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# A Gendered Assessment of the "Threat of Victimization"

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# A Gendered Assessment of the "Threat of Victimization"

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# Examining Gender Differences in Fear of Crime, Perceived Risk, Avoidance, and Defensive Behaviors

# David C. May,<sup>1</sup> Nicole E. Rader,<sup>2</sup> and Sarah Goodrum<sup>3</sup>

#### Abstract

Rader has called for a change in how researchers study fear of crime, suggesting that fear of crime, perceptions of risk, and experiences with victimization are interrelated dimensions of the larger "threat of victimization" concept. In this study, the authors examine how each independent dimension affects additional theoretical dimensions of the "threat of victimization" and how these relationships vary by gender. Using data from residents of Kentucky, the authors estimate a series of multivariate linear and logistic regression models. The findings presented here suggest that gender differences do exist in the components of the threat of victimization and that many of the relationships in the Rader model are multifaceted, including the relationship between perceived risk, fear of crime, and avoidance and defensive behaviors. Implications of these findings for future research regarding predictors of the threat of victimization are discussed.

#### **Keywords**

fear of crime, threat of victimization, perceived risk, avoidance behaviors, defensive behaviors

# Introduction

Fear of crime is an important area of research that has become increasingly popular in the last 30 years. Historically, researchers have questioned the conceptualization and operationalization of fear of crime. Several researchers have argued that the *emotive* feeling of fear differs significantly from *cognitive* perceptions of risk, suggesting that these two constructs should be measured separately (Dubow, McCabe, & Kaplan, 1979; Ferraro & LaGrange, 1987; Garafalo, 1981), although the debate over the measurement of the two concepts continues (Ferraro, 1995; Hale, 1996; May & Dunaway, 2000; Mesch, 2000; Rader, 2004; Rountree & Land, 1996; Warr & Ellison, 2000; Warr & Stafford, 1983; Williams, McShane, & Akers, 2000).

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A third construct often discussed in the fear of crime literature involves the behavioral actions individuals taken to protect themselves from crime. Constrained behaviors include avoidance behaviors (e.g., staying home at night) and defensive (or protective) behaviors (e.g., owning a gun, installing a burglar alarm) (Ferraro & LaGrange, 1987). A number of researchers have examined the place of constrained behaviors in formulating fear of crime and perceived risk (Chan & Rigakos, 2002; Ferraro, 1995; Hale, 1996; Keane, 1998; Liska, Sanchirico, & Reed, 1988; Mesch, 2000; Pain, 2001). Traditionally, perceived risk and constrained behaviors were thought to cause fear of crime; however, Rader (2004) and her colleagues (Rader, May, & Goodrum, 2007) have reconsidered this connection, arguing that fear of crime, perceived risk, constrained behaviors, and victimization experience may all be components of a multifaceted construct called the threat of victimization. Rader et al. (2007) found partial support for this argument when they determined that, although fear of crime was reciprocally related to perceived risk and avoidance/defensive behaviors, perceived risk and avoidance/defensive behaviors were not related. In this study, we expand the literature on fear of crime, perceived risk, and the threat of victimization by addressing gender differences in demographic, contextual, and theoretical predictors of perceived risk, fear of crime, and defensive and avoidance behaviors.

### Gender and Fear of Crime

Although there are many predictors of fear of crime (e.g., age, race, victimization experience), perhaps the most well-documented indicator of fear of crime is gender. Research suggests that when controlling for other factors, gender is the most stable predictor of a person's fear of crime (Day, 1994; Ferraro, 1996; Gilchrist, Bannister, Ditton, & Farrall, 1998; Haynie, 1998; Madriz, 1997; Rountree, 1998; Stanko, 1995). Women are much more likely to self-report fear of crime than men, even though they are less likely, according to official data, to experience victimization (with the exceptions of sexual assault, domestic violence, stalking, and sexual harassment). This discrepancy is often called the "gender-fear paradox" because women's fear of crime is incongruent with the reality of their criminal victimization (Ferraro, 1996). These elevated fear levels increase womens' perceptions of risk and may cause women to be more likely to engage in constrained behaviors, including a dependence on male protectors (Chan & Rigakos, 2002; Gardner, 1989; Hollander, 2001; Keane, 1998; Madriz, 1997; Pain, 2001; Rader, 2008; Rountree, 1998; Stanko, 1990; 2001).

Popular explanations for the gender-fear paradox include the idea that women have a greater fear of crime, and indeed a greater fear than necessary, in part because of their smaller physical stature that makes them less able to resist attack (Hale, 1996; Killias & Clerici, 2000; Smith & Torstensson, 1997). This approach stems from the sociology of gender literature, arguing that men and women are socialized differently and that this socialization often enhances gender inequality (Kimmel, 2004). Another explanation involves the gendered nature of decision making, suggesting that men and women vary in the emotional aspects of the decision-making process, and that women are more likely to have elevated levels of emotive fear (Hale, 1996; Lupton & Tulloch, 1999; Walklate, 2001).

The most popular and recently researched explanation of the gender-fear paradox, however, is called the "shadow hypothesis." Put forth by Warr (1984; 1985) and Ferraro (1995; 1996), this hypothesis suggests that women fear crime at higher levels than their chances of victimization warrant because of an overarching fear of sexual assault. Fear of sexual assault thus escalates women's fear of other types of crimes, making women afraid of all crime. As Warr (1984) notes, for most women "fear of crime *is* fear of rape" (p. 700). This argument is rooted in the feminist criminological literature that suggests rape and fear of rape further power inequalities among men and women (Brownmiller, 1975; Stanko, 1990).

Researchers discovered support for this hypothesis in the early 1990s, indicating that women's fear of sexual assault is a significant contributor to their general sense of fear of crime (Ferraro,

1995; 1996; Fisher & Sloan, 2003; Gordon & Riger, 1989; May, 2001; Warr, 1984; 1985; Wilcox, Jordan, & Pritchard, 2006). For example, Wilcox, Jordan, & Pritchard (2006) report that stranger-induced fear of sexual assault was more prevalent among college women than nonstranger-induced fear of sexual assault. Furthermore, Lane and Meeker (2003) find that fear of physical harm during a sexual assault may also elevate levels of fear among women. Research on the "shadow hypothesis," then, continues to provide more insight into the prevalence and nature of women's fear of crime.

Because most of this literature focuses on explaining why women fear crime, few researchers focus specifically on men's fear of crime. Arguably, the gender bias in the interpretation of the research has led to the view that women have an unreasonable fear crime rather than the alternative interpretation that men fear crime less than they logically should. Even in studies that consider men's fear of crime, the focus tends to be on men's fear of crime for others rather than men's fear of crime for the self (Ferraro, 1995; Snedker, 2003; Warr, 1992; Warr & Ellison, 2000). Those works that do focus on men's fear for self argue that men may fear crime more than they report because society views fear as a feminine phenomenon, providing cultural messages to men that fearing crime (or admitting to that fear) is taboo (Brownlow, 2005; Gilchrist et al., 1998; Goodey, 1997). This stigma may cause men to underreport their fear on surveys about fear of crime (Sutton & Farrall, 2005).

Nevertheless, recent research on the topic of men's fear of crime indicates that men do fear crime within certain contexts. Brownlow (2005) and Day, Stump, and Carreon (2003) find that men were more likely to fear crime when they felt a loss of control either involving a public space or when confronted by another male. Shafer, Huebner, and Bynum (2006) found that certain groups of men, namely African American and lower class males, were more likely to fear crime. Finally, May (2001) argues that adolescent boys may fear crime for similar reasons to women because they feel physically vulnerable to victimization. He argues that some boys may feel they are less able to resist victimization because they are physically weaker than other boys, suggesting that this may cause a "shadow of powerlessness" (p. 167). Thus, recent studies suggest that men's fear of crime may be more complex than the findings of early research suggest. Hence, the area of gender and fear of crime has made great strides in understanding women's fear of crime, yet is still lacking focus on determining causes and motivation for men's fear of crime.

#### Gender and Perceived Risk

Perceived risk is typically defined as the perceived likelihood of criminal victimization (Ferraro & LaGrange, 1987; Mesch, 2000; Warr & Stafford, 1983). This concept is viewed as a cognitive indicator of fear (as opposed to an emotional indicator of fear), and it is typically measured in terms of "safety" from crime instead of "worry" about crime (Ferraro & LaGrange, 1987; Mesch, 2000; Rader, 2004).

Several studies have also considered the impact of gender on perceived risk of victimization. Early studies conducted by Rountree and Land (1996) and Fisher, Sloan, and Wilkins (1995) found that when measuring perceived risk in terms of perceptions of safety, women had a higher perceived risk of victimization than men. Fisher and Sloan (2003) and Wilcox, Jordan, & Pritchard (2006) confirmed this finding, suggesting that women take perceived risk into consideration for the specific crime of sexual assault.

Interestingly, women do not just perceive themselves at higher risk of criminal victimization, they also perceive themselves at higher risk of arrest (Richards & Tittle, 1981). Women's assessments of victimization risk and arrest risk suggest an overarching cultural norm for women to exercise caution in their behavior—caution to protect themselves from crime as victims and caution to avoid detection from law enforcement officers as offenders. The gender differences in risk assessment for victimization and arrest may be the result of parents' socialization of girls versus boys and

the higher levels of monitoring that girls experience, particularly in patriarchal families (Blackwell, Sellers, & Schlaupitz, 2002; Hagan, 1990; Grasmick, Hagan, Blackwell, & Arneklev, 1996).

Taken together, the evidence suggests that parents' greater concern for girls' behavior (and safety) may socialize girls to minimize their risk-taking behavior more than boys and it may socialize them to have a greater awareness of and concern for danger than boys. A variety of other researchers present contradictory findings, however, suggesting that men are more likely to have higher levels of perceived risk than women (see Hale, 1996, for a review). Other researchers have also debated women's risk assessment, arguing that women are less likely to use cognitive thought and more likely to use the emotion of fear when considering potential victimization than men (Lupton & Tulloch, 1999; Smith & Torstensson, 1997). In fact, in a recent study that specifically considered the relationship between perceived risk and gender, Reid and Konrad (2004) found that perceived risk affected men's fear of crime for the crime of robbery more so than women, that perceived risk affected women's fear of sexual assault more than men, and that there were no gender differences in fear of burglary. These findings show that the relationship between gender and perceived risk is complicated and often varies by offense type.

Although it is apparent that much debate surrounds which gender is most likely to perceive risk of victimization, perceived risk as a construct or its independent relation to gender are rarely examined in the literature. It is clear that the relationship between gender and perceived risk is based on a variety of other factors, with offense type emerging as one of the most important factors (Fisher & Sloan, 2003; Reid & Konrad, 2004; Rountree & Land, 1996; Wilcox, Jordan, & Pritchard, 2006). Women seem to use perceived risk more frequently than men for the crime of sexual assault, whereas men seem to use perceived risk more frequently than women for other crimes such as robbery. Additionally, previous research also suggests that race and age are important mediators of the relationship between perceived risk and gender as well (Shafer et al., 2006). Consequently, in this study, we consider the connection between perceived risk and gender, and the impact of gender on perceived risk, both within and outside of models controlling for demographic and contextual factors as well. Based on the research reviewed above, we argue that, controlling for the aforementioned factors, females will perceive themselves to be at greater risk of criminal victimization than males.

#### Gender and Constrained Behaviors

Although constrained behaviors have not received as much attention as perceived risk or fear of crime in the scholarly literature, several studies consider the implications of the behaviors individuals take to protect themselves from potential victimization. Constrained behaviors are typically broken down into two categories, avoidance and defensive behaviors. Avoidance behaviors typically include avoidance of certain places at night, avoidance of events, or a restriction of activities. Defensive behaviors typically include behaviors such as gun ownership, burglary alarm installation, owning a watch dog, or taking a self defense class (Ferraro & LaGrange, 1987). Previous research in fear of crime often considers avoidance and defensive behaviors as correlates of fear of crime but several researchers such as Liska, Sanchirico, and Reed (1988) and May (1999) suggest that the relationship may be more complex than a direct path between fear and constrained behaviors.

Few researchers specifically focus on the relationship between constrained behaviors and gender. However, those that have focused on this relationship typically reveal that women are more likely than men to implement avoidance behaviors, especially avoiding places at night, which may restrict women's mobility (Gardner, 1989; Hollander, 2001; Keane, 1998; Pain, 2001; Stanko, 2001). However, these findings may vary by age. May (1999) finds that women and men may both engage in avoidance behaviors but, at least among young people, they do so in different ways. This suggests the relationship between avoidance behaviors and gender may vary by age, as well as other demographic correlates.

Research on the relationship between defensive behaviors and gender implies that males are more likely to engage in this type of constrained behaviors than females. This is especially the case when considering weapon carrying. Studies consistently note that males are more likely than females to carry a weapon for protection (Kuntsche & Klingemann, 2004; May, 1999; McKeganey & Norrie, 2000; Wilcox, May, & Roberts, 2006). As with responses to other types of stressful situations (including psychological distress and its gendered relationship with depression alcohol consumption), men tend to respond with external (or outward) behaviors while women tend to respond with internal thoughts or feelings (Umberson, 2003). Thus, in response to concerns about criminal victimization, weapons carrying for men and restricted activities for women may be similar examples of gendered methods of coping.

In sum, few studies examine constrained behaviors as dependent variables and even fewer studies do so with an emphasis on gender differences. Among those that have, males are generally found to be more likely to engage in defensive behaviors such as weapon carrying while females are more likely to engage in avoidance behaviors. Consequently, in this article, we consider avoidance and defensive behaviors as separate constructs, allowing for greater consideration of their relationship with gender. Based on the available literature, we suggest that females will be more likely than males to have engaged in avoidance behaviors while males will be more likely than females to have engaged in defensive behaviors.

#### Gender and the Threat of Victimization

Rader (2004) proposed a theoretical model termed "the threat of victimization model" that indicates that fear of crime, perceived risk, and constrained behaviors may work together in a reciprocal fashion. In an empirical assessment of the threat of victimization model, Rader et al. (2007) find that fear of crime was a significant predictor and contributor to perceived risk, avoidance behaviors, and defensive behaviors, but that perceived risk and constrained behaviors were not involved in a relationship when considered as separate dependent variables without fear of crime as part of the model. Given that most previous studies that examine these constructs focus solely on fear of crime as a dependent variable and perceived risk, avoidance behavior, and defensive behavior as independent variables, we view the 2007 study as a progressive step forward.

Nevertheless, neither Rader (2004) nor Rader et al. (2007) focus on gender differences in the threat of victimization or the gendered relationship that victimization experience has with the threat of victimization components. Given that gender is a strong predictor of fear of crime and has a significant effect on perceived risk and avoidance/defensive behaviors, as does victimization experience, the role of gender may vary for each theoretical construct. Therefore, building on the study of Rader et al. (2007) and using a similar analysis strategy, we examine the role of gender in each of the components of the "threat of victimization" independently and comment on the overall "threat of victimization" concept more generally.

We suggest that, for both males and females, victimization and perceived risk of victimization will be positively associated with fear of crime. We further suggest that there will be a bifurcated relationship between constrained behaviors and fear of crime; for males, engagement in defensive behaviors (but not avoidance behaviors) will be positively associated with fear of crime while females that engage in avoidance behaviors (but not defensive behaviors) will be more likely to fear crime as well.

We further suggest that the relationship between victimization, fear, and perceived risk of victimization will vary by gender as well. For males, we expect that both victimization and fear of crime will be positively associated with perceptions of risk of victimization. For females, victimization, avoidance behaviors, and fear of crime will be positively associated with perceptions of risk. Finally, we also expect that the relationship between gender, victimization experience, perceived risk, fear of crime, and avoidance and defensive behaviors will vary by gender as well. We expect that, for males, victimization, perceptions of risk, and fear of crime will be positively associated with engagement in both avoidance and defensive behaviors. For females, victimization, fear of crime, perceptions of risk, and perceptions of community crime increasing will be positively associated with avoidance behaviors, and victimization will be positively associated with defensive behaviors.

# **Problem Statement**

In the previous section, we reviewed the literature surrounding the impact of gender on fear of crime, perceived risk, and constrained behaviors. As the review suggests, the relationship between gender and these "threat of victimization" components is far more complex than a simple linear path between gender and any of the components. As such, using a large sample of adults in Kentucky, we examine the gendered nature of the relationship between fear, perceived risk, and avoidance and defensive behaviors by estimating separate models for males and females for each of the components of the threat of victimization. Our hope is that this strategy will provide further understanding of the complexity of the relationship between these variables.

# Methods

# Sampling

The population targeted for this project was the state of Kentucky. We began by purchasing a sample generated via a random digit dial procedure (including both listed and unlisted phone numbers) designed to yield a true probability sample. For the survey to be representative of the state, we sampled by demographic quota on three variables: race, gender, and rural/suburban/urban location. Potential respondents in our telephone sample were categorized by their rural/suburban/urban location prior to being contacted. The other two demographic characteristics represented the first questions asked of respondents once they agreed to participate in the survey. After a quota became full, the computer-assisted telephone interviewing (CATI) system automatically notified the interviewer who then terminated the interview after asking three broad questions about the criminal justice system in Kentucky.

#### Survey Instrument

The survey instrument used for this study was developed through consultation with the state's Justice Cabinet and Criminal Justice Council representatives; after several revisions, a final version of the survey was completed in September 2003. Telephone interviews were then conducted by a professional telephone interviewing organization in October and November 2003. A total of 2,091 interviews were completed after establishing contact with 7,614 respondents for a response rate of 27.5%.

The quota sample described above yielded a sample that was directly representative of the Kentucky population on these characteristics. During the interviews, additional demographic questions were asked of the respondents. In Table 1, we present a comparison of the demographic profile of our sample with that of the state of Kentucky using 2000 census data. With the exception of education and income, and to a lesser extent age, the sample's demographic profile is very similar to the state profile. Nevertheless, none of the differences between the sample used here and the larger state population were statistically significant.<sup>2</sup>

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Demographic variable	Sample (N = 2,091) (frequency, $\%$ )	2000 census population (frequency, $\%$ )
Gender		
Male	1015 (48.5)	1,975,368 (48.9)
Female	1072 (51.3)	2,066,401 (51.1)
Missing data	5 (.2)	
Race		
White	1865 (89.2)	3,678,740 (91.0)
Black	159 (7.6)	311,000 (7.7)
Other	57 (2.7)	96,581 (2.4)
Missing data	10 (.5)	
Marital status		
Married	1247 (59.6)	1,844,628 (57.3)
Widowed	114 (5.5)	231,630 (7.2)
Divorced	268 (12.8)	353,637 (11.0)
Separated	48 (2.3)	57,237 (1.8)
Never married	307 (14.7)	730,035 (22.7)
Missing data	107 (5.1)	
Age		
18–24	201 (9.6)	401,858 (13.4)
25–35	434 (20.6)	632,494.2 (21.0)
36–45	458 (22.0)	637,074 (21.2)
46–55	383 (18.4)	539,033.2 (17.9)
56–65	282 (13.6)	361,716.4 (12.0)
66 and over	207 (9.5)	432,219.4 (14.4)
Missing data	126 (6.0)	
Education		
No high school diploma	151 (7.2)	685,000 (25.9)
High school diploma or GED	560 (26.8)	888,277 (33.6)
Vocational program	87 (4.2)	NA
Some college	378 (18.1)	490,170 (18.5)
Two-year college degree	169 (8.1)	129.481 (4.9)
College graduate	406 (19.4)	271,418 (10.3)
Some graduate or professional	233 (11.1)	182,051 (6.9)
Missing data	107 (5.1)	
Income <sup>4</sup>		
Less than U.S.\$10,000	138 (6.6)	220,692 (13.9)
U.S.\$10,001–U.S.\$20,000	235 (11.2)	256,494 (16.1)
U.S.\$20,001–U.S.\$30,000	250 (12.0)	232,489 (14.6)
U.S.\$30,001–U.S.\$40,000	249 (11.9)	197,200 (12.4)
U.S.\$40,001–U.S.\$50,000	207 (9.9)	174,456 (11.0)
U.S.\$50,001–U.S.\$75,000	339 (16.2)	274,530 (17.2)
Over U.S.\$75,000	341 (16.3)	235,878 (14.8)
Missing data	332 (15.9)	
Urbanicity		
Rural	1056	50.5
Urban/suburban	1035	49.5
Political beliefs		
Very conservative	303	14.5
Somewhat conservative	559	26.7
Moderate	622	29.7
Somewhat liberal	287	13.7
Very liberal	128	6.1
Missing	192	9.2

Table 1. Comparison of Sample and Population Demographic Characteristics

#### Dependent (or Theoretical) Variables

The dependent variables in the analysis represent the components of the threat of victimization concept: fear of criminal victimization, perceptions of risk of criminal victimization, avoidance behaviors, and defensive behaviors.

Fear of criminal victimization index<sup>3</sup>. The fear of criminal victimization index was created by asking respondents to indicate their level of agreement with six statements examining their fear in a number of situations. Responses were scored using a four-point Likert type format (*strongly agree* = 4, *somewhat agree* = 3, *somewhat disagree* = 2, and *strongly disagree* = 1). Scores on the index thus ranged from 6 (*least fearful*) to 24 (*most fearful*) with a sample mean of 11.8 for the scale. The scale demonstrated high internal reliability with a Cronbach's  $\alpha$  of .863. The statements that comprise the index are included in the Appendix.

Perceptions of risk index. The perceived risk index was created by summating responses to a series of questions asking respondents to estimate the likelihood that seven activities would happen to them in the next 12 months (on a scale of 1 to 10, with 1 representing "not at all likely" and 10 representing "very likely"). Scores on the index thus ranged from 7 (very low risk) to 70 (very high risk) with a sample mean of 21.2 for the scale. The scale demonstrated high internal reliability with a Cronbach's  $\alpha$  of .891. The statements that comprise the index are included in the Appendix.

Avoidance behaviors. To determine the impact of fear of criminal victimization on the respondents' behaviors in this sample, respondents were asked to indicate their level of agreement with the following statement: "In the past twelve months, fear of crime has prevented me from doing things I would like to do." Responses were coded to create a dichotomous variable coded so that those who agreed (either "strongly" or "somewhat") with the previous statement were coded (1) while those who disagreed with the statement (either "strongly" or "somewhat") were coded (0). Approximately one in five respondents (19.6%) agreed that they had limited their behaviors in the past 12 months due to fear of crime.

Defensive behaviors. Respondents then read a list of items (included in the Appendix) that people place in their homes "for security reasons" (hereafter referred to as defensive behaviors) and were asked to indicate whether they had "... placed any of those items in your home in the past 12 months." Two in three respondents (63.7%) had engaged in some form of defensive behavior over the past 12 months.

#### Independent Variables

Demographic variables. Given that the preceding literature identified several demographic variables that have important influences on each of the dependent variables in this study, we controlled for a number of these variables in the models for this study. These variables included dichotomous variables representing gender (coded females = 1), race (Non-White = 1), marital status (married = 1), household income (over U.S.\$40,000 = 1), and place of residence (rural = 1). A continuous variable representing age and an eight-item variable representing education level (ranging from less than eighth grade = 1 to master's degree and beyond = 8) were also included as control variables.

Slightly over half of the sample (51.3%) was female; the vast majority (89.2%) of respondents was White. Three in five respondents (59.6%) were married and approximately equal percentages of respondents had a household income of over U.S.\$40,000 (42.4\%) and less than U.S.\$40,000 (41.7\%). One in five respondents (19.4%) was a college graduate while approximately equal

percentages of the sample were rural (50.5%) and either suburban or urban (49.5%). The mean age for the sample was 44.5 years of age.

#### **Contextual Variables**

Perception of crime in the community. Respondents were asked "Over the past 12 months, do you believe that crime in your community has: greatly decreased (coded 1), somewhat decreased (2), stayed the same (3), somewhat increased (4), or greatly increased (coded 5)?"

Satisfaction with the criminal justice system index. Because one of the primary focuses of those responsible for funding the data collection used for this project was to assess the public's perceptions of the criminal justice system, we were able to develop a measure of satisfaction with the criminal justice system. We anticipated that this measure might affect fear of crime and perceived risk, as those less satisfied with the criminal justice system may have higher levels of perceived risk and fear of crime. This variable was operationalized by summating responses to a series of questions asking respondents to indicate their level of satisfaction with various criminal justice agencies in their community. Scores on the index thus ranged from 8 (very dissatisfied with all criminal justice agencies) to 40 (very satisfied with all criminal justice agencies) with a sample mean of 27.4 for the scale. The scale demonstrated high internal reliability with a Cronbach's  $\alpha$  of .798. The statements that comprise the index are included in the Appendix.

12-month victimization experience. Because previous victimization experience affects both perceptions of crime and fear of criminal victimization (see Shafer et al., 2006, for review), respondents were also asked a series of questions to assess their criminal victimization experience in the past 12 months. These questions are included in the Appendix. The responses to those questions were then categorized into two separate variables: nonsexual violent crime victimization and property crime victimization. Any respondent indicating that they were victimized by a nonsexual violent victimization (e.g., mugging, aggravated assault, or simple assault) in the past 12 months was coded as (1) on the nonsexual violent crime victimization variable; all others were coded (0). Any respondent indicating they had been victimized by any of the property crimes in the past 12 months were coded as (1); all other respondents were coded as (0). Less than one in 20 respondents (3.7%) had been victimized by a nonsexual violent crime in the past 12 months while one in four respondents (25.7%) had been victimized by one of the property crimes in question in the past 12 months. Two in five (39%, or 30 respondents) of the 12-month nonsexual violent victims were female, as were 53% (or 281 females) of the 12-month property crime victims.

Lifetime sexual crime victimization experience. Given the traumatic emotional and psychological impact that sexual victimization has upon the victim, and the demonstrated impact of the "shadow of sexual assault" discussed earlier, we felt that this victimization was much more likely to have a "lifetime" effect than other nonsexual victimizations, whether property or violent. As such, we felt it was also important to examine the impact of lifetime sexual victimization experience on constrained and defensive behaviors; thus, we included two questions assessing the respondents' lifetime experience with sexual victimization. Those respondents who indicated they had been victimized by one of those activities were coded as (1); those who had not been victimized were coded as (0). Slightly over one in six respondents (17.6%) had experience with a sexual victimization in their lifetime. Most (81.3%, or 300 respondents) were female.

		Male		
1ean SD	Mean	SD		
28 <sup>***</sup> 14.04 278 <sup>***</sup> .448		3.64 10.65 .328 .478		
	28 <sup>***</sup> 14.04 278 <sup>***</sup> .448	39****         4.98         10.13           28****         14.04         18.93           278****         .448         .122		

Table 2. Mean Comparison of Threat of Victimization Components by Gender<sup>a</sup>

a. Due to missing data on the items included in the indexes, sample sizes varied from 967 to 990 for males and from 1,004 to 1,040 for females for the mean comparisons.

\* p < .05. \*\* p < .01. \*\*\* p < .001.

# **Analysis Strategy**

Given that the purpose of this study was to test how the various components of the threat of victimization (Rader, 2004) vary by gender, we began by estimating independent sample *t* tests for each of the four components of the threat of victimization component (fear of criminal victimization, perceptions of risk, avoidance behaviors, and defensive behaviors). Furthermore, we also wanted to examine gender differences in the relationship between these four variables and the control variables alluded to earlier. As such, we estimated a series of multivariate linear and logistic regression models separately for males and females.

# Results

# Gender and the Threat of Victimization Components

The results presented in Table 2 reflect a comparison of means using independent sample t tests to determine whether gender differences in the components of the threat of victimization were statistically significant. The results indicate that, for each of the components of the threat of victimization hypothesis, females scored significantly higher on the component than males. As such, females were significantly more fearful of criminal victimization and were significantly more likely to perceive themselves at risk of victimization than males. Additionally, females were significantly more likely to have engaged in avoidance behaviors than their male counterparts. Finally, females were also significantly more likely than males to have engaged in defensive behaviors, contradicting both what we expected to find as well as previous research. Nevertheless, given the large sample size and the relatively weak but statistically significant difference between men's and women's use of defensive behaviors (70% of females and 65% of males engaged in defensive behaviors), we argue that the gender difference in defensive behaviors is less important than the gender differences in fear, perceived risk, and avoidance behaviors. We will return to this discussion in the conclusion section.

# Predictors of Fear of Crime for Males and Females

We began our multivariate models by regressing fear of criminal victimization on the demographic (e.g., race, age, marital status, and income), contextual (e.g., perception of crime in community, satisfaction with the criminal justice system, and experience with victimization), and theoretical variables (e.g., perceptions of risk, avoidance behaviors, and defensive behaviors) separately for males and females. The results are presented in Table 3. The results presented in Table 3 suggest that the predictors of fear of criminal victimization, the first component of the threat of victimization concept, differ for males and females. The results for males indicated that property crime victims,

	Males (N = 837)			Females ( $N = 821$ )		
	В	SE	Beta	В	SE	Beta
Constant	7.549	.751		7.813	1.099	
Race (non-White $= 1$ )	.508	.319	.043	.027	.471	.002
Marital status (married = 1)	<b>093</b>	.217	012	.012	.296	.001
Age	008	.007	034	<b>025</b>	.009	<b>074</b> ***
Income (over U.S. $40,000 = 1$ )	<b>170</b>	.209	023	—. <b>189</b>	.285	019
Property victim (yes $= 1$ )	.477	.236	.058*	.535	.317	.048
Sex crime victim (yes $= 1$ )	1.029	.379	.073***	.440	.298	.041
Violent crime victim (yes $= 1$ )	.169	.459	.010	<b>488</b>	.781	017
Perceived crime in the community	.086	.131	.018	.323	.163	.057*
Satisfaction with criminal justice agents <sup>a</sup>	<b>038</b>	.016	$065^{*}$	.010	.023	.013
Avoidance behaviors	2.768	.307	.25I <sup>****</sup>	3.291	.327	.293****
Defensive behaviors	.323	.206	.042	.916	.294	.083*
Perceptions of risk	.162	.010	.463****	.156	.011	.43 I ****
F (df)	53.07 (835)			58.29 (819)		
$R^2$ (adjusted $R^2$ )	.436 (.428)			.464 (.456)		

**Table 3.** Multivariate Linear Regression Results of Regressing Fear of Criminal Victimization on Demographic,

 Contextual, and Theoretical Variables

NOTE: B = unstandardized regression coefficient

a. Differences in regression coefficients for males and females are statistically significant based on the test for differences in regression coefficients described in Paternoster et al. (1998).

\* p < .05. \*\* p < .01. \*\*\* p < .001.

sexual crime victims, those least satisfied with the criminal justice agents in their community, and those with higher levels of perceived risk were significantly more fearful than their counterparts. For female respondents, younger respondents, those who perceived that crime was increasing in their community, those who had engaged in both avoidance and defensive behaviors in the past 12 months, and those with higher levels of perceived risk were significantly more fearful than their counterparts. The models explained similar percentages of variation in respondents' fear of criminal victimization (43.6% for males and 46.4% for females).

When examining the outcome of the tests for differences in regression coefficients by gender described by Paternoster, Brame, Mazerolle, and Piquero (1998), we determined that there were significant gender differences in the impact of both satisfaction with criminal justice agents and defensive behaviors on fear of criminal victimization. Those males who were least satisfied with the criminal justice system in their community were significantly more fearful than their counterparts; for females, satisfaction with the criminal justice system had no impact on fear. Females (but not males) who engaged in defensive behaviors were significantly more fearful than their counterparts who did not. As such, there are at least two important differences in predictors of fear of criminal victimization by gender. Additionally, although the differences were not statistically significant, engagement in defensive behaviors was not a predictor of male respondents' fear, but it was a significant predictor of female respondents' fear. Perceptions of increasing crime had a greater effect on males' fear of crime than anticipated and lifetime sexual crime victimization significantly impacted fear of crime for males but not for females. These findings will be discussed in greater detail below.

### Predictors of Perceptions of Risk of Males and Females

We then regressed perceived risk of victimization—the second dimension of the threat of victimization—on the demographic, contextual, and theoretical variables separately for males and females. Those regression results are presented in Table 4 and suggest that while the predictors of perceptions

	Male (N = 837)			Female ( $N = 821$ )		
	В	SE	Beta	В	SE	Beta
Constant	-3.541	2.352		4.263	3.270	
Race (non-White $= 1$ )	.613	.945	.018	1.820	1.360	.037
Marital status (married = 1)	.321	.642	.015	.323	.855	.011
Age	.059	.020	.085***	.033	.027	.035
Income (over U.S.\$40,000=1)	<b>460</b>	.618	022	383	.824	014
Property victim (yes $= 1$ )	2.948	.691	.126***	2.716	.912	.089**
Sex crime victim (yes $= 1$ )	1.012	1.126	.025	1.912	.861	.065*
Violent crime victim (yes $= 1$ )	3.316	1.353	.069*	6.165	2.247	.078***
Perceived crime in the community	1.613	.382	.121 ****	1.476	.469	.094***
Satisfaction with criminal justice agents <sup>a</sup>	<b>049</b>	.048	029	237	.066	−.105 <sup>****</sup>
Avoidance behaviors	<b>—.697</b>	.952	022	1.360	1.002	.044
Defensive behaviors <sup>a</sup>	1.072	.608	.049	<b>—.705</b>	.855	023
Fear scale	1.422	.090	.498***	1.306	.091	.474***
F (df)	44.47 (835)			46.68 (819)		
$R^2$ (adjusted $R^2$ )	.393(.384)			.409(.40 <sup>1</sup> )		

**Table 4.** Multivariate Linear Regression Results of Regressing Perceived Risk of Criminal Victimization on Demographic, Contextual, and the Threat of Victimization Variables for Victimization and Fear of Victimization

NOTE: B = unstandardized regression coefficient

a. Differences in regression coefficients for males and females are statistically significant based on the test for differences in regression coefficients described in Paternoster et al. (1998)

\* p < .05. \*\* p < .01. \*\*\* p < .001.

of risk of victimization differ somewhat by gender, there are more similarities than differences. Among males, respondents who (1) were older, (2) were victims of property crime, (3) were victims of nonsexual violent crimes, and (4) felt crime was increasing in their community, were significantly more fearful and had higher levels of perceived risk of crime than their counterparts. For female respondents, property victims, sexual crime victims, and nonsexual violent crime victims felt that crime had increased in their community, were most dissatisfied with the criminal justice system, and had higher levels of fear had significantly higher levels of perceived risk of crime than their counterparts. The models again explained similar percentages of variation in respondents' perceived risk of criminal victimization (39.3% for males and 40.9% for females).

When examining the tests for differences in regression coefficients by gender, we determined that (just like in the previous fear of criminal victimization models) there were significant gender differences in the impact of both satisfaction with criminal justice agents and defensive behaviors on perceived risk of criminal victimization. Both males and females who were least satisfied with the criminal justice system in their community had higher levels of perceived risk than their counterparts, but the statistically significant difference between the two groups suggests that impact was stronger for males than females. Males who had engaged in defensive behaviors had higher levels of perceived risk than their counterparts who had not while females who engaged in defensive behaviors had lower levels of perceived risk than their counterparts who did not. As such, as with fear of criminal victimization, there are at least two important differences in levels of perceived risk by gender.

### Predictors of Avoidance and Defensive Behaviors for Males and Females

We then regressed respondents' decision to avoid certain activities because of fear of criminal victimization (an avoidance behavior) on the demographic, contextual, and theoretical variables. The logistic regression results for whether the respondent had engaged in avoidance behaviors in the past

	Males (N = 837)			Females ( $N = 821$ )		
	В	SE	Wald	В	SE	Wald
Constant	-7.863	1.004	56.723	-5.880	.880	44.657
Race (non-White=1)	047	.385	.015	017	.335	.003
Marital status (married $= 1$ )	.376	.269	1.953	.273	.217	1.579
Age	.016	.008	3.499	.005	.007	.562
Income (over U.S.\$40,000 = 1)	<b>749</b>	.258	8.406***	280	.209	1.784
Property victim (yes = $I$ ) <sup>a</sup>	.773	.262	8.721 <sup>***</sup>	.148	.217	.464
Sex crime victim (yes $= 1$ )	273	.408	.450	.281	.208	1.832
Violent crime victim (yes $= 1$ )	.640	.441	2.105	1.215	.560	<b>4</b> .709 <sup>*</sup>
Perceived crime in the community	.434	.151	8.275***	.478	.120	15.796***
Satisfaction with criminal justice agents <sup>a</sup>	.016	.020	.622	032	.017	3.563
Defensive behaviors	.147	.278	.279	.050	.227	.048
Fear scale	.293	.039	55.603 <sup>****</sup>	.230	.026	76.707 <sup>***</sup>
Perception of risk	012	.013	.776	.007	.008	.807
Chi-square	156.109			273.993		
-2 log likelihood	479.935			690.334		
Cox and Snell $R^2$ (Nagelkerke $R^2$ )	.170			.284		

 
 Table 5. Multivariate Logistic Regression Results of Regressing Avoidance Behaviors on Demographic, Contextual, and the Threat of Victimization Variables for Victimization, Defensive Behaviors, and Fear of Crime, and Perceived Risk of Victimization

NOTE: B = unstandardized regression coefficient

a. Differences in regression coefficients for males and females are statistically significant based on the test for differences in regression coefficients described in Paternoster et al. (1998)

\* p < .05. \*\* p < .01. \*\*\* p < .001.

12 months are presented in Table 5. For males, these results suggest that those respondents with lower household incomes, those who had been victimized by a property crime in the past 12 months, those who perceived that crime in their community was increasing, and those who were most fearful of criminal victimization were all significantly more likely than their counterparts to engage in avoidance behaviors. Among females, those who had been victimized by a nonsexual violent crime in the past 12 months, those who perceived that crime in their community was increasing, and those who were most fearful of criminal victimization were all significantly more likely than their counterparts to engage in avoidance behaviors. As such, predictors of avoidance behaviors were similar for both males and females. Interestingly, neither perceived risk nor defensive behaviors were associated with avoidance behaviors among either males or females.

Nevertheless, the tests for differences in regression coefficients by gender suggested that there were significant gender differences in the impact of both satisfaction with criminal justice agents and property victimization on avoidance behaviors. Males who were property crime victims in the past 12 months were significantly more likely to have engaged in avoidance behaviors than their counterparts; for females, property victimization did not have a significant impact on avoidance behaviors. Females that were dissatisfied with the criminal justice agents in their community were more likely to engage in avoidance behaviors than their counterparts; this association did not hold true for males.

We then regressed respondents' decisions to add items to their home to protect them against criminal victimization (defensive behaviors) on the demographic, contextual, and theoretical variables reviewed earlier in a multivariate logistic regression model separately for males and females. The results presented in Table 6 suggest that, for male respondents, the only statistically significant predictor of defensive behaviors was their 12-month property victimization experience; for females, 12-month property crime victims, younger females, and those who had engaged in avoidance

	Males (N = 837)			Fem	Females ( $N = 821$ )		
	В	SE	Wald	В	SE	Wald	
Constant	286	.615	.215	.270	.688	.154	
Race (non-White $= 1$ )	.068	.253	.071	<b>446</b>	.282	2.509	
Marital status (married = 1)	.239	.168	2.025	<b>—.164</b>	.186	.772	
Age	<b>009</b>	.005	3.231	015	.006	7.086***	
Income (over U.S.\$40,000 = 1)	.071	.162	.191	062	.175	.124	
Property victim (yes $= 1$ )	.515	.192	7.225*	.672	.217	9.622 <sup>***</sup>	
Sex crime victim (yes $= 1$ )	.394	.337	1.371	.116	.189	.377	
Violent crime victim (yes $= 1$ )	—.07 I	.384	.034	.375	.656	.326	
Perceived crime in the community	.052	.104	.244	.122	.101	1.442	
Satisfaction with criminal justice agents	.001	.013	.003	.004	.014	.067	
Avoidance behaviors	.044	.028	2.447	.068	.022	9.424***	
Fear scale <sup>a</sup>	.017	.010	3.269	006	.008	.632	
Perception of risk	.280	.272	1.060	.119	.227	.276	
Chi-square	-47.205			-62.326			
–2 log likelihood	1,040.348			922.639			
Cox and Snell $R^2$ (Nagelkerke $R^2$ )	.055			.073			

**Table 6.** Multivariate Logistic Regression Results of Regressing Defensive Behaviors on Demographic, Contextual, and the Threat of Victimization Variables for Victimization, Fear of Crime, and Perceived Risk of Victimization

NOTE: B = unstandardized regression coefficient

a. Differences in regression coefficients for males and females are statistically significant based on the test for differences in regression coefficients described in Paternoster et al. (1998)

\* p < .05. \*\* p < .01. \*\*\* p < .001.

behaviors in the past 12 months were all significantly more likely to engage in defensive behaviors than their counterparts. Victimization, perceptions of risk, and fear of crime were also hypothesized to be predictors of defensive behaviors for males, but only victimization proved significant.

Despite the weakness of the demographic and contextual variables in predicting defensive behaviors, the tests for differences in regression coefficients by gender suggested that there were significant gender differences in the impact fear of criminal victimization on defensive behaviors. Males who were fearful were more likely to have engaged in defensive behaviors than their counterparts; females who were fearful were less likely to have done so. As such, the impact of fear on defensive behaviors varies in important ways by gender.

Given the wide variation in the predictors of the components of the threat of victimization by gender, we highlight the significant predictors for each model in Table 7. The results suggest that neither race nor marital status had a significant impact on any of the components of the threat of victimization for either males or females. Additionally, some of the more interesting findings presented in the table include: (a) property victimization in the past 12 months impacts each of the components of the threat of victimization for males but only perceptions of risk and defensive behaviors for females; (b) perceptions of risk impact fear for both males and females but do not impact either defensive or avoidance behaviors for either gender; and (c) fear of criminal victimization impacts avoidance behaviors for both males and females but is associated with defensive behaviors only for females. Each of these findings is discussed in detail below.

## Discussion

In this article, we used data collected from approximately 2,000 adults in Kentucky to examined gender differences in the components of Rader's (2004) theoretical conceptualization of the threat

Male	Female		
Predictors of fear of crime by gender			
Property victims	Young		
Sexual crime victims	Believe crime is increasing in community		
Avoidance behaviors	Avoidance behaviors		
Unsatisfied with CJ system	Defensive behaviors		
High perceived risk	High perceived risk		
Predictors of perceived risk by gender			
Older	Sexual crime victims		
Property victims	Property victims		
Nonsexual violent victims	Nonsexual violent victims		
Believe crime is increasing in community	Believe crime is increasing in community		
Most fearful Most fearful	Unsatisfied with CJ system		
Predictors of avoidance behavior by gender			
Lower income	Nonsexual violent victims		
Property victims	Believe crime is increasing in community		
Believe crime is increasing in community	Most fearful		
Most fearful			
Predictors of defensive behaviors by gender			
Property victims	Property victims		
	Young		
	Avoidance behaviors		

Table 7. Table of Significant Gendered Predictors of the Threat of Criminal Victimization

of victimization. Our findings contribute to what is already known about the relationship between gender and fear of crime, perceived risk, and constrained behaviors as we analyzed each component separately for samples of men and women. Our findings reveal a number of important caveats in the gendered nature of the components of the threat of victimization.

First, and most importantly, we determined that there were significant gender differences in each independent component of the threat of victimization. Females were significantly more likely than males to fear criminal victimization, perceive themselves to be more at risk of victimization, and engage in avoidance and defensive behaviors. This finding adds additional perspective to the gendered consideration of the threat of victimization. These findings are generally supportive of the literature regarding gender and fear and risk of criminal victimization; additionally, these findings support the previous literature that suggests that females are more likely to engage in avoidance behaviors as well (Gardner, 1989; Hollander, 2001; Keane, 1998; Pain, 2001; Stanko, 2001).

Nevertheless, our findings also contradict previous research on gender and defensive behaviors to some extent, as females were more likely to engage in defensive behaviors than males in this study. Most of the research reviewed earlier that determined males were more likely to engage in defensive behavior than females equates defensive behaviors with weapon carrying. Given that our measure of defensive behaviors included a wide variety of defensive behaviors (not just weapons carrying), future research efforts should continue to explore this finding in an attempt to understand whether the relationship is due to the nature and composition of the sample (adults from Kentucky) or the operationalization of defensive behaviors used in this study.

The design of our study also allowed us to estimate separate models in the components of the threat of victimization by gender. This methodology revealed a number of important gender differences as well. The first and most obvious gender difference in the components of the threat of victimization is the impact of property crime for males; if males had been victimized by a property crime in the past 12 months, they were more fearful of criminal victimization, had higher levels

of perceived risk, and were significantly more likely to have engaged in both avoidance and defensive behaviors than their male counterparts who had not. For females, property crime victimization affected perceptions of risk and defensive behaviors but not fear or avoidance behaviors. Additionally, for avoidance behaviors, these differences were statistically significant across genders as well. As such, the impact of property victimization varies by gender for avoidance behaviors. Property crime victimization appears to cause more immediate reactions among males than females.

One possible explanation for the stronger impact of property crime victimization on avoidance behaviors for males is the "shadow of powerlessness" suggested by May (2001) and discussed earlier in the literature review. Similar to the sociology of gender literature that suggests "hegemonic masculinity" (i.e. the dominant and most sought after form of masculinity) affects several areas of men's lives, it may also be the case that under certain circumstances and within certain demographics, men may not live up to images of the hegemonic male, thus, creating a sense of powerlessness (Connell, 1987; Messerschmidt, 1993). The results presented in Table 7 combine to suggest that the impact of the various predictors of fear, perceived risk, and avoidance and defensive behaviors may be best explained through the lens of "power." Males who had been victimized by a property crime, had been victimized by a sexual crime in their lifetime, were least satisfied with the criminal justice agents in their community, and who had higher levels of perceived risk were significantly more fearful than their counterparts who had not. For males, older respondents, property victims, nonsexual violent crime victims, those who felt that crime had increased in their community over the past 12 months, and those who were most fearful also had significantly higher levels of perceived risk of crime than their counterparts. Additionally, low income males (but not females) were more likely to have engaged in avoidance behaviors, as were males who had been victimized by property crime. As such, in many of these relationships, less powerful males (whether econoically, physically, or perceptually) are significantly more likely to experience negative emotional affects.

Property victimization affected each of the four components of the threat of victimization. Given this finding, it appears that those males who feel they cannot protect themselves may be more fearful, have higher levels of perceived risk, and be more likely to make lifestyle changes to avoid those situations in which they are most likely to be victimized. Males are often socialized from a young age to believe that they are to be strong, independent, and courageous in the face of danger. Consequently, after males (but not necessarily females with different socialization experiences) have been victimized, they may realize they are not as invincible as they thought they were prior to the victimization. This property victimization, coupled with other factors such as a previous sexual victimization, dissatisfaction with the criminal justice actors who are paid to protect them, a feeling of increasing crime in the community, and few financial resources with which to buy an alarm system or other security device, may reduce the aura of invincibility they once felt and may cause them to not only experience greater levels of fear and perceived risk but make lifestyle changes to avoid those situations where they may be victimized as well. As such, it appears that the shadow of powerlessness first suggested as an explanation of fear of victimization among adolescent males may

An alternative explanation regarding the relationship between each component of the threat of victimization and their predictors may exist for females. Although the results presented in Table 7 reveal some similarities in the relationship between the predictors of fear, perceived risk, and avoidance and defensive behaviors by gender, the most important explanations for gender differences for females seem to revolve around age, nonsexual violent victimization, and the relationship between fear and the other components of the threat of victimization. Younger females had higher levels of fear of crime and were more likely to engage in defensive behaviors. Additionally, females who had been victimized by nonsexual violence were more likely to have engaged in avoidance behaviors. This finding may showcase gender socialization norms that suggest to women they cannot protect themselves from potential victimization, and therefore, an effective fear management

strategy is to avoid public space (Stanko, 2001). Consequently, younger women and those who have been victimized by violence may be more willing than their counterparts to engage in avoidance and defensive behaviors in an effort to prevent future victimization from occurring.

This explanation also bears upon the relationship between prior lifetime sexual victimization and fear of crime among females. Females who had been victimized by a sexual crime in their lifetime had higher levels of perceived risk but not higher levels of fear than females who had not been victimized. As such, it may be that females in this sample who were victimized by sexual crimes were less likely to be fearful because they had engaged in defensive or constrained behaviors early on in their life (but not necessarily in the past 12 months) and thus were less likely to be fearful but continued to have higher levels of perceived risk, a rational realization and action based on their prior victimization experiences. Future research using both lifetime and 12-month measures of defensive and constrained behaviors and sexual victimization is needed to clarify this relationship.

A third important finding from this study concerns the relationship between fear of criminal victimization, perceived risk of criminal victimization, and avoidance and defensive behaviors. Fearful men and women had higher levels of perceived risk and were more likely to engage in avoidance (but not defensive) behaviors than less fearful respondents. Perceptions of risk, however, were associated with fear but neither avoidance nor defensive behaviors. As such, these findings suggest that perceptions of risk may have a strong emotional impact on respondents but have little behavioral impact on them. This relationship exists across both genders. Although we are uncertain why risk had a nonsignificant impact on either of the behaviors, the wide variety of defensive behaviors considered may have reduced the impact of perceived risk normally found in the fear literature and the dichotomous nature of the constrained behavior measure may have reduced the impact of perceived risk on that variable as well. Regardless of the explanation, this finding (or this lack of significant finding) continues to suggest that the components of the threat of victimization are conceptually distinct enough that these sorts of analyses need to continue.

# Conclusions

The findings from this study reveal that there are gendered differences in predictors of the threat of victimization. For some males, the threat of victimization appears to be affected by the shadow of powerlessness; those males who feel least powerful are more fearful, have higher levels of perceived risk, and are more likely to engage in avoidance and defensive behaviors. For females, the threat of victimization appears to be affected by rational choices to both avoid places that they are likely to be victimized and engage in defensive behaviors to protect themselves from victimization. Furthermore, the impact of perceived risk has little association with defensive and avoidance behaviors for either gender.

As such, efforts to reduce fear of crime, perceptions of risk, and their deleterious effects may need to be targeted at certain groups and these groups vary by gender. For example, the findings presented here suggest that older males and those who have been victimized by recent property crimes should be the targets of these efforts whereas fear reduction efforts for females should target younger females and those who have been victimized by nonsexual violent crimes. Given the limited funding (or even concern) that most criminal justice agencies have for reducing fear, targeting these efforts at more focused groups may have a stronger impact than current policies.

Additionally, the findings presented here suggest that vulnerability (in a larger context) needs to be considered in discussions about fear of criminal victimization and perceptions of criminal victimization. Given that (a) fear is associated with lifestyle changes for both males and females, (b) both property and violent victimization affect fear, risk, and either avoidance or defensive behaviors, and (c) those who believe crime is increasing in their community are more fearful, have higher levels of perceived risk, and are more likely to engage in avoidance behaviors, vulnerability has a real, negative impact on some people's lives. As such, programs that both educate the public about their risk of victimization and choices they can make to reduce their likelihood of victimization (following the approaches of lifestyles theories) should reduce vulnerability and thus reduce the negative emotional and behavioral constraints brought about by that vulnerability.

Despite the important gender differences revealed here, this study is not without limitations. First, and most importantly, the findings presented here are based on cross-sectional data from one midsouthern state with a relatively low response rate. These factors may combine to reduce the generalizability of the important gender differences revealed here and should be read in that context. An additional limitation of the cross-sectional data used here is that these data do not allow us to estimate the temporal sequence of the variables under study (e.g., fear, perceived risk, and behaviors). Furthermore, the models presented here also do not allow us to test for reciprocal relationships between these variables. This limitation does not allow for an examination of potentially mediating variables between gender and either perceived risk or fear of victimization. As such, future research efforts should use longitudinal data with more advanced statistical techniques (e.g., path analysis or structural equation modeling) and more representative samples to further unravel the nature of these relationships.

Additionally, despite the large sample size used here, there remained relatively few victims of violent and sexual crimes. As such, future research efforts should use more focused sampling strategies (with larger proportions of property and personal crime victims) that use longitudinal data to examine whether the findings presented here remain in those samples. Before these findings can have real policy implications, future research needs to be conducted using these criteria.

Despite these limitations, we believe this work provides a substantive contribution to the gendered examination of the threat of victimization. Nevertheless, we realize that this effort is only the next in a series of steps that are needed to understand important gender differences in these factors. We hope that future researchers will use these findings for that purpose.

# Appendix

# Fear of Criminal Victimization Index

Respondents were asked to indicate their level of agreement with the following statements.

I am afraid someone will break into my house while I am away

I am afraid of being raped or sexually assaulted

I am afraid of being attacked by someone with a weapon

I am afraid to go out at night because I might become a victim of crime

I am afraid of being murdered

I am afraid of having my money/possessions taken from me

## Perceptions of Risk Index

Respondents were asked to indicate the likelihood that they would be victimized by each of the following crimes.

Someone breaking into your home and taking something or attempting to take something. Someone stealing or attempting to steal a motor vehicle belonging to you. Someone stealing items that belong to you without using force. Someone taking or attempting to take something from you by force or threat of force. Someone beating you or attacking you with a club, knife, gun or other weapon.

Someone threatening you with their fists, feet, or other bodily attack.

Someone forcing you or attempting to force you to have sexual intercourse with them against your will.

### **Defensive Behaviors**

Defensive behaviors were operationalized using the following question. Respondents that indicated they had engaged in one or more of the following behaviors were coded as engaging in defensive behaviors (1).

I am going to read a list of items that people place in their homes for security reasons. Please indicate with either a "Yes" or a "No" if you have placed any of the items in your home in the last 12 months.

Burglar alarms Door Bolts Extra Door Locks Window Guards Police Department Identification Stickers Guard Dogs Outside Security Lights Automatic Timers/Electronic Timers Guns

#### Satisfaction With Criminal Justice Agents

Respondents were asked to indicate their level of satisfaction with the following criminal justice agencies (coded *Very Satisfied* = 5, *Somewhat Satisfied* = 4, *Don't Know* = 3, *Somewhat Dissatisfied* = 2, and *Very Dissatisfied* = 1). *In general, how satisfied are you with the* ...

police who serve your community? adult court system that serves your community? prosecutors in your local court system? public defenders in your local court system? juvenile courts that serve your community? jail that serves your community community-oriented corrections programs (such as probation, parole, and other such programs) in your community? prison system in Kentucky?

# 12-Month Nonsexual Violent Victimization Experience

Respondents were asked if any of the following experiences had happened to them "during the past 12 months:"

- Did anyone take or attempt to take something directly from you by using force or threat of force, such as a stick-up or mugging?
- Did anyone attack you with a knife, gun, club, or another weapon other than hands, fists, or feet? Did anyone hit, attack, or beat you by using their hands, fists, or feet or other bodily attack? (not including attacks with weapons).

Respondents that answered "yes" to any of the three questions were coded (1); those answering no were coded (0).

# 12-Month Property Victimization Experience

Respondents were asked if any of the following experiences had happened to them "during the past 12 months:"

- Did anyone steal or attempt to steal a motor vehicle belonging to you such as a car, truck, motorcycle, or snowmobile?
- Did anyone break into, or try to break into, your house or some other building on your property intending to commit a crime?
- Was anything else stolen from you (other than the incidents already mentioned)?
- Did anyone intentionally damage or destroy property owned by you or someone else in your household?
- Respondents that answered "yes" to any of the four questions were coded (1); those answering no were coded (0).

# Lifetime Sexual Victimization Experience

Respondents were asked if any of the following experiences had ever happened to them.

- Has anyone made or tried to make you have sex by using force or threatening to harm you or someone close to you?
- Did anyone force you or attempt to force you into any unwanted sexual activity such as touching, grabbing, kissing, fondling, etc.?
- Respondents that answered "yes" to either of the questions were coded (1); those answering no were coded (0).

## Author's Note:

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#### **Declaration of Conflicting Interest**

The authors declared no conflicts of interest with respect to the authorship and/or publication of this article.

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#### Notes

- 1. There are interesting differences in the ways researchers portray women's higher levels of fear of crime when compared with the higher levels of fear found among whites. Whites are described as falling victim to cultural stereotypes about race and crime (viewing neighborhoods with larger black populations as having higher crime rates) in their assessments of perceived risk (see Quillian & Pager, 2001). Women, however, are described as irrational and emotional when they overestimate their risk of victimization. Quillian and Pager (2001) examine the relationship between respondent's race, perceptions of crime rates, real crime rates, and neighborhood racial composition and find that Whites are more fearful in neighborhoods where more Blacks reside—even when controlling for the actual crime rate. Liska, Lawrence and Sanchirico (1982) found similar results at the metropolitan area (as opposed to neighborhood) level, even when they controlled for two crime rate measures.
- 2. The response rate is a clear limitation of this study. It is certainly possible that persons with particular characteristics (e.g., prior victimization experiences) were systematically more likely to complete the interviews. However, recent research (Curtin, Presser, & Singer 2000; Keeter, Miller, Kohut, Groves, & Presser, 2000) suggests that low response rates in telephone interviews do not necessarily indicate larger biases. Because the differences between the sample and the 2000 census data are not statistically significant for any demographic category (using *t* tests of proportions, the results of which are available upon request from the author), we felt that weighting the data would not significantly improve any estimates. As such, we feel the response rate does not diminish the impact of this effort but future efforts should be particularly careful to insure maximum response when continuing this exploratory effort.
- 3. Principal axis factor analyses (using direct oblimin rotation) were conducted concurrently for the fear of victimization and the perceptions of risk index. The results from those analyses revealed two distinct factors, one for perceived risk and one for fear. For each index, all variables included in the index loaded at .500 or above on that factor. Additionally, because the fear of victimization index was somewhat skewed (e.g., 15% of the sample strongly disagreed that they were fearful of all crimes), we used a base-10 log transformation of the index and estimated a model using the same predictors as in the untransformed model. Because there were no substantive differences between the two models (e.g., all significant predictors in the original model remained significant in the transformed model), we included the original model in Table 3 of this study. Additionally, based on the comments of an anonymous reviewer, we used the differences in regression coefficient tests (described by Paternoster, Barme, Mazerolle, and Piquero, 1998) to conduct additional analyses for each table to determine whether there were significant gender differences in the impact of the independent variables on the component of the threat of victimization considered in that table. In those cases where there were significant gender differences, these differences are noted in the tables where they occur and discussed in the text that describes that table.
- 4. Given the amount of missing data on the income variable, we estimated all the regression models first with the income variable as a predictor variable and then without the income variable as a predictor variable. Because there were no substantive differences in the impacts of the other predictive variables between the two models, and because income had a significant association with one of the dependent variables, we presented the models that included the income variable throughout this analysis. The models that exclude the income variables are available from the authors upon request.

#### References

Blackwell, B. S., Sellers, C. S., & Schlaupitz, S. M. (2002). A power-control theory of vulnerability to crime and adolescent role exits—revisited. *Canadian Review of Sociology and Anthropology*, *39*, 199-218.
Brownlow, A. (2005). A geography of men's fear. *Geoforum*, *36*, 581-592.

Brownmiller, S. (1975). *Against our will: Men, women, and rape*. New York: Simon and Schuster. Chan, W., & Rigakos, G. S. (2002). Risk, crime and gender. *British Journal of Criminology*, *42*, 743-761. Connell, R. W. (1987). *Gender and power*. Stanford University Press.

- Curtin, R., Presser, S., & Singer, E. (2000). The effects of response rate changes on the index of consumer sentiment. *Public Opinion Quarterly*, 64, 413-428.
- Day, K. (1994). Conceptualizing women's fear of sexual assault on campus. *Environment and Behavior*, 26, 742-767.
- Day, K., Stump, C., & Carreon, D. (2003). Confrontation and loss of control: Masculinity and men's fear in public space. *Journal of Environmental Psychology*, 23, 311-322.
- Dubow, F., McCabe, E., & Kaplan, G. (1979). *Reactions to crime: A critical review of the literature*. Washington, DC: National Institute of Law Enforcement and Criminal Justice, U.S. Government Printing Office.
- Ferraro, K. F. (1995). Crime: Interpreting victimization. Albany: State University of New York Press.
- Ferraro, K. F. (1996). Women's fear of victimization: Shadow of sexual assault. Social Forces, 75, 667-690.
- Ferraro, K. F., & LaGrange, R. (1987). The measurement of fear of crime. Sociological Inquiry, 57, 667-695.
- Fisher, B. S., & Sloan, J. J. (2003). Unraveling the fear of sexual victimization among college women: Is the 'shadow of sexual assault' hypothesis supported? *Justice Quarterly*, *20*, 633-659.
- Fisher, B. S. Sloan, J. J., & Wilkins, D. L. (1995). Fear and perceived risk of victimization in an urban university setting. In Bonnie S. Fisher & John J. Sloan (Eds.), *Campus crime: Legal, social, and policy perspectives* (pp. 179-209). Springfield, IL: Charles C. Thomas.
- Garafalo, J. (1981). The fear of crime: Causes and consequences. *Journal of Criminal Law and Criminology*, 72, 714-726.
- Gardner, C. B. (1989). Analyzing gender in public places: Rethinking Goffman's vision of everyday life. *The American Sociologist, Spring*, 42-56.
- Gilchrist, E., Bannister, J., Ditton, J., & Farrall, S. (1998). Women and the fear of crime: Challenging the accepted stereotype. *British Journal of Criminology*, *38*, 283-298.
- Goodey, J. (1997). Boys don't cry: Masculinities, fear of crime, and fearlessness. British Journal of Criminology, 57, 401-418.
- Gordon, M. T., & Riger, S. (1989). The female fear. New York: Free Press.
- Grasmick, H., Hagan, J., Blackwell, B. S., & Arneklev, B. J. (1996). Risk perceptions and patriarchy: Extending power-control theory. *Social Forces*, 75, 177-199.
- Hagan, J. (1990). The structuration of gender and deviance: A power-control theory of vulnerability to crime and the search for deviant role exits. *Canadian Review of Sociology and Anthropology*, 27, 137-156.
- Hale, C. (1996). Fear of crime: A review of the literature. International Review of Victimology, 4, 79-150.
- Haynie, D. L. (1998). The gender gap in fear of crime, 1973-1994; A methodological approach. *Criminal Justice Review*, 23, 29-50.
- Hollander, J. A. (2001). Vulnerability and dangerousness: The construction of gender through conversation about violence. *Gender and Society*, 15, 83-109.
- Keane, C. (1998). Evaluating the influence of an environmental mobility on women's routine activities. *Environment and Behavior*, 30, 60-81.
- Keeter, S., Miller, C., Kohut, A., Groves, R. M., & Presser, S. (2000). Consequences of reducing nonresponse in a national telephone survey. *Public Opinion Quarterly*, 64, 125-148.
- Kimmel, M. S. (2004). The gendered society (2nd ed.). New York: Oxford University Press.
- Killias, M., & Clerici, C. (2000). Different measures of vulnerability in their relation to different dimensions of fear of crime. *British Journal of Criminology*, 40, 437-450.
- Kuntsche, E. N., & Klingemann, H. K. H. (2004). Weapon-carrying at Swiss schools: A gender-specific typology in context of victim and offender related violence. *Journal of Adolescence*, 27, 381-393.
- Lane, J., & Meeker, J. W. (2003). Social disorganization perceptions, fear of gang crime, and behavioral precautions among Whites, Latinos, and Vietnamese. *Journal of Criminal Justice*, *32*, 49-63.
- Liska, A. E., Lawrence, J. J., & Sanchirico, A. (1982). Fear of crime as a social fact. Social Forces, 60(3), 760-770.
- Liska, A. E., Sanchirico, A., & Reed, M. D. (1988). Fear of crime and constrained behavior: Specifying and estimating a reciprocal effects model. *Social Forces*, *66*, 827-837.

- Lupton, D., & Tulloch, J. (1999). Theorizing fear of crime: Beyond the rational/irrational opposition. British Journal of Sociology, 50, 507-523.
- Madriz, E. (1997). Nothing bad happens to good girls. Berkeley: University of California Press.
- May, D. C. (1999). Scared kids, unattached kids, or peer pressure: Why do students carry firearms to school? *Youth and Society*, *31*, 100-127.
- May, D. C. (2001). The effect of fear of sexual victimization on adolescent fear of crime. *Sociological Spectrum*, 21, 141-174.
- May, D. C., & Dunaway, R. G. (2000). Predictors of fear of criminal victimization at school among adolescents. Sociological Spectrum, 20, 149-168.
- McKeganey, N., & Norrie, J. (2000). Association between illegal drugs and weapon carrying in young people in Scotland: Schools' survey. *British Medical Journal*, 320, 982-984.
- Mesch, G. (2000). Perceptions of risk, lifestyle activities, and fear of crime. Deviant Behavior, 21, 67-72.
- Messerschmidt, J. W. (1993). *Masculinities and crime: Critique and reconceptualization of theory*. Lanham; MD: Rowman and Littlefield.
- Pain, R. (2001). Gender, race, age and fear in the city. Urban Studies, 38, 899-913.
- Paternoster, R., Brame, R., Mazerolle, P., & Piquero, A. (1998). Using the correct statistical test for the equality of regression coefficients. *Criminology*, 36, 859-866.
- Quillian, L., & Pager, D. (2001). Black neighbors, higher crime? The role of racial stereotypes in evaluations of neighborhood crime. *American Journal of Sociology*, 107(3), 717-767.
- Rader, N. E. (2004). The threat of victimization: A theoretical reconceptualization of fear of crime. Sociological Spectrum, 24, 689-704.
- Rader, N. E. (2008). Gendered fear management strategies: Intersections of doing gender and fear management strategies in women's lives. *Sociological Focus*, 41. Forthcoming.
- Rader, N. E., May, D. C., & Goodrum, S. (2007). An empirical assessment of the 'threat of victimization:' Considering fear of crime, perceived risk, avoidance, and defensive behaviors. *Sociological Spectrum*, 27, 475-505.
- Reid, L. W., & Konrad, M. (2004). The gender gap in fear: Assessing the interactive effects of gender and perceived risk on fear of crime. *Sociological Spectrum*, 24, 399-425.
- Richards, P., & Tittle, C. R. (1981). Gender and perceived chances of arrest. Social Forces, 59, 1182-1199.
- Rountree, P. W. (1998). A reexamination of the crime-fear linkage. Journal of Research in Crime and Delinquency, 35, 341-377.
- Rountree, P. W., & Land, K. C. (1996). Perceived risk versus fear of crime: Empirical evidence of conceptually distinct reactions in survey data. *Social Forces*, 74, 1354-1377.
- Shafer, J. A., Huebner, B. M., & Bynum, T. S. (2006). Fear of crime and criminal victimization: Gender-based contrasts. *Journal of Criminal Justice*, 34, 285-301.
- Smith, W. R., & Torstensson, M. (1997). Gender differences in risk perception and neutralizing fear of crime. *British Journal of Criminology*, 37, 608-634.
- Snedker, K. A. (2003). Altruistic and vicarious fear of crime: Fear for others and gendered social roles. Sociological Forum, 21, 163-195.
- Stanko, E. (1990). Everyday violence: Women and men's experience of personal danger. Pandora Press: London.
- Stanko, E. (1995). Women, crime, and fear. Annals of the American Academy of Political and Social Sciences, 539, 46-59.
- Stanko, E. (2001). Women, danger, and criminology. In C. M. Renzetti & L. Goodstein (Eds.), Women, crime, and criminal justice (pp. 13-26). Los Angeles, CA: Roxbury Publishing Company.
- Sutton, R. M., & Farrall, S. (2005). Gender, socially desirable responding and the fear of crime. British Journal of Criminology, 45, 212-224.
- Umberson, D. (2003). *Death of a parent: Transition to a new identity*. New York: Cambridge University Press. Walklate, S. (2001). *Gender, crime, and justice*. Portland, OR: Williams Publishing.

- Warr, M. (1984). Fear of victimization: Why are the elderly more afraid? *Social Science Quarterly*, 65, 681-702.
- Warr, M. (1985). Fear of rape among urban women. Social Problems, 32, 238-250.
- Warr, M. (1992). Altruistic fear of victimization in households. Social Science Quarterly, 73, 723-736.
- Warr, M., & Ellison, C. G. (2000). Rethinking social reactions to crime: Personal and altruistic fear in family households. *American Journal of Sociology*, 106, 551-578.
- Warr, M., & Stafford, M. (1983). Fear of victimization: A look at the proximate causes. *Social Forces*, *61*, 1033-1043.
- Wilcox, P., Jordan, C. E., & Pritchard, A. J. (2006). Fear of acquaintance versus stranger rape as a 'master status:' Towards refinement of the 'shadow of sexual assault.' *Violence and Victims*, *21*, 355-370.
- Wilcox, P., May, D. C., & Roberts, S. D. (2006). Student weapon possession and the 'fear and victimization hypothesis:' Unraveling the temporal order. *Justice Quarterly*, 23, 502-529.
- Williams, F. P., McShane, M. D., & Akers, R. L. (2000). Worry about victimization: An alternative and reliable measure for the fear of crime. *Western Criminology Review*, 2, 1-25.

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