

Florida State University Libraries

2001

Reducing Domestic Violence Revictimization: The Effects of Individual and Contextual Factors and Type of Legal Intervention

Daniel P. Mears, Matthew J. Carlson, George W. Holden and Susan D. Harris



PRINT VERSION CITATION: Mears, Daniel P., Matthew J. Carlson, George W. Holden, and Susan D. Harris. 2001. "Reducing Domestic Violence Revictimization: The Effects of Individual and Contextual Factors and Type of Legal Intervention." *Journal of Interpersonal Violence* 16(12):1260-1283.

PRE-PRINT VERSION

REDUCING DOMESTIC VIOLENCE REVICTIMIZATION: THE EFFECTS OF INDIVIDUAL AND CONTEXTUAL FACTORS AND TYPE OF LEGAL INTERVENTION

Daniel P. Mears, Matthew J. Carlson, George W. Holden, and Susan D. Harris*

*Direct correspondence to **Daniel P. Mears**, Ph.D., The Urban Institute, Justice Policy Center, 2100 M Street, N.W., Washington, D.C. 20037, phone (202-261-5592), fax (202-659-8985), e-mail (dmears@urban.org). **Matthew J. Carlson**, Ph.D., is a Health Services Research Associate, CareOregon, 522 SW 5th Avenue, Suite 200, Portland, OR 97212, phone (503-416-1482), fax (503-416-3720), e-mail (carlsonm@careoregon.org). **George W. Holden**, Ph.D., is a Professor and Associate Chair of the Psychology Department, University of Texas at Austin, Austin, TX 78712-1189, phone (512-471-6447), fax (512-471-6175), e-mail (holden@psy.utexas.edu). **Susan D. Harris**, Ph.D., is an Assistant Professor, Department of Psychology, Northern Arizona University, P.O. Box 15106, Flagstaff, AZ 86011, phone (520-523-3063), fax (520-523-6777), e-mail (susan.harris@nau.edu).

AUTHOR'S NOTE

Portions of this manuscript were presented at the Annual Meeting of the American Society of Criminology, San Francisco, California, November 2000. Grateful acknowledgment is extended to the Hogg Foundation for Mental Health, which provided a grant in support of this project. The authors also wish to acknowledge the helpful comments and suggestions of the anonymous reviewers and the editor. Dr. Carlson was supported by National Institute of Mental Health Training Grant #MH16242 while writing the initial draft of this article. The authors are solely responsible for all analyses and interpretations.

BIOGRAPHICAL SKETCHES

Daniel P. Mears, Ph.D., is a Research Associate in the Urban Institute's Justice Policy Center. He recently completed a two-year post-doctoral research fellowship with the Center for Criminology and Criminal Justice Research at the University of Texas at Austin. Dr. Mears received his Ph.D. in sociology from the University of Texas at Austin. His research focuses on the causes of crime and effective strategies for preventing and addressing crime and justice problems. He currently is involved in studying correctional drug treatment, detention and correctional bedspace needs, juvenile justice reforms, and challenges in providing for the mental health needs of youthful offenders. Recent publications include articles in Crime and Delinquency, Criminal Justice and Behavior, Criminology, Law and Policy, and Sociological Perspectives. Contact: The Urban Institute, Justice Policy Center, 2100 M Street, N.W., Washington, D.C. 20037, phone (202-261-5592), fax (202-659-8985), e-mail (dmears@urban.org).

Matthew J. Carlson, Ph.D., is a Health Services Research Associate at CareOregon, and a Clinical Assistant Professor in the Department of Public Health and Preventive Medicine at Oregon Health Sciences University. Dr. Carlson received his Ph.D. in sociology from the University of Texas at Austin. He recently completed a two-year National Institute of Mental Health post-doctoral fellowship at the Institute for Health, Health Care Policy, and Aging Research at Rutgers University in New Brunswick, New Jersey. His primary research interests include consumer satisfaction and access to health and mental health care for vulnerable populations. Recent publications include articles in Journal of Family Violence, Medical Care, and Psychiatric Services. Contact: CareOregon, 522 SW 5th Avenue, Suite 200, Portland, OR 97212, phone (503-416-1482), fax (503-416-3720), e-mail (carlsonm@careoregon.org).

George W. Holden, Ph.D., is a Professor and Associate Chair of the Psychology Department at the University of Texas at Austin, Austin. He received his B.A. from Yale University and his M.A. and Ph.D. in developmental psychology from the University of North Carolina at Chapel Hill. He is a fellow of the American Psychological Society and a member of the Society for Research in Child Development and the American Professional Society on the Abuse of Children. His research interests include parent-

child relationships, parental social cognition, and the problem of family violence. He is currently on the editorial boards of Developmental Psychology and the Journal of Emotional Abuse. Holden is the author of Parents and the Dynamics of Child Rearing and a co-editor of Children Exposed to Marital Violence and The Handbook of Family Measurement Techniques, Vols. 2 & 3. Contact: Department of Psychology, Mezes 330, University of Texas at Austin, Austin, Texas 78712-1189, phone (512-471-6447), fax (512- 471-6175), e-mail (holden@psy.utexas.edu).

Susan D. Harris, Ph.D., is an Assistant Professor of Psychology at Northern Arizona University. Dr. Harris received her Ph.D. in developmental psychology from the University of Texas at Austin. Her research interests include the impact of legal intervention on domestic violence, explanatory style and relationship quality, and parent-child relationships. She has recently published research in The Journal of Interpersonal Violence, Journal of Marriage and the Family, and Journal of Family Violence. Contact: Department of Psychology, Northern Arizona University, P.O. Box 15106, Flagstaff, Arizona 86011, phone (520-523-3063), fax (520-523-6777), e-mail (susan.harris@nau.edu).

REDUCING DOMESTIC VIOLENCE REVICTIMIZATION: THE EFFECTS OF INDIVIDUAL AND CONTEXTUAL FACTORS AND TYPE OF LEGAL INTERVENTION

ABSTRACT

This paper examines the role of individual and contextual factors and legal interventions in reducing time to domestic violence revictimization. Drawing on current theory and research, hypotheses are deduced about the effects of these factors. Cox regression and survival analyses are employed to test the hypotheses using court, police, and census data from an urban jurisdiction in Texas. Prior drug use, race/ethnicity, and community-level income were associated with time to revictimization. However, there was little evidence either of interactive effects between race/ethnicity and community-level income or of differential effects of each of three types of legal interventions. Implications for theory, research, and domestic violence interventions are discussed.

REDUCING DOMESTIC VIOLENCE REVICTIMIZATION: THE EFFECTS OF INDIVIDUAL AND CONTEXTUAL FACTORS AND TYPE OF LEGAL INTERVENTION

Despite growing recognition among researchers and policymakers of the personal and social consequences of domestic violence, we still know little about the efficacy of various types of legal (i.e., police and/or court) interventions or about the populations for which specific interventions are most efficacious (Cardarelli 1997; Miller and Wellford 1997; Bell and Mattis 2000; Dobash and Dobash 2000; Worden 2000). The situation, in part, reflects the fact that it has only been in the last three decades that domestic violence has ceased to be viewed as a purely private matter (Paquin 1994; Flowers 1996; Caringella-MacDonald 1997; Miles-Doan 1998). In recent years, however, the proliferation of mandatory arrest and prosecution laws has led to increased attention to and research on domestic violence (Gelles and Straus 1988; Sherman, Schmidt, and Rogan 1992; Keilitz 1994; Buzawa and Buzawa 1996a-b; Schmidt and Sherman 1996; Mills 1998; Dobash and Dobash 2000). There remains, though, much that is unknown theoretically and empirically about the two most common domestic violence interventions -- arrests and protective orders -- and their potential differential impact on diverse populations (Mills 1998). In addition, research to date has neglected close examination of contextual factors such as community-level socioeconomic status (Thistlewaite, Wooldredge, and Gibbs 1998; Wolfe and Jaffe 1999), the interaction of individual and contextual factors (Dobash and Dobash 2000), and intervention efficacy as measured by time to revictimization (Klein 1996).

Taking these observations as a point of departure, this paper explores three questions. First, how and to what extent are key individual and contextual-level factors (age, prior victimizations and drug use, race/ethnicity, and median family income) linked to time to revictimization after a legal (police or court) intervention, and are there race/ethnic and community interactions that disadvantage certain groups? Second, for cases in which a woman obtained a protective order (PO), cases in which a woman's partner was arrested (arrest), and cases in which a woman obtained a protective order and in which the partner was arrested (PO/arrest), are there differences in the prevalence of or time to revictimization? Third, do the interventions differentially affect time to revictimization for certain populations?

Drawing on previous theoretical and empirical research, this study addresses these questions to extend knowledge of policies aimed at reducing domestic violence. We begin by reviewing research on

domestic violence and related interventions. Then, drawing on recent theorizing and research, the central hypotheses guiding our analyses are outlined, followed by discussion of the data, methods, and findings. We conclude with a discussion of the study's theoretical, research, and policy implications.

BACKGROUND

Domestic violence no longer is seen as a private problem; rather, it is a social problem of considerable magnitude. Mills (1998) recently has summarized some of the compelling facts: domestic violence results in the death of four women every day in the U.S.; it affects all racial/ethnic and socioeconomic groups; and, for women ages 15 to 44, it is the predominant cause of injury (Bureau of Justice Statistics 1994; Brookoff et al. 1997; Worden 2000). Such patterns have repercussions for women and their children, who themselves may be the recipients of physical abuse, with attendant consequences for their long-term health and, in turn, for society (Appel and Holden 1998; Yabiku, Axinn, and Thornton 1999). Understandably, therefore, researchers increasingly have focused both on the causes of domestic violence and on the efficacy of legal interventions aimed at reducing it. Several prominent themes from this research are summarized here. (For extensive reviews, see Ohlin and Tonry 1989; Sherman, Schmidt, and Rogan 1992; Buzawa and Buzawa 1996a-b; Swisher 1996; Cardarelli 1997; Miller and Wellford 1997; Mills 1998; Walker 1999; Dobash and Dobash 2000; Worden 2000.)

Research on the causes and patterns of domestic violence has involved many different foci, initially focusing on patterns and consequences of victimization and then on batterers and their characteristics (Miller and Wellford 1997:21-22). Other foci have included focusing on individual pathology, family dysfunction, and cultural and structural context (Miller and Wellford 1997; Worden 2000; Wyatt, Axelrod, and Chin 2000). More recently, emphasis has been given to developmental aspects of domestic violence (e.g., early socialization experiences and exposure to violence, the unfolding of certain patterns over time); expanding and clarifying the notion of intimate violence; and exploring interactions of gender, political and religious systems, public attitudes, and large-scale societal events, such as wars, in producing and supporting domestic violence (Paquin 1994; Buzawa and Buzawa 1996a-b; Swisher 1996; Cardarelli 1997; Walker 1999; Dobash and Dobash 2000; Worden 2000). Although this research has revealed more of the complexity involved in domestic violence, it unfortunately has not led to widespread support for or agreement about the etiology or cessation of violence among intimate partners.

Early studies assessing interventions focused on the impact of mandatory arrest policies (e.g., Sherman and Berk 1984). These studies revealed equivocal findings, with some showing a deterrent effect that diminishes rapidly over time, some not, and some even identifying an increase in revictimization (see Buzawa and Buzawa 1996a-b; Davis, Smith, and Nickles 1998; Mills 1998). More recent research suggests that arrests might be more effective if undertaken in conjunction with other interventions, such as providing women transportation to a shelter, offering various legal and social services, and involving victims more directly in the decision to arrest (Sherman, Schmidt, and Rogan 1992). Similar, albeit more limited studies have been conducted on mandatory prosecution policies and also yielded equivocal results (see Ford and Regoli 1993; Davis, Smith, and Nickles 1998; Mills 1998).

Researchers increasingly are focusing on the efficacy of protective orders (POs), commonly referred to as restraining orders. Because one of the primary legal interventions examined in the present study includes protective orders, a brief review of what they are and how they work is in order. Protective orders can be solicited by a victim in an attempt to require, with the assistance of the courts, that an abusive partner vacate the residence. Their primary functions are to prohibit abusers from committing family violence, directly communicating with family or household members, or going to or near a family or household member's home or place of employment. As of 1976, only two states had protective order legislation, but, by 1994, all fifty states had developed protective order statutes (Keilitz 1994).

As originally conceived, protective orders were viewed as potentially more effective than criminal prosecution because the latter rarely resulted in women participating or in more than minimal punishment of the offender (Hart 1996). By contrast, it was thought that women would be more willing to seek protective orders, which involve civil proceedings, because they might feel that men would be less likely to retaliate (see, however, Zoellner et al. 2000). Furthermore, because violation of protective orders could lead to criminal penalties, there was the possibility of a deterrent effect resulting from the fear of a sanction or having a direct order from a judge to cease certain conduct (Wallace 1996:206).

Although all states have protective order legislation, few studies have examined their efficacy. Research suggests that between 23 and 50 percent of women who seek protective orders experience revictimization (Grau, Fagan, and Wexler 1985; Horton, Simonidis, and Simonidis 1987; Chaudhuri and Daly 1992; Harrell and Smith 1996; Klein 1996; Carlson, Harris, and Holden 1999). Unfortunately, several studies suffer from reliance on minimal (two to four-month) follow-up periods (Grau, Fagan, and

Wexler 1985; Chaudhuri and Daly 1992). The few studies comparing the experiences of women who sought protective orders with those who did not have found no differences in rates of revictimization (Grau, Fagan, and Wexler 1985; Harrell and Smith 1996; Klein 1996). This research also has revealed few consistent results about the effects of protective orders for different populations. Collectively, however, it suggests that revictimization may be higher among those who share biological children (Harrell and Smith 1996), lower socioeconomic and minority groups (Carlson, Harris, and Holden 1999), and couples where the perpetrator has a history of arrest (Harrell and Smith 1996; cf. Klein 1996).

In short, and largely because of the limited research to date, we currently possess a limited understanding about the comparative effects of different legal interventions, especially for specific populations. We also lack insight into the relative efficacy of these interventions in affecting time to revictimization. In addition, there has been little research on contextual-level factors that might impact the efficacy of an intervention. This study thus attempts to further research in this area by examining the comparative effect of three commonly used interventions -- protective order, arrest, and a combination of a protective order and an arrest -- on length of time to revictimization after an intervention, with particular attention to exploring the relative efficacy of different interventions for various groups.

HYPOTHESES

In this section, we outline a series of competing hypotheses linking key individual and contextual-level factors to time to revictimization after a legal intervention, the relative efficacy of three types of police and/or court interventions, and the effects of each type of intervention on time to revictimization among certain populations. We focus first on age, prior victimizations and drug use, race/ethnicity, and community socioeconomic levels. We then focus on three types of legal interventions and the possibility that they may differentially affect certain populations.

Age

In analyses of domestic violence, age is usually viewed as a control variable (see, e.g., Thistlewaite, Wooldredge, and Gibbs 1998). Yet age itself may be an important predictor of revictimization worthy of theoretical attention. On one hand, women who are older may be more entrenched in a relationship that prevents them from leaving, either because they have developed a profound sense of low self-esteem and

dependency or, more likely, because of the perceived and generally real possibility of further battering if they attempt to leave (Giles-Sims 1983; Chaudhuri and Daly 1992; Flowers 1996; Ferraro 1997); thus, older women may be more likely to be revictimized after an intervention. On the other hand, women who are older may be more experienced both with the violence they have endured and with the resources and services that are available locally; this experience in turn may contribute to a greater likelihood that an intervention will more effectively reduce revictimization for older women (Klein 1996:200).

Prior Victimizations

Research on the effect of prior abuse and likelihood of post-intervention revictimization is mixed, with some suggesting that prior abuse increases revictimization and other research suggesting no effect (Cardarelli 1997). From one perspective, we might expect prior abuse to signal entrenchment in an abusive relationship, such that escape is unlikely and revictimization more likely (Klein 1996; cf. Harrell and Smith 1996). From another, we might expect that among those who actively seek any intervention may represent a relatively homogenous group with respect to feelings of empowerment and thus experience similar rates of revictimization regardless of previous abuse (Ferraro 1997; Sullivan 1997).

Prior Drug Use

Although there is a correlation between drug use and battering, it remains unclear whether and how this translates into a causal relationship (Burgess and Draper 1989:63-65; Miller and Wellford 1997:22). It may be, for example, that drug use lowers the inhibitions of batterers, though this hypothesis has not received strong or consistent support (Wallace 1996; Miller and Wellford 1997). Following the direction of recent research, we hypothesize that drug use will be associated with further victimization, whether this be due to the victim's reliance on the abuser for supporting an addiction (Brookoff et al. 1997) or to other possibilities (e.g., reduced capacity to pursue alternative means of preventing or escaping abuse).

Race/ethnicity

Although some studies suggest that domestic violence is primarily a minority and lower-class phenomenon, others suggest there are no racial/ethnic differences (Miller and Wellford 1997). Where studies indicate differences, some have suggested that higher reporting rates among minorities and lower

socioeconomic groups may reflect their unequal access to legal or economic resources (Miller and Wellford 1997:20). Other research suggests there may be higher tolerance for domestic violence among minority and lower socioeconomic groups (Burgess and Draper 1989; Buzawa and Buzawa 1996a-b; Miller and Wellford 1997; Sullivan 1997).

We draw on two distinct arguments about racial/ethnic differences in revictimization. First, research consistently reveals that minority and lower socioeconomic groups are more likely than their white, higher socioeconomic counterparts to view the police and courts as treating them unjustly and as being unresponsive to their needs (e.g., Hagan and Albonetti 1982). Indeed, it is precisely this issue that has proved to be a central challenge to implementing effective community policing initiatives (Grinc 1994; Podolefsky 1985; Skogan 1990). Thus, insofar as abusers believe their actions will be less likely to be interfered with by police or court action -- or by sustained follow-through after an intervention -- they will be less deterred from further abuse.

Second, a wide range of social factors are associated with criminal behavior, including socialization, inequality, and institutionalized racism in society and the criminal justice system (Miller and Wellford 1997; Sullivan 1997). To the extent that such factors are manifested through racial/ethnic relations and isolation (Sampson and Wilson 1995), it is likely that racial/ethnic minorities may experience disproportionately more discrimination and frustration (Jankowski 1995). These dynamics may create an environment in which residents become accustomed to, though not necessarily accepting of, violence (Bernard 1990:87; see also Massey 1996; Miles-Doan 1998; Sampson and Wilson 1995; Sampson and Bartusch 1998). It should be emphasized that this is an argument that flows from an emphasis on social-ecological disadvantage (Sampson and Bartusch 1998:778), not racial/ethnic support of or apathy toward domestic violence. In short, either through a lesser deterrent effect or a social context that is less inhibiting -- but not necessarily more supportive -- of criminal activity, our expectation is that racial/ethnic minority victims will experience greater rates of post-intervention revictimization.

Community-level Socioeconomic Context

To date, relatively little empirical research has attended to the role of community-level factors in affecting domestic violence and especially the efficacy of various interventions (Moore 1997; see, however, Sherman, Schmidt, and Rogan 1992; Miles-Doan 1998; Thistlewaite, Wooldredge, and Gibbs

1998). This neglect is unfortunate and surprising, especially given recent work that emphasizes the importance of contextual effects (see, e.g., Miethe and Meier 1994; Sampson and Wilson 1995; Miller and Wellford 1997; Taylor 1997). The specific hypotheses we put forth for community-level socioeconomic context essentially flow from previous research linking abuse and socioeconomic status (e.g., Gelles 1972; Straus 1990; Tauchen, Witte, and Long 1991; Sherman, Schmidt, and Rogan 1992; Carlson, Harris, and Holden 1999) and from the theoretical arguments presented above concerning race/ethnicity. That is, potential abusers in lower socioeconomic areas may feel less deterred by police or court actions, and there may be a social environment that does not endorse violence but that nonetheless enables violence to be sustained through a belief among community residents that nothing can be done to stop it. In addition, in such an environment there is likely to be a breakdown in informal social controls that also contributes to increased criminal activity (Sampson 1991; Sampson and Wilson 1995; Massey 1996; Miles-Doan 1998; Thistlewaite, Wooldredge, and Gibbs 1998).

Race/ethnicity and Community-level Socioeconomic Context

Extending the above theoretical arguments further, we speculate that there will be a pronounced and differential effect of race/ethnicity across socioeconomic levels of communities. Specifically, we hypothesize that minority women will be more likely to be revictimized after an intervention, and that this effect will be especially pronounced among racial minorities residing in lower income neighborhoods. This argument flows directly from research that emphasizes notions of social disadvantage and isolation and their intersection with culture (e.g., Bernard 1990; Sampson and Wilson 1995; Heimer 1997; Massey 1996; Miller and Wellford 1997; Wyatt, Axelrod, and Chin 2000). The idea, put simply, is that for racial/ethnic minorities, the individual-level risk of revictimization is disproportionately enhanced, relative to that of whites, by low community socioeconomic level. This differential effect may be due to the concentrated disadvantage that racial/ethnic minorities from lower socioeconomic communities may experience in the face of systematic inequality and discrimination (Miller and Wellford 1997; Sullivan 1997; Bell and Mattis 2000).

Type of Intervention

Relatively little research has attended to variation in the efficacy of different interventions, and, especially, in the effects of sentence severity. One recent exception is Thistlewaite, Wooldredge, and Gibb's (1998) study of misdemeanor domestic violence in Cincinnati, Ohio (see also Dutton et al. 1992; Williams 1992; Williams and Hawkins 1992). The authors found that sanction severity, as measured by type of sanction (dropped/acquitted, fine, probation or jail, fine with probation or jail, probation and jail), was negatively associated with recidivism, thus suggesting a potential deterrent effect of increased sanction severity. Adopting a similar strategy, we examine the extent to which three relatively distinct interventions differ in their impact on revictimization. The three groups include those wherein a protective order only was issued (PO), those wherein an arrest only occurred (arrest), and those wherein both a protective order was issued and an arrest occurred (PO/arrest). We view these interventions as representing progressively more serious legal actions that arguably represent part of a continuum of intervention severity. Thus, per conventional deterrence perspectives, we hypothesize that the prevalence of and time to revictimization should be lower when the intervention is more severe.

Type of Intervention: Differential Impacts on Certain Populations

Finally, because interventions rarely reach or affect all groups the same way (Rossi, Freeman, and Lipsey 1999:238-239), we examine the extent to which certain populations are differentially affected by each of the three legal interventions in this study. Apart from the general expectation that the interventions will operate differently for different populations, we posit no specific a priori expectations about which populations will differentially benefit from each intervention because there is little theoretical or empirical guidance for doing so. Nonetheless, we believe the issue is a critical one to explore, especially in assessing more systematically precisely for whom given interventions "work."

DATA

The data, drawn from court and police files in a large, urban county in Texas, consist of 336 domestic violence cases sampled from January, August, and October for each of three years (1990-92). All protective orders filed during each of the nine study months were examined to identify victims and respondents of the PO. A dual name search was performed identifying police records matching the victim or the respondent for ten years prior to and at least two years after the PO. Both names and birth

dates were used to match POs with police records. The arrest-only group was identified by sampling twenty-five cases from each of the nine months and identifying those in which only an arrest occurred. Demographic information, including victims' street addresses were gathered from court records; data on arrest status and violence prior to and following the PO were obtained from police records.

Within these cases, there are three distinct groups that can be identified based on the intervention involved: issuance of a protective order in situations where no arrest occurred (PO, N = 83); arrest of an abuser in situations where no PO was issued (arrest, N = 126); and issuance of a protective order and arrest of the abuser (PO/arrest, N = 127). The variables used in the analyses, and the corresponding univariate descriptive statistics are presented in Table 1.

Insert Table 1 about here

The dependent variables for the analyses consist of prevalence of and days to revictimization.¹ It is the latter that constitutes the central focus of this paper. Specifically, revictimization was measured as any physical violence reported to the police within two years after an intervention. The actions representing physical violence were based on the Conflict Tactics Scale (Straus 1979) and included such events as being “slapped,” “kicked,” “hit,” “beat up,” and “threatened with or used knife or gun.”

The independent variables consist of individual and contextual-level factors. The individual-level factors include age of victim, race/ethnicity (non-Hispanic white, black, Hispanic), number of victimizations in the previous two years, and the number of reports to the police of drug abuse in the previous two years.² In addition to these individual-level factors, a contextual factor -- block-level median family income, obtained by merging victims' street addresses with 1990 U.S. census data files -- is examined. To simplify analyses, this variable was coded into three ordered categories: low (<\$18K); medium (\geq \$18K and <\$28K); high (\geq \$28-42K+).³

METHODOLOGY

We first provide univariate and multivariate Cox regression and survival analyses to examine the effects of individual and contextual-level factors. We then compare the prevalence of and time to revictimization for each of the three intervention groups. Finally, we test for interactions between type of legal intervention and each of the individual and contextual-level predictors.

Survival analysis and hazard rate techniques, and event history modeling generally in multivariate contexts, are ideal for analysis of duration outcomes with censoring (Yamaguchi 1991; Blossfeld and Rohwer 1995; Hinde 1998). For example, survival analysis is appropriate and useful for descriptive comparisons of the distributions for different groups of the probability of an event occurring at any point within a given time period. By contrast, event history analysis extends descriptive survival and hazard rate approaches by allowing for multivariate parameter estimation, where “the hazard rate (or hazard function), $h(t)$, expresses the instantaneous risk of having the event at time t , given that the event did not occur before time t ” (Yamaguchi 1992:9).

When estimation based on specific parametric assumptions about the distribution of durations (e.g., exponential, lognormal) is problematic, an appropriate alternative is “to specify only a functional form for the influence of covariates [and] leave the shape of the transition rate as unspecified as possible” (Blossfeld and Rohwer 1995:212). This type of model, also called a semi-parametric, proportional hazards, or Cox model, can be expressed as $r(t) = h(t)\exp(A(t)\alpha)$, where the transition rate, $r(t)$, is a function both of a baseline rate, $h(t)$, and of a covariate vector $A(t)$ (Blossfeld and Rohwer 1995:212). In Cox models, which will be used here, predictors are interpreted as resulting in proportional shifts up or down in the transition rate, but the underlying shape of this rate cannot be changed.⁴

Before proceeding, it should be emphasized that because police data were used to assess abuse, the findings we present should be interpreted with caution. For example, police data have often been criticized for underreporting the incidence of domestic violence (Dobash et al. 1992). Nonetheless, prior research comparing police and victim self-reports or court records has suggested that “police reports reveal the same causal factors as data from other likely sources” (Berk and Newton 1985, p.257; emphasis added). Other limitations attributed to a quasi-experimental design such as the relied on here include selection bias (e.g., women with certain characteristics or from certain areas may be more likely than others to seek a particular intervention) and attrition bias (e.g., women with certain characteristics may be more likely to move out of the study area). A review of the extant literature does not suggest, however, a consistent basis for anticipating systematic biases in the present study that would undermine assessment of the different interventions or of the causal models presented.

FINDINGS

First, as a review of the univariate Cox regression analyses in Table 2 reveals, prior victimizations and drug use, race (black vs. white), and community socioeconomic level (low vs. high income) were positively associated with increases in the hazard rate. In the present context, the hazard rate is the probability of revictimization given that the women have not been revictimized up to that point in time. For example, for blacks versus whites, the hazard ratio, or relative risk, is 3.12, which indicates that the revictimization (hazard) rate was higher for blacks as compared with whites. Specifically, for blacks there was a 312 percent increase in the revictimization rate relative to whites (i.e., during the post-intervention period, blacks were 3.12 times more likely to be revictimized than were whites). In the multivariate model, the effects of these factors remained significant, except that prior victimization dropped from significance.⁵

Insert Table 2 about here

Investigation of an interaction effect between race/ethnicity and community-level income yielded no statistically significant results. However, the combined (additive) effects of these variables is nonetheless striking. For example, blacks living in low income communities were 5.13 times more likely to be victimized than whites in high income communities, and for blacks in medium income communities the relative risk was 3.36.⁶

To provide a more intuitive description of these results, a Kaplan-Meier survival curve is presented in Figure 1. Survival curves provide cumulative probabilities of an event occurring within a given time period (here, up to 720 days). Here, the survival curve indicates the percentage of individuals who have survived to a given point in time without being revictimized. As is evident, blacks living in lower income communities had considerably lower survival times as compared with all other groups, and especially non-blacks living in higher income communities.⁷ The mean days to revictimization for the different groups were as follows: black, low income (478, s.e. 47, n = 38); black, medium/high income (572, s.e. 32, n = 60); non-black, low income (627, s.e. 25, n = 78); non-black, medium/high income (681, s.e. 13, n = 133). Log rank tests, which test the equality of the survival distributions for each of the groups, revealed that all but one of the differences between the groups were statistically significant.⁸

Insert Figure 1 about here

Turning next to prevalence of and time to revictimization, Table 3 reveals that there is no statistically significant difference among the intervention groups. This is true whether days to revictimization includes the total sample for each group or only those who were revictimized. Re-estimation using Cox regression yielded similar results. The three interventions in this study -- protective order only (PO), arrest only (arrest), and the combination of both a protective order and an arrest of the abuser (PO/arrest) -- thus appear to exert a similar impact on both prevalence and time to revictimization. Examination of interactions between each intervention and the other predictors revealed few notable interactions (results not shown here), save that women from low income communities who obtained protective orders were more at risk of revictimization than their counterparts from high income communities.

Insert Table 3 about here

DISCUSSION

We explored how and to what extent individual and contextual-level factors were associated with time to post-intervention revictimization and whether there were race/ethnic and community-level interactions that advantaged or disadvantaged certain groups. In addition, we assessed whether police and court interventions had differential effects on the prevalence or time to revictimization, and whether their relative efficacy was similar across certain populations.

The fact that age and prior victimization were unrelated to revictimization perhaps is unsurprising in light of previous research showing inconsistent to nominal effects of these factors (see, e.g., Klein 1996; Cardarelli 1997; Miller and Wellford 1997; Thistlewaite, Wooldredge, and Gibbs 1998). The lack of effect may well be linked to domestic violence being part of a more entrenched and closed relationship that is largely impervious to intervention, regardless of the victim's age/maturity or previous abuse. Consider that protective orders represent an attempt on the part of victims to intervene actively in the violence in their lives, yet in this study they provided no additional protection from revictimization. Some recent research suggests why. For example, one study found that "few victims sought additional care or swore out arrest warrants for their assailants, despite months or even years of repeated assault" (Brookoff et al. 1997:1372). The same study reported that "many of the female victims we surveyed, most with obvious injuries, nonetheless asked us to intercede with the police to stop the arrest of their assailants" (p. 1372). As with other research (e.g., Giles-Sims 1983; Chaudhuri and Daly 1992; Flowers

1996; Ferraro 1997; Zoellner et al. 2000), the authors found that one of the foremost barriers to victims seeking help or intervention was the fear that this would result in retaliation by the abuser. A key issue, then, is to identify those factors necessary to assist with transitioning victims out of abusive relationships and in turn to develop the types of services and interventions that effectively empower women to escape, end, or otherwise modify these relationship (Mills 1998; Sullivan 1997; Bell and Mattis 2000).

There is insufficient evidence to date to indicate that alcohol and drug use are causally related to domestic violence; indeed, “most batterers are neither alcoholics nor drug addicts” (Miller and Wellford 1997:22). Nonetheless, in this study and in others (e.g., Brookoff et al. 1997), prior drug use was strongly associated with increased revictimization. How, if at all, drug use is linked to subsequent abuse clearly merits closer scrutiny (Burgess and Draper 1989). The argument that drugs serve to disinhibit potential batterers has seemed to be the most likely explanation, but it suffers from markedly little empirical support (Miller and Wellford 1997:22). However, there has been less attention to drug use among victims or to the possibility that such use is linked to increased dependency of the victim on the abuser. Such an explanation could be linked directly to research on the financial dependence of female victims on their male abusers (Giles-Sims 1983; Chaudhuri and Daly 1992), yet remains unaddressed.

The findings concerning race/ethnicity, community socioeconomic level, and the lack of interaction between these two factors raise perhaps the most intriguing and important questions from this study. That there was not an interaction suggests the possibility that minority women in low income areas are not necessarily at greater risk of revictimization than if they lived in higher income areas. It should be emphasized, however, that analysis of factors other than income, such as informal social controls and community efficacy (Sampson and Bartusch 1998), might yield different results. Nonetheless, minority women in lower income areas were at a considerably pronounced risk of revictimization in this study. Why? Several explanations suggest themselves. First, as noted earlier, it is entirely possible that potential abusers believe -- correctly or not -- that the police will be unresponsive to attempts by black and lower income women to seek assistance (Hagan and Albonetti 1982; see also Gelles 1972; Straus 1990; Tauchen, Witte, and Long 1991; Sherman, Schmidt, and Rogan 1992). This possibility is echoed by research showing that community policing initiatives in minority and socioeconomically impoverished areas frequently are viewed with considerable suspicion and mistrust (e.g., Podolefsky 1985; Skogan 1990; Grinc 1994). Second, the effects of belonging to a racial/ethnic minority group and of living in

lower socioeconomic communities may be part of a broader pattern of social structural inequality that is linked to breakdowns in informal social control mechanisms and to the belief that nothing can be done to reduce violence (Bernard 1990; Paquin 1994; Sampson and Wilson 1995; Heimer 1997; Miles-Doan 1998; Sampson and Bartusch 1998; Thistlewaite, Wooldredge, and Gibbs 1998).

The fact that no one intervention, especially the combination of both a protective order and an arrest (PO/arrest), was more effective in reducing the prevalence or time to revictimization is surprising and important. In keeping with some recent research (e.g., Thistlewaite, Wooldredge, and Gibbs 1998; Carlson, Harris, and Holden 1999), we expected that protective orders might afford more protection than arrests and that the combination of both a protective order and an arrest might afford the most protection. One reason for the relatively comparable effects may have to do with the foregoing discussion regarding the effect of previous victimizations and community context. It may be that domestic violence is such a complex and deeply rooted problem -- both for the victims and for the communities in which the victims reside -- that few women are able to escape it. For those who do, it may be that a selection process produces an essentially homogenous group -- that is, those who seek an intervention of any kind versus those who do not or cannot (Zoellner et al. 2000). This explanation certainly accords with the limited research to date, which reveals no single intervention to be more effective than others. However, as Mills (1998) has emphasized, there well may be interventions that are uniquely suited to promote personal empowerment in particular types of abusive situations; the problem simply is that there are few such programs and that they have yet to be adequately assessed (Dobash and Dobash 2000). Yet clearly such research is warranted if we are to identify the kinds of programs and policies that can empower women and, in turn, facilitate reduced revictimization.

Finally, we speculated that the interventions might differentially impact certain populations, but found no evidence of interactions between each of the three types of interventions and the other predictors. The one exception was that women from low income communities who obtained protective orders were more at risk of revictimization than were women from high income communities who obtained protective orders. Given the exploratory and atheoretical nature of this aspect of the study, the finding should be viewed cautiously. However, one plausible interpretation is that protective orders may have different meaning to women or abusers in lower versus higher income communities or that they are viewed differently by others. If, for example, obtaining a protective order were viewed by abusers in

lower income areas as a clear act of aggression or defiance, the result might well be higher rates of revictimization. Alternatively, different initial police or court experiences (e.g., positive/negative, easy/difficult, sympathetic/unsympathetic), or the subsequent impacts of these experiences (e.g., mobilization of resources and support, or not) among women and men from different socioeconomic backgrounds might also affect revictimization rates: among men, they might reduce any potential deterrent effect and among women they might reduce the likelihood of breaking out of abusive relationships. Although these explanations at present must remain speculative, they are precisely the kinds of possibilities that must be investigated if we are to determine more precisely who will benefit from specific interventions and why.

CONCLUSION AND IMPLICATIONS

The results of this study suggest the importance of focusing on both individual and contextual-level factors associated with time to revictimization. That age and prior abuse were not linked to revictimization rates does not reflect their lack of importance, but rather may reflect the profound entrapment that women who have suffered repeated victimization experience, and, in turn, the difficulty confronted by any intervention aimed at reducing victimization. Such a view is supported in part by the pronounced effect of prior drug use on increasing the likelihood of revictimization. The marked effects of race/ethnicity and community context, and especially their combined effects, emerged as perhaps the most striking finding in this study: it is women who are black and who reside in low income communities that by far appear to benefit the least from any type of intervention. Finally, the fact that the different interventions exerted a similar impact on revictimization, save for women from low income communities who obtained protective orders compared with women from higher income communities, suggests the need for more comparative assessments of diverse domestic violence interventions.

Having briefly summarized several of the key findings from this study, we turn now to several implications for theory, research, and policy. First, there is a need for considerably more research on factors associated with revictimization and, as importantly, with time to revictimization. All else being equal, two interventions with similar post-intervention prevalence rates for revictimization but with differential impacts on time to revictimization are not equally effective. More generally, given the current lack of understanding about the efficacy of various mandatory policies and other types of

interventions (Mills 1998; Wolfe and Jaffe 1999), there is a need for more theoretical and empirical research on their relative efficacy and, as importantly, on precisely for whom they are effective (Bell and Mattis 2000; Dobash and Dobash 2000). In addition, although the present study did not address the cumulative impact of previous interventions or the severity of revictimization, both dimensions clearly merit further study and represent a conspicuous gap in research on the efficacy of various interventions (see, however, Harrell and Smith 1996; Dobash and Dobash 2000).

Second, both theoretical and empirical research on domestic violence have neglected the potential importance of community context in affecting intervention efficacy. Even for studies that have examined community context (e.g., Thistlewaite, Wooldredge, and Gibbs 1998), there remains much to be understood. For example, we need better measures of and research on the precise community factors that affect domestic violence (Paquin 1994; Miles-Doan 1998; Sampson and Bartusch 1998), and the mechanisms through which these factors operate. Similarly, interventions may differentially advantage certain groups within communities (Bell and Mattis 2000). As Moore (1997) has emphasized, “non-context-specific interventions may yield dissimilar outcomes” (p. 100). Indeed, there are potentially complex interactions between social structural inequality, race/ethnic relations, and cultural practices and definitions of violence that may affect an intervention’s success (Bernard 1990; Heimer 1997; Thistlewaite, Wooldredge, and Gibbs 1998; Dobash and Dobash 2000). As we have argued, strong theoretical and empirical grounds exist to suggest that higher rates of domestic violence revictimization among minorities in lower income areas may result from a combination of socially structured inequality, concentrated poverty, and real or perceived differences in the responsiveness of social control institutions such as the police and courts (Bernard 1990; Skogan 1990; Hagan and Albonetti 1982; Massey 1996; Heimer 1997; Miles-Doan 1998; Sampson and Bartusch 1998; Wyatt, Axelrod, and Chin 2000).

Third, to the extent that community-level factors affect an intervention’s efficacy, it is imperative that attention be given to ensuring that women who live in particular communities are reached and provided follow-up services. This is an issue that the police and courts in particular should consider; if, as in this study, women, and especially minority women, who live in lower income communities are at greater risk of revictimization, then every effort should be made to provide consistent follow-up services to these women. Although there may be systematic barriers to providing services to them, they are most likely to benefit from them. More generally, and echoing Mills’ (1998) recommendation on this issue,

law enforcement and social service providers should be provided training that includes a “crash course on the harsh realities that battered women face and especially on the compelling financial, cultural, and emotional interests that force them to stay in abuse relationships” (pp. 316-317).

Fourth, for interventions to work, they must reach and then effectively serve their target populations. The first condition essentially is an access/provision issue, whereas the second involves consideration of the design or substance of the intervention. Focusing on the latter, one important direction for future research centers around the empowerment of women, including, how this is achieved and to what effect (Mills 1998; Sullivan 1997; Worden 2000). For example, recent research suggests that perceived power, absolute power, consensus about relative power within a relationship, and other aspects bearing on couple interactions can each affect domestic violence (Sagrestano, Heavey, and Christensen 1999). Other research suggests that a victim’s attachment to the batterer, as well as their perception of threat, may affect their willingness not only to initiate but follow through with obtaining legal interventions (Zoellner et al. 2000). Considerable research also attests to the critical role of batterers and the difficulty of reducing their assaultive behavior, regardless of efforts undertaken by women (Klein 1996). Increased knowledge about such patterns, and the manner in which they can be changed, is needed before interventions can become effective in addressing the unique circumstances of survivors of domestic violence (Miller and Wellford 1992; Wolfe and Jaffe 1999; Dobash and Dobash 2000).

The consequences of domestic violence are broad-reaching, affecting the long-term physical and mental health of survivors as well as their children, to say nothing of the communities in which such violence occurs (Sampson and Wilson 1995; Appel and Holden 1998; Yabiku, Axinn, and Thornton 1999). The results of this research suggest that for legal interventions effectively to limit these consequences, there needs to be a clearer understanding of the specific populations and communities who will benefit and of appropriate measures of effectiveness. Attention to these issues provides a unique opportunity to further our understanding of theories of violence, and it may well have a profound, if not lifesaving, impact on the survivors of domestic violence.

NOTES

¹We refer to “revictimization” rather than “reabuse” or “reoffending” because we are relying on victim-level rather than offender or offense-level data.

²“Drug abuse” in these data reflects the perpetrator’s and/or victim’s use of drugs.

³The categorizations reflect natural breakpoints in the distribution of median family income and simplify presentation of the results; only nine of the median family income values were above \$42,000, with a range of \$44-87,000. Analyses with a categorization based on the continuous measure as well as a categorization based on \$10,000 increments revealed largely similar results.

⁴Cox models are appropriate when there is no clear information about the shape of time dependence, there is a weak theoretical basis for specifying a particular parametric model, and interest centers primarily around the magnitude and direction of effect of key predictors (Yamaguchi 1992:102-103; Blossfeld and Rohwer 1995:213; see also Schmidt and Witte 1988).

⁵The univariate results are presented in part to highlight the exploratory nature of this research and to demonstrate that the effects of the different predictors are robust across models.

⁶The relative risks for these two groups (blacks in low income communities versus blacks in medium income communities) are obtained by first adding and then exponentiating the race and income multivariate Cox coefficients.

⁷Inspection of these survival curves with those obtained from the multivariate analyses revealed virtually identical ordering and spacing of the survival distributions of each of the four groups.

⁸The pairwise log rank comparisons were as follows: black low income was different from black high income (.097), non-black low income (.003), and non-black high income (.001); black high income was not different from non-black low income (.188) but was different from non-black high income (.002); and non-black low income was different from non-black high income (.098).

REFERENCES

- Appel, Anne E. , and George W. Holden. 1998. "The Co-occurrence of Spouse and Physical Child Abuse: A Review and Appraisal." Journal of Family Psychology 12:578-599.
- Bell, Carl C., and Jacqueline Mattis. 2000. "The Importance of Cultural Competence in Ministering to African American Victims of Domestic Violence." Violence Against Women 6:515-532.
- Berk, Richard A., and Phyllis J. Newton. 1985. "Does Arrest Really Deter Wife Battery? An Effort to Replicate the Findings of the Minneapolis Spouse Abuse Experiment." American Sociological Review 50:253-262.
- Bernard, Thomas J. 1990. "Angry Aggression Among the 'Truly Disadvantaged.'" Criminology 28:73-96.
- Blossfeld, Hans-Peter, and Götz Rohwer. 1995. Techniques of Event History Modeling: New Approaches to Causal Analysis. Mahwah, NJ: Lawrence Erlbaum Associates.
- Brookoff, Daniel, Kimberly O'Brien, Charles S. Cook, Terry D. Thompson, and Charles Williams. 1997. "Characteristics of Participants in Domestic Violence: Assessment at the Scene of Domestic Assault." Journal of the American Medical Association 277:1369-1373.
- Bureau of Justice Statistics. 1994. Violence Against Women. Washington, D.C.: Bureau of Justice Statistics.
- Burgess, Robert L., and Patricia Draper. 1989. "The Explanation of Family Violence: The Role of Biological, Behavioral, and Cultural Selection." In Family Violence, edited by Lloyd Ohlin and Michael H. Tonry, pp. 59-116. Chicago: University of Chicago Press.
- Buzawa, Eve S., and Carl G. Buzawa. 1996a, eds. Do Arrests and Restraining Orders Work? Thousand Oaks, CA: Sage.
- , 1996b. Domestic Violence: The Criminal Justice Response. Thousand Oaks, CA: Sage.
- Cardarelli, Albert P., ed. 1997. Violence Between Intimate Partners: Patterns, Causes, and Effects. Boston: Allyn and Bacon.
- Caringella-MacDonald, Susan. 1997. "Women Victimized by Private Violence." In Violence Between Intimate Partners: Patterns, Causes, and Effects, edited by Albert P. Cardarelli, pp. 144-153. Boston: Allyn and Bacon.
- Carlson, Matthew J., Susan D. Harris, and George W. Holden. 1999. "Protective Orders and Domestic

- Violence: Risk Factors for Re-Abuse.” Journal of Family Violence 14:205-225.
- Chaudhuri, Molly, and Kathleen Daly. 1992. “Do Restraining Orders Help? Battered Women’s Experience With Male Violence and Legal Process.” In Domestic Violence: The Changing Criminal Justice Response, edited by Eve S. Buzawa and Carl G. Buzawa, pp. 227-252. Westport, CT: Auburn House.
- Davis, Robert C., Barbara E. Smith, and Laura B. Nickles. 1998. “The Deterrent Effect of Prosecuting Domestic Violence Misdemeanors.” Crime and Delinquency 44:434-442.
- Dobash, R. Emerson, and Russell P. Dobash. 2000. “Evaluating Criminal Justice Interventions for Domestic Violence.” Crime and Delinquency 46:252-270.
- Dobash, Russell, R. Emerson Dobash, Margo Wilson, and Martin Daly. 1992. “The Myth of Sexual Symmetry in Marital Violence.” Social Problems 39:71-91.
- Dutton, Donald G., Stephen D. Hart, Les W. Kennedy, and Kirk R. Williams. 1992. “Arrest and the Reduction of Repeat Wife Assault.” In Domestic Violence: The Changing Criminal Justice Response, edited by Eve S. Buzawa and Carl G. Buzawa, pp. 111-128. Westport, CT: Auburn House.
- Ferraro, Kathleen J. 1997. “Battered Women: Strategies for Survival.” In Violence Between Intimate Partners: Patterns, Causes, and Effects, edited by Albert P. Cardarelli, pp. 124-143. Boston: Allyn and Bacon.
- Flowers, Ronald B. 1996. “The Problem of Domestic Violence Is Widespread.” In Domestic Violence, edited by Karin L. Swisher, pp. 10-21. San Diego: Greenhaven.
- Ford, David A., and Mary J. Regoli. 1993. “The Criminal Prosecution of Wife Assaulters: Process, Problems, and Effects.” In Legal Responses to Wife Assault: Current Trends and Evaluation, edited by Zoe Hilton, pp. 127-164. Newbury Park, CA: Sage.
- Gelles, Richard J. 1972. The Violent Home: A Study of Physical Aggression Between Husbands and Wives. Beverly Hills, CA: Sage.
- Gelles, Richard J., and Murray A. Straus. 1988. Intimate Violence: The Causes and Consequences of Abuse in the American Family. New York: Simon and Schuster.
- Giles-Sims, Jean. 1983. Wife Battering: A Systems Theory Approach. New York: Guilford Press.
- Grau, Janice, Jeffrey Fagan, and Sandra Wexler. 1985. “Restraining Orders for Battered Women:

- Issues of Access and Efficacy.” In Criminal Justice Politics and Women: The Aftermath of Legally Mandated Change, edited by Claudine Schweber and Clarice Feinman, pp. 13-28. New York: Haworth Press.
- Grinc, Randolph M. 1994. “‘Angels in Marble’: Problems in Stimulating Community Involvement in Community Policing.” Crime and Delinquency 40:437-468.
- Hagan, John, and Celeste Albonetti. 1982. “Race, Class, and the Perception of Criminal Injustice in America.” American Journal of Sociology 88:329-355.
- Harrell, Adele, and Barbara Smith. 1996. “Effects of Restraining Orders on Domestic Violence Victims.” In Do Arrests and Restraining Orders Work?, edited by Eve S. Buzawa and Carl G. Buzawa, pp. 214-242. Thousand Oaks, CA: Sage.
- Hart, Barbara. 1996. “Battered Women and the Criminal Justice System.” In Do Arrests and Restraining Orders Work?, edited by Eve S. Buzawa and Carl G. Buzawa, pp. 98-114. Thousand Oaks, CA: Sage.
- Heimer, Karen. 1997. “Socioeconomic Status, Subcultural Definitions, and Violent Delinquency.” Social Forces 75:799-833.
- Hinde, Andrew. 1998. Demographic Methods. New York: Arnold.
- Horton, Anne L., Kyriacos M. Simonidis, and Lucy L. Simonidis. 1987. “Legal Remedies for Spousal Abuse: Victim Characteristics, Expectations, and Satisfaction” Journal of Family Violence 2:265-279.
- Jankowski, Martín S. 1995. “Ethnography, Inequality, and Crime in the Low-Income Community.” In Crime and Inequality, edited by John Hagan and Ruth D. Peterson, pp. 82-94. Stanford, CA: Stanford University Press.
- Keilitz, Susan L. 1994. “Civil Protection Orders: A Viable Justice System Tool for Deterring Domestic Violence.” Violence and Victims 9:79-84.
- Klein, Andrew R. 1996. “Re-Abuse in a Population of Court-Restrained Male Batterers: Why Restraining Orders Don’t Work.” In Do Arrests and Restraining Orders Work?, edited by Eve S. Buzawa and Carl G. Buzawa, pp. 192-213. Thousand Oaks, CA: Sage.
- Massey, Douglas S. 1996. “The Age of Extremes: Concentrated Affluence and Poverty in the Twenty-first Century.” Demography 33:395-412.

- Miethé, Terance D., and Robert F. Meier. 1994. Crime and Its Social Context. Albany: State University of New York Press.
- Miles-Doan, Rebecca. 1998. "Violence between Spouses and Intimates: Does Neighborhood Context Matter?" Social Forces 77:623-645.
- Miller, Susan L., and Charles F. Wellford. 1997. "Patterns and Correlates of Interpersonal Violence." In Violence Between Intimate Partners: Patterns, Causes, and Effects, edited by Albert P. Cardarelli, pp. 16-28. Boston: Allyn and Bacon.
- Mills, Linda G. 1998. "Mandatory Arrest and Prosecution Policies for Domestic Violence: A Critical Literature Review and the Case for More Research to Test Victim Empowerment Approaches." Criminal Justice and Behavior 25:306-318.
- Moore, Angela M. 1997. "Intimate Violence: Does Socioeconomic Status Matter?" In Violence Between Intimate Partners: Patterns, Causes, and Effects, edited by Albert P. Cardarelli, pp. 90-100. Boston: Allyn and Bacon.
- Ohlin, Lloyd, and Michael H. Tonry, eds. 1989. Family Violence. Chicago: University of Chicago Press.
- Paquin, Gary W. 1994. "A Statewide Survey of Reactions to Neighbor's Domestic Violence." Journal of Interpersonal Violence 9:493-502.
- Podolefsky, Aaron M. 1985. "Rejecting Crime Prevention Programs: The Dynamics of Program Implementation in High Need Communities." Human Organization 44:33-40.
- Rossi, Peter H., Howard E. Freeman, and Mark W. Lipsey. 1999. Evaluation: A Systematic Approach. 6th edition. Newbury Park, CA: Sage.
- Sagrestano, Lynda M., Christopher L. Heavey, and Andrew Christensen. 1999. "Perceived Power and Physical Violence in Marital Conflict." Journal of Social Issues 55:65-80.
- Sampson, Robert J. 1991. "Linking the Micro- and Macro-level Dimensions of Community Social Organization." Social Forces 70:43-64.
- Sampson, Robert J., and Dawn J. Bartusch. 1998. "Legal Cynicism and (Subcultural?) Tolerance of Deviance: The Neighborhood Context of Racial Differences." Law and Society Review 32:777-804.
- Sampson, Robert J., and William J. Wilson. 1995. "Toward a Theory of Race, Crime, and Urban Inequality." In Crime and Inequality, edited by John Hagan and Ruth D. Peterson, pp. 37-54.

- Stanford, CA: Stanford University Press.
- Schmidt, Janell D., and Lawrence W. Sherman. 1996. "Does Arrest Deter Domestic Violence?" In Do Arrests and Restraining Orders Work?, edited by Eve S. Buzawa and Carl G. Buzawa, pp. 43-53. Thousand Oaks, CA: Sage.
- Schmidt, Peter, and Ann D. Witte. 1988. Predicting Recidivism Using Survival Models. New York: Springer-Verlag.
- Sherman, Lawrence W., and Richard Berk. 1984. "The Specific Deterrent Effects of Arrest for Domestic Assault." American Sociological Review 49:261-272.
- Sherman, Lawrence W., Janell D. Schmidt, and Dennis P. Rogan. 1992. Policing Domestic Violence: Experiments and Dilemmas. New York: Free Press.
- Sherman, Lawrence W., Douglas A. Smith, Janell D. Schmidt, and Dennis P. Rogan. 1992. "Crime, Punishment, and Stake in Conformity: Legal and Informal Control of Domestic Violence." American Sociological Review 57:680-697.
- Skogan, Wesley G. 1990. Disorder and Decline. New York: Free Press.
- Straus, Murray A. 1979. "Measuring Intrafamily Conflict and Violence: The Conflict Tactics (CT) Scales." Journal of Marriage and the Family 41:75-88.
- . 1990. "Social Stress and Marital Violence in a National Sample of American Families." In Physical Violence in American Families, edited by Murray A. Straus and Richard J. Gelles, pp. 181-201. New Brunswick, NJ: Transaction.
- Sullivan, Cris. 1997. "Societal Collusion and Culpability in Intimate Male Violence." In Violence Between Intimate Partners: Patterns, Causes, and Effects, edited by Albert P. Cardarelli, pp. 154-164. Boston: Allyn and Bacon.
- Sullivan, Shawn. 1996. "Domestic Violence is a Serious Problem for Black Women." In Domestic Violence, edited by Karin L. Swisher, pp. 37-40. San Diego: Greenhaven Press.
- Tauchen, Helen V., Ann D. Witte, and Sharon K. Long. 1991. "Domestic Violence: A Nonrandom Affair." International Economic Review 32:491-511.
- Taylor, Ralph B. 1997. "Social Order and Disorder of Street Blocks and Neighborhoods: Ecology, Microecology, and the Systemic Model of Social Disorganization." Journal of Research in Crime and Delinquency 34:113-155.

- Thistlewaite, Amy, John Wooldredge, and David Gibbs. 1996. "Severity of Dispositions and Domestic Violence Recidivism." Crime and Delinquency 44:388-398.
- Walker, Lenore E. 1999. "Psychology and Domestic Violence Around the World." The American Psychologist 54:21-29.
- Wallace, Harvey. 1996. Family Violence: Legal, Medical, and Social Perspectives. Boston: Allyn and Bacon.
- Williams, Kirk R. 1992. "Social Sources of Marital Violence and Deterrence: Testing an Integrated Theory of Assaults Between Partners." Journal of Marriage and the Family 54:620-629.
- Williams, Kirk R., and Richard Hawkins. 1992. "Wife Assault, Costs of Arrest, and the Deterrence Process." Journal of Research in Crime and Delinquency 29:292-310.
- Wolfe, David A., and Peter G. Jaffe. 1999. "Emerging Strategies in the Prevention of Domestic Violence." The Future of Children 9:133-144.
- Worden, Alissa P. 2000. "The Changing Boundaries of the Criminal Justice System: Redefining the Problem and the Response in Domestic Violence." In Boundary Changes in Criminal Justice Organizations, edited by Charles M. Friel, pp. 215-266. Washington, D.C.: National Institute of Justice.
- Wyatt, Gail E., Julie Axelrod, and Dorothy Chin. 2000. "Examining Patterns of Vulnerability to Domestic Violence among African American Women." Violence Against Women 6:495-515.
- Yabiku, Scott T., William G. Axinn, and Arland Thornton. 1999. "Family Integration and Children's Self-Esteem." American Journal of Sociology 104:1494-1524.
- Yamaguchi, Kazuo. 1991. Event History Analysis. Newbury Park, Calif.: Sage.
- Zoellner, Lori A., Norah C. Feeny, Jennifer Alvarez, Christina Watlington, Melanie L. O'Neill, Ruth Zager, and Edna B. Foa. 2000. "Factors Associated with Completion of the Restraining Order Process in Female Victims of Partner Violence." Journal of Interpersonal Violence 15:1081-1099.

Table 1. Descriptive Statistics: Means and Standard Deviations for All Variables (N = 336)

Variable	Mean	S.D.
Revict. w/in 2 years post-intervention (1 = yes, 0 = no)	.23	.42
No. days to revict. w/in 2 years post-intervention	621.89	220.91
No. days to revict. w/in 2 years post-intervention (revictimized only)	254.88	195.14
Age	32.82	8.19
No. victimizations w/in 2 years pre-intervention	1.10	1.01
No. times drug use reported to police w/in 2 years pre-intervention	.13	.38
Race		
Black (1 = black, 0 = other)	.32	.47
Hispanic (1 = Hispanic, 0 = other)	.34	.47
White (1 = non-Hispanic white, 0 = other)	.34	.48
Median family income (block-level, 1990 U.S. Census)		
Low median family income (1 = <\$18K, 0 = ≥\$18K)	.37	.48
Medium median family income (1 = \$18-28K, 0 = <18K or ≥28K)	.36	.48
High median family income (1 = ≥\$28-42K+, 0 = <\$28K)	.27	.45
Intervention		
(P) Protective Order (1 = PO, 0 = other)	.25	.43
(Arrest) Arrest (1 = arrest, 0 = other)	.38	.49
(PO/arrest) Protective Order/Arrest (1 = PO and arrest, 0 = other)	.38	.48

Table 2. Cox Regression Analysis (N = 336)

	Univariate Cox regression	Multivariate Cox regression
	RR ^a (95% CI)	RR (95% CI)
Age	0.979 (0.951-1.008)	0.989 (0.958-1.022)
No. prior victimizations	1.232 (1.029-1.476)*	1.126 (0.939-1.350)
No. times prior drug use	2.256 (1.501-3.392)***	2.164 (1.316-3.558)**
Race		
Black vs. white	3.124 (1.745-5.593)***	2.929 (1.554-5.523)***
Hispanic vs. white	1.401 (0.736-2.667)	1.409 (0.697-2.847)
Median family income (block-level)		
Low vs. high	1.890 (1.032-3.460)*	1.752 (0.939-3.270)†
Medium vs. high	1.130 (0.586-2.177)	1.145 (0.589-2.225)

^aRR, the exponentiated value of a Cox regression coefficient, denotes the relative risk of revictimization for a one-unit increase in a given independent variable.

† < .10 * < .05 ** < .01 *** < .001

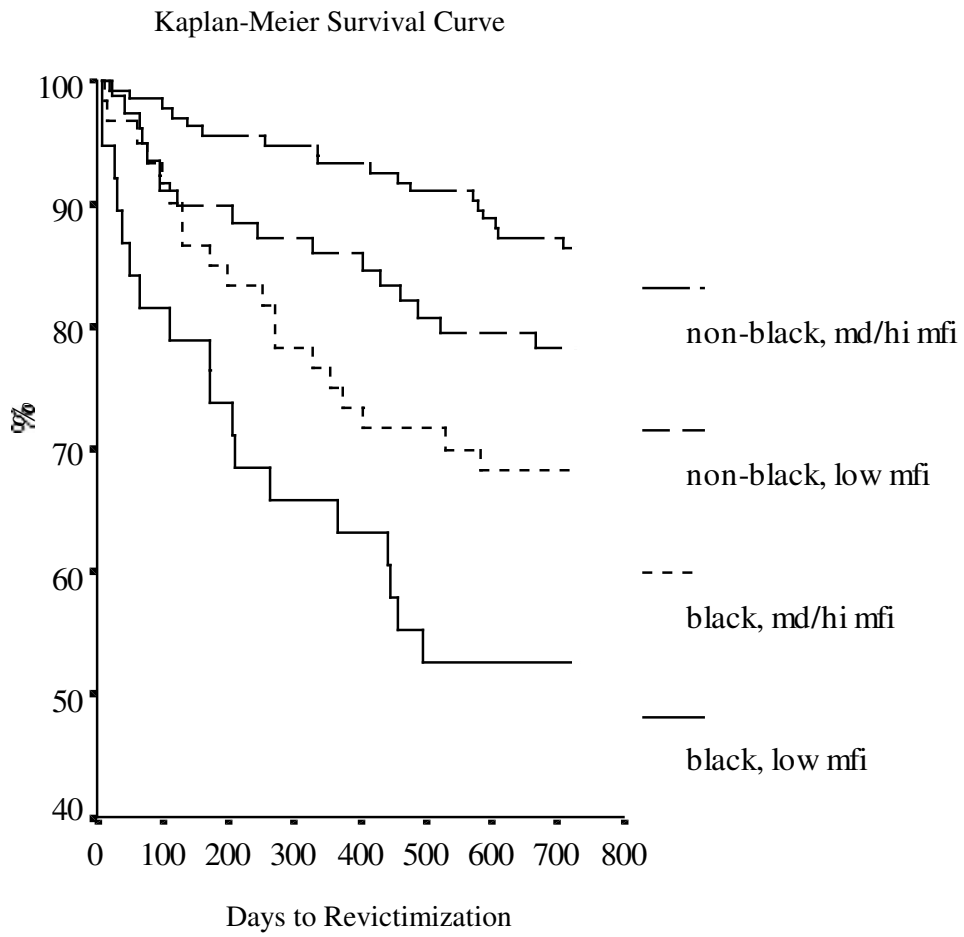


Figure 1. Days to Revictimization as a Function of Race and Median Family Income

Table 3. Prevalence and Time to Revictimization Among Three Intervention Groups^a

Variable	Mean	S.D.
<u>(P) Protective Order (N = 83)</u>		
Revict. w/in 2 years post-intervention (1 = yes, 0 = no)	.20	.41
No. days to revict. w/in 2 years post-intervention	629.14	225.88
No. days to revict. w/in 2 years post-intervention (revictimized only)	233.71	229.22
<u>(Arrest) Arrest (N = 126)</u>		
Revict. w/in 2 years post-intervention (1 = yes, 0 = no)	.23	.42
No. days to revictimization within two years after intervention	621.89	220.91
No. days to revict. w/in 2 years post-intervention (revictimized only)	282.61	187.98
<u>(PO/arrest) Protective Order/Arrest (N = 127)</u>		
Revict. w/in 2 years post-intervention (1 = yes, 0 = no)	.25	.44
No. days to revict. w/in 2 years post-intervention	607.76	232.17
No. days to revict. w/in 2 years post-intervention (revictimized only)	241.88	185.34

^aPost hoc pairwise comparisons (SPSS 10.0) revealed no statistically significant differences among the three groups for either prevalence or time to revictimization.