	42.6%
Number of Women Interviewed	10,428	9,619	9,153	8,834	8,866	8,870	9,054

<sup>a</sup>Women may be victims of more than one crime type. Therefore the sum of women in each victimization category plus those categorized as nonvictims exceeds the total number of women.

Table 3.3: Multivariate Models

Outcome	Categories of Key Predictors	Sample	Model
Models Describing Intimate Partner Victimization			
Model A: Occurrence of Intimate Partner Violence	Report of Recent Intimate Partner Violence <sub>t</sub> = $f(\text{Race}_t, \text{Class}_t, \text{Demographic Characteristics}_t)$	All Interviews with All Women	Logistic Regression
Model B: Self-Defense	Self-Defense <sub>t</sub> = $f(\text{Race}_t, \text{Class}_t, \text{Demographic Characteristics}_t, \text{Interview Characteristics}_t, \text{Incident Characteristics}^a)$	All Woman-Interviews with Violent Crime Victimization at Time t; and separately for victims of intimate partner violence.	Logistic Regression
Model C: Injury	Injury <sub>t</sub> = $f(\text{Race}_t, \text{Class}_t, \text{Demographic Characteristics}_t, \text{Interview Characteristics}_t, \text{Incident Characteristics}^a)$	All Woman-Interviews with Violent Crime Victimization at Time t; and separately for victims of intimate partner violence.	Logistic Regression
Model D: If Injured, Sought Medical Help	Medical Help <sub>t</sub> = $f(\text{Race}_t, \text{Class}_t, \text{Demographic Characteristics}_t, \text{Interview Characteristics}_t, \text{Incident Characteristics}^a)$	All Woman-Interviews with Violent Crime Victimization at Time t; and separately for victims of intimate partner violence.	Logistic Regression
Model E: Victim Notified Police	Police Notification <sub>t</sub> = $f(\text{Race}_t, \text{Class}_t, \text{Demographic Characteristics}_t, \text{Interview Characteristics}_t, \text{Incident Characteristics}^a)$	All Woman-Interviews with Crime Victimization at Time t; and separately for victims of intimate partner violence.	Logistic Regression

Table 3.3: Multivariate Models (continued)

Outcome	Categories of Key Predictors	Sample	Model
Models Predicting Focal Outcomes			
Model 1: Marital Dissolution/Woman's Move/Household Move/No change)	Marital Dissolution/Individual Move/Household Move <sub>t+1</sub> = $f(\text{Recent and Prior Victimizations}_t, \text{Race}_t, \text{Class}_t, \text{Intervening Variables}^a, \text{Demographic Characteristics}_t, \text{Interview Characteristics}_t, \text{Incident Characteristics}^a)$	All Wives Living with their Husband at Time t; All Violent Crime Victims Living with their Husband at Time t	Modelled as Competing Risks
Model 2: Individual or Household Move	Individual/Household Move <sub>t+1</sub> = $f(\text{Recent and Prior Victimizations}_t, \text{Race}_t, \text{Class}_t, \text{Intervening Variables}^a, \text{Demographic Characteristics}_t, \text{Interview Characteristics}_t, \text{Incident Characteristics}^a)$	All Unmarried Women at Time t; All Unmarried Violent Crime Victims at Time t	Discrete Time Event History
Model 3: Entry into the Labor Force	Entry into the Labor Force <sub>t</sub> = $f(\text{Recent and Prior Victimizations}_t, \text{Race}_t, \text{Class}_t, \text{Intervening Variables}^a, \text{Demographic Characteristics}_t, \text{Interview Characteristics}_t, \text{Incident Characteristics}^a)$	All Women Unemployed at Time t; All Violent Crime Victims Unemployed at Time t	Discrete Time Event History
Model 4: Exit from the Labor Force	Exit from the Labor Force <sub>t</sub> = $f(\text{Recent and Prior Victimizations}_t, \text{Race}_t, \text{Class}_t, \text{Intervening Variables}^a, \text{Demographic Characteristics}_t, \text{Interview Characteristics}_t, \text{Incident Characteristics}^a)$	All Women Employed at Time t; All Violent Crime Victims Employed at Time t	Discrete Time Event History
Model 5: Subsequent Intimate Partner Violence	Subsequent Assault <sub>t+1</sub> = $f(\text{Prior Intimate Victimizations}, \text{Race}, \text{Class}, \text{Intervening Variables}^a, \text{Employment Consequences}, \text{Marital Dissolution}, \text{Demographic Characteristics}, \text{Interview Characteristics}, \text{Incident Characteristics}^a)$	All Intimate Partner Violence Victims from Time of First Victimization	Discrete Time Event History

<sup>a</sup>Separate Models are run to assess the role of incident characteristics. These models are restricted to victims of violent crime and all of their interviews from the time of first victimization are included.

Note: Appendix C details each of the variables in the indicated categories.

Table 4.1: Prevalence of Intimate Partner Violence Victimization per 1,000 Women by Age

	Weighted IPV Prevalence/1,000 Women (Unweighted #Victims/#Women)
All Women	11.6 (463/42,765)
<b>Age at First Interview</b>	
12-15	2.3 (4/1,873)
16-19	11.7 (29/2,944)
20-24	21.5 (101/4,548)
25-34	17.7 (153/8,826)
35-49	13.6 (152/11,567)
50-64	2.9 (21/6,705)
65+	0.4 (3/6,302)

Table 4.2: Prevalence of Intimate Partner Violence Victimization by Race and Class

	Weighted IPV Prevalence/1,000 Women (Unweighted #Victims/#Women)	Weighted IPV Prevalence/1,000 Women Age 16-49 (Unweighted #Victims/#Women)
All Women	11.6 (463/42,765)	16.2 (433/27,765)
<b>Race</b>		
White, non-Hispanic	11.8 (334/30,584)	17.3 (312/19,041)
Black, non-Hispanic	13.7 (73/5,418)	17.8 (69/3,727)
Hispanic	8.8 (41/4,828)	10.5 (37/3,603)
Asian, non-Hispanic	2.2 (4/1,656)	3.0 (4/1,200)
Native American, non-Hispanic	52.6 (10/189)	76.9 (10/128)
<b>Education</b>		
Less than High School Degree	10.5 (53/5,901)	22.6 (43/2,115)
High School Degree	11.9 (96/8,543)	18.1 (90/5,305)
At Least Some College	10.0 (100/10,161)	12.7 (95/7,428)
<b>Annual Household Income</b>		
Low Income (Under \$15,000)	19.8 (182/9,310)	29.1 (173/5,668)
\$15,000-\$74,999	10.1 (218/23,358)	13.9 (204/15,615)
High Income (\$75,000 or More)	5.0 (22/4,545)	6.5 (19/3,048)
<b>Public Housing</b>	19.9 (20/1,031)	28.7 (19/619)

Note: Class characteristics refer to those reported at first interview.



Table 4.3: Relationship Between Victim and Offender and Nature of Intimate Partner Victimization for Women Age 16-49 Reporting at Least One Intimate Partner Victimization

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***Percentage of Intimate Partner Violence Victims with One or More Assaults by:***

Boyfriend or Ex-Boyfriend	58.2%
Husband	28.1%
Ex-Husband	15.6%

***Percentage of Intimate Partner Violence Victims with One or More Assaults where Type of Crime is:***

Simple Assault Completed with Injury	33.1%
Assault without Weapon without Injury	21.7%
Verbal Threat of Assault	18.8%
Completed Aggravated Assault with Injury	13.2%
Completed Rape	5.5%
Completed Robbery without Injury	4.2%
Threatened Assault with Weapon	3.4%
Completed Robbery with Injury from Minor Assault	3.0%
Attempted Aggravated Assault with Weapon	2.8%
Completed Burglary, Unlawful Entry without Force	2.3%
Attempted Robbery without Injury	2.1%
Completed Burglary, Forcible Entry	1.9%
Attempted Rape	1.4%
Attempted Robbery with Injury from Minor Assault	0.8%
Attempted Forcible Entry	0.8%
Sexual Assault without Injury	0.7%
Attempted Robbery with Injury from Serious Assault	0.7%
Completed Robbery with Injury from Serious Assault	0.5%
Sexual Attack with Minor Assault	0.4%
Sexual Attack with Serious Assault	0.4%
Unwanted Sexual Contact without Force	0.2%
Verbal Threat of Rape	0.0%
Verbal Threat of Sexual Assault	0.0%

---

Note: Relationship and Crime Categories Sum to greater than 100% because a woman could report multiple incidents.

Table 4.4: Percentage Distribution for Dependent Variables by Crime Victimization Status for Women Age 16-49

	All Women Age 16-49	Intimate Partner Violence Victims	Victims of Violence by a Known, non- Intimate	Victims of Stranger Violence	Nonviolent Crime Victims	Nonvictims
<i>Dependent Variables</i>	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)
<b>Exiting the Relationship</b>						
Percent of Women Ever Reporting						
Divorce	1.16%	7.87%	0.99% ***	1.07% ***	1.64% ***	0.92% ***
Individual Residential Mobility	0.02%	0.00%	0.00%	0.00%	0.00%	0.02% *
Household Mobility	22.96%	28.73%	25.03%	24.21% #	23.16% **	22.17% ***
<b>Employment Consequences</b>						
Percent of Women Ever Reporting						
Entry into the Labor Force	9.43%	11.36%	14.83%	14.00%	13.62%	8.19% *
Exit From the Labor Force	8.77%	12.70%	13.12%	15.07%	13.87%	7.27% **
<b>Percent of Intimate Partner Violence Victims Ever Reporting Subsequent Intimate Partner Assault</b>	--	25.59%	--	--	--	--
<b>Sample Size</b>	27,765	433	532	568	4988	21,244

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

<sup>1</sup>Categories will not sum to 100% , as missing cases are not shown.

Note that the crime categories are mutually exclusive so that the significance of differences could be tested. A woman victimized by an intimate partner will not appear in any other category regardless of how many types of victimizations she experienced (and self-defense, injury and help seeking refer only to intimate partner victimizations for such women), a woman victimized violently by a known, non-intimate offender, but not also by an intimate, will show up as a victim in the violence by a known, non-intimate category, but not in another category regardless of how many victimizations were experienced, and so on. All significance tests assess differences between victims of intimate partner violence and other groups.

Table 4.5: Mean (Standard Deviation) / Percentages for Race, Class and Control Variables by Crime Victimization Status for Women Age 16-49

	All Women Age 16-49	Intimate Partner Violence Victims	Victims of Violence by a Known, non- Intimate	Victims of Stranger Violence	Nonviolent Crime Victims	Nonvictims
	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)
<b>Minority Race</b>	32.43%	28.00%	24.90%	33.10%	32.21%	32.75% *
<b>Education<sup>1</sup></b>						
Less than 12 Years	7.46%	10.40%	12.39%	10.00%	8.22%	7.04% #
12 Years (Reference/Omitted Category)	17.09%	19.10%	18.78%	18.55%	19.23%	16.49%
More than 12 Years	24.56%	19.29%	23.86%	29.39% ***	30.89% ***	23.14% #
<b>Household Income (Year 2000 Dollars)</b>	\$45,068.78 (\$42,776.81)	\$30,384.05 (\$31,731.45)	\$38,348.93 *** (\$41,335.13)	\$42,224.50 *** (\$39,398.24)	\$46,653.35 *** (\$43,197.48)	\$45,262.23 *** (\$49,923.23)
<b>Public Housing Resident</b>	2.39%	4.23%	6.13%	2.46%	2.82% #	2.16% *
<b>Intervening Variables</b>						
Percent of Victims Ever Reporting Self-Defense	--	12.84%	11.15%	5.97% ***	0.00%	--
Percent of Victims Ever Reporting Injury	--	53.06%	29.01% ***	22.06% ***	0.00%	--
Percent of Injured Victims Ever Reporting Seeking Medical Attention for Injuries	--	20.92%	21.72%	29.76%	--	--
Percent of Victims Ever Reporting They Notified the Police	--	53.20%	32.39% ***	33.38% #	31.94% ***	--
<b>Demographic Characteristics</b>						
Age (in Years)	30.8 (9.3)	28.4 (8.3)	29.2 # (9.9)	29.5 ** (9.1)	31.4 (9.1)	30.8 *** (9.4)
Marital Status <sup>1</sup>						
Married	46.04%	19.40%	27.62% **	37.67% ***	45.27% ***	47.45% ***
Divorced	13.82%	36.97%	18.56% ***	16.50% ***	16.46% ***	12.56% ***
Single	39.36%	43.63%	53.17% *	45.47%	37.77% **	39.12% #
Employed	65.52%	64.12%	61.63%	65.28%	67.88%	65.12%
Attending School	14.18%	11.51%	12.34%	15.24%	14.18%	14.26%
Tenure (in Months)	45.5 (70.8)	31.3 (55.7)	44.8 ** (69.0)	46.5 *** (69.8)	48.4 *** (69.4)	45.1 *** (71.4)
Home Ownership	48.47%	37.60%	45.98% **	44.26% *	50.28% ***	48.46% ***
Multiple Unit Dwelling	37.92%	40.52%	38.33%	43.18%	37.01%	37.93%
Urbanicity	78.99%	76.75%	76.47%	88.25% ***	84.12% *	77.71%
Household Composition						
Lone Adult	14.23%	37.36%	19.32% ***	18.13% ***	16.37% ***	13.03% ***
Two Adults (Reference/Omitted Category)	48.06%	30.67%	38.41% **	46.14% ***	46.41% ***	49.09% ***
Many Adults	37.71%	31.97%	42.27% **	35.73%	37.22% *	37.88% *
Number of Children	0.8 (1.0)	1.1 (1.1)	0.8 *** (1.1)	0.8 *** (1.1)	0.8 *** (1.0)	0.7 *** (1.0)

Table 4.5: Mean (Standard Deviation) / Percentages for Race, Class and Control Variables by Crime Victimization Status for Women Age 16-49 (continued)

	All Women Age 16-49	Intimate Partner Violence Victims	Victims of Violence by a Known, non- Intimate	Victims of Stranger Violence	Nonviolent Crime Victims	Nonvictims
	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)
<b>Incident Characteristics</b>						
Percent of Women Ever Reporting Police Notification by Someone Other than the Victim	--	15.24%	21.85% **	25.97% ***	14.20%	
Percent of Women Ever Reporting Perpetrator Arrested if Police Ever Notified	--	40.07%	26.13% ***	23.25% ***	7.48% ***	--
Percent of Women Ever Reporting Weapon Use	--	18.07%	22.87% #	31.59% ***	0.00% ***	--
Percent of Women Ever Reporting Perpetrator Under Influence of Drugs/Alcohol	--	44.87%	32.84% **	22.26% ***	1.62% ***	--
Percent of Women Ever Reporting Series Incident	--	8.94%	5.46% #	2.98% ***	1.02% ***	--
<b>Sample Size</b>	27,765	433	532	568	4988	21,244

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

<sup>1</sup>Categories will not sum to 100% , as missing cases are not shown.

Note that the crime categories are mutually exclusive so that the significance of differences could be tested. A woman victimized by an intimate partner will not appear in any other category regardless of how many types of victimizations she experienced (and self-defense, injury and help seeking refer only to intimate partner victimizations for such women), a woman victimized violently by a known, non-intimate offender, but not also by an intimate, will show up as a victim in the violence by a known, non-intimate category, but not in another category regardless of how many victimizations were experienced, and so on. All significance tests assess differences between victims of intimate partner violence and other groups..

Multivariate models also include flags for race missing, education missing, income imputed, income missing, public housing missing, marital status imputed, marital status missing, employed imputed, employed missing, attending school imputed, attending school missing, tenure imputed, multiple unit dwelling missing.

Table 4.6: Results from Logistic Regression Models Predicting Any Recent Intimate Assault Among All Women Age 16-49 (Standard Error Adjusted for Sampling)

	Coefficient	Standard Error	Odds Ratio
<b>Average Previous Intimate Partner Violence</b>	0.443	0.131	1.557 **
<b>Minority Status</b>	-0.543	0.142	0.581 ***
<b>Education</b>			
Less than 12 Years	0.022	0.196	1.023
12 Years (Reference/Omitted Category)	--		
More than 12 Years	-0.075	0.162	0.927
<b>Household Income (10,000 Year 2000 Dollars)</b>	-0.005	0.002	0.995 *
<b>Public Housing Resident</b>	-0.263	0.290	0.769
<b>Demographic Characteristics</b>			
Age (Years)	-0.053	0.008	0.948 ***
Marital Status			
Married	-0.920	0.222	0.399 ***
Divorced	1.350	0.166	3.856 ***
Single (Reference/Omitted Category)	--		
Employed	0.044	0.117	1.045
Household Composition			
Lone Adult	0.933	0.146	2.542 ***
Two Adults (Reference/Omitted Category)	--		
Many Adults	0.450	0.197	1.569 *
Number of Children	0.285	0.050	1.330 ***
<b>Interview Characteristics</b>			
Interview Period	-0.029	0.037	0.971
Interview Conducted Via Proxy	-1.513	0.706	0.220 *
Unbounded Interview	0.767	0.130	2.152 ***
<b>F(24, 141)</b>	39.98 ***		
<b>Sample Size</b> (Woman-Interviews)		90,276	

† indicates that the cell size was too small to produce reliable estimates.

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes flags for race missing, education missing, income imputed from household data, marital status imputed, marital status missing, employed imputed, employed missing. There were insufficient cases where income was imputed to the mean to include that control.

Table 4.7: Results from Logistic Regression Models Predicting Any Recent Intimate Assault Among All Women Age 16-49 that Include Race\*Class Interactions (Standard Error Adjusted for Sampling)

	Coefficient	Standard Error	Odds Ratio
<b>Minority Status</b>	0.022	0.215	1.022
<b>Education</b>			
Less than 12 Years	0.341	0.228	1.407
12 Years (Reference/Omitted Category)	--		
More than 12 Years	-0.092	0.172	0.912
<b>Household Income (10,000 Year 2000 Dollars)</b>	-0.003	0.002	0.997
<b>Public Housing Resident</b>	0.128	0.378	1.137
<b>Interactions</b>			
Minority*Less than 12 Years of Education	-1.055	0.423	0.348 *
Minority*More than 12 Years of Education	0.175	0.287	1.191
Minority*Household Income	-0.000	0.000	1.000 *
Minority*Public Housing Resident	-1.001	0.636	0.368
<b>F(28, 137)</b>	34.36 ***		
<b>Sample Size</b> (Woman-Interviews)		90,276	

† indicates that the cell size was too small to produce reliable estimates.

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes prior intimate partner victimization and all controls included in Table 4.6.

Table 4.8: Odds Ratios from Logistic Regression Models Predicting Intervening Variables (Past 6 Months) For All Female Violent Crime Victims Age 16-49

	Violent Crime Victims		Injured Violent Crime Victims	Violent Crime Victims
	Self-Defense	Injury	If Injured, Medical Help Sought	Victim Contacted Police
	(1)	(2)	(3)	(4)
<b>Victimizations</b>				
Recent Intimate Partner Violence	1.145	1.591 ***	0.985	1.429 ***
Previous Intimate Partner Violence	1.274	1.041	0.061	0.961
Recent Violence by Other Known Offender	1.257 #	1.148	0.962	1.203 *
Previous Violence by Other Known Offender	1.080	1.020	0.765	1.082
Recent Violence by a Stranger	0.974	0.911	0.912	1.205 ***
Previous Violence by a Stranger	0.940	1.622	0.696	1.538
<b>Minority Race</b>	1.089	0.991	1.212	1.086 #
<b>Education</b>				
Less than 12 Years	1.508	0.881	0.917	0.755
12 Years (Reference/Omitted Category)	--	--	--	--
More than 12 Years	0.831	0.652 *	0.715	0.798
<b>Household Income (10,000 Year 2000 Dollars)</b>	1.035	0.985	0.923	0.980
<b>Public Housing</b>	0.435	0.807	0.507	1.503
<b>Intervening Variables</b>				
Self-Defense	--	2.730 ***	0.785	0.903
Injury	2.720 ***	--	--	1.077
Injured and Sought Medical Attention for Injuries	--	--	--	0.691 #
Victim Notified the Police	--	--	0.781	--

Table 4.8: Odds Ratios from Logitsic Regression Models Predicting Intervening Variables (Past 6 Months) For All Female Violent Crime Victims Age 16-49 (continued)

	Violent Crime Victims		Injured Violent Crime Victims	Violent Crime Victims
	Self-Defense	Injury	If Injured, Medical Help Sought	Victim Contacted Police
			(1)	(2)
<b>Demographic Characteristics</b>				
Age (Years)	1.010	0.993	0.978	1.004
Marital Status				
Married	0.534 *	0.795	1.628	1.009
Divorced	0.722	1.024	1.512	1.578 **
Single	(Reference/Omitted Category)	--	--	--
Employed	0.847	0.858	0.830	0.850
Household Composition				
Lone Adult	0.831	1.207	1.569	1.330 *
Two Adults	(Reference/Omitted Category)	--	--	--
Many Adults	1.055	1.113	1.486	0.717 **
Number of Children	1.076	0.933	0.789 *	1.173 **



Table 4.8: Odds Ratios from Logitsic Regression Models Predicting Intervening Variables (Past 6 Months) For All Female Violent Crime Victims Age 16-49 (continued)

	Violent Crime Victims		Injured Violent Crime Victims	Violent Crime Victims
	Self-Defense	Injury	If Injured, Medical Help Sought	Victim Contacted Police
	(1)	(2)	(3)	(4)
<b>Interview Characteristics</b>				
Interview Period	0.967	1.070 #	0.983	1.046
Interview Conducted Via Proxy	†	1.963	5.399 #	1.194
Unbounded Interview	1.784 *	1.318 *	1.373	1.065
<b>Incident Characteristics</b>				
Police Notification by Someone Other than the Victim	--	--	2.383 **	--
Perpetrator Arrested	--	--	2.473 ***	--
Weapon Use	1.086	1.117	1.776 *	1.395 **
Perpetrator Under Influence of Drugs/Alcohol	1.661 **	1.406 **	0.708	1.170
Series Incident	0.412	0.390 #	1.016	0.229 *
<b>-2 Log Likelihood</b>	1000.103 ***	1976.974 ***	517.436 ***	2211.684 ***
<b>Sample Size</b> (Woman-Interviews)	1,710	1,710	527	1,710

† indicates that the cell size was too small to produce reliable estimates.

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes flags for race missing, education missing, income imputed from household data, income imputed to mean, marital status imputed, marital status missing, employed imputed, employed missing where there were sufficient cell sizes to include them.

Table 4.9: Results from Logistic Regression Models Predicting Intervening Variables (Past 6 Months) For All Female Crime Victims Age 16-49 that Include Race\*Class Interactions

	Violent Crime Victims			Injured Violent Crime Victims			Violent Crime Victims					
	Self-Defense			Injury			If Injured, Medical Help Sought			Victim Contacted Police		
	(1) Coeff.	Std. Error	Odds Ratio	(2) Coeff.	Std. Error	Odds Ratio	(3) Coeff.	Std. Error	Odds Ratio	(4) Coeff.	Std. Error	Odds Ratio
<b>Minority Race</b>	0.162	0.292	1.176	0.075	0.193	1.077	0.064	0.182	1.066	0.050	0.182	1.051
<b>Education</b>												
Less than 12 Years	0.517	0.343	1.676	0.021	0.237	1.021	0.046	0.229	1.047	0.035	0.228	1.036
12 Years	--			--			--			--		
More than 12 Years	-0.403	0.331	0.668	-0.367	0.191	0.693 #	-0.164	0.174	0.848	-0.162	0.174	0.851
<b>Household Income (10,000 Year 2000 Dollars)</b>	0.043	0.026	1.044 #	-0.018	0.018	0.982	-0.029	0.016	0.972	-0.029	0.016	0.971 #
<b>Public Housing</b>	0.067	0.565	1.070	0.012	0.380	1.012	-0.048	0.371	0.953	-0.041	0.371	0.960
<b>Interactions</b>												
Minority*Less than 12 Years of Education	-0.283	0.554	0.753	-0.436	0.382	0.647	-1.048	0.378	0.351	-1.033	0.378	0.356 **
Minority*More than 12 Years of Education	0.714	0.489	2.042	-0.252	0.329	0.777	-0.178	0.290	0.837	-0.170	0.290	0.844
Minority*Household Income	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000
Minority*Public Housing Resident	-2.565	1.496	0.077 #	-0.426	0.525	0.653	0.971	0.519	2.640	0.968	0.518	2.634 #
<b>-2 Log Likelihood</b>	992.383 ***			1974.481 ***			513.199 ***			2202.740 ***		
<b>Sample Size</b> (Woman-Interviews)	1,710			1,710			527			1,710		

† indicates that the cell size was too small to produce reliable estimates.

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes all victimization variables, intervening variables and controls included in Table 4.8.

Table 4.10: Odds Ratios from Logistic Regression Models Predicting Intervening Variables (Past 6 Months) For All Female Victims of Intimate Partner Violence Age 16-49

	Self-Defense	Injury	If Injured, Medical Help Sought	Victim Contacted Police
	(1)	(2)	(3)	(4)
<b>Previous Intimate Partner Violence</b>	0.996	0.915	0.048	1.040
<b>Minority Race</b>	1.054	0.690	0.770	1.154
<b>Education</b>				
Less than 12 Years	0.928	1.022	1.068	0.719
12 Years (Reference/Omitted Category)	--	--	--	--
More than 12 Years	0.960	0.621	1.261	0.616
<b>Household Income (10,000 Year 2000 Dollars)</b>	1.098 *	1.030	0.898	0.947
<b>Public Housing</b>	0.407	0.884	1.434	2.819
<b>Intervening Variables</b>				
Self-Defense	--	2.586 **	0.681	1.104
Injury	2.428 **	--	--	0.706
Injured and Sought Medical Attention for Injuries	--	--	--	0.945
Victim Notified the Police	--	--	0.786	--
<b>Demographic Characteristics</b>				
Age (Years)	1.029	0.979	1.010	1.005
Marital Status				
Married	0.614	1.958 #	1.001	0.927
Divorced	0.482 #	1.044	1.207	1.577 #
Single (Reference/Omitted Category)	--	--	--	--
Employed	0.670	0.880	1.219	1.052
Household Composition				
Lone Adult	0.712	0.756	2.241	1.865 *
Two Adults (Reference/Omitted Category)	--	--	--	--
Many Adults	0.566	0.784	1.421	0.919
Number of Children	1.220	0.916	0.922	1.205 #
<b>Interview Characteristics</b>				
Interview Period	0.944	1.086	0.997	1.074
Interview Conducted Via Proxy	†	†	†	1.506
Unbounded Interview	1.917	1.518 #	2.295	1.255
<b>Incident Characteristics</b>				
Police Notification by Someone Other than the Victim	--	--	1.865	--
Perpetrator Arrested	--	--	4.190 **	--
Weapon Use	2.026 *	1.812 *	1.574	1.679 #
Perpetrator Under Influence of Drugs/Alcohol	1.354	1.601 *	0.502 #	0.924
Series Incident	0.814	1.290	1.448	0.445 *
<b>-2 Log Likelihood</b>	326.604 *	615.405 **	214.623	607.667 ***
<b>Sample Size</b> (Woman-Interviews)	462	462	240	462

† indicates that the cell size was too small to produce reliable estimates.

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes flags for race missing, education missing, income imputed from household data, income imputed to mean, marital status imputed, marital status missing, employed imputed, employed missing.

Table 4.11: Results from Logistic Regression Models Predicting Intervening Variables (Past 6 Months) For All Female Victims of Intimate Partner Violence Age 16-49 that Include Race\*Class Interactions

	Self-Defense			Injury			If Injured, Medical Help Sought			Victim Contacted Police		
	(1)			(2)			(3)			(4)		
	Coeff.	Std. Error	Odds Ratio	Coeff.	Std. Error	Odds Ratio	Coeff.	Std. Error	Odds Ratio	Coeff.	Std. Error	Odds Ratio
<b>Minority Race</b>	0.098	0.468	1.103	-0.638	0.352	0.528 #	0.137	0.738	1.147	-0.341	0.3668	0.711
<b>Education</b>												
Less than 12 Years	0.298	0.650	1.347	-0.384	0.430	0.681	0.284	0.807	1.329	-0.140	0.4298	0.869
12 Years (Reference/Omitted Category)	--			--			--			--		
More than 12 Years	-0.407	0.588	0.588	-0.775	0.354	0.461 *	0.270	0.591	1.310	-0.672	0.3558	0.511 #
<b>Household Income (10,000 Year 2000 Dollars)</b>	0.104	0.051	0.588 *	0.043	0.038	1.044	-0.091	0.096	0.913	-0.073	0.0399	0.930 #
<b>Public Housing</b>	-0.801	0.933	0.588	0.016	0.592	1.016	-0.201	1.050	0.818	0.869	0.7433	2.384
<b>Interactions</b>												
Minority*Less than 12 Years of Education	-1.528	1.267	0.217	1.875	0.932	6.522 *	-0.845	1.442	0.430	-0.837	0.8311	0.433
Minority*More than 12 Years of Education	1.154	0.837	3.170	1.189	0.596	3.285 *	†			0.750	0.6041	2.116
Minority*Household Income	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	1E-05	1.000
Minority*Public Housing Resident	†			-0.632	1.039	0.532	1.661	1.677	5.263	0.856	1.5004	2.353
<b>-2 Log Likelihood</b>	322.541 *			607.166 **			212.292 *			601.058 ***		
<b>Sample Size</b> (Woman-Interviews)	462			462			240			462		

† indicates that the cell size was too small to produce reliable estimates.

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes all victimization variables, intervening variables and controls included in Table 4.10.

Table 5.1: Relative Risk Ratios from Multinomial Logistic Regression Models Predicting Marital Dissolution and Residential Mobility Among All Married Women Age 16-49

	All Women Age 16-49 Married at t		All Violent Crime Victims Age 16-49 Married at t		All Intimate Partner Violence Victims Age 16-49 Married at t	
	Marital Dissolution or Individual Move vs. Staying in the Home	Household Move vs. Staying in the Home	Marital Dissolution or Individual Move vs. Staying in the Home	Household Move vs. Staying in the Home	Marital Dissolution or Individual Move vs. Staying in the Home	Household Move vs. Staying in the Home
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Victimizations</b>						
Recent Intimate Partner Violence	1.309	1.446 *	0.632	1.616 *	--	--
Previous Intimate Partner Violence	1.379	0.852	2.048	1.021	--	--
Recent Violence by Other Known Offender	0.552	0.921	0.095 #	0.952	--	--
Previous Violence by Other Known Offender	1.218	0.986	0.971	1.074	--	--
Recent Violence by a Stranger	0.475	1.055	0.056 #	0.944	--	--
Previous Violence by a Stranger	0.931	0.725	0.426	0.612	--	--
Recent Nonviolent Crime Victimization	1.292 *	1.091 #	--	--	--	--
Previous Nonviolent Crime Victimization	1.285 #	1.231 **	--	--	--	--
<b>Minority Race</b>	0.908	0.869 **	0.589	1.004	1.234	0.341
<b>Education</b>						
Less than 12 Years	1.085	1.157 #	1.303	1.582	†	†
12 Years (Reference/Omitted Category)	--	--	--	--	--	--
More than 12 Years	0.831	1.249 ***	0.463	0.935	†	†
<b>Household Income (10,000 Year 2000 Dollars)</b>	0.959 **	0.996	1.070	1.049	1.141	0.882
<b>Public Housing</b>	1.680	0.689 *	†	†	†	†
<b>Intervening Variables</b>						
Self-Defense	--	--	†	†	†	†
Injury	--	--	4.179	1.781	2.866	0.692
Injured and Sought Medical Attention for Injuries	--	--	2.083	0.141 #	†	†
Victim Notified the Police	--	--	3.108	1.436	0.255	1.667

Table 5.1: Relative Risk Ratios from Multinomial Logistic Regression Models Predicting Marital Dissolution and Residential Mobility Among All Married Women Age 16-49 (continued)

	All Women Age 16-49 Married at t		All Violent Crime Victims Age 16-49 Married at t		All Intimate Partner Violence Victims Age 16-49 Married at t	
	Marital Dissolution or Individual Move vs. Staying in the Home	Household Move vs. Staying in the Home	Marital Dissolution or Individual Move vs. Staying in the Home	Household Move vs. Staying in the Home	Marital Dissolution or Individual Move vs. Staying in the Home	Household Move vs. Staying in the Home
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Demographic Characteristics</b>						
Age (Years)	0.991	0.967 ***	1.027	0.951 *	0.984	0.845 *
Employed	1.895 ***	0.937	2.226	1.398	1.300	10.319 *
Tenure (Months)	1.000	0.995 ***	1.000	0.996	0.998	0.993
Home Ownership	0.735	0.087 ***	0.490	0.316 ***	1.084	0.125 *
Multiple Unit Dwelling	0.887	1.504 ***	0.343	0.531 #	0.245	0.700
Urbanicity	1.085	1.019	13.237	1.174 *	†	†
<b>Household Composition</b>						
Lone Adult	9.180 ***	2.268 ***	8.882	0.214 #	5.801	1.112
Two Adults (Reference/Omitted Category)	--	--	--	--	--	--
Many Adults	1.404 **	0.946	0.713	1.147	0.517	5.479 #
Number of Children	1.145 **	1.028	1.131	1.074	0.507	1.401
Proportion of Prior Interviews Not Married	8.004 ***	1.359 *	5.441	1.925	13.985	4.768 #
<b>Interview Characteristics</b>						
Interview Period	0.999	1.054 ***	0.895	0.978	1.125	0.931
Interview Conducted Via Proxy	1.379	1.140	6.032	6.828 **	†	†
<b>Incident Characteristics</b>						
Police Notification by Someone Other than the Victim	--	--	1.366	1.833	0.270	1.135
Perpetrator Arrested	--	--	0.227	0.713	1.060	0.644
Weapon Use	--	--	†	†	†	†
Perpetrator Under Influence of Drugs/Alcohol	--	--	3.522	0.543	1.006	0.467
Series Incident	--	--	†	†	†	†
<b>Sample Size</b> (Woman-Interviews)	40,663		1,065		141	

† indicates that the cell size was too small to produce reliable estimates.

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes flags for race missing, education missing, income imputed to mean, marital status imputed, marital status missing, employed imputed, employed missing, and tenure missing, where there were sufficient cell sizes to include them. There was not sufficient variation to include income imputed from household data or multiple unit dwelling missing in any model.

Table 5.2: Relative Risk Ratios from Multinomial Logistic Regression Models Predicting Marital Dissolution and Residential Mobility Among All Married Women Age 16-49 that Include Race\*Class Interactions

	All Women Age 16-49 Married at t						All Violent Crime Victims Age 16-49 Married at t					
	Marital Dissolution or Individual Move vs. Staying in the Home			Household Move vs. Staying in the Home			Marital Dissolution or Individual Move vs. Staying in the Home			Household Move vs. Staying in the Home		
	Coeff.	Std. Error	Odds Ratio	Coeff.	Std. Error	Odds Ratio	Coeff.	Std. Error	Odds Ratio	Coeff.	Std. Error	Odds Ratio
<b>Minority Race</b>	-0.187	0.219	0.829	-0.168	0.077	0.845 *	0.751	1.321	2.119	0.125	0.470	1.133
<b>Education</b>												
Less than 12 Years	0.090	0.283	1.094	0.180	0.118	1.197	0.422	1.390	1.525	1.360	0.638	3.896
12 Years (Reference/Omitted Category)	--			--			--			--		
More than 12 Years	-0.304	0.154	0.738 †	0.217	0.063	1.242 ***	-0.815	0.703	0.443	0.241	0.392	1.273
<b>Household Income (10,000 Year 2000 Dollars)</b>	-0.0387	0.016	0.962 *	-0.005	0.006	0.995	0.082	0.057	1.085	0.025	0.036	1.025
<b>Public Housing</b>	1.115	0.659	3.050 #	-0.219	0.268	0.803	†			†		
<b>Interactions</b>												
Minority*Less than 12 Years of Education	0.056	0.413	1.058	-0.054	0.157	0.947	-0.760	2.112	0.468	-2.016	0.925	0.133 *
Minority*More than 12 Years of Education	0.537	0.279	1.711 #	0.023	0.104	1.023	0.593	1.719	1.809	-1.609	0.813	0.200 *
Minority*Household Income	-0.000	0.000	1.000	0.000	0.000	1.000	-0.000	0.000	1.000	0.000	0.000	1.000
Minority*Public Housing Resident	-0.865	0.859	0.421	-0.246	0.351	0.782	†			†		
<b>Sample Size</b>	(Woman-Interviews) 40,663						1,065					

† indicates that the cell size was too small to produce reliable estimates.

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes all victimization variables, intervening variables and controls included in Table 5.1.

Table 5.3: Odds Ratios from Logistic Regression Models Predicting Individual or Household Moves Among Unmarried Women Age 16-49

	All Women Age 16-49 Unmarried at t	All Violent Crime Victims Age 16-49 Unmarried at t	All Intimate Partner Violence Victims Age 16- 49 Unmarried at t
	Moving vs. Staying in the Home	Moving vs. Staying in the Home	Moving vs. Staying in the Home
<b>Victimizations</b>			
Recent Intimate Partner Violence	1.202 ***	1.090	--
Previous Intimate Partner Violence	0.966	0.896	--
Recent Violence by Other Known Offender	1.191 **	1.092	--
Previous Violence by Other Known Offender	0.886	0.805	--
Recent Violence by a Stranger	1.218 *	1.084	--
Previous Violence by a Stranger	1.031	0.893	--
Recent Nonviolent Crime Victimization	1.143 ***	--	--
Previous Nonviolent Crime Victimization	1.229 ***	--	--
<b>Minority Race</b>	0.844 ***	1.142	1.073
<b>Education</b>			
Less than 12 Years	1.074	1.060	0.970
12 Years (Reference/Omitted Category)	--	--	--
More than 12 Years	1.134 *	1.048	1.263
<b>Household Income (10,000 Year 2000 Dollars)</b>	0.962 ***	0.941 *	0.854 *
<b>Public Housing</b>	0.821 *	0.537 *	0.410
<b>Intervening Variables</b>			
Self-Defense	--	0.818	0.990
Injury	--	1.093	1.389
Injured and Sought Medical Attention for Injuries	--	0.901	1.251
Victim Notified the Police	--	1.115	1.240
<b>Demographic Characteristics</b>			
Age (Years)	0.981 ***	0.983 *	0.972 #
Employed	0.927 #	0.906	0.734
Tenure (Months)	0.994 ***	0.996 **	0.992 *
Home Ownership	0.101 ***	0.245 ***	0.101 **
Multiple Unit Dwelling	1.229 ***	1.035	0.886
Urbanicity	1.025	0.793	1.190
<b>Household Composition</b>			
Lone Adult	1.084 #	1.017	0.964
Two Adults (Reference/Omitted Category)	--	--	--
Many Adults	0.857 **	0.766	0.895
Number of Children	1.017	0.946	0.916
Proportion of Prior Interviews Married	2.359 ***	2.486 *	4.589 **
<b>Interview Characteristics</b>			
Interview Period	0.967 **	0.915 #	0.911
Interview Conducted Via Proxy	0.921	1.644	†
<b>Incident Characteristics</b>			
Police Notification by Someone Other than the Victim	--	1.283	0.941
Perpetrator Arrested	--	0.970	0.849
Weapon Use	--	0.893	0.590
Perpetrator Under Influence of Drugs/Alcohol	--	1.094	0.958
Series Incident	--	1.426	2.021 *
<b>-2 Log Likelihood</b>	20757.597 ***	1735.756 ***	575.910 ***
<b>Sample Size</b> (Woman-Interviews)	31,748	2,099	697

† indicates that the cell size was too small to produce reliable estimates.

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes flags for race missing, education missing, income imputed to mean, marital status imputed, marital status missing, employed imputed, employed missing, tenure missing, and multiple unit dwelling missing, where there were sufficient cell sizes to include them. There was not sufficient variation to include income imputed from household data.



Table 5.4: Odds Ratios from Logistic Regression Models Predicting Individual or Household Moves Among Unmarried Women Age 16-49 that Include Race\*Class Interactions

	All Women Age 16-49 Unmarried at t			All Violent Crime Victims Age 16- 49 Unmarried at t			All Intimate Partner Violence Victims Age 16-49 Unmarried at t		
	Moving vs. Staying in the Home			Moving vs. Staying in the Home			Moving vs. Staying in the Home		
	Coeff.	Std. Error	Odds Ratio	Coeff.	Std. Error	Odds Ratio	Coeff.	Std. Error	Odds Ratio
<b>Minority Race</b>	-0.172	0.064	0.842 **	0.003	0.237	1.003	-0.483	0.435	
<b>Education</b>									
Less than 12 Years	0.135	0.094	1.145	0.202	0.264	1.224	-0.380	0.492	
12 Years (Reference/Omitted Category)	--			--			--		
More than 12 Years	0.118	0.066	1.125 #	0.108	0.209	1.114	0.283	0.359	
<b>Household Income (10,000 Year 2000 Dollars)</b>	-0.040	0.008	0.961 ***	-0.074	0.031	0.929 *	-0.213	0.098 *	
<b>Public Housing</b>	-0.034	0.143	0.967	-0.275	0.421	0.760	-1.247	0.747 #	
<b>Interactions</b>									
Minority*Less than 12 Years of Education	-0.111	0.117	0.895	-0.329	0.401	0.719	1.387	0.848	
Minority*More than 12 Years of Education	0.024	0.093	1.025	-0.250	0.329	0.779	-0.450	0.602	
Minority*Household Income	0.000	0.000	1.000	0.000	0.000	1.000 #	0.000	0.000 #	
Minority*Public Housing Resident	-0.232	0.175	0.793	-0.462	0.557	0.630	0.554	1.092	
<b>-2 Log Likelihood</b>	20753.964 ***			1730.650 ***			569.779 ***		
<b>Sample Size</b> (Woman-Interviews)	31,748			2,099			697		

† indicates that the cell size was too small to produce reliable estimates.

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes all victimization variables, intervening variables and controls included in Table 5.3.

Table 5.5: Odds Ratios from Logistic Regression Models Predicting Labor Force Entry Among Women Not Employed Age 16-49

	All Women Age 16-49 Not Employed at t Odds ratio	All Violent Crime Victims Age 16-49 Not Employed at t Odds ratio	All Intimate Partner Violence Victims Age 16-49 Not Employed at t Odds ratio
<b>Victimizations</b>			
Recent Intimate Partner Violence	0.852	0.848	--
Previous Intimate Partner Violence	1.033	1.142	--
Recent Violence by Other Known Offender	0.630 **	0.603 **	--
Previous Violence by Other Known Offender	0.972	1.017	--
Recent Violence by a Stranger	0.418 ***	0.416 ***	--
Previous Violence by a Stranger	1.052	1.154	--
Recent Nonviolent Crime Victimization	0.520 ***	--	--
Previous Nonviolent Crime Victimization	1.019	--	--
<b>Minority Race</b>	0.808 ***	0.639 *	0.560
<b>Education</b>			
Less than 12 Years	0.734 ***	0.839	0.895
12 Years (Reference/Omitted Category)	--	--	--
More than 12 Years	1.243 ***	1.551 #	1.556
<b>Household Income (10,000 Year 2000 Dollars)</b>	1.005	1.038 #	1.019
<b>Public Housing</b>	0.800 *	0.899	0.452
<b>Intervening Variables</b>	1.000	1.000	1.000
Self-Defense	--	1.593 *	3.703 **
Injury	--	0.900	1.096
Injured and Sought Medical Attention for Injuries	--	1.806 #	1.208
Victim Notified the Police	--	0.830	1.874
<b>Demographic Characteristics</b>			
Age (Years)	0.977 ***	0.976 *	0.972
<b>Marital Status</b>			
Married	0.699 ***	0.570 *	0.875
Divorced	1.040	0.903	1.392
Single (Reference/Omitted Category)	--	--	--
Attending School	0.893 #	1.111	0.727
<b>Household Composition</b>			
Lone Adult	0.982	0.844	0.571
Two Adults (Reference/Omitted Category)	--	--	--
Many Adults	1.149 **	0.949	0.473 #
Number of Children	0.860 ***	1.050	0.946
Proportion of Prior Interviews Employed	18.040 ***	6.187 ***	0.867
<b>Interview Characteristics</b>			
Interview Period	0.883 ***	0.915 #	0.957
Interview Conducted Via Proxy	0.555 ***	0.538	†
<b>Incident Characteristics</b>			
Police Notification by Someone Other than the Victim	--	0.992	1.888
Perpetrator Arrested	--	0.883	0.429 #
Weapon Use	--	1.164	1.424
Perpetrator Under Influence of Drugs/Alcohol	--	0.907	1.210
Series Incident	--	0.689	1.101
<b>-2 Log Likelihood</b>	17922.059 ***	1073.775 ***	248.37
<b>Sample Size</b> (Woman-Interviews)	18,059	1,151	256

† indicates that the cell size was too small to produce reliable estimates.

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes flags for race missing, education missing, income imputed from household data, income imputed to mean, marital status imputed, marital status missing, student status imputed, and student status missing, where there were sufficient cell sizes to include them.

Table 5.6: Odds Ratios from Logistic Regression Models Predicting Labor Force Entry Among Women Not Employed Age 16-49 that Include Race\*Class Interactions

	All Women Age 16-49 Not Employed at t			All Violent Crime Victims Age 16-49 Not Employed at t			All Inmate Partner Violence Victims Age 16-49 Not Employed at t		
	Coeff.	Std. Error	Odds Ratio	Coeff.	Std. Error	Odds Ratio	Coeff.	Std. Error	Odds Ratio
<b>Minority Race</b>									
<b>Education</b>									
Less than 12 Years	-0.362	0.081	0.696 ***	-0.398	0.309	0.672	-0.182	0.704	0.834
12 Years (Reference/Omitted Category)	--	--	--	--	--	--	--	--	--
More than 12 Years	0.187	0.058	1.205 **	0.266	0.276	1.304	0.824	0.704	2.280
<b>Household Income (10,000 Year 2000 Dollars)</b>									
<b>Public Housing</b>	0.002	0.005	1.002	0.035	0.023	1.036	0.005	0.057	1.005
<b>Interactions</b>									
Minority*Less than 12 Years of Education	-0.212	0.217	0.809	-0.312	0.609	0.732	-0.901	0.997	0.406
Minority*More than 12 Years of Education	0.136	0.110	1.145	0.672	0.435	1.958	0.549	1.095	1.731
Minority*Household Income	0.134	0.103	1.143	0.674	0.457	1.962	-1.251	1.309	0.286
Minority*Public Housing Resident	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000
	0.011	0.248	1.011	0.464	0.765	1.590	†		
<b>-2 Log Likelihood</b>									
<b>Sample Size</b> (Woman-Interviews)	17916.118 ***	18,059		1067.159 ***	1,151		246.947		256

† indicates that the cell size was too small to produce reliable estimates.

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes all victimization variables, intervening variables and controls included in Table 5.5.

Table 5.7: Odds Ratios from Logistic Regression Models Predicting Labor Force Exit Among Employed Women Age 16-49

	All Women Over Age 12 Employed at t	All Violent Crime Victims Over Age 12 Employed at t	All Intimate Partner Violence Victims Over Age 12 Employed at t
	Odds ratio	Odds ratio	Odds ratio
<b>Victimizations</b>			
Recent Intimate Partner Violence	0.914	0.881	--
Previous Intimate Partner Violence	0.923	0.910	--
Recent Violence by Other Known Offender	1.035	1.037	--
Previous Violence by Other Known Offender	1.017	1.052	--
Recent Violence by a Stranger	1.021	1.019	--
Previous Violence by a Stranger	1.042	1.108	--
Recent Nonviolent Crime Victimization	0.777 ***	--	--
Previous Nonviolent Crime Victimization	1.163 **	--	--
<b>Minority Race</b>	1.055	0.972	1.351
<b>Education</b>			
Less than 12 Years	1.552 ***	1.253	0.624
12 Years (Reference/Omitted Category)	--	--	--
More than 12 Years	0.941	0.961	0.847
<b>Household Income (10,000 Year 2000 Dollars)</b>	0.986 ***	0.946 **	0.915
<b>Public Housing</b>	1.781 ***	1.338	0.775
<b>Intervening Variables</b>			
Self-Defense	--	1.542 *	2.460 *
Injury	--	0.974	0.748
Injured and Sought Medical Attention for Injuries	--	1.210	0.376 #
Victim Notified the Police	--	0.936	0.701
<b>Demographic Characteristics</b>			
Age (Years)	0.983 ***	0.973 **	0.878 ***
<b>Marital Status</b>			
Married	1.323 ***	1.048	2.223 #
Divorced	0.923	0.619 *	0.857
Single (Reference/Omitted Category)	--	--	--
Attending School	1.486 ***	0.913	0.950
<b>Household Composition</b>			
Lone Adult	0.811 **	0.899	0.739
Two Adults (Reference/Omitted Category)	--	--	--
Many Adults	1.080 *	1.064	1.471
Number of Children	1.187 ***	1.294 ***	1.604 ***
Proportion of Prior Interviews Not Employed	10.154 ***	4.112 ***	3.169 *
<b>Interview Characteristics</b>			
Interview Period	0.912 ***	0.949	1.028
Interview Conducted Via Proxy	1.937 ***	3.092 **	3.238
<b>Incident Characteristics</b>			
Police Notification by Someone Other than the Victim	--	0.845	1.168
Perpetrator Arrested	--	0.992	1.367
Weapon Use	--	1.681 ***	3.224 **
Perpetrator Under Influence of Drugs/Alcohol	--	1.302 #	1.804 #
Series Incident	--	0.785	0.296 #
<b>-2 Log Likelihood</b>	24970.090 ***	1686.385 ***	381.940 ***
<b>Sample Size</b> (Woman-Interviews)	43,067	2,695	746

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes flags for race missing, education missing, income imputed from household data, income imputed to mean, marital status imputed, marital status missing, student status imputed, and student status missing, where there were sufficient cell sizes to include them.

Table 5.8: Odds Ratios from Logistic Regression Models Predicting Labor Force Exit Among Employed Women Age 16-49 that Include Race\*Class Interactions

	All Women Over Age 12 Employed at t				All Violent Crime Victims Over Age 12 Employed at t			All Intimate Partner Violence Victims Over Age 12			
	Coeff.	Std. Error	Odds Ratio		Coeff.	Std. Error	Odds Ratio	Coeff.	Std. Error	Odds Ratio	
<b>Minority Race</b>	0.327	0.066	1.387	***	0.247	0.256	1.280	0.802	0.580	2.230	
<b>Education</b>											
Less than 12 Years	0.454	0.084	1.574	***	0.346	0.285	1.413	-0.579	0.625	0.560	
12 Years (Reference/Omitted Category)	--				--			--			
More than 12 Years	0.009	0.051	1.009		0.062	0.209	1.064	-0.033	0.522	0.968	
<b>Household Income (10,000 Year 2000 Dollars)</b>	-0.008	0.004	0.992	#	-0.052	0.022	0.949	*	-0.069	0.065	0.934
<b>Public Housing</b>	0.583	0.221	1.791	**	0.203	0.529	1.225		-0.782	1.125	0.458
<b>Interactions</b>											
Minority*Less than 12 Years of Education	-0.090	0.120	0.914		-0.453	0.473	0.636		0.241	1.069	1.272
Minority*More than 12 Years of Education	-0.293	0.090	0.746	**	-0.387	0.355	0.679		-0.246	0.982	0.782
Minority*Household Income	0.000	0.000	1.000	***	0.000	0.000	1.000		0.000	0.000	1.000
Minority*Public Housing Resident	-0.082	0.257	0.921		0.142	0.659	1.152		0.977	1.603	2.655
<b>-2 Log Likelihood</b>	24938.15 ***				1763.668 ***			445.141 ***			
<b>Sample Size</b> (Woman-Interviews)	43,067				2,695			746			

† indicates that the cell size was too small to produce reliable estimates.

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes all victimization variables, intervening variables and controls included in Table 5.7.

Table 6.1: Self-Defense, Injury, Help-Seeking, Employment and Marital Outcomes, and Incident Characteristics Among Intimate Partner Violence Victims Age 16-49

	One Assault	First of Multiple Assaults
Number of Victims (Unweighted)	322	111
Percent of Victims	74.6%	25.4%
<b>Self-Defense, Injury and Help-Seeking During/Following First Incident</b>		
Self-defense	10.4%	14.8%
Injury	48.7%	50.9%
Injured and Sought Medical Attention for Injuries	18.0%	22.3%
Police Contact by Victim	52.5%	38.7% ***
<b>Outcomes Within 6 Months of First Incident</b>		
Entered the Labor Force (if unemployed at first incident)	19.7%	21.0%
Left the Labor Force (if employed at first incident)	13.1%	3.4% *
Divorced/Separated (if Married at t-1)	7.3%	0.0%
<b>First Incident Characteristics</b>		
Police Notification by Someone Other than the Victim	15.0%	9.1%
Perpetrator Arrested (if contacted by victim or someone else)	40.7%	34.4%
Weapon Use	16.4%	15.1%
Perpetrator Under Influence of Drugs/Alcohol	37.8%	51.6% #

# p < 0.10, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001, two tailed tests

Table 6.2: Results from Logistic Regression Models Predicting Subsequent Intimate Partner Assault Among Intimate Partner Violence Victims Age 16-49

	Coefficient	Standard Error	Odds Ratio
<b>Minority Race Class</b>	-0.228	0.271	0.797
<b>Education</b>			
Less than 12 Years	-0.172	0.399	0.842
12 Years (Reference/Omitted Category)	--		
More than 12 Years	-0.143	0.332	0.867
<b>Household Income (10,000 Year 2000 Dollars)</b>	-0.015	0.037	0.985
<b>Public Housing</b>	0.665	0.504	1.944
<b>Intervening Variables</b>			
Self-Defense	0.813	0.303	2.255 **
Injury	0.050	0.230	1.052
Injured and Sought Medical Attention for Injuries	0.703	0.379	2.020 #
Victim Notified the Police	-0.312	0.249	0.732
<b>Employment Consequences</b>			
Entered the Labor Force	-0.557	0.476	0.573
Left the Labor Force	-1.474	0.564	0.229 **
<b>Marital Dissolution</b>	0.461	0.540	1.586
<b>Demographic Characteristics</b>			
Age (Years)	-0.043	0.017	0.958 **
Marital Status			
Married	0.495	0.394	1.640
Divorced	0.769	0.294	2.158 **
Single (Reference/Omitted Category)	--		
Employed	-0.267	0.257	0.766
Household Composition			
Lone Adult	0.147	0.291	1.158
Two Adults (Reference/Omitted Category)	--		
Many Adults	0.760	0.287	2.138 **
Number of Children	-0.129	0.111	0.879
<b>Interview Characteristics</b>			
Interview Period	-0.092	0.069	0.912
Interview Conducted Via Proxy	†		
Unbounded Interview	1.270	0.271	3.560 **
<b>Prior IPV Incident Characteristics</b>			
Police Notification by Someone Other than the Victim	-0.794	0.405	0.452 #
Perpetrator Arrested	-0.659	0.315	0.518 *
Weapon Use	-0.184	0.299	0.832
Perpetrator Under Influence of Drugs/Alcohol	0.733	0.223	2.082 ***
<b>-2 Log Likelihood</b>	782.561 ***		
<b>Sample Size</b> (Woman-Interviews)		1,040	

† indicates that the cell size was too small to produce reliable estimates.

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes flags for education missing, income imputed to mean, and employment status imputed,. There were insufficient cell sizes to include race missing, income imputed from household data, entered the labor force missing, left the labor force missing, marital dissolution missing, marital status imputed, marital status missing, and employment status missing.

Table 6.3: Results from Logistic Regression Models Predicting Subsequent Intimate Partner Assault Among Intimate Partner Violence Victims Age 16-49 that Include Race\*Class Interactions

	Coeff.	Standard Error	Odds Ratio
<b>Minority Status</b>			
<b>Education</b>			
Less than 12 Years	-0.645	0.414	0.524
12 Years	-0.278	0.452	0.757
More than 12 Years	--		
		(Reference/Omitted Category)	
<b>Household Income (10,000 Year 2000 Dollars)</b>			
<b>Public Housing Resident</b>			
<b>Interactions</b>			
Minority*Less than 12 Years of Education	0.364	0.810	1.439
Minority*More than 12 Years of Education	1.313	0.632	3.716 *
Minority*Household Income	0.000	0.000	1.000
Minority*Public Housing Resident	-1.024	1.306	0.359
<b>-2 Log Likelihood</b>	648.675 ***		
<b>Sample Size</b> (Woman-Interviews)		1,040	

† indicates that the cell size was too small to produce reliable estimates.

# P<0.10, \*p<0.05, \*\* p<0.01, \*\*\*p<0.001, two-tailed tests

Note: Model includes prior intimate partner victimization and all controls included in Table 6.2.



Appendix 3.1: Classification of Crimes

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**Violent Crimes**

- 1 Completed Rape
- 2 Attempted Rape
- 3 Sexual Attack with Serious Assault
- 4 Sexual Attack with Minor Assault
- 5 Completed Robbery with Injury from Serious Assault
- 6 Completed Robbery with Injury from Minor Assault
- 7 Completed Robbery without Injury
- 8 Attempted Robbery with Injury from Serious Assault
- 9 Attempted Robbery with Injury from Minor Assault
- 10 Attempted Robbery without Injury
- 11 Completed Aggravated Assault with Injury
- 12 Attempted Aggravated Assault with Weapon
- 13 Threatened Assault with Weapon
- 14 Simple Assault Completed with Injury
- 15 Sexual Assault without Injury
- 16 Unwanted Sexual Contact without Force
- 17 Assault without Weapon without Injury
- 18 Verbal Threat of Rape
- 19 Verbal Threat of Sexual Assault
- 20 Verbal Threat of Assault

*Intimate Partner Violence* includes any violent crime incident (1-20) and burglaries/attempted forcible entries (31-33) perpetrated by a spouse, ex-spouse, boy/girlfriend or ex-boy/girlfriend.

*Violent Victimization by another known offender* includes any violent victimization (1-20) perpetrated by non-intimate relatives, friends/former friends, roommates/boarders, schoolmates, neighbors, or other nonrelated, identifiable individuals.

*Violent Victimization by a stranger* includes any violent victimization "(1-20) perpetrated by someone unknown to the victim.

*Nonviolent Crime Victimization* includes any other crimes (21-41) perpetrated by anyone *except* burglaries/attempted forcible entries (31-33) perpetrated by a spouse, ex-spouse, boy/girlfriend or ex-boy/girlfriend.

**Other Crimes**

*Personal Theft*

- 21 Completed Purse Snatching
- 22 Attempted Purse Snatching
- 23 Pocket Picking (completed only)
- 24 Completed Personal Larceny without Contact Less than \$10
- 25 Completed Personal Larceny without Contact \$10 to \$49
- 26 Completed Personal Larceny without Contact \$50 to \$249
- 27 Completed Personal Larceny without Contact \$250 or greater
- 28 Completed Personal Larceny without Contact Value NA
- 29 Attempted Personal Larceny without Contact

*Household Crimes*

- 31 Completed Burglary, Forcible Entry
- 32 Completed Burglary, Unlawful Entry without Force
- 33 Attempted Forcible Entry
- 34 Completed Household Larceny Less than \$10
- 35 Completed Household Larceny \$10 to \$49
- 36 Completed Household Larceny \$50 to \$249
- 37 Completed Household Larceny \$250 or Greater
- 38 Completed Household Larceny Value NA
- 39 Attempted Household Larceny
- 40 Completed Motor Vehicle Theft
- 41 Attempted Motor Vehicle Theft

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Source: Bureau of Justice Statistics (2000)

Appendix 3.2: Dependent Variables

Theoretical Constructs	Survey Question(s)	Operationalization
<i>Outcome Variables</i>		
<b>Exiting the Relationship</b>		
Marital Dissolution	Marital Status THIS/LAST Survey Period	Married in t; Divorced/Separated in t+1: Yes/No
Individual Residential Mobility	Reason for Noninterview (Person Level)	Move between t and t+1: Yes/No
Household Mobility	Household Number; Reason for Noninterview (Household Level)	Move between t and t+1: Yes/No
<b>Employment Consequences</b>		
Movement into/out of the Labor Force	Did you have a job at the time of the incident?, then in subsequent waves: Did you have a job or work at a business last week? (Do not include volunteer work or work around the house.) Did you have a job or work at a business during the last 6 months? Did that (job/work) last 2 consecutive weeks or more?	Entry into/Exit from the labor force between incident/t and t+1: Yes/No
<b>Subsequent Victimization</b>	Multiple Intimate partner Assaults During a Survey Period or Reported Incident(s) of Intimate Partner Violence Reported in a follow up panel of the NCVS.	Subsequent Assault: Yes/No

Source: Bureau of Justice Statistics (2000)

Note: Missing values for dependent variables were not imputed.

Appendix 3.3: Independent and Intervening Variables

Theoretical Constructs	Survey Question(s)	Operationalization	Treatment of Missing Data
<i>Independent Variables</i>			
<b>Victimizations<sup>a</sup></b>			
Recent Crime Variables	Reported Incident(s) of Intimate Partner Violence at t, Violence by Other Known Offender at t, Violence by a Stranger at t, and Nonviolent Crime Victimization at t.	Count for Each Type of Victimization Reported in t	
Previous Crime Variables	Reported Incident(s) of Intimate Partner Violence prior to t, Violence by Other Known Offender prior to t, Violence by a Stranger prior to t, and Nonviolent Crime Victimization prior to t.	Average/Woman-Interview for Each Type of Victimization Reported Prior to t.	
Race			For all women, assigned race at all interviews the value reported at first interview. Category "missing" created for remaining missing cases.
White, non-Hispanic	Reported Race/Hispanic Origin at First Interview	Indicator, Coded (1) if reported race is white, else (0); Minority status indicator coded (0).	
Black, non-Hispanic	Reported Race/Hispanic Origin at First Interview	Indicator, Coded (1) if reported race is black, else (0); Minority status indicator coded (1).	
Hispanic	Reported Race/Hispanic Origin at First Interview	Indicator, Coded (1) if reported race is Asian, else (0).	
Asian, non-Hispanic	Reported Race/Hispanic Origin at First Interview	Indicator, Coded (1) if reported race is Native American, else (0); Minority status indicator coded (1).	
Native American, non-Hispanic	Reported Race/Hispanic Origin at First Interview	Indicator, Coded (1) if reported race is Hispanic, else (0); Minority status indicator coded (1).	
Education	What is the highest grade or year of regular school ... has ever attended?)		If missing at t and value at t-1=value at t+1 then value at t=value at t-. Only works for missing values t1-t5. Category "missing" created for remaining missing cases.
Less than 12 Years		Indicator, Coded (1) for less than 12 years of education, else (0).	
12 Years		Indicator, Coded (1) for 12 years of education, else (0).	
More than 12 Years		Indicator, Coded (1) for more than 12 years of education, else (0).	

Appendix 3.3: Independent and Intervening Variables (continued)

Theoretical Constructs	Survey Question(s)	Operationalization	Treatment of Missing Data
Household Income	Household Income collected in 14 categories.	Converted to continuous measure using midpoints and a Pareto estimation by year for the upper, open-ended category; adjusted to year 2000 dollars.	If missing at t and value at t-1=value at t+1 then mean of t-1 value and t+1 value. Only works for missing values t1-t5; imputation flag created. Category "missing" created for remaining missing cases, which were assigned the mean value.
<b>Intervening Variables</b>			If no evidence, then assigned 0.
Self-Defensive Actions at the Time of	Did respondent use or threaten to use physical force against the offender? Who was the first to use or threaten to use physical force - you, the offender, or someone else?	Self Defense: Yes/No	
Injury following Intimate Partner	What were the injuries you suffered, If any? Anything else?	Indicator, Coded (1) if injury sustained after any Intimate Partner Violence Incident reported in t, else (0).	
Injured and Sought Medical Attention for Injuries	Were you injured to the extent that you received any medical care, including self treatment? Where did you receive this care? Anywhere else?	Indicator, Coded (1) if medical attention sought for injuries resulting from intimate partner violence reported in t, else (0). Care received at the scene or at home.a friend's/ neighbor's is excluded since it does not represent seeking help via the medical establishment.	
Victim Notified the Police follow	Were the police informed or did they find out about this incident in any way? How did the police find out about it?	Indicator, Coded (1) if the victim notified the police after an incident of Intimate Partner Violence reported in t, else (0).	

Appendix 3.3: Independent and Intervening Variables (continued)

Theoretical Constructs	Survey Question(s)	Operationalization	Treatment of Missing Data
<b>Demographic Characteristics</b>			
Age	Age last Birthday (Allocated)	Age in years.	For all women, began at woman's first interview. Incremented by 0.5 year at each subsequent interview.
Marital Status <sup>b</sup>	Marital status THIS survey period		If missing at t and value at t-1=value at t+1 then mean of t-1 value and t+1 value. Only works for missing values t1-t5; imputation flag created. Category "missing" created for remaining missing cases.
Married		Indicator, Coded (1) if married, else (0).	
Divorced		Indicator, Coded (1) if divorced/separated, else (0).	
Single		Indicator, Coded (1) if single, else (0).	
Employment Status <sup>b</sup>	Did you have a job or work at a business last week? Did you have a job or work at a business during the last 6 months?	Indicator, Coded (1) if employed at t, else (0).	If missing and status at t-1 was the same as at t+1, coded that value. Only works for missing values t1-t5; imputation flag created. Category "missing" created for remaining missing cases.
Student Status	Attending school	Indicator, Coded (1) if student at t, else (0).	If missing at t and value at t-1=value at t+1 then value at t=value at t-1. Only works for missing values t1-t5; imputation flag created. Category "missing" created for remaining missing cases.

Appendix 3.3: Independent and Intervening Variables (continued)

Theoretical Constructs	Survey Question(s)	Operationalization	Treatment of Missing Data
Tenure	How long have you lived at this address? (months) How long have you lived at this address? (years)	Months at Address.	For all women, converted reports at each time period to months by multiplying years by 12 and adding months. Beginning with first report, incremented by 6 months. Mean value assigned to missing values and imputation flag created.
Home Ownership	Tenure (Allocated)	Indicator, Coded (1) if own home, else (0).	If missing at t and value at t-1=value at t+1 then value at t=value at t-1. Only works for missing values t1-t5.
Multiple Unit Dwelling	Number of Housing Units in Structure	Indicator, Coded (1) if multiple unit dwelling, else (0).	Assigned multiple unit dwelling status at all interviews the value reported at first interview.
Public Housing	Public Housing (Yes/No)	Indicator, Coded (1) if public housing, else (0).	Assigned public housing status at all interviews the value reported at first interview.
Urbanicity	Land Use	Indicator, Coded (1) if urban, else (0).	Assigned urbanicity at all interviews the value reported at first interview.
Household Composition			
Lone Adult Household	Indicator of only one household member 12 years of age and over	Indicator, Coded (1) if only one adult, else (0).	Imputation Not Necessary.
Many Adult Household	Indicator of more than two household members 12 years of age and over	Indicator, Coded (1) if more than two adults, else (0).	Imputation Not Necessary.
Number of Children	Number of household members under 12 years of age (0-9)	Count	Imputation Not Necessary.
<b>Employment Stability</b>			
Proportion of Previous Interviews not Employed			
Proportion of Previous Interviews Married			
<b>Marital Stability</b>			
Proportion of Previous Interviews not Married			
Proportion of Previous Interviews Employed			
<b>Interview Characteristics</b>			
Interview Period	Created based upon year and quarter, panel and rotation group	Range is 1-6.	
Interview Conducted Via Proxy	Type of Interview	Indicator, Coded (1) if proxy interview, else 0.	
Unbounded Interview	First Interview with Woman	Indicator, Coded (1) if interview is the first with the respondent interview, else 0.	

Appendix 3.3: Independent and Intervening Variables (continued)

Theoretical Constructs	Survey Question(s)	Operationalization	Treatment of Missing Data
<b>Incident Characteristics</b>			If no evidence, then assigned 0.
Police Notification by Someone Other than the Victim	Were the police informed or did they find out about this incident in any way? How did they find out about it?	Indicator, Coded (1) if someone other than the victim contacted police, else 0.	
Perpetrator Arrested	As far as you know, was anyone arrested or were charges brought against anyone in connection with this incident?	Indicator, Coded (1) if arrest/charges, else 0.	
Weapon Use	Did the offender have a weapon such as a gun or knife, or something to use as a weapon, such as a bottle or wrench?	Indicator, Coded (1) if weapon used, else (0).	
Perpetrator Under Influence of Drugs/Alcohol	Was the offender drinking or on drugs, or don't you know?	Indicator, Coded (1) if perpetrator was under the influence, else (0).	
Series Incident <sup>a</sup>	6 or more similar incidents about which the respondent cannot recall enough individual detail to distinguish.	Indicator Coded (1) to indicate at least one series incident, else (0).	

Source: Bureau of Justice Statistics (2000)

<sup>a</sup>Series incidents are counted as six incidents, the minimum number required to be considered a series.

<sup>b</sup>Employment and Marital Status were only imputed after constructing the dependent variables.

Note: Not all variables are in all models. For example, marital dissolution models are limited to those married at t; marital status is not included in these models.

Appendix 3.4: Order of Programs to Construct Analytic Data Sets

<b>Input Data Set(s)</b>	<b>Output Data Set(s)</b>	<b>Program File Name</b>	<b>Purpose</b>
longtdl9699n.dat <sup>1</sup>	longNCVS.sas7bdat	NCVS_6406_long.sas	Brings in incident-level information.
longtdl9699n.dat <sup>1</sup>	long_females_person.sas7bdat	NCVS6406_long_person.sas	Brings in person-level information. This file also contains any information on the household (for households with interviews) for that time period.
longtdl9699n.dat <sup>1</sup>	long_household.sas7bdat	NCVS6406_long_household.sas	Brings in household-level information for households that were interviewed and not interviewed.
long_females_person.sas7bdat long_household.sas7bdat	hhnumb.sas7bdat	select_households.sas	Takes all of the females and aggregates them up to the household level. Then it merges it with the household data. Then it deletes households that don't meet selection criteria for analyses (i.e. households without women).
long_household.sas7bdat hhnumb.sas7bdat	selected_housholds.sas7bdat	making_households.sas	Merges the large household file with the household numbers from above and keeps only those records that were selected.
longNCVS.sas7bdat long_females_person.sas7bdat	perint.sas7bdat	IncidVars.sas	Codes the incident level information so that it can be aggregated up to the person level. Also brings in the person file and then merges the aggregate incident level information to the person level information and does some recodes that will be used later.



Appendix 3.4: Order of Programs to Construct Analytic Data Sets (continued)

Input Data Set(s)	Output Data Set(s)	Program File Name	Purpose
perint.sas7bdat selected_households.sas7bdat	mrghpi.sas7bdat	merge_house_person_incident.sas	Merges the household information with the person/incident information, so that non-interviewed household information is included in the data. Also, it only keeps information from persons in households that were interviewed and met selection criteria.
mrghpi.sas7bdat	flatpers.sas7bdat	CreatePersonLevel.sas	Takes the vertical file from above and makes it a horizontal file where each row is a different female over time. (Note: This has been broken down into six programs that do the merge one interview period at a time, given the size of the files created.)
flatpers.sas7bdat	flatvars.sas7bdat	FlatWVars.sas	Creates variables on the flat file and prepares to go long. Note that two steps are actually employed so that variables can be constructed utilizing extra household information.
selected_housholds.sas7bdat flatvarsA.sas7bdat	flathh.sas7bdat	HHMoves.sas	Constructs household moves at address and household levels; merges to person level file.
longNCVS.sas7bdat	flathh.sas7bdat newflat.sas7bdat SUBvict.sas7bdat	IncidVarsA_SUBS.sas	Creates a person level file of IPV victims, constructs some variables for an over time look.
flathh.sas7bdat	longtwo.sas7bdat keyvars1.sas7bdat longvars.sas7bdat	GoingLongAgain.sas	Takes the horizontal file above and elongates it to an interview level file with recent and prior victimization variables and the other key analytic variables.
longvars.sas7bdat		Analyses.sas	Runs analyses. (Actually a series of programs.)

<sup>1</sup>longtd19699n.dat is the file provided by the Bureau of Justice Statistics.

<sup>2</sup>The models predicting subsequent assault will be run on a version of the data set where each line represents one woman, and variables are coded slightly differently, as appropriate to a continuous time event history model.

Appendix 4.1: Mean (Standard Deviation) / Percentages for All Independent Variables in Table 4.6 for all Interviews with Women Age 16-49

	Mean /Percent (Standard Deviation)
<b>Average Previous Intimate Partner Violence</b>	0.005 (0.108)
<b>Minority Status</b>	29.46%
<b>Education<sup>1</sup></b>	
Less than 12 Years	9.05%
12 Years (Reference/Omitted Category)	23.40%
More than 12 Years	34.02%
<b>Household Income (10,000 Year 2000 Dollars)</b>	52.490 (48.813)
<b>Public Housing Resident</b>	2.12%
<b>Demographic Characteristics</b>	
Age (Years)	34.0 (9.7)
Marital Status <sup>1</sup>	
Married	55.22%
Divorced	13.44%
Single (Reference/Omitted Category)	30.90%
Employed	68.91%
Household Composition	
Lone Adult	12.42%
Two Adults (Reference/Omitted Category)	47.20%
Many Adults	40.40%
Number of Children	0.8 (1.0)
<b>Interview Characteristics</b>	
Interview Period	3.0 (0.46)
Interview Conducted Via Proxy	2.19%
Unbounded Interview	30.55%
<b>Sample Size (Woman-Interviews)</b>	90,276

<sup>1</sup>Categories will not sum to 100% , as missing cases (education missing category=1) are not shown.

Appendix 4.2: Mean (Standard Deviation) / Percentages for All Variables in Table 4.8 for all Interviews with Reports of Crime Victimization for Women Age 16-49

	Violent Crime Victims Age 16-49	Injured Violent Crime Victims Age 16-49
	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)
<b>Victimizations</b>		
Recent Intimate Partner Violence	0.455 (1.110)	0.794 (1.432)
Previous Intimate Partner Violence	0.026 (0.240)	0.035 (0.251)
Recent Violence by Other Known Offender	0.514 (1.030)	0.490 (1.073)
Previous Violence by Other Known Offender	0.051 (0.362)	0.045 (0.332)
Recent Violence by a Stranger	0.482 (0.833)	0.328 (0.775)
Previous Violence by a Stranger	0.024 (0.154)	0.028 (0.214)
Recent Nonviolent Crime Victimization	--	--
Previous Nonviolent Crime Victimization	--	--
<b>Minority Race</b>	27.74%	29.03%
<b>Education<sup>1</sup></b>		
Less than 12 Years	11.44%	12.05%
12 Years (Reference/Omitted Category)	19.79%	21.05%
More than 12 Years	25.88%	18.33%
<b>Household Income (10,000 Year 2000 Dollars)</b>	3.903 (4.191)	3.297 (3.728)
<b>Public Housing</b>	4.45%	4.93%

Appendix 4.2: Mean (Standard Deviation) / Percentages for All Variables in Table 4.6 for all Interviews with Reports of Crime Victimization for Women Age 16-49 (continued)

	Violent Crime Victims	Injured Violent Crime Victims
	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)
<b>Intervening Variables</b>		
Self-Defense	9.73%	17.50%
Injury	32.27%	100.00%
Injured and Sought Medical Attention for Injuries	7.30%	22.63%
Victim Notified the Police	41.57%	44.80%
<b>Demographic Characteristics</b>		
Age (Years)	29.9 (9.6)	28.818 (9.6)
Marital Status <sup>1</sup>		
Married	26.55%	17.71%
Divorced	26.93%	31.48%
Single	(Reference/Omitted Category) 46.36%	50.81%
Employed	64.83%	60.71%
Household Composition		
Lone Adult	25.67%	31.51%
Two Adults	(Reference/Omitted Category) 36.20%	31.66%
Many Adults	38.13%	36.83%
Number of Children	0.9 (1.1)	0.881 (1.1)

Appendix 4.2: Mean (Standard Deviation) / Percentages for All Independent Variables in Table 4.6 for all Interviews with Reports of Crime Victimization for Women Age 16-49 (continued)

	Violent Crime Victims	Injured Violent Crime Victims
	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)
<b>Interview Characteristics</b>		
Interview Period	2.5 (2.1)	2.6 (2.1)
Interview Conducted Via Proxy	1.31%	1.54%
Unbounded Interview	50.58%	57.10%
<b>Incident Characteristics</b>		
Police Notification by Someone Other than the Victim	22.26%	29.73%
Perpetrator Arrested	17.61%	27.58%
Weapon Use	24.25%	24.67%
Perpetrator Under Influence of Drugs/Alcohol	33.10%	41.83%
Series Incident	5.91%	7.35%
<b>Sample Size</b> (Woman-Interviews)	1,710	527

<sup>1</sup>Categories will not sum to 100% , as missing cases (education missing category=1) are not shown.

Appendix 4.3: Coefficients and Standard Errors from Logistic Regression Models Predicting Intervening Variables For All Female Violent Crime Victims Age 16-49

	Violent Crime Victims				Injured Violent Crime Victims		Violent Crime Victims	
	Self-Defense		Injury		If Injured, Medical Help Sought		Victim Contacted Police	
	Coefficeint	Standard Error	Coefficeint	Standard Error	Coefficeint	Standard Error	Coefficeint	Standard Error
	(1)		(2)		(3)		(4)	
<b>Victimizations</b>								
Recent Intimate Partner Violence	0.136	0.120	0.465	0.098	-0.015	0.167	0.3569	0.0919
Previous Intimate Partner Violence	0.242	0.282	0.040	0.213	-2.795	2.369	-0.0394	0.2111
Recent Violence by Other Known Offender	0.228	0.118	0.138	0.095	-0.039	0.175	0.1849	0.089
Previous Violence by Other Known Offender	0.077	0.271	0.020	0.174	-0.268	0.517	0.0784	0.1413
Recent Violence by a Stranger	-0.026	0.172	-0.093	0.119	-0.092	0.208	0.1868	0.1011
Previous Violence by a Stranger	-0.062	0.578	0.484	0.343	-0.362	1.035	0.4305	0.3406
<b>Minority Race</b>	0.085	0.198	-0.009	0.130	0.192	0.256	0.0823	0.1208
<b>Education</b>								
Less than 12 Years	0.411	0.304	-0.126	0.205	-0.086	0.383	-0.2816	0.197
12 Years (Reference/Omitted Category)	--		--		--		--	
More than 12 Years	-0.185	0.290	-0.428	0.174	-0.335	0.372	-0.2256	0.158
<b>Household Income (10,000 Year 2000 Dollars)</b>	0.035	0.025	-0.015	0.017	-0.080	0.050	-0.0197	0.0153
<b>Public Housing</b>	-0.833	0.507	-0.215	0.268	-0.679	0.592	0.4076	0.2606
<b>Intervening Variables</b>								
Self-Defense	--		1.004	0.176	-0.242	0.314	-0.1017	0.1798
Injury	1.001	0.177	--		--		0.0742	0.1251
Injured and Sought Medical Attention for Injuries	--		--		--		-0.3697	0.2183
Victim Notified the Police	--		--		-0.247	0.293	--	
<b>Demographic Characteristics</b>								
Age (Years)	0.010	0.012	-0.007	0.008	-0.022	0.016	0.004	0.007
<b>Marital Status</b>								
Married	-0.628	0.281	-0.230	0.174	0.487	0.376	0.009	0.157
Divorced	-0.326	0.246	0.024	0.160	0.414	0.319	0.456	0.150
Single (Reference/Omitted Category)	--		--		--		--	
Employed	-0.166	0.185	-0.153	0.122	-0.186	0.243	-0.162	0.114
<b>Household Composition</b>								
Lone Adult	-0.185	0.231	0.188	0.152	0.450	0.302	0.285	0.143
Two Adults (Reference/Omitted Category)	--		--		--		--	
Many Adults	0.054	0.215	0.107	0.138	0.396	0.306	-0.333	0.126
Number of Children	0.073	0.079	-0.070	0.055	-0.237	0.115	0.160	0.051

Appendix 4.3: Coefficients and Standard Errors from Logitsic Regression Models Predicting Intervening Variables For All Female Crime Victims Age 16-49 (Continued)

	Violent Crime Victims				Injured Violent Crime Victims		All Crime Victims	
	Self-Defense		Injury		If Injured, Medical Help Sought		Victim Contacted Police	
	Coefficeint	Standard Error	Coefficeint	Standard Error	Coefficeint	Standard Error	Coefficeint	Standard Error
	(1)		(2)		(3)		(4)	
<b>Interview Characteristics</b>								
Interview Period	-0.034	0.059	0.068	0.037	-0.017	0.076	0.045	0.034
Interview Conducted Via Proxy	†		0.674	0.464	1.686	0.876	0.177	0.473
Unbounded Interview	0.579	0.225	0.276	0.140	0.317	0.306	0.063	0.129
<b>Incident Characteristics</b>								
Police Notification by Someone Other than the Victim	--		--		0.869	0.287	--	
Perpetrator Arrested	--		--		0.906	0.268	--	
Weapon Use	0.083	0.198	0.111	0.131	0.574	0.251	0.333	0.121
Perpetrator Under Influence of Drugs/Alcohol	0.508	0.175	0.341	0.117	-0.346	0.241	0.157	0.111
Series Incident	-0.887	0.642	-0.941	0.482	0.015	0.870	-1.473	0.449
<b>Sample Size</b> (Woman-Interviews)	1,710		1,710		527		1,710	

† indicates that the cell size was too small to produce reliable estimates.

Appendix 4.4: Mean (Standard Deviation) / Percentages for All Independent Variables in Table 4.10 for all Interviews with Reports of Intimate Partner Victimization for Women Age 16-49

	All Intimate Partner Violence Victims Age 16-49	Injured Intimate Partner Violence Victims Age 16-49
	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)
<b>Previous Intimate Partner Violence</b>	0.070 (0.423)	0.077 (0.368)
<b>Minority Race</b>	27.17%	25.72%
<b>Education<sup>1</sup></b>		
Less than 12 Years	11.01%	12.49%
12 Years (Reference/Omitted Category)	19.18%	20.31%
More than 12 Years	20.48%	16.98%
<b>Household Income (10,000 Year 2000 Dollars)</b>	3.040 (3.282)	3.087 (3.414)
<b>Public Housing</b>	4.56%	0.0467714
<b>Intervening Variables</b>		
Self-Defense	12.75%	18.09%
Injury	52.97%	100.00%
Injured and Sought Medical Attention for Injuries	10.56%	19.94%
Victim Notified the Police	55.32%	51.21%
<b>Demographic Characteristics</b>		
Age (Years)	29.0 (8.6)	28.5 (8.7)
Marital Status <sup>1</sup>		
Married	12.76%	15.41%
Divorced	46.34%	42.77%
Single (Reference/Omitted Category)	40.90%	41.82%
Employed	66.64%	64.49%
Household Composition		
Lone Adult	40.48%	38.56%
Two Adults (Reference/Omitted Category)	25.64%	28.87%
Many Adults	33.89%	32.58%
Number of Children	1.1 (1.1)	1.1 (1.1)
<b>Interview Characteristics</b>		
Interview Period	2.6 (2.2)	2.6 (2.1)
Interview Conducted Via Proxy	0.37%	0.70%
Unbounded Interview	57.50%	61.14%
<b>Incident Characteristics</b>		
Police Notification by Someone Other than the Victim	17.45%	22.28%
Perpetrator Arrested	27.14%	33.34%
Weapon Use	17.74%	22.55%
Perpetrator Under Influence of Drugs/Alcohol	45.94%	52.28%
Series Incident	8.50%	9.86%
<b>Sample Size</b> (Woman-Interviews)	462	240

<sup>1</sup>Categories will not sum to 100% , as missing cases (education missing category=1) are not shown.



Appendix 4.5: Coefficients and Standard Errors from Logistic Regression Models Predicting Intervening Variables For All Female Victims of Intimate Partner Violence Age 16-49

	Self-Defense		Injury		If Injured, Medical Help Sought		Victim Contacted Police	
	Coefficeint	Standard Error	Coefficeint	Standard Error	Coefficeint	Standard Error	Coefficeint	Standard Error
	(1)		(2)		(3)		(4)	
<b>Previous Intimate Partner Violence</b>	-0.004	0.417	-0.089	0.246	-3.036	3.007	0.040	0.242
<b>Minority Race</b>	0.052	0.348	-0.371	0.240	-0.261	0.453	0.143	0.241
<b>Education</b>								
Less than 12 Years	-0.075	0.597	0.022	0.389	0.065	0.723	-0.330	0.386
12 Years (Reference/Omitted Category)	--		--		--		--	
More than 12 Years	-0.041	0.496	-0.476	0.321	0.232	0.588	-0.485	0.320
<b>Household Income (10,000 Year 2000 Dollars)</b>	0.094	0.047	0.029	0.035	-0.107	0.100	-0.055	0.037
<b>Public Housing</b>	-0.899	0.928	-0.123	0.483	0.361	0.797	1.036	0.645
<b>Intervening Variables</b>								
Self-Defense	--		0.950	0.323	-0.385	0.511	0.099	0.302
Injury	0.887	0.328	--		--		-0.348	0.219
Injured and Sought Medical Attention for Injuries	--		--		--		-0.056	0.322
Victim Notified the Police	--		--		-0.241	0.527	--	
<b>Demographic Characteristics</b>								
Age (Years)	0.028	0.022	-0.022	0.015	0.010	0.027	0.005	0.015
Marital Status								
Married	-0.488	0.497	0.672	0.381	0.001	0.654	-0.076	0.362
Divorced	-0.730	0.388	0.043	0.262	0.188	0.484	0.456	0.263
Single (Reference/Omitted Category)	--		--		--		--	
Employed	-0.401	0.323	-0.128	0.225	0.198	0.429	0.050	0.223
Household Composition								
Lone Adult	-0.339	0.370	-0.279	0.267	0.807	0.504	0.623	0.262
Two Adults (Reference/Omitted Category)	--		--		--		--	
Many Adults	-0.570	0.410	-0.243	0.274	0.351	0.534	-0.084	0.266
Number of Children	0.199	0.131	-0.087	0.095	-0.081	0.181	0.187	0.097
<b>Interview Characteristics</b>								
Interview Period	-0.058	0.106	0.082	0.069	-0.003	0.129	0.071	0.070
Interview Conducted Via Proxy	†		†		†		0.409	1.695
Unbounded Interview	0.651	0.403	0.417	0.250	0.831	0.514	0.228	0.255
<b>Incident Characteristics</b>								
Police Notification by Someone Other than the Victim	--		--		0.623	0.581	--	
Perpetrator Arrested	--		--		1.433	0.452	--	
Weapon Use	0.706	0.351	0.595	0.277	0.454	0.429	0.518	0.275
Perpetrator Under Influence of Drugs/Alcohol	0.303	0.304	0.470	0.205	-0.690	0.384	-0.080	0.208
Series Incident	-0.206	0.530	0.255	0.358	0.370	0.562	-0.810	0.353
<b>Sample Size</b> (Woman-Interviews)	462		462		240		462	

† indicates that the cell size was too small to produce reliable estimates.

Appendix 5.1: Mean (Standard Deviation) / Percentages for All Independent Variables in Table5.1 for all Interviews with Married Women Age 16-49

	All Women Age 16-49 Married at t	All Violent Crime Victims Age 16-49 Married at t	All Intimate Partner Violence Victims Age 16-49 Married
	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)
<b>Victimizations</b>			
Recent Intimate Partner Violence	0.002 (0.082)	0.086 (0.500)	--
Previous Intimate Partner Violence	0.002 (0.058)	0.070 (0.351)	--
Recent Violence by Other Known Offender	0.005 (0.123)	0.194 (0.734)	--
Previous Violence by Other Known Offender	0.004 (0.087)	0.156 (0.518)	--
Recent Violence by a Stranger	0.006 (0.107)	0.242 (0.620)	--
Previous Violence by a Stranger	0.006 (0.090)	0.228 (0.509)	--
Recent Nonviolent Crime Victimization	0.075 (0.329)	--	--
Previous Nonviolent Crime Victimization	0.061 (0.231)	--	--
<b>Minority Race</b>	23.09%	23.55%	34.42%
<b>Education<sup>1</sup></b>			
Less than 12 Years	6.55%	7.26%	12.95%
12 Years (Reference/Omitted Category)	27.63%	25.47%	18.00%
More than 12 Years	42.66%	45.90%	43.16%
<b>Household Income (10,000 Year 2000 Dollars)</b>	6.275 (4.959)	5.747 (4.586)	4.985 (4.555)
<b>Public Housing</b>	0.73%	1.40%	0.00%
<b>Intervening Variables</b>			
Self-Defense	--	1.87%	5.29%
Injury	--	7.60%	23.17%
Injured and Sought Medical Attention for Injuries	--	1.76%	3.18%
Victim Notified the Police	--	14.45%	15.95%

Appendix 5.1: Mean (Standard Deviation) / Proportions for All Independent Variables in Table 5.1 for all Interviews with Married Women Age 16-49 (continued)

	All Women Age 16-49 Married at t	All Violent Crime Victims Age 16-49 Married at t	All Intimate Partner Violence Victims Age 16-49 Married
	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)
<b>Demographic Characteristics</b>			
Age (Years)	37.1 (7.7)	36.3 (7.3)	34.5 (7.2)
Employed	68.10%	71.31%	72.69%
Tenure (Months)	80.5 (75.9)	77.7 (69.6)	56.6 (56.4)
Home Ownership	76.18%	72.74%	65.02%
Multiple Unit Dwelling	16.29%	17.40%	18.18%
Urbanicity	69.93%	74.89%	67.21%
<b>Household Composition</b>			
Lone Adult	0.65%	1.41%	5.29%
Two Adults (Reference/Omitted Category)	58.65%	54.70%	47.33%
Many Adults	40.70%	43.89%	47.38%
Number of Children	1.0 (1.1)	1.0 (1.1)	1.1 (1.1)
Proportion of Prior Interviews Not Married	0.019 (0.119)	0.040 (0.170)	0.083 (0.235)
<b>Interview Characteristics</b>			
Interview Period	2.5 (1.7)	3.0 (1.5)	3.0 (1.6)
Interview Conducted Via Proxy	1.43%	1.30%	2.52%
<b>Incident Characteristics</b>			
Police Notification by Someone Other than the Victim	--	9.55%	12.30%
Perpetrator Arrested	--	5.35%	12.43%
Weapon Use	--	8.42%	8.56%
Perpetrator Under Influence of Drugs/Alcohol	--	10.98%	23.13%
Series Incident	--	2.51%	4.96%
<b>Sample Size</b> (Woman-Interviews)	40,663	1,065	141

<sup>1</sup>Categories will not sum to 100% , as missing cases (education missing category=1) are not shown.

Appendix 5.2: Coefficients and Standard Errors from Multinomial Logistic Regression Models Predicting Marital Dissolution and Residential Mobility Among All Married Women Age 16-49

All Women Age 16-49 Married at t				
	Marital Dissolution or Individual Move vs. Staying in the Home		Household Move vs. Staying in the Home	
	Coefficient	Standard Error	Coefficient	Standard Error
<b>Victimizations</b>				
Recent Intimate Partner Violence	0.269	0.267	0.369	0.156
Previous Intimate Partner Violence	0.321	0.371	-0.16	0.389
Recent Violence by Other Known Offender	-0.594	1.049	-0.082	0.185
Previous Violence by Other Known Offender	0.197	0.449	-0.014	0.227
Recent Violence by a Stranger	-0.745	0.933	0.054	0.181
Previous Violence by a Stranger	-0.071	0.421	-0.322	0.309
Recent Nonviolent Crime Victimization	0.256	0.11	0.087	0.052
Previous Nonviolent Crime Victimization	0.251	0.134	0.208	0.071
<b>Minority Race</b>	-0.096	0.134	-0.14	0.049
<b>Education</b>				
Less than 12 Years	0.082	0.218	0.146	0.086
12 Years (Reference/Omitted Category)	--		--	
More than 12 Years	-0.185	0.14	0.222	0.058
<b>Household Income (10,000 Year 2000 Dollars)</b>	-0.042	0.014	-0.004	0.005
<b>Public Housing</b>	0.519	0.431	-0.373	0.173
<b>Intervening Variables</b>				
Self-Defense	--		--	
Injury	--		--	
Injured and Sought Medical Attention for Injuries	--		--	
Victim Notified the Police	--		--	
<b>Demographic Characteristics</b>				
Age (Years)	-0.009	0.009	-0.034	0.003
Employed	0.639	0.134	-0.065	0.044
Tenure (Months)	0.000	0	-0.005	0
Home Ownership	-0.308	0.34	-2.444	0.124
Multiple Unit Dwelling	-0.120	0.174	0.408	0.055
Urbanicity	0.082	0.127	0.019	0.053
<b>Household Composition</b>				
Lone Adult	2.217	0.265	0.819	0.166
Two Adults (Reference/Omitted Category)	--		--	
Many Adults	0.339	0.12	-0.056	0.05
Number of Children	0.135	0.05	0.028	0.019
Proportion of Prior Interviews Not Married	2.080	0.195	0.307	0.129
<b>Interview Characteristics</b>				
Interview Period	-0.001	0.034	0.053	0.013
Interview Conducted Via Proxy	0.321	0.418	0.131	0.158
<b>Incident Characteristics</b>				
Police Notification by Someone Other than the Victim	--		--	
Perpetrator Arrested	--		--	
Weapon Use	--		--	
Perpetrator Under Influence of Drugs/Alcohol	--		--	
Series Incident	--		--	
<b>Sample Size</b>	(Woman-Interviews)		40,285	

Appendix 5.2: Coefficients and Standard Errors from Multinomial Logitsic Regression Models Predicting Marital Dissolution and Residential Mobility Among All Married Women Age 16-49 (continued)

All Violent Crime Victims Age 16-49 Married at t				
	Marital Dissolution or Individual Move vs. Staying in the Home		Household Move vs. Staying in the Home	
	Coefficient	Standard Error	Coefficient	Standard Error
<b>Victimizations</b>				
Recent Intimate Partner Violence	-0.459	0.512	0.48	0.198
Previous Intimate Partner Violence	0.717	0.561	0.021	0.37
Recent Violence by Other Known Offender	-2.352	1.385	-0.049	0.224
Previous Violence by Other Known Offender	-0.029	0.597	0.071	0.24
Recent Violence by a Stranger	-2.887	1.284	-0.058	0.248
Previous Violence by a Stranger	-0.854	0.831	-0.491	0.378
Recent Nonviolent Crime Victimization	--		--	
Previous Nonviolent Crime Victimization	--		--	
<b>Minority Race</b>	-0.529	0.716	0.004	0.309
<b>Education</b>				
Less than 12 Years	0.265	1.039	0.459	0.52
12 Years (Reference/Omitted Category)				
More than 12 Years	-0.77	0.658	-0.067	0.363
<b>Household Income (10,000 Year 2000 Dollars)</b>	0.068	0.056	0.048	0.032
<b>Public Housing</b>	†		†	
<b>Intervening Variables</b>				
Self-Defense	†		†	
Injury	1.43	1.021	0.577	0.466
Injured and Sought Medical Attention for Injuries	0.734	1.548	-1.956	1.178
Victim Notified the Police	1.134	0.872	0.362	0.374
<b>Demographic Characteristics</b>				
Age (Years)	0.027	0.048	-0.05	0.021
Employed	0.8	0.637	0.335	0.293
Tenure (Months)	0	0.005	-0.004	0.003
Home Ownership	-0.713	0.66	-1.151	0.321
Multiple Unit Dwelling	-1.069	0.839	-0.633	0.337
Urbanicity	2.583	1.222	0.16	0.348
<b>Household Composition</b>				
Lone Adult	2.184	1.115	-1.541	1.171
Two Adults (Reference/Omitted Category)				
Many Adults	-0.338	0.564	0.137	0.282
Number of Children	0.123	0.242	0.071	0.126
Proportion of Prior Interviews Not Married	1.694	1.059	0.655	0.545
<b>Interview Characteristics</b>				
Interview Period	-0.111	0.187	-0.022	0.09
Interview Conducted Via Proxy	1.797	1.388	1.921	0.715
<b>Incident Characteristics</b>				
Police Notification by Someone Other than the Victim	0.312	1.02	0.606	0.454
Perpetrator Arrested	-1.482	1.293	-0.338	0.617
Weapon Use	†		†	
Perpetrator Under Influence of Drugs/Alcohol	1.259	0.949	-0.61	0.445
Series Incident	†		†	
<b>Sample Size</b> (Woman-Interviews)	1,065			

† indicates that the cell size was too small to produce reliable estimates.

Appendix 5.2: Coefficients and Standard Errors from Multinomial Logits Regression Models Predicting Marital Dissolution and Residential Mobility Among All Married Women Age 16-49 (continued)

All Intimate Partner Violence Victims Age 16-49 Married at t				
	Marital Dissolution or Individual Move vs. Staying in the Home		Household Move vs. Staying in the Home	
	Coefficient	Standard Error	Coefficient	Standard Error
<b>Victimizations</b>	--		--	
Recent Intimate Partner Violence	--		--	
Previous Intimate Partner Violence	--		--	
Recent Violence by Other Known Offender	--		--	
Previous Violence by Other Known Offender	--		--	
Recent Violence by a Stranger	--		--	
Previous Violence by a Stranger	--		--	
Recent Nonviolent Crime Victimization	--		--	
Previous Nonviolent Crime Victimization	--		--	
<b>Minority Race</b>	0.210	1.005	-1.076	0.818
<b>Education</b>				
Less than 12 Years	†		†	
12 Years (Reference/Omitted Category)	--		--	
More than 12 Years	†		†	
<b>Household Income (10,000 Year 2000 Dollars)</b>	0.132	0.088	-0.126	0.179
<b>Public Housing</b>	†		†	
<b>Intervening Variables</b>				
Self-Defense	†		†	
Injury	1.053	0.957	-0.368	0.791
Injured and Sought Medical Attention for Injuries	†		†	
Victim Notified the Police	-1.365	1.198	0.511	1.024
<b>Demographic Characteristics</b>				
Age (Years)	-0.016	0.063	-0.168	0.072
Employed	0.262	0.945	2.334	0.982
Tenure (Months)	-0.002	0.008	-0.007	0.013
Home Ownership	0.081	1.145	-2.080	1.060
Multiple Unit Dwelling	-1.405	1.267	-0.357	1.298
Urbanicity	†		†	
<b>Household Composition</b>				
Lone Adult	1.758	1.349	0.106	1.798
Two Adults (Reference/Omitted Category)	--		--	
Many Adults	-0.659	0.984	1.701	1.032
Number of Children	-0.680	0.549	0.337	0.424
Proportion of Prior Interviews Not Married	2.638	1.575	1.562	1.456
<b>Interview Characteristics</b>				
Interview Period	0.118	0.271	-0.071	0.260
Interview Conducted Via Proxy	†		†	
<b>Incident Characteristics</b>				
Police Notification by Someone Other than the Victim	-1.309	1.373	0.127	1.059
Perpetrator Arrested	0.058	1.254	-0.440	0.971
Weapon Use	†		†	
Perpetrator Under Influence of Drugs/Alcohol	0.006	0.853	-0.761	0.770
Series Incident	†		†	
<b>Sample Size</b> (Woman-Interviews)	141			

† indicates that the cell size was too small to produce reliable estimates.

Appendix 5.3: Mean (Standard Deviation) / Percentages for All Independent Variables in Table 5.3 for all Interviews with Unmarried Women Age 16-49

	All Women Age 16-49 Unmarried at t	All Violent Crime Victims Age 16-49 Unmarried at t	All Intimate Partner Violence Victims Age 16-49 Unmarried at t
	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)
<b>Victimizations</b>			
Recent Intimate Partner Violence	0.017 (0.246)	0.267 (0.920)	--
Previous Intimate Partner Violence	0.010 (0.159)	0.146 (0.601)	--
Recent Violence by Other Known Offender	0.017 (0.210)	0.257 (0.777)	--
Previous Violence by Other Known Offender	0.011 (0.144)	0.162 (0.537)	--
Recent Violence by a Stranger	0.013 (0.156)	0.205 (0.573)	--
Previous Violence by a Stranger	0.008 (0.095)	0.125 (0.350)	--
Recent Nonviolent Crime Victimization	0.122 (0.459)	--	--
Previous Nonviolent Crime Victimization	0.077 (0.310)	--	--
<b>Minority Race</b>	36.59%	28.69%	27.35%
<b>Education<sup>1</sup></b>			
Less than 12 Years	13.40%	14.89%	11.36%
12 Years (Reference/Omitted Category)	20.92%	24.46%	25.95%
More than 12 Years	28.32%	27.67%	26.46%
<b>Household Income (10,000 Year 2000 Dollars)</b>	3.867 (3.987)	3.332 (3.762)	2.834 (3.033)
<b>Public Housing</b>	3.79%	5.62%	5.24%
<b>Intervening Variables</b>			
Self-Defense	--	12.11%	11.42%
Injury	--	35.39%	46.16%
Injured and Sought Medical Attention for Injuries	--	8.03%	9.98%
Victim Notified the Police	--	48.68%	53.73%

Appendix 5.3: Mean (Standard Deviation) / Percentages for All Independent Variables in Table5.3 for all Interviews with Unmarried Women Age 16-49 (continued)

	All Women Age 16 49 Married at t	All Violent Crime Victims Age 16-49 Married at t	All Intimate Partner Violence Victims Age 16-49 Married
	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)
<b>Demographic Characteristics</b>			
Age (Years)	30.1 (10.3)	29.6 (9.8)	30.2 (8.5)
Employed	69.86%	66.20%	71.14%
Tenure (Months)	69.2 (90.3)	60.4 (77.5)	52.2 (65.3)
Home Ownership	47.90%	41.06%	40.25%
Multiple Unit Dwelling	40.35%	41.72%	38.83%
Urbanicity	81.65%	81.00%	78.15%
<b>Household Composition</b>			
Lone Adult	26.68%	34.67%	44.27%
Two Adults (Reference/Omitted Category)	32.66%	28.42%	26.64%
Many Adults	40.66%	36.92%	29.10%
Number of Children	0.5 (0.9)	0.8 (1.1)	1.1 (1.1)
Proportion of Prior Interviews Married	0.019 (0.129)	0.035 (0.167)	0.069 (0.229)
<b>Interview Characteristics</b>			
Interview Period	2.4 (1.8)	2.7 (1.7)	2.7 (1.7)
Interview Conducted Via Proxy	2.97%	1.94%	0.82%
<b>Incident Characteristics</b>			
Police Notification by Someone Other than the Victim	--	23.67%	12.56%
Perpetrator Arrested	--	19.55%	25.15%
Weapon Use	--	26.75%	17.80%
Perpetrator Under Influence of Drugs/Alcohol	--	32.94%	40.04%
Series Incident	--	6.21%	7.87%
<b>Sample Size</b> (Woman-Interviews)	31,748	2,099	697

<sup>1</sup>Categories will not sum to 100% , as missing cases (education missing category=1) are not shown.



Appendix 5.4: Coefficients and Standard Errors from Logistic Regression Models Predicting Marital Dissolution or Residential Mobility Among All Unmarried Women Age 16-49

	All Women Age 16-49 Unmarried at t		All Violent Crime Victims Age 16-49 Married at t		All Intimate Partner Violence Victims Age 16-49	
	Moving vs. Staying in the Home		Moving vs. Staying in the Home		Moving vs. Staying in the Home	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
<b>Victimizations</b>					--	
Recent Intimate Partner Violence	0.184	0.053	0.086	0.083	--	
Previous Intimate Partner Violence	-0.034	0.101	-0.110	0.136	--	
Recent Violence by Other Known Offender	0.175	0.068	0.088	0.093	--	
Previous Violence by Other Known Offender	-0.121	0.148	-0.217	0.177	--	
Recent Violence by a Stranger	0.197	0.092	0.081	0.119	--	
Previous Violence by a Stranger	0.031	0.184	-0.114	0.219	--	
Recent Nonviolent Crime Victimization	0.134	0.033	--		--	
Previous Nonviolent Crime Victimization	0.206	0.049	--		--	
<b>Minority Race</b>	-0.170	0.040	0.132	0.146	0.070	0.253
<b>Education</b>						
Less than 12 Years	0.072	0.071	0.058	0.220	-0.031	0.421
12 Years (Reference/Omitted Category)	--		--		--	
More than 12 Years	0.126	0.059	0.047	0.184	0.234	0.316
<b>Household Income (10,000 Year 2000 Dollars)</b>	-0.039	0.007	-0.061	0.029	-0.158	0.081
<b>Public Housing</b>	-0.198	0.085	-0.622	0.288	-0.891	0.547
<b>Intervening Variables</b>						
Self-Defense	--		-0.201	0.200	-0.010	0.362
Injury	--		0.089	0.145	0.328	0.246
Injured and Sought Medical Attention for Injuries	--		-0.104	0.241	0.224	0.359
Victim Notified the Police	--		0.109	0.139	0.215	0.260
<b>Demographic Characteristics</b>						
Age (Years)	-0.019	0.002	-0.017	0.008	-0.028	0.016
Employed	-0.075	0.042	-0.098	0.140	-0.309	0.248
Tenure (Months)	-0.006	0.000	-0.004	0.001	-0.008	0.003
Home Ownership	-2.291	0.096	-1.406	0.387	-2.290	0.715
Multiple Unit Dwelling	0.207	0.047	0.034	0.163	-0.121	0.289
Urbanicity	0.024	0.059	-0.232	0.189	0.174	0.322
<b>Household Composition</b>						
Lone Adult	0.081	0.044	0.017	0.151	-0.037	0.271
Two Adults (Reference/Omitted Category)	--		--		--	
Many Adults	-0.155	0.049	-0.266	0.176	-0.111	0.319
Number of Children	0.017	0.020	-0.055	0.062	-0.088	0.110
Proportion of Prior Interviews Not Married	0.858	0.135	0.911	0.363	1.524	0.476
<b>Interview Characteristics</b>						
Interview Period	-0.033	0.013	-0.089	0.046	-0.094	0.074
Interview Conducted Via Proxy	-0.083	0.138	0.497	0.510	†	
<b>Incident Characteristics</b>						
Police Notification by Someone Other than the Victim	--		0.250	0.162	-0.061	0.389
Perpetrator Arrested	--		-0.030	0.166	-0.163	0.284
Weapon Use	--		-0.113	0.150	-0.527	0.328
Perpetrator Under Influence of Drugs/Alcohol	--		0.090	0.135	-0.043	0.243
Series Incident	--		0.355	0.382	0.704	0.355
<b>Sample Size</b>	(Woman-Interviews)	31,748		2,099		697

† indicates that the cell size was too small to produce reliable estimates.

Appendix 5.5: Mean (Standard Deviation) / Percentages for All Independent Variables in Table 5.5 for all Interviews with Women Not Employed Age 16-49

	All Women Over Age 12 Not Employed at t	All Violent Crime Victims Over Age 12 Not Employed at t	All Intimate Partner Violence Victims Over Age 12 Not Employed at t
	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)
<b>Victimizations</b>			
Recent Intimate Partner Violence	0.013 (0.199)	0.209 (0.762)	--
Previous Intimate Partner Violence	0.007 (0.138)	0.109 (0.537)	--
Recent Violence by Other Known Offender	0.018 (0.213)	0.275 (0.799)	--
Previous Violence by Other Known Offender	0.011 (0.157)	0.177 (0.596)	--
Recent Violence by a Stranger	0.012 (0.134)	0.192 (0.495)	--
Previous Violence by a Stranger	0.009 (0.104)	0.147 (0.386)	--
Recent Nonviolent Crime Victimization	0.134 (0.471)	--	--
Previous Nonviolent Crime Victimization	0.094 (0.321)	--	--
<b>Minority Race</b>	33.75%	35.57%	37.81%
<b>Education<sup>1</sup></b>			
Less than 12 Years	17.42%	21.41%	17.47%
12 Years (Reference/Omitted Category)	25.78%	22.43%	21.29%
More than 12 Years	27.95%	20.40%	16.02%
<b>Household Income (10,000 Year 2000 Dollars)</b>	4.721 (4.977)	2.978 (-3.820)	2.683 (3.904)
<b>Public Housing</b>			
<b>Intervening Variables</b>	3.86%	7.42%	6.42%
Self-Defense	--	12.35%	17.86%
Injury	--	34.91%	53.30%
Injured and Sought Medical Attention for Injuries	--	9.05%	11.62%
Victim Notified the Police	--	49.55%	46.88%
<b>Demographic Characteristics</b>			
Age (Years)	33.7 (9.9)	30.5 (10.0)	29.4 (8.9)
Marital Status			
Married	60.59%	30.63%	15.51%
Divorced	10.09%	24.59%	43.23%
Single (Reference/Omitted Category)	29.03%	44.57%	41.25%
Attending School	10.41%	11.18%	12.16%
Household Composition			
Lone Adult	9.23%	23.50%	32.62%
Two Adults (Reference/Omitted Category)	47.01%	37.76%	31.60%
Many Adults	43.76%	38.74%	35.78%
Number of Children	1.1 (1.2)	1.2 (1.2)	1.5 (1.3)
Proportion of Prior Interviews Employed	0.112 (0.231)	0.102 (0.236)	0.086 (0.222)
<b>Interview Characteristics</b>			
Interview Period	3.3 (1.8)	3.2 (2.0)	3.1 (2.1)
Interview Conducted Via Proxy	2.90%	1.47%	0.37%
<b>Incident Characteristics</b>			
Police Notification by Someone Other than the Victim	--	26.00%	17.28%
Perpetrator Arrested	--	17.44%	26.25%
Weapon Use	--	29.68%	21.56%
Perpetrator Under Influence of Drugs/Alcohol	--	35.67%	42.94%
Series Incident	--	6.72%	9.28%
<b>Sample Size</b> (Woman-Interviews)	18,059	1,151	256

<sup>1</sup>Categories will not sum to 100% , as missing cases (education missing category=1) are not shown.

Appendix 5.6: Coefficients and Standard Errors from Logistic Regression Models Predicting Labor Force Entry Among Women Not Employed Age 16-49

	All Women Age 16-49 Not Employed at t		All Violent Crime Victims Age 16-49 Not Employed at t		All Intimate Partner Violence Victims Age 16-49 Not Employed at t	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
<b>Victimizations</b>						
Recent Intimate Partner Violence	-0.160	0.116	-0.164	0.142	--	
Previous Intimate Partner Violence	0.033	0.126	0.133	0.157	--	
Recent Violence by Other Known Offender	-0.462	0.146	-0.506	0.183	--	
Previous Violence by Other Known Offender	-0.028	0.123	0.017	0.151	--	
Recent Violence by a Stranger	-0.872	0.215	-0.877	0.246	--	
Previous Violence by a Stranger	0.051	0.179	0.143	0.207	--	
Recent Nonviolent Crime Victimization	-0.654	0.060	--		--	
Previous Nonviolent Crime Victimization	0.019	0.060	--		--	
<b>Minority Race</b>	-0.213	0.044	-0.448	0.189	-0.579	0.431
<b>Education<sup>1</sup></b>						
Less than 12 Years	-0.310	0.063	-0.175	0.262	-0.111	0.634
12 Years (Reference/Omitted Category)	--		--		--	
More than 12 Years	0.217	0.053	0.439	0.253	0.442	0.596
<b>Household Income (10,000 Year 2000 Dollars)</b>	0.005	0.004	0.037	0.022	0.019	0.051
<b>Public Housing</b>	-0.223	0.109	-0.107	0.380	-0.795	0.989
<b>Intervening Variables</b>						
Self-Defense	--		0.466	0.233	1.309	0.440
Injury	--		-0.106	0.198	0.092	0.379
Injured and Sought Medical Attention for Injuries	--		0.591	0.306	0.189	0.589
Victim Notified the Police	--		-0.187	0.178	0.628	0.391
<b>Demographic Characteristics</b>						
Age (Years)	-0.024	0.002	-0.024	0.012	-0.028	0.026
<b>Marital Status</b>						
Married	-0.358	0.057	-0.562	0.250	-0.133	0.608
Divorced	0.040	0.075	-0.102	0.237	0.331	0.462
Single (Reference/Omitted Category)	--		--		--	
Attending School	-0.114	0.062	0.106	0.255	-0.319	0.595
<b>Household Composition</b>						
Lone Adult	-0.018	0.076	-0.169	0.240	-0.561	0.455
Two Adults (Reference/Omitted Category)	--		--		--	
Many Adults	0.139	0.042	-0.052	0.190	-0.750	0.452
Number of Children	-0.151	0.019	0.049	0.071	-0.056	0.149
Proportion of Prior Interviews Employed	2.893	0.078	1.823	0.307	-0.143	0.914
<b>Interview Characteristics</b>						
Interview Period	-0.124	0.013	-0.089	0.051	-0.044	0.099
Interview Conducted Via Proxy	-0.589	0.127	-0.620	0.737	†	
<b>Incident Characteristics</b>						
Police Notification by Someone Other than the Victim	--		-0.008	0.205	0.635	0.588
Perpetrator Arrested	--		-0.125	0.238	-0.847	0.471
Weapon Use	--		0.152	0.177	0.354	0.464
Perpetrator Under Influence of Drugs/Alcohol	--		-0.098	0.175	0.191	0.366
Series Incident	--		-0.372	0.464	0.097	0.635
<b>Sample Size</b> (Woman-Interviews)	18,059		1,151		256	

† indicates that the cell size was too small to produce reliable estimates.

Appendix 5.7: Mean (Standard Deviation) / Percentages for All Independent Variables in Table 5.7 for all Interviews with Employed Women Age 16-49

	All Women Over Age 12 Employed at t	All Violent Crime Victims Over Age 12 Employed at t	All Intimate Partner Violence/Victims Over Age 12 Employed at t
	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)	Mean /Percent (Standard Deviation)
<b>Victimizations</b>			
Recent Intimate Partner Violence	0.012 (0.198)	0.195 (0.770)	--
Previous Intimate Partner Violence	0.007 (0.126)	0.116 (0.490)	--
Recent Violence by Other Known Offender	0.013 (0.180)	0.206 (0.693)	--
Previous Violence by Other Known Offender	0.009 (0.125)	0.139 (0.481)	--
Recent Violence by a Stranger	0.014 (0.168)	0.220 (0.637)	--
Previous Violence by a Stranger	0.010 (0.106)	0.152 (0.399)	--
Recent Nonviolent Crime Victimization	0.137 (0.460)	--	--
Previous Nonviolent Crime Victimization	0.093 (0.307)	--	--
<b>Minority Race</b>	25.31%	23.49%	24.71%
<b>Education<sup>1</sup></b>			
Less than 12 Years	6.13%	7.81%	8.46%
12 Years (Reference/Omitted Category)	25.51%	23.50%	23.85%
More than 12 Years	41.91%	37.47%	31.72%
<b>Household Income (10,000 Year 2000 Dollars)</b>	5.814 (5.043)	4.769 (4.533)	3.536 (3.524)
<b>Public Housing</b>	1.30%	2.98%	3.68%
<b>Intervening Variables</b>			
Self-Defense	--	9.12%	11.32%
Injury	--	28.36%	46.18%
Injured and Sought Medical Attention for Injuries	--	6.00%	8.52%
Victim Notified the Police	--	46.11%	53.36%
<b>Demographic Characteristics</b>			
Age (Years)	35.9 (9.2)	32.8 (9.4)	31.9 ## (8.5)
Marital Status			
Married	57.47%	35.31%	17.61%
Divorced	15.41%	28.18%	50.35%
Single (Reference/Omitted Category)	26.89%	36.36%	32.04%
Attending School	9.80%	13.26%	12.68%
Household Composition			
Lone Adult	13.63%	24.05%	39.90%
Two Adults (Reference/Omitted Category)	47.15%	37.52%	28.96%
Many Adults	39.21%	38.43%	31.15%
Number of Children	0.6 (0.9)	0.7 (1.0)	0.9 (1.0)
Proportion of Prior Interviews Not Employed	0.885 (0.271)	0.720 (0.418)	0.682 (0.442)
<b>Interview Characteristics</b>			
Interview Period	3.4 (1.8)	3.3 (1.9)	3.4 (2.0)
Interview Conducted Via Proxy	1.48%		
<b>Incident Characteristics</b>			
Police Notification by Someone Other than the Victim	--	1.80%	1.10%
Perpetrator Arrested	--	25.03%	14.22%
Weapon Use	--	18.93%	27.94%
Perpetrator Under Influence of Drugs/Alcohol	--	24.75%	17.19%
Series Incident	--	31.90%	45.02%
	--	6.69%	7.56%
<b>Sample Size</b> (Woman-Interviews)	43,067	2,695	746

<sup>1</sup>Categories will not sum to 100% , as missing cases (education missing category=1) are not shown.

Appendix 5.8: Coefficients and Standard Errors from Logistic Regression Models Predicting Labor Force Exit Among Employed Women Age 16-49

	All Women Over Age 12 Employed at t		All Violent Crime Victims Over Age 12 Employed at t		All Intimate Partner Violence Victims Over Age 12 Employed at t	
	Coefficient	Standard Error	Coefficient	Standard Error	Coefficient	Standard Error
<b>Victimizations</b>						
Recent Intimate Partner Violence	-0.089	0.101	-0.127	0.130	--	
Previous Intimate Partner Violence	-0.080	0.137	-0.094	0.174	--	
Recent Violence by Other Known Offender	0.035	0.088	0.036	0.114	--	
Previous Violence by Other Known Offender	0.017	0.130	0.051	0.159	--	
Recent Violence by a Stranger	0.021	0.096	0.019	0.123	--	
Previous Violence by a Stranger	0.041	0.147	0.103	0.184	--	
Recent Nonviolent Crime Victimization	-0.252	0.044	--		--	
Previous Nonviolent Crime Victimization	0.151	0.048	--		--	
<b>Minority Race</b>	0.053	0.040	-0.028	0.158	0.3009	0.3259
<b>Education<sup>1</sup></b>						
Less than 12 Years	0.440	0.066	0.226	0.243	-0.4715	0.5415
12 Years (Reference/Omitted Category)	--		--		--	
More than 12 Years	-0.060	0.046	-0.039	0.190	-0.1665	0.4681
<b>Household Income (10,000 Year 2000 Dollars)</b>	-0.014	0.004	-0.055	0.021	-0.0884	0.0683
<b>Public Housing</b>	0.577	0.116	0.292	0.323	-0.2547	0.7366
<b>Intervening Variables</b>						
Self-Defense	--		0.433	0.207	0.900	0.3701
Injury	--		-0.026	0.167	-0.2906	0.301
Injured and Sought Medical Attention for Injuries	--		0.191	0.280	-0.9794	0.5898
Victim Notified the Police	--		-0.066	0.152	-0.3554	0.3882
<b>Demographic Characteristics</b>						
Age (Years)	-0.017	0.002	-0.027	0.010	-0.1296	0.0281
<b>Marital Status</b>						
Married	0.280	0.051	0.047	0.197	0.7988	0.4521
Divorced	-0.080	0.066	-0.479	0.210	-0.1538	0.3985
Single (Reference/Omitted Category)	--		--		--	
Attending School	0.396	0.054	-0.091	0.201	-0.0518	0.4564
<b>Household Composition</b>						
Lone Adult	-0.209	0.066	-0.107	0.197	-0.303	0.3995
Two Adults (Reference/Omitted Category)	--		--		--	
Many Adults	0.077	0.038	0.062	0.161	0.3858	0.3868
Number of Children	0.171	0.018	0.258	0.064	0.4725	0.1395
Proportion of Prior Interviews Employed	2.318	0.076	1.414	0.250	1.1535	0.5107
<b>Interview Characteristics</b>						
Interview Period	-0.092	0.011	-0.053	0.040	0.0275	0.0806
Interview Conducted Via Proxy	0.661	0.110	1.129	0.385	1.1751	1.022
<b>Incident Characteristics</b>						
Police Notification by Someone Other than the Victim	--		-0.168	0.167	0.1549	0.44
Perpetrator Arrested	--		-0.008	0.180	0.3127	0.3494
Weapon Use	--		0.519	0.145	1.1707	0.3564
Perpetrator Under Influence of Drugs/Alcohol	--		0.264	0.145	0.5902	0.3086
Series Incident	--		-0.242	0.393	-1.2168	0.6982
<b>Sample Size</b> (Woman-Interviews)	43,067		2,695		746	

Appendix 6.1: Mean (Standard Deviation) / Percentages for All Independent Variables in Table 6.2 for all Interviews with Intimate Partner Violence Victims Age 16-49

	Mean /Percent (Standard Deviation)
<b>Minority Race Class</b>	28.40%
<b>Education<sup>1</sup></b>	
Less than 12 Years	10.68%
12 Years (Reference/Omitted Category)	23.61%
More than 12 Years	27.69%
<b>Household Income (10,000 Year 2000 Dollars)</b>	3.295 (3.621)
<b>Public Housing</b>	4.30%
<b>Intervening Variables</b>	
Self-Defense	12.56%
Injury	46.61%
Injured and Sought Medical Attention for Injuries	8.99%
Victim Notified the Police	50.33%
<b>Employment Consequences</b>	
Entered the Labor Force	5.29%
Left the Labor Force	7.15%
<b>Marital Dissolution</b>	3.45%
<b>Demographic Characteristics</b>	
Age (Years)	31.3 (8.7)
Marital Status	
Married	16.94%
Divorced	48.66%
Single (Reference/Omitted Category)	34.29%
Employed	71.94%
Household Composition	
Lone Adult	37.66%
Two Adults (Reference/Omitted Category)	30.00%
Many Adults	32.34%
Number of Children	1.1 (1.1)
<b>Interview Characteristics</b>	
Interview Period	3.3 (2.0)
Interview Conducted Via Proxy	1.02%
Unbounded Interview	25.71%
<b>Prior IPV Incident Characteristics</b>	
Police Notification by Someone Other than the Victim	14.64%
Perpetrator Arrested	26.98%
Weapon Use	17.70%
Perpetrator Under Influence of Drugs/Alcohol	43.57%
<b>Sample Size</b> (Woman-Interviews)	1,040

<sup>1</sup>Categories will not sum to 100% , as missing cases (education missing category=1) are not shown.

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