A Multidimensional Examination of Campus Safety: Victimization, Perceptions of Danger, Worry About Crime, and Precautionary Behavior Among College Women in the Post-Clery Era
Pamela Wilcox, Carol E. Jordan and Adam J. Pritchard

Crime Delinquency 2007; 53; 219
DOI: 10.1177/0097700405283664

The online version of this article can be found at:
http://cad.sagepub.com/cgi/content/abstract/53/2/219
A Multidimensional Examination of Campus Safety

Victimization, Perceptions of Danger, Worry About Crime, and Precautionary Behavior Among College Women in the Post-Clery Era

Pamela Wilcox

University of Cincinnati, OH

Carol E. Jordan

Adam J. Pritchard

University of Kentucky, Lexington

Using data from a spring 2004 telephone survey of 1,010 female undergraduate and graduate students at one southeastern state university, the authors examine the objective and subjective experiences with sexual assault or coercion, physical assault, and stalking among college women, paying particular attention to whether actual victimization experiences while in college coincide with cognitive assessments of campus risk, emotionally based worry about crime, and fear-related precautionary behavior. Furthermore, the authors explore whether these interrelationships might be perpetrator specific, focusing on differences in risk perception, worry, or precautionary behavior across acquaintance versus stranger-perpetrated victimization experiences. Results suggest that there is a loose coupling between actual victimization and subjective crime experiences. Implications for how colleges and universities publicly report crime and victimization, as mandated by the Clery Act, are discussed in light of these findings.

Keywords: campus safety; victimization; fear of crime; violence against women

Authors’ Note: The authors would like to thank Bonnie S. Fisher for her comments on an earlier version of this article. Please direct all correspondence to Pamela Wilcox, Division of Criminal Justice, University of Cincinnati, 600 Dyer Hall, Box 210389, Cincinnati, OH 45221-0389.
Leading fear-of-crime researcher Mark Warr (2000) suggests,

Fear is a natural and commonplace emotion. Under many circumstances, it is a beneficial, even life-saving emotion. Under the wrong circumstances, it is an emotion that can unnecessarily constrain behavior, restrict freedom and personal opportunity, and threaten the foundation of communities. (p. 482)

Warr implies that “wrong circumstances” for fear of crime are those in which there is a disconnect between fear levels and objective risk levels. “Fear, then, is not intrinsically bad. It is when fear is out of proportion to objective risk that it becomes dysfunctional” (p. 455).¹ Warr’s delineation of fear as an experience with crime often very distinct from objective experience is an important one. Furthermore, his highlighting of both the positive and negative functions of fear (vis-à-vis objective risk) is important, though what constitutes “dysfunctionally out of proportion” has not yet been clearly defined (at either end of the spectrum) in the literature. After all, it makes intuitive sense to expect and even desire a somewhat higher level of fear than actual victimization within society, with some people’s fear undoubtedly serving to reduce their future victimization risk, thus highlighting a very functional “feedback loop” or reciprocity between objective and subjective risk (Cook, 1986). At the same time, fear levels dramatically higher than actual risk and/or experience levels are unhealthy anxieties that can lead to unnecessarily restrictive behaviors. Further complicating the issue is the possibility that some people with high objective risks may have low fear levels (Warr, 1994), thus creating another type of dysfunctional fear—too little fear.

Although no threshold for a healthy or functional versus unhealthy or dysfunctional objective-to-subjective risk ratio has been established, it is clear that people experience crime in different ways—both objectively and subjectively—and that both types of experiences have important potential implications for well-being. Hence, knowledge about how people experience crime both objectively and subjectively is important information for those concerned with addressing crime and safety in a comprehensive, multidimensional fashion. To this end, during the past several decades scholars have studied the level of interconnectedness among victimization, perceptions of safety, individual victimization risk perception, emotional fear, and behavioral manifestations of fear (e.g., Baumer, 1985; Braungart, Braungart, & Hoyer, 1980; Ferraro, 1995; Fisher & Sloan, 2003; Garofalo, 1979; Lee & Ulmer, 2000; Skogan, 1987; Warr & Stafford, 1983; Wilcox Rountree, 1998; Wilcox Rountree & Land, 1996a, 1996b). Theoretical models such as the risk
interpretation approach (Ferraro, 1995) or the general opportunity interpretation approach (Wilcox Rountree, 1998) have been put forth to explain the interrelationships among these experiences. These risk or opportunity interpretation models suggest that various individual and contextual background characteristics, including previous victimization experiences, shape cognitive perceptions of perceived criminal opportunity and crime risk (i.e., perceived risk), which in turn increases emotional fear of crime and avoidance behavior (Ferraro, 1995; Wilcox Rountree, 1998). Extending this theoretical development, criminologists have attempted to address how interrelationships posited by such theoretical models might vary among different subgroups within the population and across different types of crime (Ferraro, 1995; Fisher & Sloan, 2003; Lane & Meeker, 2000; Wilcox Rountree, 1998). For instance, understanding women’s relatively high levels of fear, despite relatively low levels of actual victimization and perceived risk, has been a source of important research. This research highlights not only women’s uniquely elevated levels of fear (in comparison to men’s fear) but their particularly elevated levels of fear of sexual assault specifically (e.g., Ferraro, 1995, 1996; Fisher & Sloan, 2003; May, 2001; Warr, 1984, 1985).

Unraveling women’s fear of sexual assault vis-à-vis objective and perceived risk of sexual assault has received attention, but subjective perceptions and feelings about other crimes experienced by women, including those associated with physical assault and stalking, are less often addressed (but see Lane & Meeker, 2003; Tjaden & Thoennes, 2000). As such, we know little about how women’s actual experiences with such other crimes relate to their subjective experiences. Furthermore, we know little about how interrelationships among women’s subjective and objective crime experiences might vary not only across type of crime but also across type of offender (e.g., stranger vs. acquaintance). Actual violence against women is largely intimate partner violence (Tjaden & Thoennes, 2000), yet that acquaintance violence takes place in a culture that touts the dangers of random, stranger-perpetrated violence (e.g., Best, 1999). As such, it is plausible that objective victimization experiences might be loosely coupled with subjective experiences regarding stranger-perpetrated crime, with fear being experienced well beyond the victim population. In contrast, objective and subjective experiences could be more closely linked for acquaintance-perpetrated crime, whereby women who fear acquaintance-perpetrated crime are largely those who have experienced it.

In the present study, we address the above-mentioned gaps in the literature by (a) examining the interrelationships among objective and subjective crime experiences among women regarding three different types of crime—sexual
assault or coercion, physical assault, and stalking—and (b) comparing the interrelationships among objective and subjective experiences across crimes involving strangers versus those involving acquaintances. We address these questions using survey data collected in spring 2004 from a sample of 1,010 college women.

The College Context

The population of college women is of particular interest in examining the interrelationships among objective crime experiences and various subjective crime experiences in that college women appear to be at greater objective risk of some forms of criminal victimization compared to similarly aged, noncollege counterparts (e.g., Fisher & Cullen, 2000; Fisher, Sloan, Cullen, & Lu, 1998; but also see Baum & Klaus, 2005), while at the same time they are in an environment historically subject to much less public scrutiny regarding crime than that occurring beyond the ivory tower (e.g., Hudge, 2000; Leinwand, 2000; Shipman, 1994). In fact, the tradition of campuses downplaying crime was the focus of a concerted social movement in the late 1980s and 1990s, resulting in the passage of federal law designed to make the public reporting of campus crime mandatory, more extensive, and more accurate (e.g., Fisher, 1995; Hudge, 2000; Nicklin, 2000). The Campus Crime Disclosure Act (1998), later renamed the Clery Act (2000), amended the earlier Campus Security Act (1990) with new provisions mandating that schools report hate crimes in addition to those already required (index offenses), that schools include in their reports crime that occurs on property unowned by the college but contiguous to campus, and that schools receive punishment for noncompliance in crime reporting. If such legislative policies are successful in terms of their intent, today’s college students should be well-informed about crime events on and around campus and should therefore objectively fear crimes most commonly experienced. However, campus crime reporting in the post-Clery era has been criticized for continued underreporting of crime for a variety of reasons. Numerous media and professional sources, for instance, have suggested that many campuses continue to underreport campus crime even in light of Clery because of jurisdictional confusion, organizational inefficiency, and concern with student (offender) confidentiality (Gregory, 2001; Hardy & Barrows, 2001; Kennedy, 2000; Leinwand, 2000; Megerson, 1992; Nicklin, 1999). Others have suggested that Clery-mandated crime reports underrepresent campus crime because they measure only crimes reported to police...
rather than victimization incidents, and they exclude categories with high-
incident rates such as larceny theft (Fisher, Hartman, Cullen, & Turner,
2002). With such limitations, subjective risk on the part of students might 
be dangerously deflated even in the post-Clery era. If so, fear of crime may 
be unique among college women because fear is lower as opposed to higher 
in relation to objective risk.

Moreover, the extent to which women have subjective perceptions of crime 
more closely versus more loosely coupled with objective risks may depend on 
crime characteristics such as offense type and victim-perpetrator relationship.
Clery, in theory, should cover all three crimes examined herein, including those 
committed by strangers and acquaintances. However, there may be systematic 
bias in noncompliance whereby certain crimes (e.g., those committed by other 
students) are less often reported, less widely reported, or reported with fewer 
details. Furthermore, even if crimes committed by acquaintances, including 
other students, are reported by colleges and universities in the exact same 
manner as are crimes committed by strangers, these reports may be received 
differently on the part of college or university women. Fueled by media por-
trayals of random violence, women may react more strongly to reports of 
stranger-perpetrated violence than to acquaintance-perpetrated violence.

In summary, the present study cannot discern the extent to which col-
leges and universities comply with Clery nor the manner in which campus 
women interpret reports that do surface at their institutions. Nonetheless, 
the emergence of Clery within a context in which the broader culture sup-
ports long-held biases toward magnifying stranger violence while at the 
same time most victimization of college women occurs at the hands of 
acquaintances (Fisher, Cullen, & Turner, 2000) provides an interesting con-
fluence for exploring the interconnectedness of women’s objective and sub-
jective crime experiences and the extent to which these interconnections 
might vary across crime and perpetrator type.

Fear of Crime

Early work on fear of crime relied almost exclusively on either a General 
Social Survey (GSS) question—“Is there an area right around here (within a 
mile) where you would be afraid to walk alone at night?”—or one item from 
the National Crime Survey (NCS; “How safe do you feel or would you feel 
being out alone in your neighborhood at night?”).2 However, these measures 
were criticized on numerous grounds. First, as crime is not even mentioned 
in the questions, it was thought that the GSS and NCS measure tapped social
concerns, or “urban unease,” broader than fear of crime (e.g., DuBow, McCabe, & Kaplan, 1979; Garofalo & Laub, 1978). Further, Garofalo (1981) pointed out that the items measured anticipatory feelings (“How safe would you feel . . .”), which might be quite different from feelings one experiences when actually encountering the situation in question. Following on these criticisms, a good deal of work in the fear-of-crime literature in recent decades has focused on issues of conceptualization and operationalization. This work has lead to recognition of a multidimensionality of fear of crime, with cognitive, emotional, and behavioral dimensions. Ferraro and LaGrange (1987), for instance, suggested that the NCS fear measure was more along the lines of a cognitive assessment of safety or judgment of risk than an emotionally or behaviorally based fear of crime because the question does not ask about actual feelings of worry or fear of crime or actual behavior in response to crime. Recent empirical work has supported the distinction highlighted by Ferraro and LaGrange between measures of cognitive perception of either general or personal risk (e.g., “How safe is your neighborhood from ______?”; “How likely is it that ______ will happen to you?”) and emotional fear (e.g., “How afraid/worried are you about ______?”). Studies have found moderate correlations between the two types of measures (typically around .6), and although there are some similar covariates across risk and worry measures, extant research has also unearthed important etiological differences (e.g., Bennett & Flavin, 1994; Chiricos, Hogan, & Gertz, 1997; Ferraro, 1995; Fishman & Mesch, 1996; LaGrange & Ferraro, 1989; LaGrange, Ferraro, & Supancic, 1992; Lee & Ulmer, 2000; May & Dunaway, 2000; Mesch, 2000; Skogan, 1987; Warr, 1987; Wilcox Rountree & Land, 1996b). Previous research has also highlighted such distinctiveness with the behavioral dimension, showing that individual and contextual covariates vary somewhat across measures of risk perception, fear, and restricted or constrained routine activities (Ferraro, 1995; Wilcox Rountree & Land, 1996a).

Scholars have suggested further that fear of crime is not only multidimensional in the sense of having cognitive, emotional, and behavioral components but that it is also multidimensional in the sense of having crime-specific qualities. Previous studies have shown, for example, that the level and nature of fear vary depending on the crime category under consideration (Ferraro, 1995, 1996; Lee & Ulmer, 2000; May, 2001; Warr, 1984; Warr & Stafford, 1983; Wilcox Rountree, 1998). As such, fear of violence cannot be considered analogous to fear of property crime, and within the category of property crime, fear of burglary may be quite different than fear of vandalism, for instance.
Rational Fear? Its Link to Objective Risk

Given multidimensionality in fear, how do different dimensions relate to actual crime risk? A great number of studies have addressed this issue, examining both the extent to which individual-level victimization experiences relate to fear and the extent to which rates of crime in the surrounding area relate to fear. Unfortunately, most have addressed this issue without explicitly distinguishing and examining various dimensions of fear, thus confounding whether these effects might vary across cognitive, emotional, or behavioral spheres (for exceptions, see Chiricos et al., 1997; Ferraro, 1995; Lee & Ulmer, 2000; Wilcox Rountree & Land, 1996b). Perhaps partly because of the failure to distinguish multiple dimensions of fear, findings regarding the effect of previous victimization on fear have been mixed, with some studies supporting a positive relationship (e.g., Braungart et al., 1980; Garofalo, 1979; Skogan, 1987; Wilcox Rountree, 1998; Wilcox Rountree & Land, 1996b) and others questioning the strength of this relationship for at least some dimensions of fear (e.g., Baumer, 1985; Ferraro, 1995; Hindelang, Gottfredson, & Garofalo, 1978; Lane & Meeker, 2003; May, 2001; McGarrell, Giacomazzi, & Thurman, 1997). Still others have suggested that the link between victimization and fear is moderated by race, with the most pronounced effect for victimization on fear seen among Whites (Chiricos et al., 1997).

Studies assessing the link between actual risk and fear by estimating the effects of community rates of crime also reveal mixed results. Evidence exists of a positive effect of community crime on fear (Skogan & Maxfield, 1981), but other studies show weaker effects (Ferraro, 1995; Lee & Ulmer, 2000; Lewis & Maxfield, 1980; Lewis & Salem, 1986; Skogan, 1990; Taylor & Hale, 1986). Such effects have also been shown to be indirect, operating through local media coverage (Liska & Baccaglini, 1990), and effects of area crime have been shown to be conditional on a variety of other factors including individual race and age (Chiricos et al., 1997; Liska, Lawrence, & Sanchirico, 1982) and type of crime under consideration (Wilcox Rountree, 1998).

Extant research that differentiates between a cognitive component of fear assessing perceived risk of crime and an emotional component assessing worry or concern about crime has shown that the effects of personal victimization experiences and/or community rates of crime on emotional worry may operate through cognitive perceived risk (Chiricos et al., 1997; Ferraro, 1995; Lee & Ulmer, 2000) and perceived community incivilities (Wilcox Rountree, 1998). Finally, research differentiating a behavioral
dimension of fear in terms of constrained behavior or safety precautions has been mixed, with some studies finding that victimization experiences and area rates of crime have little to do with safety precautions (Ferraro, 1995) and others providing evidence that victimization and area crime rates may have both direct effects on safety precautions and indirect effects through cognitive risk perceptions (Wilcox Rountree & Land, 1996a).

**Campus Fear**

Historically, most fear-of-crime scholarship has focused on the general adult population. However, coinciding with the heightened social awareness and political attention surrounding campus crime that began in the late 1980s, fear of crime on campus has also received increased attention in the past several decades. Still, scholarly empirical study of fear of crime among college students is scant, with important exceptions. Fisher and Nasar (1992, 1995; see also Nasar & Fisher, 1992, 1993), for instance, presented one of the first empirical studies of fear on campus with their work on the microlevel physical cues associated with fear in and around The Ohio State University’s Wexner Center for the Visual Arts. They found that certain aspects of the built and/or natural environment were associated with student fear, including “areas that were characterized by limited prospect, much concealment, and difficult escape” (Fisher & Nasar, 1995, p. 232; see also Day, 1999). Other single-campus surveys of fear have supported these spatial patterns and also highlighted temporal and sex-based differences in student levels of emotional concerns and/or cognitive risk perception. For instance, several single-campus studies have found that nighttime fear exceeds daytime fear among students (Fisher, Sloan, & Wilkins, 1995; McConnell, 1997). Furthermore, college women have reported higher levels of fear than do men, regardless of time of day (Fisher et al., 1995; McConnell, 1997) and across a variety of spatial domains, including campus jogging paths, campus parking lots, libraries, and so on (McConnell, 1997). Less research has been conducted on the behavioral dimension of fear among college women, though important work by Day (1994) suggested that many traditional campus safety initiatives aimed at reducing women’s victimization and emotional fear thereof actually serve to, somewhat ironically, further control and constrain college women’s behavior.

In one of the only studies of campus fear using a national sample of college students, Fisher and Sloan (2003) examined daytime and nighttime emotional fear, along with cognitive personal risk perception, across college men and women for a variety of specific crimes (e.g., larceny theft,
robbery, simple assault, aggravated assault, and rape). Women’s personal risk perception and daytime emotional fear levels exceeded those of men for every crime except larceny theft. Women’s nighttime emotional fear levels exceeded those of their male counterparts for all offenses examined. Furthermore, the link between perceived risk and fear, among women in particular, was not always obvious. For instance, among the five crime-specific risks or fears examined, women had the highest levels of perceived risk for larceny theft, yet that was the crime they feared the least at night. The crime that the college women feared most at night—rape—ranked third (out of five) among crime-specific risk perceptions. Although perceived risk was a significant positive predictor of nighttime fear of rape, the effects of various measures of objective crime experiences were less consistent. For instance, having been a victim of off-campus sexual or nonsexual assault was positively related to nighttime fear of rape, but on-campus sexual or nonsexual assault was nonsignificant. The effect of lifetime experience with rape or sexual assault victimization specifically was also nonsignificant, and the overall student sexual violence victimization rate was actually negatively related to nighttime fear of rape among college women.

In conclusion, the findings of Fisher and Sloan (2003) do not lend clear support for the notion of a close coupling among fear and perceived risk for college women, particularly when considering the crime of rape. Despite the importance of such findings, more work is needed to further unpack college women’s fear of crime and understand it vis-à-vis their other objective and subjective crime experiences. It would seem particularly important to extend the work of Fisher and Sloan by examining the links between objective and subjective crime experiences for other offenses affecting college women. Furthermore, it would seem important to examine whether the links between victimization and multiple dimensions of subjective crime experiences (i.e., cognitive, emotional, and behavioral) vary not only across different crimes but across different victim-offender relationships.

**The Present Study**

The present study therefore extends previous research by examining different crime-related experiences including actual victimization, perceptions of campus danger, emotional worry or concern among college women, and safety or precautionary behavior. We focus on experiences regarding three crime categories in particular: stalking, physical assault victimization, and sexual victimization. Furthermore, we examine these crime experiences...
with sensitivity to the possibility of domain-specificity in the sense of victimization and fear, and the interrelationships thereof, perhaps being conditional on victim-offender relationship (i.e., stranger crime vs. acquaintance crime).

**Data**

Data for the present study were collected from a sample of 1,010 women surveyed by telephone at a state university in the southeastern United States (referred to anonymously as State U hereafter). State U is a state-supported public university that includes an urban campus and large medical center complex. State U is located in an urban area with a population of 260,512. The university is unique among land-grant universities in that all its 16 colleges are located on one campus, resulting in a student population of more than 25,000. State U offers 88 certified degree programs that lead to bachelor’s degrees and master’s degrees in 93 fields and PhDs and other doctoral degrees in 60 programs.

Telephone interviews were conducted by specially trained interviewers contracted through Schulman, Ronca & Bucuvalas, Inc., using computer-assisted telephone interviewing procedures. These procedures allowed the survey instrument to incorporate a complex skip pattern, ensuring that participants were asked only relevant questions regarding the specific details of experiences with campus victimization. A university-provided list of 7,875 phone numbers for current female students was used to generate a random sample of 1,010 female students. The overall cooperation rate for valid student contacts was 83.5%. The interviews were conducted between April 1, 2004, and May 4, 2004, with each completed interview lasting an average of 17.5 minutes.

Consenting telephone contacts were included as participants if they reported that they were older than 18 and students at the university. Following this initial screening, participants were first asked questions regarding overall fear of crime on campus, then questions regarding fear of specific types of victimization (stalking, sexual abuse or attack, physical abuse or attack) by either a known offender or a stranger, following the recommendation of Fisher and Sloan (2003). Next, participants were asked to provide basic background information; this section also included questions about current relationship status and alcohol or drug use. Finally, following the lead of recent studies of violence against women (Fisher & Cullen, 2000; Fisher et al., 2000; Tjaden & Thoennes, 2000), participants’ previous victimization experiences were screened using 34 yes-no questions about specific types
of events (see the appendix). Participants identified by these screening questions as victims of stalking, physical assault, or sexual victimization (including assault or rape, sexual coercion, and unwanted sexual contact) were then asked general follow-up questions regarding the circumstances (victim-offender relationship, occurrence before or during college, concurrency with other forms of victimization, etc.). Finally, detailed follow-up questions were asked only for the most recent events occurring while enrolled at State U.

Overall, this study’s sample population was roughly representative of the total female population at the university according to the registrar’s data. The following information summarizes the demographic breakdown of the sample. Participants ranged from 18 to 60 years of age, with a median age of 21 years and a mean age of 23.5 years. Though the mean age of the total female population (25.1 years) was significantly higher ($t = 7.920, p = .000$), the median was comparable at 22 years. The difference in means likely reflects the greater age range in the university population, which included female students ranging from 17 to 79 years old, than in the sample. As expected, this age difference resulted in a significantly larger sample proportion of full-time students (89.5% in the sample vs. 78.9% for all female students). However, the sample proportions for class standing do not significantly differ from the female university population at large. In terms of accurately measuring rates of victimization, this is a crucial point of comparison because students with higher class standing had more often experienced victimization. In terms of ethnicity, the proportions of White and Black female students (comprising 84.2% and 7.1%, respectively, of all sampled participants) do not differ between the sample and university population, nor did the proportion of Hispanic students. Although students identifying themselves as Asian or Pacific Islander were significantly greater in the sample (6.4% of the sample vs. 2.8% of the population), this difference may be accounted for by the fact that 5.4% of the university population did not specify or indicated Other for ethnicity versus 0.2% in the sample.

Measures of Variables

As indicated above, numerous survey screening questions were utilized to determine whether respondents were classified as having ever been victims of stalking, physical assault, or sexual victimization (see the appendix). If respondents indicated that any of the events comprising these types of victimization had occurred, they were asked whether the event had occurred before college, while in college at someplace other than State U,
or while enrolled at State U. For those where stalking, physical assault and sexual assault, coercion, or contact victimization occurred while at State U, they were asked to reveal the relationship of the offender characterizing the most recent incident. Based on this series of screening and follow-up questions, we constructed three categories for classifying respondents according to each of the three types of victimization: (a) respondent’s most recent State U stalking or physical assault or sexual victimization experience was stranger perpetrated, (b) respondent’s most recent State U stalking or physical assault or sexual victimization experience was acquaintance perpetrated, or (c) respondent had not experienced stalking or physical assault or sexual victimization since being enrolled at State U.

We compare these various categories of campus victimization with measures of subjective crime experiences spanning cognitive, emotional, and behavioral dimensions. First, we measure cognitive assessment of campus danger with a single survey item asking respondents how safe their campus is from crime. Responses ranged from 1 (very safe) to 4 (very unsafe).4 We measure emotional worry about crime with six separate crime- and perpetrator-specific survey questions tapping level of worry (1 = not really worried, 4 = very worried): the respondent experiences regarding (a) personally being stalked by a stranger, (b) personally being stalked by an acquaintance, (c) personally being physically abused or attacked by a stranger, (d) personally being physically abused or attacked by an acquaintance, (e) personally being sexually abused or attacked by a stranger, and (f) personally being sexually abused or attacked by an acquaintance.5

We also measure crime experiences in the form of crime-related behavioral adjustments. For instance, we utilize a dichotomous variable to indicate (1 = yes, 0 = no) whether respondents have something they carry or keep at their home to protect themselves from crime. We also include a measure of avoidance behavior, utilizing a single survey item asking respondents how often they avoid places on or around State U’s campus out of concern for personal safety. Responses ranged from 1 (never) to 4 (always).

We note that our measures of actual victimization versus various subjective perceptions of crime are somewhat different in terms of crime specificity and domain specificity. Victimization included those that happened, while enrolled at State U, either on or off campus. Assessment of danger refers to campus specifically and is a general and global rather than crime-specific and personal measure. Measures of emotional worry are crime-specific but, like victimization, are not campus specific. Neither behavioral measure is crime specific, but one is campus specific (avoidance of campus),
whereas the other (carrying or owning something for protection) is not. Given these fluctuations, we realize that our examination of the interrelationships between these various crime-related experiences calls for qualification in that it cannot isolate linkages between campus victimization and campus-based danger, worry, or protective action. We nonetheless believe that examining college women’s victimization (both on and off campus) vis-à-vis various dimensions of fear, whether or not the fear is specific to college or campus, is a valuable exercise in beginning to understand these linkages. We believe that women’s subjective experiences with crime in terms of perceptions of the campus environment, worry about crime (both on and off campus), and precautionary behavior (both on and off campus) should be viewed in relation to crime victimization experienced while in college, whether on or off campus. How safe women perceive their campus to be, how strained women feel in terms of emotional concern about crime, and what sorts of avoidance and general precautionary behaviors they engage in all have important implications for general well-being of college women and should therefore be of interest to administrators, faculty, student affairs professionals, and parents.

In addition to these measures of various crime experiences, we also include in some of our subsequent analyses several control variables. We control for class standing through a series of dichotomous variables indicating (1 = yes, 0 = no) whether the respondent is a freshman, sophomore, junior, senior, with the category of graduate student being the reference group in multivariate analyses. We control for respondent’s race with a dichotomous variable indicating whether the respondent is non-White (1 = yes, 0 = no). We also control for whether the respondent is currently in a romantic relationship in the form of a spouse, a cohabiting partner, or a noncohabiting girlfriend or boyfriend (1 = yes, 0 = no). Household structure is controlled with a variable indicating the number of adults with whom the respondent lives.6

Analysis Plan

Below, we first present descriptive information about victimization among the sampled college women. In successive sections, we then discuss the relationship between college victimization (while at State U) and cognitive assessment of campus danger, emotional worry about crime, and behavioral reactions to concern about crime, respectively. When discussing these relationships, we move from bivariate analyses toward multivariate logistic regression analyses, controlling for possible confounding characteristics. It should be noted, as discussed above, that our measures of perceived campus
danger, worry about crime, and campus avoidance were all originally measured as four-category ordinal scales. As such, ordinal logistic regression is one appropriate multivariate analytic tool. However, ordinal logistic regression analysis assumes proportional odds, or parallel lines, meaning that the coefficients provided are assumed to be the same regardless of whether the contrasts are (a) dependent variable (DV) = 1 v. DV = (2, 3, 4); (b) DV = (1, 2) v. DV = (3, 4); or (c) DV = (1, 2, 3) v. DV = 4. Ordinal logistic models were run (not shown herein), and tests of this parallel lines assumption were estimated, revealing that in most of the ordinal models estimated, the assumption was indeed violated. Hence, the coefficients provided in such ordinal models were dependent on the categories or groups of categories being compared; each binary comparison yielded different coefficients for at least some of the variables. Because of this, presenting three binary logistic regression models (one model for each of the three possible contrasts across the four DV categories) would be preferable to presenting the ordinal logistic model. Most preferable, in our opinion, is to present the binary logistic model that represents the DV contrast most consistent with our substantive interests. Substantively, we are most interested in how victimization is related to moderate to severe levels of perceived campus danger, worry about crime, and avoidance (as opposed to absence of or low levels of perceived danger, worry, and avoidance). Therefore, in each of the models involving a variable with an original four-category ordinal scale, we present multivariate regression models that are binary logistic models, providing coefficients relevant to the contrast of DV = (3, 4), or moderate to severe perceived danger or worry or avoidance, versus DV = (1, 2), or little to no perceived danger or worry or avoidance.

**Results**

In examining the extent to which various dimensions of fear of crime among college women correspond with objective crime experiences in terms of personal victimization, we first discuss the extent of victimization experienced by sampled women. Overall, 35.6% of respondents had experienced stalking, physical assault, and/or sexual victimization while enrolled at State U. More specifically, 24.9% of participants experienced one type of victimization, 8.7% experienced two of the three types, and 1.4% experienced all three types. When examining victimization by perpetrator type within crime category, as depicted in Table 1, interesting differences clearly surface. Table 1 reveals that sexual victimization by an acquaintance is the
most prevalent form of victimization queried, with 15.5% of respondents indicating such experiences. In contrast, physical assault by a stranger is the least prevalent, with 1.3% of respondents experiencing such victimization. For each of the three crime categories examined, acquaintance-perpetrated victimization is substantially more common than is stranger-perpetrated victimization. Fortunately, however, the modal category for each crime type is no victimization, with an overwhelming majority (more than 80.0%) indicating no such experiences.

### Table 1
Victimization Among Sample Respondents, While Students at State U

<table>
<thead>
<tr>
<th>Victimization</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stalking victimization, stranger</td>
<td>7.0</td>
</tr>
<tr>
<td>Stalking victimization, acquaintance</td>
<td>10.2</td>
</tr>
<tr>
<td>No stalking victimization</td>
<td>82.8</td>
</tr>
<tr>
<td>Physical victimization, stranger</td>
<td>1.3</td>
</tr>
<tr>
<td>Physical victimization, acquaintance</td>
<td>8.6</td>
</tr>
<tr>
<td>No physical victimization</td>
<td>90.1</td>
</tr>
<tr>
<td>Sexual victimization, stranger</td>
<td>4.1</td>
</tr>
<tr>
<td>Sexual victimization, acquaintance</td>
<td>15.5</td>
</tr>
<tr>
<td>No sexual victimization</td>
<td>80.4</td>
</tr>
</tbody>
</table>

Victimization and Assessment of Campus Danger

Our examination of the distribution of cognitive assessment of campus danger among respondents implies that college women may perceive the campus to be safer than their college victimization experiences would suggest. According to this distribution, 15.5% of respondents indicated that they thought campus was unsafe—either somewhat or very unsafe—from crime. Interestingly, this percentage is quite a bit lower than the 35.6% who had actually experienced victimization while enrolled at State U.8

To begin to examine the extent to which assessment of campus danger relates to different types of victimization experiences, we plotted the mean levels of risk among the stranger-perpetrated, acquaintance-perpetrated, and no victimization categories for each of the three crimes under study. The results are shown in Figure 1. The data suggest that for stalking and physical assault, those experiencing stranger-perpetrated victims actually report somewhat higher mean levels of campus danger than do acquaintance-perpetrated
victims. Those not experiencing victimization, as expected, report the lowest levels of campus danger.

Comparisons of means using ANOVA indicate that these means are significantly different for stalking ($F = 10.221$, $p < .001$) and physical assault ($F = 7.938$, $p < .001$). However, in neither case is the contrast between stranger- and acquaintance-perpetrated victimization significant. For stalking, the only significant contrast is between stranger-perpetrated stalking victimization and no stalking victimization ($p < .001$). Keeping in mind the very small number of stranger-perpetrated physical assaults ($n = 13$), the only statistically significant contrast among physical assault categories was between acquaintance-perpetrated physical assault and no physical assault victimization ($p = .002$). Differences in mean campus danger for the different categories of sexual assault were nonsignificant ($F = 2.138$, $p = .118$).

Finally, we consider the effect of victimization experiences on cognitive assessment of campus danger within a multivariate logistic regression model, predicting the odds of perceiving the campus to be unsafe (somewhat or very unsafe) as opposed to safe (somewhat or very safe). These
results are presented in Table 2. Results indicate that assessing the campus as dangerous is positively and significantly related to stranger-perpetrated stalking victimization. In comparison to those experiencing no stalking victimization (the reference category), victims of stranger-perpetrated stalking had 2.65 times greater odds of perceiving the campus to be unsafe. In contrast, it was physical assault by an acquaintance that significantly increased the odds of an unsafe assessment (by 78%) in comparison to no physical assault victimization. Odds of assessing the campus as dangerous were not significantly different for either victims of stranger or acquaintance sexual assaults in comparison to nonvictims of sexual assault.

**Victimization and Worry About Crime**

We next turn to an examination of the relationship between actual crime experiences and an emotional dimension of fear of crime. For these purposes, we employ six crime- and offender-specific measures of worry about crime: worry about stranger-perpetrated and acquaintance-perpetrated stalking, physical assault, and sexual assault. Table 3 presents the percentage of respondents who indicated being worried—either somewhat or very
worried—about each of these six offenses in comparison to the percentage of respondents who had actually experienced similar sorts of victimization while a student at State U. As Table 3 indicates, for all three stranger-perpetrated crimes in question, the percentage who are victimized is far less than the percentage who are fearful of such stranger-perpetrated crimes. The exact opposite pattern holds for the acquaintance-perpetrated victimizations and fears, where the percentage victimized exceeds the percentage fearful in all three instances, though the differences for acquaintance-perpetrated victimization versus worry were much smaller than the differences regarding stranger crimes.

Such patterns suggest a weak coupling of victimization and emotional fear, especially among stranger-perpetrated crimes. Indeed, bivariate correlations between victimization and fear measures are weak, ranging from −.15 to .15. Furthermore, results from multivariate logistic regression analysis of each crime-specific worry, shown in Table 4, support the idea that victimization experiences are generally weakly related to worry about crime, controlling for possible confounding effects. For each type of worry, two models are presented in Table 4—one without cognitive assessment of campus danger controlled and a second model with campus danger included. All of the coefficients for stalking and stranger-perpetrated victimization shown in Table 4 are in relation to the omitted no stalking or physical assault or sexual victimization category. All of the coefficients for campus danger are in relation to perceiving the campus to be somewhat or very safe.

Hence, regarding the first model estimating worry about stranger-perpetrated stalking, previous stranger stalking victims have 88% greater odds of worry than do nonvictims of stalking. However, that is the only significant victimization effect, and that effect disappears once assessment of

---

**Table 3**

Percentage of Respondents Victimized Versus Somewhat or Very Worried by Victimization Type

<table>
<thead>
<tr>
<th>Victimization</th>
<th>% Victimized</th>
<th>% Worried</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stalking stranger</td>
<td>7.00</td>
<td>21.83</td>
<td>−14.83</td>
</tr>
<tr>
<td>Stalking acquaintance</td>
<td>10.20</td>
<td>8.35</td>
<td>1.85</td>
</tr>
<tr>
<td>Physical victim stranger</td>
<td>1.29</td>
<td>38.42</td>
<td>−37.13</td>
</tr>
<tr>
<td>Physical victim acquaintance</td>
<td>8.57</td>
<td>6.83</td>
<td>1.74</td>
</tr>
<tr>
<td>Sex victim stranger</td>
<td>4.06</td>
<td>41.87</td>
<td>−37.81</td>
</tr>
<tr>
<td>Sex victim acquaintance</td>
<td>15.54</td>
<td>10.11</td>
<td>5.43</td>
</tr>
</tbody>
</table>

© 2007 SAGE Publications. All rights reserved. Not for commercial use or unauthorized distribution.
Table 4
Logistic Regression Coefficients, Standard Errors (in Parentheses), and Odds Ratios for Crime-Specific Worry (“Somewhat or Very Worried” Versus “Not Worried or Just a Little Worried”)

<table>
<thead>
<tr>
<th></th>
<th>Stalking Worry</th>
<th>Physical Assault Worry</th>
<th>Sex Victim Worry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stranger</td>
<td>Acquaint</td>
<td>Stranger</td>
</tr>
<tr>
<td>Stalking Stranger</td>
<td>.63* (.28)</td>
<td>.50 (.29)</td>
<td>.69* (.27)</td>
</tr>
<tr>
<td></td>
<td>.60 (.42)</td>
<td>.57 (.43)</td>
<td>.99 (.51)</td>
</tr>
<tr>
<td>Stalking Acquaint</td>
<td>.13 (.27)</td>
<td>.06 (.27)</td>
<td>.38 (.22)</td>
</tr>
<tr>
<td></td>
<td>1.28* (.31)</td>
<td>1.27* (.31)</td>
<td>1.46 (.22)</td>
</tr>
<tr>
<td>Physical Victim Stranger</td>
<td>.57 (.64)</td>
<td>.44 (.66)</td>
<td>.81 (.61)</td>
</tr>
<tr>
<td></td>
<td>1.13 (.75)</td>
<td>1.10 (.75)</td>
<td>2.25 (.61)</td>
</tr>
<tr>
<td>Physical Victim Acquaintance</td>
<td>.17 (.28)</td>
<td>.08 (.28)</td>
<td>.36 (.24)</td>
</tr>
<tr>
<td></td>
<td>.18 (.40)</td>
<td>.17 (.40)</td>
<td>.143 (.24)</td>
</tr>
<tr>
<td>Sex Victim Stranger</td>
<td>-.82 (.50)</td>
<td>-.80 (.50)</td>
<td>-.63 (.37)</td>
</tr>
<tr>
<td></td>
<td>-.134 (1.04)</td>
<td>-.133 (1.04)</td>
<td>.53 (.35)</td>
</tr>
<tr>
<td></td>
<td>1.30 (.60)</td>
<td>1.61 (.62)</td>
<td>1.04 (.19)</td>
</tr>
<tr>
<td>Sex Victim Acquaintance</td>
<td>.26 (.22)</td>
<td>.23 (.22)</td>
<td>.04 (.19)</td>
</tr>
<tr>
<td></td>
<td>.48 (.30)</td>
<td>.47 (.31)</td>
<td>.53 (.19)</td>
</tr>
<tr>
<td></td>
<td>1.30 (.17)</td>
<td>1.61 (.17)</td>
<td>1.04 (.19)</td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th></th>
<th>Stalking Worry</th>
<th>Physical Assault Worry</th>
<th>Sexual Assault Worry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stranger</td>
<td>Acquaint</td>
<td>Stranger</td>
</tr>
<tr>
<td>Campus Danger</td>
<td>−</td>
<td>.82*</td>
<td>−</td>
</tr>
<tr>
<td></td>
<td>−</td>
<td>(.20)</td>
<td>−</td>
</tr>
<tr>
<td></td>
<td>−</td>
<td>2.27</td>
<td>−</td>
</tr>
<tr>
<td>Constant</td>
<td>−1.94</td>
<td>−2.03</td>
<td>−2.54</td>
</tr>
<tr>
<td>Model Chi-Square (df=13)</td>
<td>32.93*</td>
<td>48.77*</td>
<td>39.35*</td>
</tr>
<tr>
<td></td>
<td>17.80</td>
<td>56.71*</td>
<td>44.66*</td>
</tr>
</tbody>
</table>

Note: Models control for class standing, race (non-White), whether in a romantic relationship, and number of adults living in same household. All control variables were non-significant except for race (non-White positive and significant in all models). Sophomore was also positive and significant in the stalking models. *p < .05
campus danger is controlled. Campus danger is significantly related to worry about stranger stalking, with those who perceive State U as unsafe having 2.27 times higher odds of worry about stranger stalking than those who perceive State U as safe. Combining findings from Table 2 and Table 4, it appears as if assessment of campus danger may mediate the effects of stranger stalking victimization on worry about stalking. Those who have been stalked by strangers while enrolled at State U perceive their campus as unsafe and, in turn, worry about future stranger stalking. When estimating worry about stalking by acquaintances, only acquaintance-stalking victimization is significantly related to worry about acquaintance stalking. Odds of acquaintance-stalking worry are more than 250% greater for previous victims of acquaintance stalking in comparison to nonvictims of stalking. Furthermore, this effect is not diminished on controlling for assessment of campus danger. Campus danger, in fact, has a nonsignificant effect.

In our estimation of worry about physical assault, the only type of victimization significantly related to worry about stranger-perpetrated physical assault was stranger-stalking victimization. Victims of stranger stalking had significantly higher odds of worry about physical assault than did nonvictims, even after controlling for assessment of campus danger. In contrast, in estimating worry about acquaintance-perpetrated physical assault, stranger-perpetrated physical assault victimization was the only significant effect, and it disappeared on controlling for campus danger.

Worry about stranger-perpetrated sexual assault appears unrelated to sexual assault victimization experiences, by acquaintance or stranger. The only significant effect revealed in the stranger sexual assault worry model was for acquaintance-stalking victimization, and this effect disappeared on controlling for assessment of campus danger. Furthermore, the model chi-square for estimation of stranger sexual assault worry without campus danger included is nonsignificant, suggesting that the covariates do not significantly improve the estimation in comparison to a null (intercept only) model. In contrast, worry about sexual assault by an acquaintance is linked to similar victimization experiences; acquaintance sexual assault victims had 1.75 times greater odds of worry than did nonvictims of sexual assault. Furthermore, those who had been physically assaulted by an acquaintance had just more than twice the odds of worry about acquaintance-perpetrated sexual assault than did nonvictims of physical assault. However, both of these effects became nonsignificant once we controlled for assessment of campus danger.

In sum, Table 4 indicates that there appears to be an overall fairly loose coupling between victimization experiences and worries about crime among
college women. Each type of worry was related to some sort of previous victimization experience, but most victimization measures in each model were nonsignificant. Furthermore, in the exceptional instances where victimization does appear related to worry, the two are not always linked in a crime-specific and offender-specific way. Instead, in some instances, crossover effects occur, whereby previous victimization experiences of one type relate to worry about another type of crime. Thus, the effects of victimization on worry were not general but instead appeared very isolated, with no clear pattern emerging regarding which specific victimizations experiences mattered more. Furthermore, most of these isolated effects of victimization that did emerge in initial models disappeared in secondary models that controlled for assessment of campus danger. Assessment of campus danger, in contrast, had consistent strong positive effects on odds of worry about stranger-perpetrated crime in particular, and model fits for these worries tended to improve substantially on inclusions of campus danger. Interestingly, stranger-perpetrated sexual assaults appear to be feared more than other offenses (see Table 3), but the model estimating worry about stranger sexual assault (without campus danger controlled) had the lowest model chi-square among all models presented in Table 4. The second and third lowest chi-square values were associated with the other two models of stranger worries—worry about stranger-perpetrated physical assault and worry about stranger-perpetrated stalking (without campus danger controlled). Once assessment of campus danger was added to these models, however, their model fits were the three highest among all models presented in Table 4. Hence, results from Table 4 support what Table 3 also revealed—worry about stranger-perpetrated crimes and victimization experiences appear especially weakly linked. However, although worry about stranger-perpetrated crime appears weakly linked to previous victimization experiences, it appears strongly linked to cognitive perceptions of the campus environment as unsafe.

Victimization and Precautionary Behavior

The final dimension of fear of crime that we examine vis-à-vis victimization experiences is a behavioral dimension, including measures of self-protective behavior and avoidance behavior. In terms of self-protection, nearly 47.0% of students reported carrying or having in their home something to protect themselves from crime. Among that 47.0%, the most commonly named items were (a) mace or other spray (66.2%), (b) a cellular phone (12.1%), (c) a knife or sharp object (11.5%), (d) a gun (10.0%), and (e) a keychain or keys (9.4%). Figure 2 depicts the percentage who carry
or own something for protection across different victimization categories. Although nonvictims are less likely than either stranger- or acquaintance-perpetrated victims to carry or own something for protection across all three offense types, the differences between stranger victims and acquaintance victims are inconsistent. Among stalking and physical assault victims, those experiencing victimization by acquaintances are more likely to carry, whereas victims of stranger sexual assault are more likely to carry than are acquaintance-perpetrated sexual assault victims. Differences among the three victim subgroups were only significant, however, in the case of sexual assault ($F = 3.615, p = .027$).

As another form of precautionary behavior, 81.5% of student respondents indicated avoiding campus (or areas right around campus) at least sometimes out of concern about crime; 35.8% engaged in such avoidance usually or always. Figure 3 depicts the mean level of avoidance across the different subgroups of victims for each of the three types of crime considered here; post hoc analyses of the three different contrasts involved in each three crime categories revealed no significant differences. Thus, as was

![Figure 2](http://cad.sagepub.com)
the case for emotional worry, victimization status appears to have little to do with crime-related precautionary behavior in the form of either carrying or owning something for protection or campus avoidance.

Examining these relationships within multivariate models reveals similar findings. In Table 5, we present logistic regression models of protective carrying or owning and campus avoidance. As in Table 4, we present two models for each dependent variable—one without assessment of campus danger controlled and another model with campus danger included. Across all of the models for precautionary behavior, there is only one significant effect of victimization. Previous sexual victimization by a stranger more than doubled the odds of carrying or owning something for protection in comparison to sexual assault nonvictimization. Furthermore, this effect remained after controlling for assessment of campus danger. Aside from that important exception, however, Table 5 indicates that nonvictims in our sample differed little from victims (regardless of perpetrator type) in terms of precautionary behavior. Cognitive assessment of campus danger was significantly and positively related

Figure 3
Mean Level of Campus Avoidance (Out of Concern for Personal Safety) by Victimization

![Bar chart showing mean level of campus avoidance by victimization status.](http://cad.sagepub.com)
Table 5
Logistic Regression Coefficients, Standard Errors, and Odds Ratios for Precautionary Behavior

<table>
<thead>
<tr>
<th>Variable</th>
<th>Carry or Own Protective Device</th>
<th>Campus Avoidance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>SE</td>
</tr>
<tr>
<td>Stalking stranger</td>
<td>-0.02</td>
<td>0.27</td>
</tr>
<tr>
<td>Stalking acquaintance</td>
<td>0.08</td>
<td>0.22</td>
</tr>
<tr>
<td>Physical victim stranger</td>
<td>0.08</td>
<td>0.60</td>
</tr>
<tr>
<td>Physical victim acquaintance</td>
<td>0.39</td>
<td>0.24</td>
</tr>
<tr>
<td>Sex victim stranger</td>
<td>0.79*</td>
<td>0.34</td>
</tr>
<tr>
<td>Sex victim acquaintance</td>
<td>0.13</td>
<td>0.19</td>
</tr>
<tr>
<td>Campus danger</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Chi-square</td>
<td>27.58*</td>
<td>29.95*</td>
</tr>
</tbody>
</table>

Note: C is coefficient. SE is standard error. OR is odds ratio. Models control for class standing, race (non-White), whether in a romantic relationship, and number of adults living in same household. All control variables were nonsignificant except for non-White (negative) and freshman and senior standing (positive) in the carry or own model.

*p < .05.
to campus avoidance, but it was unrelated to carrying or owning something for protection. The overall model fits for campus avoidance were, however, nonsignificant (with or without campus danger included); the model fit for carrying or owning something for protection was significant. Overall, then, cognitive assessment of campus danger appears to play a less important role in understanding precautionary behavior than it does in understanding worry about stranger-perpetrated crimes, for instance (see Table 4).

Discussions and Conclusions

Extant research in the fear-of-crime tradition has been largely void of examination of the linkages among various objective and subjective crime experiences with particular attention to (a) multiple dimensions of women’s subjective crime experiences and (b) perpetrator-specific experiences. In one of the only other studies estimating a relationship between victimization and fear among college women, a weak linkage was found (Fisher & Sloan, 2003). The present study supports that weak linkage, with some important caveats to add.

Overall, we found that victimization was weakly related to multiple subjective crime experiences, especially crime- and perpetrator-specific measures of worry, safety precautions, and avoidance behavior. This overall weak relationship was qualitatively different, however, depending on the type of crime and/or fear under consideration. Victimization appears especially weakly related to worry about stranger-perpetrated crime, for instance, because the prevalence of worry among college women in our sample was much greater than the prevalence of victimization by strangers. Furthermore, individual victimization was a nonsignificant predictor of worry about stranger-perpetrated crimes. In addition, the women in our sample engaged in precautionary behavior and avoidance behavior at rates in substantial excess of stranger victimization rates. In contrast, victimization rates by acquaintances tended to exceed rates of worry about acquaintance-perpetrated crimes among college women in our sample.

At first blush, therefore, it appears as if college women’s worries are not entirely well placed in the sense that they appear to be most worried about stranger-perpetrated crime, whereas they are less worried about the acquaintance-perpetrated crime for which they experience higher objective risk. However, such conclusions are confounded by the fact that there is undoubtedly reciprocity between victimization experiences and various fear experiences, including worry. There may be a large disconnect between levels of
precautionary behavior, worry, and victimization, for instance, because the victim- and/or fear-related precautions are successful. If there is a feedback loop as part of a risk or opportunity interpretation model whereby fear and precautions lessen victimization (Cook, 1986), then an effect of victimization on fear or precautions may be difficult to unearth in a cross-sectional model. Our findings of a loose coupling between objective and subjective experiences is similar to several other studies (e.g., Baumer, 1985; Fisher & Sloan, 2003; Lane & Meeker, 2003; May, 2001), and scholars have suggested one important reason for such findings is unmeasured reciprocity (Cook, 1986; Skogan, 1987). Other scholars have suggested that personal victimization is not as important in shaping worry about crime and precautionary behavior as is “indirect victimization” (victimization of others within one’s social network; e.g., Ferraro, 1995), local media exposure (Chiricos, Padgett, & Gertz, 2000), or personal, crime-specific risk perception (e.g., Ferraro, 1995; Lee & Ulmer, 2000), which has been found to mediate the effects of victimization on emotional worry, making those effects almost entirely indirect. The data for our study, unfortunately, did not allow us to compare the effects of direct versus indirect victimization experiences or to control for media exposure or personal crime-specific risk perception. Our models, however, did show robust effects of generalized perceived campus danger in models of worry about stranger-perpetrated crimes, suggesting that women’s perceived risk around campus affects this sort of worry much more than does direct victimization. Some of the effects of this general perception may be, more specifically, because of unmeasured indicators of risk and criminal opportunity such as friends’ victimization, media or news exposure, or personal perceived risk.

Thus, although our findings hint at the loose coupling of objective and subjective crime experiences among college women, especially regarding stranger crime, we think it is essential for future research to examine such relationships, while measuring both direct and indirect victimization, exposure to news or information about crime, and personal crime-specific risk perception, within nonrecursive models (e.g., Liska, Sanchirico, & Reed, 1988). In this way, the potential bidirectionality can be appropriately considered, and the source of perceived campus danger can be more clearly determined. Aside from their cross-sectional nature, findings from our study are further limited in that they focus on women from one large, public, southeastern university. Despite the sample’s selection from one university, sample characteristics are reasonably close to those revealed in previous national samples of college women, with our sample being somewhat older because of inclusion of a higher percentage of graduate students.
For instance, the national sample of college women analyzed by Fisher et al. (2000) was 80.0% White, 90.0% full-time, and 86.0% undergraduate, with a mean age of 21.54. In comparison, our sample was 84.0% White, 89.5% full-time, and 73.9% undergraduate, with a mean age of 23.5. Hence, although we do not claim that our findings are necessarily generalizable to all college women given the small scope of our sampling frame, we also do not think our sample is too unlike average college or university women, especially those at large, state research universities, with a strong emphasis on graduate programs. As such, our findings should be useful to many universities across the country. However, future work should attempt to address whether there are region-specific or even campus-specific effects regarding victim-fear relationships, possibly through the use of multistage sampling and multilevel modeling.

Despite its limitations, we feel that this study provides an important step toward delineating the relationship between victimization and multiple dimensions of fear among college women. Given the implications for quality-of-life indicators among college women (e.g., perceptions of campus, campus avoidance behavior, emotional distress), college administrators, faculty, and staff need to be aware of the subjective crime that many women experience above and beyond any direct crime experiences, and they need to know whether these multidimensional indicators of fear exceed actual rates of victimization or, in contrast, whether students are less fearful than their actual risks would suggest. Our work has implications, therefore, for understanding crime experiences among college women in a post-Clery era. As noted earlier, crime reporting by campuses, as mandated by the Clery Act, has been criticized for underrepresenting actual campus crime because of organizational issues, methodological issues, and confidentiality concerns. These criticisms imply that much crime that actually takes place on college campuses is not getting reported in the Clery-mandated statistics, leading some to suggest that Clery represents much more symbolic as opposed to substantive reform (Fisher et al., 2002). Our findings hint that Clery-mandated statistics may be flawed not only in terms of how much crime they report but in the nature of that crime as well. Our findings suggest that students may not be getting accurate information about the specific characteristics of the crimes for which they are most at risk, as stranger-perpetrated worries predominate and are closely linked to unsafe perceptions of campus despite acquaintance-perpetrated victimization being more common. As such, it may not be sufficient simply to make crime statistics public to make people more appropriately aware of their risks. Rather, a more detailed discussion of actual risks is warranted. Nonspecific news of crime around campus, without more
targeted educational initiatives, may only serve to heighten worries regarding crime that students are least likely to experience—violence perpetrated by strangers—while also increasing both perceptions of campus danger and campus avoidance.

There is strong reason to believe that such changes can occur on college campuses without changing the Clery Act per se. In fact, research on the effectiveness of Clery has shown that few students actually pay attention to the published crime statistics that are formally mandated by Clery, but more students (especially women) do pay attention to other programs and information put forth by colleges that, although not formally mandated by the Clery Act, are probably a by-product of the awareness it has created (e.g., Gregory & Janosik, 2002; Janosik, 2001). Therefore, if more colleges incorporate into their informal (i.e., not Clery mandated) crime-related education and programming domain- and perpetrator-specific information about victimization risk, student fear in terms of perception of campus danger, worry about crime, and precautionary and avoidance behavior could become more congruent with actual risk. With such change, the Clery Act’s effect, albeit indirect, could shift from symbolic to substantive.

Appendix

Screening Items for Stalking, Physical Assault, and Sexual Assault

**Stalking: Has anyone, male or female, . . .**
- Sent you unsolicited letters?
- Made unsolicited phone calls to you?
- Stood outside your home, school, or workplace?
- Showed up at places you were even though he or she had no business being there?
- Left unwanted items for you to find?
- Tried to communicate with you in other ways against your will?
- Vandalized your property or destroyed something you loved?

**Physical assault: Has anyone . . .**
- Thrown something at you that could hurt you?
- Pushed, grabbed, or shoved you?
- Pulled your hair?
- Slapped or hit you?
- Kicked or bitten you?
Choked or attempted to drown you?
Hit you with some object?
Beat you up?
Threatened you with a gun?
Threatened you with a knife or other weapon besides a gun?
Used a gun on you?
Used a knife or other weapon on you besides a gun?

Sexual assault: Has anyone, male or female, . . .
Made you have sexual intercourse by using force or threatening to harm you or someone close to you (by intercourse, I mean putting penis into vagina)?
Made you have oral sex by force or threat of harm (by oral sex, I mean did someone’s mouth or tongue make contact with your vagina or anus or did your mouth or tongue make contact with someone else’s genitals or anus)?
Made you have anal sex by force or threat of harm (by anal sex, I mean putting a penis in your anus or rectum)?
Used force or threat of force to sexually penetrate you with a foreign object?
Attempted or threatened but not succeeded in making you take part in any of the unwanted sexual experiences that I have just asked you about?

Not counting the above experiences, has anyone . . .
Engaged you in any unwanted or uninvited touching of a sexual nature such as forced kissing, touching of private parts, grabbing, fondling, even if it was over your clothes?
Attempted or threatened but not succeeded in unwanted or uninvited touching of a sexual nature?
Made or tried to make you have sexual intercourse or sexual contact when you did not want to by making threats of nonphysical punishment such as lowering a grade, being demoted or fired from a job, damaging your reputation, or being excluded from a group?
Made or tried to make you have sexual intercourse or sexual contact when you did not want to by making promises of rewards such as raising a grade, being hired or promoted, being given a ride or class notes, or getting help with course work?
Made or tried to make you have sexual intercourse or sexual contact when you did not want to by simply being overwhelmed by someone’s verbal pressure or pestering?
Made or tried to make you have sexual intercourse or sexual contact when you did not want to by encouraging or pressuring you to use drugs?
Made or tried to make you have sexual intercourse or sexual contact when you did not want to by giving you drugs?
Not counting any incidents we have already discussed, have you experienced any other type of unwanted or uninvited sexual contact?

Notes

1. Scholars such as Warr (2000) often cite the discrepancy between American levels of victimization and fear as evidence of possible dysfunction regarding fear. Recent data from the National Crime Victimization Survey, for instance, suggest that the overall rate of personal victimization per 1,000 persons age 12 and older in the United States is 22.6, suggesting that just about 2% of the population is at risk, objectively speaking (Catalano, 2004). Yet four decades worth of time-series data from the National Opinion Research Center has consistently revealed that approximately 40% of Americans are fearful, as indicated by affirmative responses to the GSS question, “Is there any area right around here—within a mile—where you would be afraid to walk alone at night?” (see http://webapp.icpsr.umich.edu/GSS).

2. Since that early work, the National Crime Survey has been renamed. It is now the National Crime Victimization Survey.

3. In measuring stalking victimization (borrowing from the National Violence Against Women Survey; Tjaden & Thoennes, 2000), it was not specified that unwanted letters and unwanted phone calls were from people other than solicitors, and an anonymous reviewer thus raised the possibility that the validity of the stalking measure is affected by some participants including such solicitations. We recognize this important potential limitation of our measure of stalking victimization. However, given that the question about unwanted letters and phone calls was amid other less ambiguous questions about stalking behavior and within the context of a broad survey about violence, it is probably the case that most participants excluded such innocuous solicitations from their response to that item. Frequency distributions regarding various items within the measurement of stalking are consistent with this assumption. The percentage answering yes to having received unwanted letters was lower than the percentage indicating that they had been spied on and/or followed, and the percentage answering yes to having received unwanted phone calls was the same as the percentage indicating that they had been spied on and/or followed. Thus, unwanted phone calls and unwanted letters do not appear out of sync with the other items.

4. We recognize that respondent assessment of campus safety is not a measure of personal, crime-specific victimization risk, often found to be a strong correlate in previous studies of crime-specific fear (e.g., Ferraro, 1995, 1996; Fisher & Sloan, 2003; LaGrange, Ferraro, & Supancic, 1992; Lane & Meeker, 2003; Lee & Ulmer, 2000; May, 2001), yet our measure of campus danger does at least provide a sense of cognitive perceptions of general risk referent to a domain (campus) in which sampled participants spend a significant amount of time, and it is distinct from the emotional measure of fear in the ways suggested by Ferraro and LaGrange (1987) and Ferraro (1995). Previous studies have used similar items to measure
general or global risk perception as opposed to personal and crime-specific risk perception (e.g., Wilcox Rountree & Land, 1996a, 1996b).

5. Note that the term worry as opposed to afraid is used to measure emotional fear in our study. Our measure was based on methodological work by Ferraro and LaGrange (1987) and Ferraro (1995). Ferraro (1995) suggests specifically that “measures of fear of crime should tap the emotional state of fear or worry,” should contain “explicit reference to the type of crime . . . should be aimed at assessing the phenomena in the subject’s everyday life—not hypothetical or purposefully avoided situations” (p. 27). Our measure meets these criteria, and similar measures have been used in previous recent studies (Lane & Meeker, 2000; Miethe, 1992). Lane and Meeker (2000) suggest, in fact, that worry is often language used in lay conversations to convey the emotion of “being afraid.”

6. There was less than 1.0% missing data on all study variables, with the exception of race, in which 2.4% of cases were missing. Listwise deletion of cases with missing data was employed for all analyses. No analysis contained fewer than 963 cases, or 95.3% of the overall sample.

7. Because our measures of worry about crime did not distinguish between rape and other sexual assault or abuse, we combine these various sexual victimizations for the analyses presented herein. However, the reader should note that sexual coercion and/or unwanted sexual contact were far more common than was rape. In all, 3.5% of the sample had experienced rape by an acquaintance, whereas 12.2% of the sample had experienced another type of sexual victimization by an acquaintance. The same pattern held for sexual victimization by strangers: 0.2% of the sample had been raped by a stranger while at State U, and 3.9% had experienced sexual coercion or contact by a stranger.

8. It seems intuitive to suggest that some of the disparity between victimization levels and perceived campus danger levels is because of the fact that the survey asked about campus safety, whereas victimization included acts occurring either on or off campus. However, this logic is contradicted by the fact that when students were asked where on campus they were most fearful, they listed places both on and off campus. Based on these data, therefore, we conclude that when students assess the safety of campus or their fear levels on campus, they conceptualize campus as the greater campus vicinity, thus making the spatial referent between the victimization questions and the safety or fear questions more similar than they appear on the surface.

9. Scheffé, Bonferroni (both assuming equal variances), and Tamhane (assuming unequal variances) tests of contrasts were conducted, all revealing similar results.

10. Again, Scheffé, Bonferroni (both assuming equal variances), and Tamhane (assuming unequal variances) tests of contrasts were conducted, all revealing similar results.

11. As noted previously, preliminary ordinal logit analyses for dependent variables with ordinal scales (not shown) violated important model assumptions, so the model shown for campus avoidance reflects effects on the odds of usually or always avoiding campus versus sometimes or never avoiding campus.

References


**Pamela Wilcox** is at the Division of Criminal Justice, University of Cincinnati.

**Carol E. Jordan** is at the Center for Research on Violence Against Women, University of Kentucky.

**Adam J. Pritchard** is at the Department of Sociology, University of Kentucky.