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Fear of crime and criminal victimization: Gender-based contrasts

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Abstract

Extant research on the fear of crime and criminal victimization had generally found that women express greater levels of fear than men. Using survey data, this study contrasted perceptions of safety and the fear of personal and property victimization among male and female respondents. Specifically considered was the relationship between demographic characteristics, fear facilitators, fear inhibitors, neighborhood context, and crime-related fear. Results indicated some gender differences in the influence explanatory variables had on fear, although not all achieved statistical significance. For both gender groups, respondents' perceptions of their neighborhood as orderly and satisfactory had the largest effect on perceptions. Gender-based differences in the outcome of the analyses further supported that males and females experienced fear based upon different factors.
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Introduction

Studies conducted in the past four decades probed fear of crime and perceived risk of criminal victimization among the American public. It had been widely recognized that Americans had a substantial fear of crime and that crime-related fear was greater among women (Covington & Taylor, 1991; Garofalo, 1981; McGarrell, Giacomazzi, & Thurman, 1997; Parker, Onyekwuluje, & Komanduri, 1995), although variation had been noted (Hale, 1996; Haynie, 1998; Thompson, Bankston, & St. Pierre, 1992). Initial studies viewed crime-related fear as a product of demographic characteristics and individual experiences with crime and victimization. More recently, scholars had attempted to broaden insight into crime-related fear to understand why women report greater levels of fear than men. Researchers had most often argued that fear among women was overshadowed by their fear of sexual victimization, even when respondents were prompted to consider nonpersonal and nonviolent offenses (Ferraro, 1995; Fisher & Sloan, 2003; Pain, 2001; Valentine, 1989; Warr, 1984).

Although the hypothesized shadow effect of fear of sexual assault provided important insight into the fear among women, less was known about what differentiated fear between the genders. This study sought to understand the factors driving variation in the level of fear expressed by both genders. Given the possibility that men and women experienced fear for different reasons, it was hypothesized that explanatory models would exhibit gender-specific variation; therefore, separate models were estimated for male and female respondents. Hierarchical linear modeling (HLM) was used to separate the influence of individual predictors from contextual neighborhood constructs when modeling variation in individual fear and perceptions of safety.

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The utility of these predictors was explored using three measures of fear including perceptions of safety, fear of personal victimization, and fear of property victimization.

Exploring fear among women

Research had consistently established gender-based differences in reported levels of crime-related fear. Higher rates of fear expressed by women are thought to reflect a broader concern of sexual harassment and assault (Ferraro, 1995; Pain, 2001; Valentine, 1989), which some frame as an extension of gender roles, social control, and societal oppression of women (Garofalo, 1981; Goodey, 1997; Madriz, 1997; Pain, 2001; Stanko, 1990; Valentine, 1989). Women are more likely to be victims of sex crimes, generating an ever-present fear of sexual victimization (Riger, Gordon, & Le Bailley, 1978; Stanko, 1990; Valentine, 1989; Warr, 1984). Women often feel less capable of defending themselves (Riger et al., 1978) and are socialized to be highly sensitive of their physical and social vulnerabilities (Burt & Estep, 1981; Goodey, 1997; Madriz, 1997; Scott, 2003; Stanko, 1995). In addition, gendered childcare roles can compel women to feel that they must defend not only themselves, but also their children (Gilchrist, Bannister, Ditton, & Farrall, 1998; Smith, 1989).

For women, fear of sexual assault may serve as a "master offense" that influences their fear and risk assessment for other forms of victimization (Ferraro, 1996). Warr (1984) suggested that female fear of sexual assault influenced fear of nonpersonal crimes, such as burglary. While males fear having property stolen via burglary, women fear being sexually victimized by a burglar. In this way, fear of sexual victimization becomes "perceptually contemporaneous" with the fear of other forms of victimization (Warr, 1984). Recent research had provided empirical validation of the shadow hypothesis (Ferraro, 1995, 1996; Fisher & Sloan, 2003; May, 2001).

It had been argued that most studies had operationalized the risk of victimization in such a way that female crime risks were underestimated. If fear-to-risk ratios were modeled to place greater weight on sexual crimes and accounted for the actual risk women face of being the victim of broader forms of sex crimes (including sexual harassment), their fear would be more proportional to their risk (Pain, 2001; Sacco, 1990; Stanko, 1995). Additionally, women may believe that they will be perceived as partially responsible (due to routine behavior, clothing, lifestyle, etc.) if they are the victim of a sex or personal crime (Burt & Estep, 1981; Gordon & Riger, 1989; Pain, 2001; Sacco, 1990). This perception may generate a heightened fear of victimization because of greater psychological harm associated with sexual crimes (Ferraro, 1996; Gordon & Riger, 1989; Riger et al., 1978). Their heightened fear and/or perceived risk may cause women to modify their behavior, resulting in reductions in actual victimization (Sacco, 1990; Valentine, 1989).

These explanations are helpful in understanding some aspects of the differences between men and women; however, they do not help one understand differences within the genders (Haynie, 1998). Treating gender as an independent variable masks within-gender variation. Recognizing that fear differs by gender, how does it differ within the gender groups? Women report rates of crime-related fear that are nearly twice that of men (Haynie, 1998), but men and women are not homogeneous in their levels of crime-related fears (Newburn & Stanko, 1994); there are fearful men and fearless women (Goodey, 1997; Warr, 1985). Unfortunately, with few exceptions (LaGrange & Ferraro, 1989; Lane & Meeker, 2003; May, 2001) research had focused on explaining differences between, rather than within the genders (Gilchrist et al., 1998).[1] This study sought to contribute to the understanding of the gender differences in crime-related fear by conducting separate analyses for male and female respondents.

Literature review

A comprehensive review of prior literature studying crime-related fear was beyond the scope of this study; however, the following section reviews the most salient research.[2] Four main issues are reviewed. First, the study of crime-related fear necessitated consideration of how key concepts are defined and measured. Next, research suggested that crime-related fear might be the product of at least three categories of predictors: individual factors, fear facilitators, and fear inhibitors (McGarrell et al., 1997); each was reviewed in turn.

Conceptualizing and operationalizing crime-related fear

The specific dimensions of crime-related fear measured in a study (for example, fear of being the victim of a specific crime versus general views of one's safety in a given area) may influence the significance, magnitude, and direction of explanatory models and individual independent predictors. Recent research underscored the importance of using care in interpreting the concepts actually reflected by measures of crime-related fear

(Farrall, Bannister, Ditton, & Gilchrist, 1997; Ferraro, 1995; Ferraro & LaGrange, 1987; Rountree & Land, 1996; Thompson et al., 1992; Warr, 1985; Warr & Ellison, 2000; Warr & Stafford, 1983). Crime-related fear has often been conceptualized and operationalized in a manner consistent with major federal research initiatives, such as the National Crime Victimization Survey (Lewis & Salem, 1986; McGarrell et al., 1997; Skogan & Maxfield, 1981) and the General Social Survey (Haynie, 1998).[3] The use of such broad measures had been challenged as ambiguous and inconsistent (Bursik & Grasmick, 1993; Ferraro, 1995; Ferraro & LaGrange, 1987; Rountree & Land, 1996; Thompson et al., 1992; Warr, 2000) considering fear encompasses "a wide range of subjective and emotional assessments and behavioral reports" (DuBow, McCabe, & Kaplan, 1979, p. 1). Conceptual specificity and an understanding of the dimensions represented by common measures are imperative.

Scholars had employed a range of concepts as dependent measures, ranging from affective and emotional responses (fear) toward the general notion of crime, to more rational and cognitive risk assessments (perceived risk) for specific types of criminal victimization (Ferraro & LaGrange, 1987; Warr & Stafford, 1983). Some (Bursik & Grasmick, 1993; Garofalo & Laub, 1978) contended research seeking to measure general crime-related fear might be gauging perceived disorder, rather than actual perceptions of crime. These measures are all of importance in understanding responses to and perceptions of crime, but they gauge distinct concepts (Ferraro, 1995; Warr, 2000). Variation would be expected in the strength, significance, and direction of their association with independent variables, as "risk perceptions and actual fear may have different sociodemographic predictors" (Rountree & Land, 1996, p. 1370). There was no consensus on optimum measurement of fear, thus care must be used to understand specific dimensions of crime-related fear used across studies (LaGrange & Ferraro, 1989).

Individual factors

Fear can be generated by one's actual or perceived physical or social vulnerabilities (Bennett & Flavin, 1994; Goodey, 1997; Skogan & Maxfield, 1981; Taylor & Hale, 1986), as well as one's "position in social space" (Garofalo, 1981, p. 842). Social vulnerabilities produce fear when residents perceive they frequent high crime areas and/or engage in lifestyle behaviors that place them at greater risk of victimization (Austin, Furr, & Spine, 2002; Bennett & Flavin, 1994; Garofalo, 1981; O'Mahony & Quinn, 1999). Physical vulnerabilities affect those perceiving they are at a physical disadvantage against possible assailants (e.g., women and the elderly). Social and physical vulnerabilities are nested within the attributes, habits, and environments of individual research participants. Research had generally supported the physical and social vulnerability perspectives, using measures including gender, age, race, income, level of education, marital status, and prior victimization.

As discussed above, gender had been consistently associated with higher levels of fear. In addition, many had found age predicts crime-related fear (Baumer, 1985; Garofalo & Laub, 1978; McGarrell et al., 1997; Parker & Ray, 1990; Skogan, 1995), although perceived and actual risk may be disproportionate; some recent studies had not fully supported the age-fear relationship (Chiricos, Hogan, & Gerta, 1997; Ferraro, 1995). Minority residents (Garofalo & Laub, 1978; Parker & Ray, 1990; Skogan, 1995; Taylor & Hale, 1986) and those with lower incomes report greater levels of fear (Baumer, 1985; Bennett & Flavin, 1994; Garofalo, 1981; Garofalo & Laub, 1978; McGarrell et al., 1997; Taylor & Hale, 1986; Will & McGrath, 1995). Education tends to be associated with income and may influence crime-related fear through residential patterns and routine activities (Baumer, 1978; Riger et al., 1978). Married residents express less fear than their non-married counterparts (Baumer, 1978; Haynie, 1998; Mesch, 2000), perhaps due to lifestyle and activity modifications, as well as a decreased sense of physical vulnerability (although Warr & Ellison, 2000, noted important complexities). Finally, early crime-related fear research suggested victims of crime were more fearful (Garofalo, 1977). Recent studies had yielded mixed results (cf. Baumer, 1985; Bursik & Grasmick, 1993; Ferraro, 1996; May & Dunaway, 2000; McGarrell et al., 1997; Mesch, 2000; Parker & Ray, 1990; Will & McGrath, 1995), leading to speculation that victimization is stronger when it is vicarious (i.e., through the media, family, friends, or neighbors) (Covington & Taylor, 1991; Skogan & Maxfield, 1981).

Fear facilitators

Certain citizen behaviors and perceptions have the capacity to "facilitate" higher levels of fear (McGarrell et al., 1997). It had long been suggested that there was a link between disorder and both neighborhood attachment and crime-related fear. Disorder directly affects fear when residents become concerned with the impact of such conditions (e.g., rowdy youth, public drinking, panhandling, etc.). Disorder indirectly affects

fear through residents' perceptions and concerns (Taylor, 1995); social and physical decay may indicate a neighborhood has lost the ability to exert informal social control (Kelling & Coles, 1996; Wilson, 1975), generating fear and perceived vulnerability (Bennett & Flavin, 1994). The perceived inability to control neighborhood conditions can erode residents' social ties and sense of community (Conklin, 1975; Lewis & Salem, 1986; Podolefsky & DuBow, 1981; Wilson, 1975). Viewed in this way, disorder can be seen as starting a "spiral of decay" (Skogan, 1990), generating anxiety, helplessness, withdrawal, and the propagation of disorderly conditions.

Studies had offered theoretical arguments and empirical evidence that disorder, or the perception thereof, directly and/or indirectly contributed to the fear of crime (Covington & Taylor, 1991; Garofalo & Laub, 1978; Hale, Pack, & Salked, 1994; LaGrange, Ferraro, & Supancic, 1992; Lewis & Salem, 1986; McGarrell et al., 1997; O'Mahony & Quinn, 1999; Pate, Wycoff, Skogan, & Sherman, 1986; Podolefsky & DuBow, 1981; Skogan, 1990; Skogan & Maxfield, 1981; Taylor, 2001; Taylor, Gottfredson, & Brower, 1985; Taylor & Hale, 1986; Wilson & Kelling, 1982), although the veracity of the "broken windows" thesis remains empirically questionable (Crank, Giacomazzi, & Heck, 2003). Extant studies assessing crime and disorder had used both objective (economic and social data) and subjective (residents' perceptions) indicators (Covington & Taylor, 1991; Garofalo & Laub, 1978; Taylor, Shumaker, & Gottfredson, 1985). When a citizen subjectively believes disorder is significant, this perception becomes real in its consequences (i.e., increased fear), despite reality (Taylor, 2001; Taylor & Hale, 1986). Objective measures such as local crime rates could be expected to shape fear; those residing in high-crime areas would be expected to express more fear.[4]

Fear may also be facilitated by vicarious crime knowledge acquired from the media, family, friends, co-workers, and neighbors (Covington & Taylor, 1991; Rountree & Land, 1996). Further, those who are more "in-tune" with crime problems in their community can be more fearful as a result of their increased knowledge (Garofalo, 1981; Lewis & Salem, 1986; McGarrell et al., 1997; Skogan & Maxfield, 1981; Zhao, Gibson, Lovrich, & Gaffney, 2002), particularly citizen volunteers who work with local police.

Fear inhibitors

Scholars have given less consideration to factors that insulate people from fear or reduce its impact upon them (McGarrell et al., 1997). Fear inhibitors generate feelings of collective efficacy and capability to thwart the incursion of disorderly, dangerous, and/or criminal conditions. Inhibitors allow people to feel as if they are not alone in wanting to make their community a safe and stable place to live. Fear inhibitors include respondent's bonds with their neighborhood; conceptually, stronger attachments should work to reduce residents' fear, although the opposite has also been found (Covington & Taylor, 1991; Zhao et al., 2002). Other inhibitors include perceived social integration in a neighborhood, residents' investment within a neighborhood (i.e., home-ownership) (McGarrell et al., 1997), a neighborhood's stability, and residents' perceptions of neighborhood quality.

A citizen's perception of their neighborhood's informal networks and informal social control reflect beliefs about that neighborhood's capacity to self-regulate (Skogan & Maxfield, 1981). Neighborhood self-regulation can contribute to crime and disorder (Bursik & Grasmick, 1993), both real and perceived; as fear is facilitated by disorder (Skogan, 1990); it is inhibited by neighborhood integration (McGarrell et al., 1997). A neighborhood's culture, efficacy, and integration may shape local crime rates, necessitating the inclusion of salient measures in modeling fear. For example, homeowners have a long-term interest in the quality and security of their neighborhood and might be more willing to take an active role in neighborhood self-regulation. Both homeowners and those residing in neighborhoods with a high rate of homeownership would be expected to report a lower fear of crime (McGarrell et al., 1997).

The inhibition of fear can be furthered through contextual factors exhibited in a citizen's neighborhood (Baumer, 1985; Hale et al., 1994; Lewis & Salem, 1986; Rountree & Land, 1996; Skogan & Maxfield, 1981). At a most basic level, residents' global assessments of their neighborhood broadly capture perceptions of their residential environment. Neighborhood contextual factors indirectly reflected in measures of neighborhood stability. Residents reporting they are likely to be living in their neighborhood in another year can be viewed as offering an indirect endorsement of that neighborhood. In some cases, however, such a situation may actually reflect a respondent's lack of social mobility.

Research objectives

This study sought to contribute to the understanding of crime-related fear in three ways. First, the study sought to examine if the utility of the analytical models differed for males and females. Given the theoretical

reasons men and women could experience crime-related fear for divergent reasons, observable differences were expected in the significance, magnitude, and direction of observed relationships. Second, the analyses sought to better discern the relationship between individual factors, fear inhibitors, fear facilitators, and crime-related fear. Few studies had incorporated all of these factors into multivariate models to understand their inter-relationships, a weakness of much of the early crime-related fear literature (Bennett & Flavin, 1994). Third, three different outcome measures of crime-related fear (perceptions of safety, fear of personal victimization, and fear of property victimization) were used to better understand the relationships between independent variables and various dimensions of crime-related fear.

Data and methods

The data for the study were drawn from a larger research project examining attitudes toward crime, public safety, and the police in a midwestern community. The study city was the largest community (with approximately 125,000 residents) located in a metropolitan area of over 300,000 residents. Its primary economic base was the auto industry, government, and education. The local police department employed 250 officers. In 1996 (the year preceding data collection), the department received 275,000 calls for service (36 percent were emergencies), reported 10,000 index crimes (a rate of 8,100 per 100,000 residents), and handled 2,000 drug-related violations (1,600 per 100,000 residents). The community's population was 52 percent female, 68 percent White (non-Hispanic), 23 percent African American, and 10 percent Hispanic; the average resident was thirty-one years of age. The median household income was almost $35,000 and the median household value was $73,000.[5]

Data used in the analysis were based on the outcome of structured telephone interviews conducted with 2,058 community residents. Residential telephone numbers within the community were stratified for random selection based upon the city's eighteen patrol beats; at least one hundred residents over the age of eighteen were interviewed within each patrol beat. Screening mechanisms were employed to ensure that there were similar numbers of male and female respondents.[6] Although there was variation in the gender distribution within various patrol beats (women ranged from 44.6 percent to 54.3 percent of respondents by beat), through serendipity the final sample contained an equal number of male and female respondents.

Dependent variables

Three unique outcome variables were designed to capture distinct aspects of perceived safety and fear of personal and property crime victimization. The *perceived safety* construct reflected a general emotional response to fear in a broad context; whereas, the *fear of personal and property victimization* measures were more focused indicators of crime-specific assessments of fear. The variables and scales listed below, as well as the individual items that comprise them, are described in Appendix A. Descriptive statistics are presented in Table 1 for the total sample and by gender.

Perceived safety was operationalized using a two-item additive scale ($\alpha = 0.652$).[7] Respondents were asked to rate, (1) "How safe do you feel after dark?" (1 = very safe, 2 = somewhat safe, 3 = somewhat unsafe, 4 = very unsafe), and (2) "How often does your worry about crime prevent you from doing things you would like to do in your neighborhood?" (1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = very often).

Fear of property and personal victimization were both constructed using three-item additive scales. For the *property victimization* measure, individuals were asked about their fear in relationship to how worried they were that: someone will try to break into your home while no one is there, vandalize your home, or steal something outside of your home ($\alpha = 0.710$). For the *personal victimization* measure, respondents were queried about their fear that: someone will try to attack you while you are outside of your neighborhood, you will be a victim of a violent crime in your neighborhood, or you will be a victim of a violent crime in your home ($\alpha = 0.801$). The response options for the personal and property victimization items ranged from 1 to 3 and included not worried, somewhat worried, and very worried.

When considered by gender, there were significant differences in the mean scale scores for fear of personal crime victimization and perceived safety measures (see Table 2). On both measures, female respondents were significantly more fearful than males. Male respondents actually reported a higher fear of property victimization, although the difference was not statistically significant. Even though certain significant relationships emerged, it was interesting to note that the overall fear reported by the respondents (particularly for the personal and property victimization measures) was moderate to low.

The majority of respondents indicated they had a low level of fear in respect to both perceived lack of safety and the victimization-specific measures. In order to mitigate some of the skewness in the additive scales, each measure was reclassified to reflect high, medium,

Table 1
Descriptive statistics—total sample and by gender

	Male (n = 1,029)		Female (n = 1,029)		Total sample (n = 2,058)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Outcome variable						
Perceived safety	1.54	0.64	1.89	0.72	1.71	0.70
Fear of personal victimization	1.36	0.57	1.54	0.64	1.45	0.62
Fear of property victimization	1.98	0.62	1.95	0.65	1.96	0.63
Independent measures						
Individual factors						
Married	0.51	0.50	0.48	0.50	0.50	0.50
Education	0.66	0.47	0.56	0.50	0.61	0.49
Age	3.72	0.38	3.78	0.43	3.75	0.41
Income	0.32	0.47	0.23	0.42	0.28	0.45
Race	0.81	0.39	0.82	0.38	0.82	0.39
Employment	0.61	0.49	0.35	0.48	0.48	0.50
Fear facilitators						
Perceptions of disorder	0.05	1.01	−0.05	0.99	0.00	1.00
Perceptions of major crime	0.04	1.05	−0.04	0.95	0.00	1.00
Neighborhood association	0.16	0.37	0.16	0.37	0.16	0.37
Children in home	0.32	0.47	0.37	0.48	0.35	0.48
Personal crime rate	0.26	0.44	0.24	0.43	0.22	0.43
Fear inhibitors						
Homeowner	0.69	0.46	0.72	0.45	0.71	0.46
Neighborhood integration	−0.06	1.00	0.06	0.98	0.00	1.00
Neighborhood assessment	0.67	0.47	0.70	0.46	0.68	0.47
Neighborhood stability	0.82	0.38	0.78	0.41	0.80	0.40

and low levels of fear. For the victimization measures, scores of 3 were classified as low, 4–6 were classified as medium, and 7–9 were classified as high. For the perceived safety measure, scores of 2 and 3 were classified as low, 4–6 as medium, and 7–9 as high.

Independent variables

Citizen level controls

Consistent with previous research, a number of individual-level demographic characteristics were included in the model as statistical controls. A series of dummy variables were constructed to measure demographic influences including household income, race, employment and the natural log of the repondent's age in years.[8] A central goal of the current research was to study the correlates of fear among gender groups, thus the analysis was disaggregated by gender groups and gender was excluded as an independent variable.

Table 2
Distribution of initial victimization and perceived safety constructs by gender

	Range	Gender	Mean	Std. deviation
Perceived safety*	2–9	Male	3.7461	1.7790
		Female	4.7880	1.9937
Personal victimization*	3–9	Male	3.7168	1.2936
		Female	4.0923	1.5289
Property victimization	3–9	Male	5.0860	1.6899
		Female	4.9970	1.6929

* Scores were significantly different at $p < .05$ by gender.

Fear inhibitors

It had been suggested that more cohesive and integrated neighborhoods have a stronger capacity to insulate residents from fear of crime. As such, the models included measures of neighborhood integration, neighborhood assessment, neighborhood stability, and homeowner status. A four-item weighted factor score was developed to measure *neighborhood integration*. Residents were asked how often they have a friendly chat with neighbors, get together socially with neighbors, agree to watch a neighbor's home, and share tools or other things with neighbors (eigenvalue 2.385 factor > 0.68, $\alpha = 0.77$). A dichotomous measure of *neighborhood assessment* was derived from respondents' perceptions of their neighborhoods as a place to live. Dichotomous measures of respondent *homeowner status* and *neighborhood stability* (likelihood respondent would still be residing in their neighborhood in one year) were also included in the predictive models.

Fear facilitators

Five fear facilitator constructs were incorporated into the current models. *Perceptions of major crime* was a three-item weighted factor score and calculated based on how problematic respondents perceived assaults in public, shootings and other public violence, and violent attacks were within their neighborhood (eigenvalue 1.89, factor loadings >0.77, $\alpha = 0.71$). *Perceptions of disorder* was measured using a seven-item weighted factor score based on how problematic respondents perceived litter and trash, loitering, public drinking, drug dealing, parents who don't supervise their children, landlords not maintaining their property, and gangs were within their neighborhood (eigenvalue 3.21, factor loadings >0.69, $\alpha = 0.81$). A dichotomous indicator of minor *children in the home* was incorporated into the models based on the finding that some reported fear might be altruistic concern for the safety of others, rather than personalized fear for one's self (Warr & Ellison, 2000). A dichotomous measure of participation in a *neighborhood association* was also included.

Finally, an indicator of arrests for serious personal crimes in each of the eighteen patrol beats was included in the model at the neighborhood level.[9] Data for the *personal crime* measure were obtained from official police records, and represented the number of murder, sexual assault, felony assault, and robbery arrests made by the police in the study community in 1997. Data on the population of each patrol beat were not available; therefore, the incidence of personal crime arrests in each police patrol beat was ranked into quartiles. The personal crime measure was then dichotomized into those individuals living in police beats who had arrests for personal crimes in the top quartile and those residents who inhabited police patrol beats in the lowest three quartiles (reference category).

Analysis

A series of hierarchical ordered probit models were used to explore the relative effects of individual factors, fear inhibitors, and fear facilitators on safety and crime-specific perceptions. Hierarchical linear modeling (HLM) was the most appropriate technique for this analysis because it allowed individual data to be nested within patrol beats, while examining variation in fear and perceived safety at the individual level (Raudenbush & Bryk, 2002). The dependent variables used in this analysis were ordinal-level variables; therefore, the ordered probit model was most appropriate.

Theoretically, the ordered probit statistical model is based on the assumption that y, the dependent measure, is a ratio-level variable (see Long, 1997). As y was unobserved in this model, the ordered probit model was developed to estimate the latent variable y^*. The τ in the model represented thresholds or cutpoints that were imposed on the infinite number of outcomes that were possible with y^*. To estimate y based on y^*, the following measurement model was used:

$$yi = \begin{cases} 1 \Rightarrow \text{low} & \text{if } \tau_0 = -\infty \geq y_i^* < \tau_1 \\ 2 \Rightarrow \text{medium} & \text{if } \tau_1 \geq y_i^* < \tau_2 \\ 3 \Rightarrow \text{high} & \text{if } \tau_2 \geq y_i^* < \tau_3 = \infty \end{cases}$$

Two models were estimated for each dependent variable in the analysis. The first (unconditional) model provided estimates of model-fit and a reliability coefficient for the sample mean. In the second model, exogenous predictors were added to evaluate the probability that perceptions of safety and fear of victimization varied as a function of individual and neighborhood level variables. In addition, Z scores were calculated for each of the exogenous predictors in the models according to the formula presented by Paternoster, Brame, Mazerolle, and Piquero (1998). These coefficient comparison tests provided greater context by informing whether the effects of the individual factors, fear facilitators, and fear inhibitors varied by gender.

Tests for multicollinearity were conduced for each dependent measure; no variance inflation factor or tolerance scores were high enough to suggest the presence of multicollinearity. To facilitate additional comparisons, all three models were estimated for the full sample, treating gender as an independent variable (see Appendix B).

Findings

When considered by gender, there were significant differences in the mean scale scores for fear of personal crime victimization and perceived safety measures (see Table 2). On both measures, female respondents were significantly more fearful than males. Male respondents actually reported a higher fear of property victimization, although the difference was not statistically significant. Even though certain significant relationships emerged, it was interesting to note that the overall fear reported by the respondents (particularly for the personal and property victimization measures) was moderate to low.

Perceived safety

Table 3 presents the results from the perceived safety analysis. Overall, subtle differences were found in the

Table 3
Perceived safety by gender

	Male (N = 1,029)			Female (N = 1,029)			Comparison
	Coeff.	s.e.	Odds	Coeff.	s.e.	Odds	*Z-score*
Constant	−4.55*	0.85	–	−0.23	0.68	–	
Level I—individual level							
Individual factors							
Married	0.13	0.15	0.94	0.10	0.13	1.11	0.15
Education	−0.10	0.14	0.90	−0.33**	0.13	0.72	1.20
Age	0.77**	0.22	2.16	−0.04	0.17	0.96	2.91**
Income	−0.60**	0.16	0.55	−0.22	0.16	0.80	−1.68
Race	−0.52**	0.17	0.59	0.19	0.16	1.21	−3.04**
Employment	−0.18	0.15	0.84	−0.22	0.14	0.80	0.19
Fear facilitators							
Perceptions of disorder	0.50**	0.09	1.65	0.30**	0.09	1.35	1.57
Perceptions of major crime	0.40**	0.08	1.50	0.33**	0.09	1.39	0.58
Neighborhood association	−0.17	0.19	0.84	0.15	0.17	1.16	−1.26
Children in home	−0.16	0.16	0.85	−0.12	0.15	0.89	−0.18
Fear inhibitors							
Homeowner	−0.04	0.17	0.96	−0.19	0.15	0.83	0.66
Neighborhood integration	−0.19**	0.07	0.83	−0.13	0.07	0.88	−0.61
Neighborhood assessment	−0.55**	0.16	0.58	−0.70**	0.17	0.50	0.64
Neighborhood stability	−0.26	0.17	0.77	−0.46**	0.17	0.63	0.83
Level II—neighborhood level							
Personal crime	0.17	0.16	1.19	0.05	0.15	1.05	0.55
Model fit							
Threshold difference							
Unconditional model	2.32**	0.11		2.13**	0.08		
Conditional model	2.89**	0.14		2.48**	0.10		
Level II variance							
Unconditional model	0.19**			0.10**			
Conditional model	0.01			0.00			
Reliability	0.72			0.61			

* $p < .05$.
** $p < .01$ (two-tailed tests).

reported safety of men and women with most of the variation between gender groups being driven by individual factors. The results from the analysis of the male subgroup suggested that older and non-White men were less likely to perceive being safe in their neighborhood. In fact, the comparison coefficients tests for both age ($z = 2.91$) and race ($z = -3.04$) were statistically significant. This finding suggested that age and race have significantly different effects on men's perceptions of safety than they do for women's perceptions. Based on the odds ratio statistics presented, older males and non-White males were the least likely to report feeling safe. Consistent with the physical and social vulnerability perspectives, one would expect that older persons and non-Whites would be most likely to report fear; however, one would also assume that these factors would be more likely to work in concert for female members of the sample because they are typically thought to perceive themselves as being more physically vulnerable than men.

The remaining demographic variables had divergent effects on perceived safety, although the difference between the genders was not statistically significant. Income had a significant, negative effect on safety for the male subgroup analysis, but did not reach a level of significance for women. Education was the only significant coefficient in the female subgroup analysis; women with post-high school educations felt less safe.

Respondents' perceptions of neighborhood disorder and major crime were the only statistically significant fear facilitators. Men and women who perceived high levels of disorder and major crime in their neighborhood felt less safe in their neighborhood. Participation in neighborhood meetings and having minor children in the home were not significant for either gender group. Personal crime was also not a significant

predictor of perceived safety. For both men and women, perceptions of crime and disorder outweighed the effect of the official crime measure. Respondents were influenced by their subjective impressions of crime and disorder, rather than objective measures of personal crime.

Although a number of inhibitors were found to be significant predictors of perceived safety, none varied significantly by gender. Overall, respondents who felt their neighborhood was a good place to live also reported that they felt safe in their neighborhood; this effect was quite strong for both men and women. Based on the reported odds ratios, it was possible to conclude that women or men who indicated that their neighborhood was a good place to live were approximately half as likely to report low levels of perceived safety. In addition, women who indicated that they were likely to remain in their neighborhood over the following year and men who reported high levels of neighborhood integration were more likely to report feeling safe in their neighborhood.

Fear of personal victimization

Based on research conducted to date, it would be expected that the predictive models for fear of personal victimization would vary significantly by gender, with women reporting greater fear of being victimized. Although female respondents reported significantly higher levels of fear of personal victimization, the models as estimated did not yield dramatic gender-based variation (see Table 4). The majority of the demographic, facilitator, and inhibitor variables did not vary significantly by gender. Only the perceptions of disorder ($z = 2.75$) and age ($z = 3.64$) contrasts achieved statistical significance in the model. For both men and women, individuals who perceived high levels of disorder in their neighborhood feared personal victimization. Based on the odds ratio calculations, men were more likely to be negatively affected by neighborhood disorder. In addition, the effect of age on fear of personal victimization varied by gender with older men reporting a disparately higher level of fear of personal victimization.

In reference to the individual factors, the income and race constructs were statistically significant for the male sample. Male respondents with incomes less than $50,000 were significantly more likely to report being fearful of personal victimization. Minority males were also more likely to indicate a fear of personal victimization. A similar relationship between race, income, and fear of personal victimization was not found for women. Apart from perceptions of major crime and disorder, the remaining fear facilitators did not achieve statistical significance. For both genders, individuals that perceived a high level of crime in their neighborhood were more likely to report fear of personal victimization. The official crime measures had little impact in the models. The presence of children in the home and participation in a neighborhood association were not significantly related to fear of personal victimization. None of the fear inhibitors significantly differentiated between gender groups. Men who perceived a high level of neighborhood integration in their neighborhood were less likely to fear personal victimization, as were women with positive neighborhood assessments.

Fear of property victimization

Very little difference was found between gender groups in the fear of property victimization model presented in Table 5. Employment was the only significant individual factor. For women, employment increased the likelihood of reporting property-related fear. Unlike the perceived crime and personal victimization models, age and race did not achieve a level of statistical significance. Based on these findings, it appeared that the physical vulnerability perspective had little utility in explaining fear of property victimization.

Consistent with the perceived safety and fear of personal crime models, both men and women who perceived their neighborhood to be disorderly and to have high levels of major crime reported higher levels of fear of property victimization; the personal crime measure did not influence fear of property victimization. Based on the significant z-score ($z = 2.30$), it was important to note that the effect of perceptions of disorder on fear of property victimization varied by gender. Judging from the odds ratios, men's perceptions were more adversely affected by perceptions of disorder. Only homeownership status and neighborhood assessment were found to be statistically significant inhibitors of fear. Overall, respondents who reported that their neighborhood was a good place to live were less likely to fear property crime victimization. Consistent with previous models, the effect of neighborhood assessment was moderately strong. In fact, for both men and women, reporting a positive neighborhood assessment decreased the odds that an individual would report a medium or high level of fear of personal victimization by approximately 40 percent, holding all other variables constant. In contrast, women and men who owned

Table 4
Fear of personal victimization by gender

	Male (N = 1,029)			Female (N = 1,029)			Comparison
	Coeff.	s.e.	Odds	Coeff.	s.e.	Odds	*Z-score*
Constant	−6.74**	0.99	–	−1.93*	0.72	–	
Level I—individual level							
Individual factors							
Married	0.13	0.17	1.14	0.10	0.14	1.11	0.14
Education	0.01	0.16	1.01	−0.08	0.13	0.92	0.44
Age	1.05**	0.25	2.85	−0.07	0.18	0.93	3.64**
Income	−0.60**	0.19	0.55	−0.32	0.17	0.72	−1.10
Race	−0.56**	0.18	0.57	−0.15	0.17	0.86	−1.66
Employment	0.08	0.17	1.08	−0.01	0.15	0.99	0.40
Fear facilitators							
Perceptions of disorder	0.56**	0.10	1.75	0.19*	0.09	1.21	2.75**
Perceptions of major crime	0.42**	0.08	1.52	0.51**	0.09	1.67	−0.75
Neighborhood association	0.30	0.20	1.35	−0.00	0.18	1.00	1.11
Children in home	0.12	0.18	1.13	−0.02	0.16	0.98	0.58
Fear inhibitors							
Homeowner	−0.34	0.18	0.71	−0.09	0.16	0.91	−1.04
Neighborhood integration	−0.17*	0.08	0.84	−0.11	0.07	0.89	−0.56
Neighborhood assessment	−0.22	0.18	0.80	−0.51**	0.17	0.60	1.17
Neighborhood stability	−0.06	0.19	0.94	0.06	0.18	1.06	−0.46
Level II—neighborhood level							
Personal crime	0.07	0.18	1.07	0.01	0.16	1.01	0.25
Model fit							
Threshold difference							
Unconditional model	2.62**	0.14		2.30**	0.11		
Conditional model	2.69**	0.17		2.63**	0.13		
Level II variance							
Unconditional model	0.24**			0.34**			
Conditional model	0.00			0.00			
Reliability	0.73			0.63			

* $p < .05$.
** $p < .01$ (two-tailed tests).

homes were significantly more likely to report being fearful of property victimization. Although current research suggested that homeownership reduces fear of crime, acquiring substantial possessions might actually increase the fear that these assets will be victimized.

Female respondents perceived that they were less safe and were more worried about personal victimization; however, the predictive models did little to illuminate differences between the genders. In order to further understand the relative effect of gender on perceived safety and personal and property victimization, a series of models were estimated using gender as an independent variable (see Appendix B). Consistent with the baseline models, women felt less safe overall and were more fearful of personal victimization than men. The standardized coefficients further revealed the magnitude of the effect of gender on perceived safety and fear of personal victimization. In contrast, gender had little effect in the property victimization model. Finally, assessments of disorder and major crime in the neighborhood and negative perceptions of neighborhood quality of life consistently increased levels of reported fear.

Discussion

Research exploring gender difference in crime-related fear had generally been limited to comparison of mean scores for specific types of victimization (Ferraro, 1996; Fisher & Sloan, 2003) and with few exceptions (Lane & Meeker, 2003) multivariate models had treated gender as an independent variable. Prior shadow hypotheses studies had varied in sampling schemes (c.f. Ferraro, 1996; Fisher & Sloan, 2003; Warr, 1984), offenses studied, and the measurement of fear

Table 5
Fear of property victimization by gender

	Male (N = 1,029)			Female (N = 1,029)			Comparison
	Coeff.	s.e.	Odds	Coeff.	s.e.	Odds	*Z score*
Constant	−2.11*	0.86	–	−1.37	0.70	–	
Level I—individual level							
Individual factors							
Married	0.00	0.15	1.00	0.20	0.14	1.22	−0.97
Education	0.05	0.15	1.05	0.15	0.13	1.16	−0.50
Age	0.04	0.21	1.04	−0.12	0.18	0.89	0.58
Income	0.12	0.16	1.27	−0.17	0.17	0.84	1.24
Race	−0.06	0.17	0.94	0.22	0.17	1.25	−1.16
Employment	0.23	0.15	1.26	0.36**	0.14	1.43	−0.63
Fear facilitators							
Perceptions of disorder	0.69**	0.10	1.99	0.38**	0.09	1.46	2.30*
Perceptions of major crime	0.37**	0.08	1.45	0.25**	0.09	1.28	1.00
Neighborhood association	−0.18	0.18	0.84	−0.06	0.18	0.94	−0.47
Children in home	0.07	0.16	1.07	0.16	0.15	1.17	−0.41
Fear inhibitors							
Homeowner	0.35*	0.17	1.42	0.32*	0.16	1.38	0.13
Neighborhood integration	−0.11	0.07	0.90	−0.05	0.07	0.95	−0.61
Neighborhood assessment	−0.46**	0.17	0.63	−0.53**	0.17	0.59	0.29
Neighborhood stability	−0.05	0.17	0.95	−0.16	0.18	0.85	0.44
Level II—neighborhood level							
Personal crime	−0.09	0.24	0.91	−0.17	0.16	0.84	0.28
Model fit							
Threshold difference							
Unconditional model	2.95**	0.10		2.70**	0.09		
Conditional model	3.55**	0.13		3.01**	0.11		
Level II variance							
Unconditional model	0.10**			0.06**			
Conditional model	0.10**			0.00			
Reliability	0.57			0.46			

* $p < .05$.
** $p < .01$ (two-tailed tests).

(c.f. Ferraro, 1996; Fisher & Sloan, 2003; Lane & Meeker, 2003). This study further differed by using HLM (as opposed to regression) for multivariate modeling. Nonetheless, parallels could be drawn between this analysis and other studies of fear and the shadow hypothesis. Consistent with prior studies, women were equally or more fearful of crime then were men (Ferraro, 1996; Fisher & Sloan, 2003; Lane & Meeker, 2003; Warr, 1984). In particular, women expressed more fear of personal victimization and more concern with their perceived safety. Contrary to prior research findings (Ferraro, 1996; Fisher & Sloan, 2003; Warr, 1984), men and women reported comparable fear of property victimization.

Despite the differences in the baseline of fear, men and women were only significantly different on a small number of independent variables. The cases of gender-based differences, coupled with nonsignificant differences in male and female models did, however, lend some support to the shadow of sexual assault hypothesis (Ferraro, 1995; Fisher & Sloan, 2003; Pain, 2001; Valentine, 1989). With only two exceptions (education in the perceived safety model and employment in the fear of property victimization model), the views reported by women did not vary by demographic factors. Findings from studies aggregating men and women suggested that demographic factors should be prominent in predicting safety and perceived risk (Ferraro, 1996; Haynie, 1998; Rountree & Land, 1996; McGarrell et al., 1997) although exceptions could be noted (Lane & Meeker, 2003).

This analysis found demographics to be consistently significant predictors for men (as seen in the perceived safety and fear of personal victimization models), although they were rarely significant for

women. If the fear of sexual assault overrides fear of other crimes, it makes intuitive sense that this would be the case, regardless of a woman's age, race, education, income, marital status, and employment status. That other factors, such as perceptions of neighborhood conditions, were significant for women provided further support. Although a female respondent might not have been at more/less risk based upon her race, her perceptions might have varied depending on the level of security she saw in her surrounding environment. Further, if fear among women was overshadowed by concern over sexual victimization, it would be expected that women would express greater fear for their safety and personal victimization. If men had less fear of sexual victimization, their fear of personal victimization would be constrained to a smaller range of possible offenses.

This study also provided important insight into the study of fear of crime in general. Specifically, fear and safety were related more with subjective perceptions of neighborhood quality of life than with objective measures of neighborhood dangers. Perceptions of major crime, disorder, and neighborhood quality were statistically significant in nearly all of the models estimated. In contrast, the measure of personal crime included at the patrol beat level was never statistically significant. This was a critical finding bolstering the argument that subjective evaluations of neighborhoods inform the understanding of fear (Bursik & Grasmick, 1993; Hale et al., 1994; O'Mahony & Quinn, 1999; Taylor & Hale, 1986). Residents who believed their neighborhoods were disorderly or less satisfactory reported more concern over safety and risk of criminal victimization, net of reported personal crime at the neighborhood level. This suggests reducing the personal crime rate in a neighborhood can yield only negligible effects on fear; by itself, reducing crime may not reduce fear (Lane & Meeker, 2000). Instead, reducing perceived disorderly situations and improving the quality of life in the neighborhood may go farther in reducing fear for residents.

In a similar light, neighborhood integration was significant in the perceived safety and personal victimization models, but only for male respondents. The lack of statistical significance for property victimization, and among female respondents, was an interesting outcome of the study. Conceptually, neighborhood integration should not exhibit a variable effect for male and female respondents; the nature of this concept was such that gender differences in its affect would not be expected. In addition, the effect of neighborhood integration would be expected to have a constant impact across the dependent variables. The explanation for this outcome was unclear. It was possible that neighborhood integration, as a concept, did not have the expected broad influence.

In contrast, involvement in neighborhood associations was never a significant predictor of fear or perceived safety. Contrary to recent findings (Zhao et al., 2002), involvement in a neighborhood association did not facilitate or mitigate fear in this study. This might be the result of different samples and operational decisions. Zhao and colleagues contrasted citizen volunteers with "average" residents, finding greater reported fear among those who volunteered their time to assist the police. This study compared those who had some level of involvement in a neighborhood association. Simply having occasional exchanges of information with officers in the context of working with neighbors to improve a neighborhood's quality of life was not enough to generate greater levels of fear.

The results of this study must be tempered with several acknowledged limitations. First, the data did not include a victimization measure. Some had found prior victimization (direct and/or vicarious) shaped fear of crime and perceptions of victimization risk (Covington & Taylor, 1991; Ferraro, 1996; Parker & Ray, 1990; Rountree & Land, 1996; Skogan, 1987); unfortunately, victimization measures were not available. Victimization has conceptual significance for shaping fear; however studies had failed to conclusively establish a relationship (Bennett & Flavin, 1994; Bursik & Grasmick, 1993; Gates & Rohe, 1987; McGarrell et al., 1997; Miethe, 1995; Skogan & Maxfield, 1981). Second, the items used to create the two fear of victimization measures cued respondents to report their level of "worry" about possible victimization; although some (Lane & Meeker, 2000) had suggested measures of worry were adequate reflections of fear, the extent to which these were analogous was not clear. Third, the dependent measures assessed fear of victimization for several personal and property offenses, but they did not account for as many possible offenses as others had used (Ferraro, 1996; LaGrange & Ferraro, 1989; Warr, 1984; Warr & Stafford, 1983). This limitation arose from the broader intent of the original data project; resource constraints limited the number of survey items measuring fear-related issues. Finally, the analysis did not directly assess explanations suggesting fear of sexual victimization overrode broader fear among women (Ferraro, 1995, 1996; Gordon & Riger, 1989; Warr, 1984).

Overall, these findings hold important implications for the understanding of fear of crime and criminal

victimization. Gender does matter in determining the extent to which a citizen is fearful or fearless; however, the differences in this sample were less than would have been expected based upon existing research. Even though women reported higher levels of fear, the predictive models were a better statistical fit for male respondents. Findings suggested that fear among women (and men) might be more complex than originally conceived (see Lane & Meeker, 2003). Future research should delve deeper into gender differences in perceptions of fear and criminal victimization. In specific, additional inquiry into the root causes of the fear of personal victimization among women is warranted.

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Appendix A. Description of variables

Outcome variables	
Perceived safety	A two-item scale (alpha 0.652) including: how safe do you feel walking alone in your neighborhood after dark? (1 = very safe, 2 = somewhat safe, 3 = somewhat unsafe, 4 = very unsafe) and how often does your worry about crime prevent you from doing things you would like to do in your neighborhood? (1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = very often).
Fear of personal victimization	A three-item scale (alpha 0.801) including: how worried are you that: someone will try to attack you while you are outside your neighborhood, you will be a victim of a violent crime in your neighborhood, and you will be a victim of a violent crime in your home? (1 = not worried, 2 = somewhat worried, 3 = very worried).
Fear of property victimization	A three-item scale (alpha 0.710) including: how worried are you that: someone will try to break into your home while no one is there, vandalize your home, or steal something outside of your home? (1 = not worried, 2 = somewhat worried, 3 = very worried).
Independent measures	
Individual factors	
Married	A dummy variable with married = 1. Individuals who were single, divorced, or widowed served as the reference category.
Education	A dummy variable with post high school education = 1.
Age	The natural log of the respondent's age in years.
Income	A dummy variable with household income more than $50,000 = 1.
Race	A dummy variable with White = 1.
Employment	A dummy variable with fulltime employment = 1. Individuals who were unemployed or worked part time served as the reference category.
Female	A dummy variable with female = 1.
Fear facilitators	
Perceptions of disorder	A seven-item factor score (eigenvalue 3.21, factor loadings > 0.69, α = 0.81) including: tell me whether you think that lately litter and trash, loitering, public drinking, parents who don't supervise their children, landlords not maintaining their property, drug dealing, and gangs is (1 = not a problem, 2 = somewhat of a problem, 3 = a big problem).
Perceptions of major crime	A three-item factor score (eigenvalue 1.89, factor loadings > 0.77, α = 0.71) including: tell me whether you think that assaults in public, shootings and other public violence, and violent attacks on neighborhood residents is (1 = not a problem, 2 = somewhat of a problem, 3 = a big problem).
Neighborhood association	A dummy variable with those individuals who indicated they attended neighborhood association meetings = 1.
Children in home	A dummy variable with respondents who were living with one or more children under the age of eighteen = 1.
Personal crime	A dummy variable with neighborhoods with murder, sexual assault, robbery, and felony assault arrests in 1997 within the highest quartile of all neighborhoods = 1.
Fear inhibitors	
Homeowner	A dummy variable with homeowner = 1.
Neighborhood integration	A four-item factor score (eigenvalue 2.385, factor loadings > 0.68) including: have a friendly chat with neighbors on your block when they are outside; get together socially with neighbors on your block; agree to watch a neighbor's home when they are on vacation; share tools or other things with your neighbors (1 = never, 2 = rarely, 3 = sometimes, 4 = often).
Neighborhood assessment	A dummy variable with those individuals who indicated their neighborhood as an excellent or good place to live = 1.
Neighborhood stability	A dummy variable with those individuals who are somewhat or very likely to remain in their neighborhood a year from now = 1.

Appendix B. Hierarchical ordinal regression models for perceived safety, personal and property victimization—total sample (n = 2,058)

	Perceived safety			Personal victimization			Property victimization		
	Coeff.	s.e.	Odds	Coeff.	s.e.	Odds	Coeff.	s.e.	Odds
Constant	−2.44***	0.57		−4.25***	.62		−1.61*	.57	
Level I—individual level									
Individual factors									
Female	1.16***	.09	3.18	0.76***	.10	2.14	0.04	.09	
Married	0.08	.11		0.11	.12		0.12	.11	
Education	−0.20*	.09	0.81	−0.03	.10		0.12	.10	
Age	0.24	.14		0.41**	.15	1.50	−0.09	.14	
Income	−0.39***	.11	0.67	−0.45***	.13	0.64	−0.04	.11	
Race	−0.14	.12		−0.39**	.12	0.68	0.10	.12	
Employment	−0.22*	.10	0.80	−0.02	.11		0.27*	.10	1.30
Fear facilitators									
Perceptions of disorder	0.39***	.06	1.47	0.35***	.07	1.42	0.52***	.07	1.68
Perceptions of major crime	0.37***	.05	1.44	0.46***	.06	1.58	0.32***	.06	1.37
Neighborhood association	0.02	.12		0.13	.13		−0.11	.13	
Children in home	−0.12	.11		0.03	.12		0.12	.11	
Fear inhibitors									
Homeowner	−0.11	.11		−0.15	.12		0.35**	.11	1.42
Neighborhood integration	−0.15**	.05	0.86	−0.13*	.05	0.87	−0.09	.05	
Neighborhood assessment	−0.62***	.11	0.54	−0.40***	.12	0.67	−0.49***	.12	0.62
Neighborhood stability	−0.34**	.11	0.71	0.00	.13		−0.07	.12	
Level II—neighborhood level									
Personal crime	0.13	.11		0.01	.12		−0.15	.15	
Model fit									
Threshold difference									
Unconditional model	2.10***	.06		2.25***	.09		2.78***	.07	
Conditional model	2.61***	.08		2.62***	.10		3.20***	.08	
Level II variance									
Unconditional model	0.12***	.35		0.16***	.40		0.06***	.25	
Conditional model	0.00	0.01		0.02	.00		0.17*	.03	
Reliability	0.79			0.81			0.63		

Note: Female is a dichotomous variable (1 = female; 0 = male).
* p <.05.
** p <. 01.
*** p <. 001 (two-tailed tests).

Notes

1. Prior multivariate analyses contrasting fear and risk among men and women had relied on focused samples and/or contexts. May (2001) and May and Dunaway (2000) utilized an adolescent sample; the latter study focused on victimization while at school. Lane (2002) and Lane and Meeker (2003) restricted their analyses to gang crimes. Fisher and Sloan (2003) used a sample of college students. LaGrange and Ferraro (1989) limited their gender comparison to differences in means.

2. Comprehensive treatments of fear of crime literature had been provided by others (Ferraro & LaGrange, 1987; Flanagan & Longmire, 1993; Garofalo, 1977; Hale, 1996).

3. The National Crime Victimization Survey asks respondents "How safe do you feel being outside and alone in your neighborhood at night (during the day)?" The General Social Survey asks "Is there any area, right around here, that is, within a mile where you would be afraid to walk alone at night?"

4. This may not be the case for a number of reasons. Residents may be unaware of the actual prevalence of crime in their neighborhood, evidenced in disproportionate fear-to-risk ratios (Garofalo, 1981). Alternatively, citizens living in a high crime neighborhood who accept the reality of their physical environment may have a low fear of crime in relation to actual risk (Gilchrist et al., 1998). The relationship between risk and fear has theoretical integrity (Taylor, Shumaker, & Gottfredson, 1985), but it may be subject to variation among neighborhoods and residents.

5. Demographic and economic indicators were based on 2000 U.S. Census data. Data on arrests and departmental characteristics were obtained from the city police department.

6. Survey services were subcontracted; the research firm geo-coded the community's phone listings, facilitating the stratification

based on patrol beat boundaries. On average, contact was attempted with 235 residential phone numbers to complete one hundred interviews; this rate was proportional with the experiences of others engaged in large-scale telephone surveys (e.g., Chermak, McGarrell, & Weiss, 2001; Weeks, Kulka, & Pierson, 1987; Williams & Nofziger, 2003). As the interviews progressed, respondents were disproportionately men. The staff solicited female respondents where possible; men who were willing to be interviewed were accepted in the absence of a willing female.

7. Confirmatory factor analyses were conducted for each of the dependent measures. Statistics for each of the dependent variables were as following: perceived lack of safety (eigenvalue 1.48 factor > 0.86), property victimization (eigenvalue 1.91 factor > 0.76), and personal victimization (eigenvalue 2.14 factor > 0.87).

8. Due to limitations in the data, a continuous measure of household income was not available; this measure was developed to represent respondents with above average incomes. Further deconstruction of non-Whites was precluded by the composition of respondents. Only 20 percent of respondents were non-White; half of these respondents were African American and the remainder was Asian, Hispanic, or other races.

9. A range of conceptual and operational definitions had been used in constructing "neighborhoods," including: involving citizens in defining areas by cuing respondents to consider "their neighborhood" (Frank, Brandl, Worden, & Bynum, 1996) or using interviews to identify defined neighborhoods (Skogan, 1990; Taylor, 1996); creating aggregations using census tracts (Baumer, 2002; Bellair, 2000; Morenoff, Sampson, & Raudenbush, 2001; Rountree & Warner, 1999; Sampson & Raudenbush, 2001; Skogan, 1990); or using police beats (Vélez, 2001). The stratified nature of the sampling procedure yielded data most representative of police beats.

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