



E-ISSN 2332-886X

Available online at

<https://scholasticahq.com/criminology-criminal-justice-law-society/>

---

## Avoidance Behaviors in a Campus Residential Environment

---

Julie Hibdon, Joseph Schafer, Charern Lee, and Monica Summers

*Southern Illinois University, Carbondale*

### ABSTRACT AND ARTICLE INFORMATION

---

Over the last several decades, campus crime, victimization, and incidents of violence have been a focal concern for campus administrators and have generated interest in the research community. Studies have provided insight into the nature of campus crime and victimization, as well as whether these concerns relate with fear of crime and perceptions of risk. Less consideration has been given to the relationship between these variables and the use of protective action among college students, especially those residing in student housing environments. This study uses survey data from students residing in campus housing at a Midwestern university to examine how fear of crime, perceived risk of victimization, and other relevant concepts predict student protective action and, more specifically, the use of avoidance behaviors. The findings suggest that White and female residents, as well as those who were more fearful of crime and had prior victimization experiences, were more likely to engage in avoidance behaviors.

---

#### *Article History:*

Received 27 May 2016

Received in revised form 15 July 2016

Accepted 26 July 2016

---

#### *Keywords:*

fear of crime; victimization; avoidance behaviors; university housing

---

© 2016 *Criminology, Criminal Justice, Law & Society* and The Western Society of Criminology  
Hosting by Scholastica. All rights reserved.

Despite the increase in federal mandates governing crime prevention, response, and reporting on college campuses, the nature of students' fear of crime, perceived risk of victimization, and use of protective and avoidance behaviors on campuses remains understudied. Students residing in campus housing environments represent an important sub-set of a university population because, for these students, their campus is not simply a place where they spend a few hours a week attending classes. The campus environment is where they attend classes, study, live, socialize, and sometimes work. The limited studies of college samples tend to consider precautionary behaviors (to include protective and avoidance actions) only among the general student population

(see Pritchard, Jordan, & Wilcox, 2015 for one exception). It is unclear what initiates these behaviors among the subset of students who live on campus. These types of research questions have both theoretical and practical value. Not only do they inform the application of criminological theory to important sub-sets of the population, results also offer important insights for campus officials. Fear of crime can hamper students' learning or lead to their separation from their institution; a better understanding of fear and the use of avoidance behaviors can aid in the establishment of more impactful safety initiatives that make judicious use of finite campus resources.

The objective of this study is to examine the use of avoidance behaviors on campus among student residents in campus housing facilities at a Midwestern university. It considers a set of avoidance behaviors thought to reduce students' exposure to risky places and times. The analysis makes use of common demographic predictors, as well as measures of fear of crime, perception of victimization risk, and prior victimization experiences. In addition, it includes constructs of student perception of public safety efficacy and victim blaming, to test the influence of Black's Self-Help Theory, which argues that citizens who have less confidence in formal social control mechanisms are more likely to take informal security measures. Overall, this study contributes to the current literature on campus fear and crime by specifically examining student residents and what initiates their protective actions in the areas that they live, study, and work.

### Literature Review

Crime and victimization on college campuses is a significant social concern. Beyond any normative social effects, campus crime is a matter of additional concern for school officials. Risk of criminal victimization, whether real or perceived, can have a deleterious influence on recruitment, retention, and the overall quality of the learning environment, in addition to serving as a liability for the institution (Fernandez & Lizotte, 1995; Fisher, Daigle, & Cullen, 2010; Fisher & Sloan, 2013). In recent decades, a number of studies have provided key insights into the nature of campus crime and victimization across the United States (Barberet, Fisher, & Taylor, 2004; Baum & Klaus, 2005; Bromley, 1992; Fisher, 1995; Fisher, Daigle, Cullen, & Turner, 2003; Fisher & Nasar, 1992; Fisher & Sloan, 2003; Franklin, 2016; Gilmore et al., 2016; Henson & Stone, 1999; Kaminski, Koons-Witt, Stewart Thompson, & Weiss, 2010; Mustaine & Tewksbury, 1998; Pritchard, Jordan, & Wilcox, 2015; Schildkraut, Elsass, & Stafford, 2015; Woolnough, 2009).

Additionally, researchers have examined fear of crime and perceptions of risk expressed by college students (Fisher, 1995; Fisher & Nasar, 1992; Fisher & Sloan, 2003; Hilinski, 2009; Kaminski et al., 2010; Lane, Gover, & Dahod, 2009; Steinmetz & Austin, 2014). More recent research efforts have considered the nature and prediction of the reported protective behaviors taken by college students (Jang, Kang, Dierenfeldt, & Lindsteadt, 2015; Jennings, Gover, & Pudrzynska, 2007; Nasar, Hecht, & Wener, 2007; Tewksbury & Mustaine, 2003; Wilcox, Jordan, & Pritchard, 2007; Woolnough, 2009).<sup>1</sup> Studies have considered general student populations or a mix of

students living on-or-off campus (Fisher & May, 2009; Fisher & Sloan, 2003; Fisher, Sloan, Cullen, & Chunmeng, 1998; Fisher & Wilkes, 2003; Hilinski, 2009; Jennings et al., 2007; Kaminski et al., 2010; Pritchard et al., 2015; Tewksbury & Mustaine, 2003; Woolnough, 2009). To date, limited efforts have also been applied to understanding the influence of the physical and contextual features of campuses (Fernandez & Lizotte, 1995; Fisher & Nasar, 1992; Nasar, Fisher, & Grannis, 1993; Sloan, 1992; Steinmetz & Austin, 2014) and the effects of campus safety initiatives designed to reduce various forms of victimization and risk (Barberet & Fisher, 2009; Janosik, 2001; King, 2009; Perumean-Chaney & Sutton, 2013).

Concerns about crime and safety can be functional if they result in individuals taking appropriate protective actions and/or avoiding risky behavior, spaces, and situations (Jackson & Gray, 2010; cf. Steinmetz & Austin, 2014; Wilcox et al., 2007), though psychological distress can also result (Hale, 1996; Tewksbury & Mustaine, 2003). Individuals might engage in a range of defense or avoidance behaviors in response to their fear and in an attempt to mitigate or ameliorate perceived risk of victimization (Rader, May, & Goodrum, 2007; Rader & Haynes, 2014). College students who express high levels of fear report adopting more avoidance and defensive behaviors (Wilcox et al., 2007; Woolnough, 2009).<sup>2</sup> For example, students may avoid going out at night, avoid certain areas of campus, or choose not to enroll in certain classes based on time or location. Avoidance behaviors can lead students to engage in isolation that impedes building prosocial relationships (Dobbs, Waid, & Shelley, 2009); this may increase fear of crime because students are less likely to seek help from social outlets and university resources (Burgess-Proctor et al., 2016; Ferraro, 1995, 1996; Jennings et al., 2007; Woodward, Pelletier, Giffin, & Harrington, 2016; Woolnough, 2009).

In addition to avoidance behaviors, people engage in defensive actions to protect their person and property from victimization. For instance, individuals protect their person by carrying mace or taking self-defense classes, and they secure their property by locking doors or installing security systems (Burgess-Proctor et al., 2016; Ferraro, 1995; Hale, 1996; Tewksbury & Mustaine, 2003; Woolnough, 2009). Research efforts to date tend to report the frequency of adopting various defensive behaviors or examine how these actions might be predicted by demographic or experiential (i.e., victimization) variables. Few studies have considered how associated student perceptions (i.e., fear, risk, and perceptions of social control and victim blaming) might condition defensive behaviors. These latter points are not merely of

theoretical value; if relationships are noted, these findings can clearly inform the policy actions taken by campus officials.

### **Avoidance Behaviors & Demographics**

Citizens engage in a range of behaviors with the intent of protecting themselves and their property from criminal victimization (Yuan & McNeeley, 2015). Research suggests that the use of these measures vary by gender, with female students reporting greater use of both avoidance and defensive behaviors, such as carrying mace, locking their door, and avoiding areas on campus that have poor lighting and lots of shrubbery (Jang et al., 2015; Jennings et al., 2007; Kelly & Torres, 2006; Woolnough, 2009). In contrast, male students are more likely to carry weapons (e.g., knives, guns) to cope with fear of crime, specifically if they fear property and violent offenses (Woolnough, 2009). Scholars contend that female students who engage in protective behaviors are more afraid of crime than those who do not exercise these behaviors (Fisher & Sloan, 2003; Lane et al., 2009; Woolnough, 2009). Women also cope with fear of crime by perceiving that victimization was evitable and by seeking help from campus resources, family, and friends (Kelly & Torres, 2006).

It is unclear whether race/ethnicity plays a role in the use of avoidance measures. In general population research, Hale (1996) suggests that ethnic minorities tend to live in socially and economically disadvantaged neighborhoods where they are less likely to protect themselves or their property and to avoid crime or disorder. However, prior evidence shows that minorities perceive that they are less likely to be victimized, and thus, they implement fewer safety precautions than whites (Kanan & Pruitt, 2002; Roundtree & Land, 1996). One explanation offered for this finding is that minorities who live in socially disadvantaged communities are exposed to disorders, and over time, they become desensitized to the disorders (Carvalho & Lewis, 2003).

### **Fear of Crime**

It is reasonable to expect that individuals who are more fearful of criminal victimization are more likely to engage in avoidance behaviors. Fear of crime has been repeatedly associated with individual demographic characteristics, such as sex, age, and race. In both the general population and among college students, women express higher levels of fear of crime, even though they are less likely to be victims of most crimes (Barberet et al., 2004; Fisher, 1995; Fox, Nobles, & Piquero, 2009; Jennings et al., 2007; Kaminski et al., 2010; Lane et al., 2009; Snedker, 2015; Walsh, 2015). An important exception is that female students are more likely to experience sexual

victimizations, and college-aged women experience such victimization at rates higher than women of the same age who are not attending college (Hilinski, 2009).

The “shadow of sexual assault hypothesis” suggests that women tend to fear crime through the lens of sexual assault victimization (Ferraro, 1995, 1996). For example, while fear for a male might be associated with being the victim of a burglary at night or even some type of property victimization, a female may envision a property offense that turns into a more serious victimization, like sexual assault. Studies have found evidence supporting the shadow hypothesis (Dobbs et al., 2009; Ferraro, 1995, 1996; Fisher & Sloan, 2003; Henson & Reynolds, 2015; Hilinski, 2009; Jordan, 2014; Kelly & Torres, 2006; Lane et al., 2009). College samples are a prime group in which to test the shadow hypothesis; students are victimized at rates above those found in the general population and engage in a range of behaviors that elevate their risk (i.e., dating, consumption of alcohol, being out late at night; Lane et al., 2009). Furthermore, research suggests that, for women, the fear of rape often overshadows fear associated with other form of victimization (e.g., simple assault, aggravated assault, robbery, theft; Fisher & Sloan, 2003; Hilinski, 2009). While the shadow hypothesis can shape the general fear expressed by men, the fear of sexual violence has a stronger effect on the overall fear expressed by women (Lane et al., 2009).<sup>3</sup> It is likely that women engage in more avoidance behaviors as a response to a heightened sense of fear as a result of the shadow hypothesis.

Studies that look at the relationship between age and fear of crime indicate that elderly people are more afraid of crime than younger individuals (Ferraro, 1995; Hale, 1996) because they perceive themselves to be more vulnerable. An age and fear relationship is rarely evident in research on college students given the constrained age ranges in these populations. When significant relationships are found, studies often conclude that the age effect works in a direction opposite to what might be expected; younger college students express more fear of crime than older peers (Fisher & Sloan, 2003; Kaminski et al., 2010). It may be that younger students are more afraid of crime because they have been on campus for a shorter duration of time and are less familiar with the campus environment. Greater experience and familiarity with the campus environment might instill students with more balanced perspectives of their actual risk, it might allow students to better utilize effective avoidance behaviors, and/or it might allow students to mature out of behaviors that put them at higher risk for victimization. Older students (reflected by class standing) and those who have lived longer in campus

housing are expected, then, to engage in fewer forms of protective behavior.

Fear of crime research finds that racial and ethnic minorities express higher fear levels than Whites (Ferraro, 1995; Hale, 1996). In the general population, this outcome is explained by a number of factors. For example, minorities tend to live in poorer neighborhoods with higher levels of disorder and crime, and this may increase their likelihood of victimization. Or, it could be that minorities face threats of racial offenses, which expose them to more victimization. A third explanation argues that minorities have fewer social and economic resources to increase their level of security and aid recovery from victimization (Hale, 1996). While the literature on the race effect on campus is limited, the extant research has reported similar results. Specifically, these studies find that non-white students are more likely to be afraid of crime (Fox et al., 2009; Kaminski et al., 2010; Lane et al., 2009) even though statistics indicate that White students are more likely to experience actual victimization (Baum & Klaus, 2005). Given this finding, it is likely that White students are generally less likely to use avoidance measures.

### Perception of Safety

In recent years, studies have examined student perceptions of safety. Hummer and Preston (2006) studied perceptions of safety among students, faculty, and staff, finding that the majority of respondents did not perceive personal safety as a concern. Students, however, reported significantly higher levels of safety concerns than faculty and staff. Prior research has found that men perceive that they are safer on campus than female students (Tomsich, Gover, & Jennings, 2011). The location of the college campus can impact levels of perceived safety, with greater perceptions of safety expressed by students at a rural institution than counterparts at an urban campus (Patton & Gregory, 2014). Tewksbury and Mustaine (2003) found that increased exposure to dangerous circumstances, individuals, and behaviors were associated with greater use of self-protection devices, although it is difficult to disentangle the time ordering of these various behaviors. Students who perceive lower levels of personal safety are expected to engage in more forms of avoidance behaviors.

### Victimization Experiences

College students, like other adolescents and young adults, are in the life phase of risk taking, experimentation, and exploratory behaviors (Fernandez & Lizotte, 1995; Franklin, Franklin, Nobles, & Kercher, 2012). Student exposure and vulnerability can be escalated by the tendency to

engage in risk taking and naïve behavioral choices that place youth and their property at both direct risk (failure to secure personal property, being in unsafe areas, being out at unsafe times) and indirect risk (using drugs or alcohol, being around others who are under the influence of drugs or alcohol). College students report that most of their victimization experiences occur off-campus (Baum & Klaus, 2005). The majority of campus crimes are property offenses of small monetary value (i.e., thefts and burglaries; Jennings et al., 2007; Sloan, 1992). These property crimes are often offenses of opportunity; most burglary victims report the offense was unforced (i.e., the victims left their door unlocked; Henson & Stone, 1999). Those residing on campuses have more of their personal property in that environment (Fernandez & Lizotte, 1995; Fisher et al., 1998), especially small, lightweight, and portable electronic devices (Fisher & Wilkes, 2003) that provide profitable and attractive targets for theft. This matter is compounded by the tendency for students to not make use of locks, protective devices, and protective actions to secure their personal property. For example, Henson and Stone (1999) found most burglary victims reported that forced entry had not been needed to enter their residence.

Victimization data indicate that college students are less likely to experience violence than nonstudents from the same age group, except for rape/sexual assault (Baum & Klaus, 2005). Although college campuses are generally found to be safer than their surrounding communities (Bromley, 1992; cf. Fernandez & Lizotte, 1995; Volkwein, Szelest, & Lizotte, 1995), the rate of sexual victimization among college women is higher than other women of the same age (Fisher & Sloan, 2003). White and male students have a greater likelihood of experiencing overall violence than other races and females. Victimization experiences tend to elevate subsequent reported fear of crime (Ferraro, 1995; cf. Hale, 1996), though the outcomes of victimization experiences are mixed in prior studies (Hale, 1996; Rader et al., 2007; Skogan, 1987; Smith & Hill, 1991). It is expected that students who report prior victimization will be more likely to use avoidance behaviors to reduce their risk of subsequent victimization.

### Black's Self-Help Theory

Donald Black's (1983) Self-Help Theory describes how individuals might use criminal means to either mobilize the law or as a response when they perceive their power to mobilize the law is low. Black (1983) details how individuals use retributive forms of (often violent) crime when formal means of social control are perceived to be weak. This weakness might not be a complete indictment of a society's



social control apparatus; rather, it might reflect that the social control apparatus is not inclined to respond vigorously when the individual holds low levels of power (i.e., women, the poor, racial minorities, etc.). For example, individuals engaged in an active criminal lifestyle might perceive that they are unlikely to receive a vigorous police response when they are victimized, necessitating that they take “self-help” behaviors in the form of violent and criminal retribution or retaliation against their assailant.

Self-Help Theory has been extended to account for other forms of citizen action, including defensive weapon ownership (Smith & Uchida, 1988) and engagement in neighborhood crime prevention efforts (Lavrakas, 1985). Individuals who perceive failings in the context of formal social control mechanisms will be more likely to engage in protective actions and behaviors (McDowell & Loftin, 1983; Skogan, 1989). Perceptions of the visibility and efficacy of formal social control systems, including campus public safety and security services, have been linked with broader views of safety and security, as well as fear of crime (Miller & Pan, 1987; Patton & Gregory, 2014; Winkel, 1986). Students who perceive that campus public safety is less effective would be expected to engage in more forms of non-criminal self-help to offset the perceived inadequacies in that formal mode of social control. Victim blaming might also be associated with this belief system. Those who believe victims of crime play a role in their own victimization should be more likely to perceive a need to engage in self-help (in the form of avoidance behaviors) to offset potential victimization experiences.

### Research Objectives

This study seeks to examine protective actions, with a primary focus on avoidance behaviors, in a sample of students residing in on-campus university housing. Ordinary least squares (OLS) regression is used to assess whether demographics, experiential variables, or common crime-related predictors can explain variation in student reported behaviors. The analysis also seeks to conduct a provisional assessment of whether Black’s Self-Help Theory has relevance in the context of protective action. Black’s original idea focused on citizens taking illegal action to respond to criminal events that they perceived the justice system would overlook. This study uses that general premise to determine if students with less confidence in campus public safety (a mechanism of formal social control) and/or those who engage in victim blaming (which would suggest citizens need to take actions to minimize their risk) are more likely to engage in protective actions.

### Methodology

The data used for the study were collected as part of a larger university-driven initiative to understand and address campus life and safety issues for students, faculty, and staff at a large Midwestern university. The institution was interested in the perceptions and experiences of a range of sub-segments of the campus community, including students residing in campus housing. There was concern that fear of crime was pushing students either away from the institution or into off-campus housing following the mandatory year of on-campus residency.

The institution was a diverse campus, drawing students from a variety of demographic, geographic, and experiential backgrounds. The institution enrolled almost 20,000 students, with one-third identifying as a member of a racial or ethnic minority group. Approximately 20% of the student body resided in a campus housing facility. The campus was located in a relatively rural area; its host community, while modest in size, was one of the larger cities in the region. The student body was drawn from that rural area but also from urban and suburban communities located at a greater distance from the campus. While the campus itself was positioned in a rural area, the student body was drawn from communities of all types and sizes.

Data in this paper come from a survey specifically of campus residents. The survey aimed to capture resident assessments of the campus housing environment, as well as measures of fear, safety, victimization, and protective behaviors (i.e., weapon use, actions to guard property, and avoidance) used by student residents. The authors, in consultation with leadership from university housing, developed the survey items and data collection plan. Survey participants were selected using a randomized stratified sampling procedure. University dormitories are located on opposite ends of campus. Further, the university sponsors floors that accommodate special-interest designations (e.g., all female/male, living-learning communities for specified majors, honors students, upperclassmen, etc.). In order to get a representative sample, the floors of the dorms were cataloged for random selection, with those floors stratified by campus location and whether they were general housing or special-interest housing.<sup>4</sup> Floors were selected from each side of campus to roughly approximate the distribution of resident students between the two sides of campus and general vs. special-interest housing.

The survey was administered over a two-week period in April of 2013. The Resident Assistant (RA) of selected floors delivered a survey packet to all residents of that floor. Survey packets were sealed in envelopes and included informed consent information

and unmarked return envelopes. RAs and graduate research assistants followed up with potential respondents during the correspondence period. Participation was voluntary and anonymous; those opting to not participate were encouraged to return the unmarked survey to their RA. At the end of the two-week period, RAs submitted all the envelopes that had been returned to them. Out of the 844 student residents selected for participation, 569 completed or partially completed the survey (67.4% response rate). After examining the data for any potential bias, we decided to implement list-wise deletion to address issues with missing data from the partially completed surveys. This further reduced the sample to 490 complete responses.

Descriptive statistics of the sample are included in Table 1 below. Just over half of the study sample was female (51.8%), which is slightly higher than the total percentage of females who live in residence halls (48%). The percentage of minority respondents in the sample (41.2%) is lower than the proportion of minority residents (46.9%) residing in campus housing. Close to 30% of residents reported living in the residence halls beyond a year (i.e., 3 or more semesters). This is in-line with housing demographics from the university that indicate approximately one-third of all housing residents are returning students. The majority of the sample (79.3%) is underclassmen, which is slightly lower than the total proportion of campus residents (87.2%).

**Table 1 – Descriptive Characteristics of Sample (N=490)**

	Percent/Mean	Std. Dev.	Min.	Max.
Female	51.8%	-	-	-
White	58.8%	-	-	-
Residential Tenure (3+ semesters)	28.2%	-	-	-
First-Year	56.0%			
Prior Victimization	0.7	1.1	0	6
Fear at Night	31.5	23.8	9	90
Personal Safety	11.7	2.3	3	15
Perception of Public Safety	11.2	2.8	3	15
Defensive Behavior – Weapon	1.13e-09	.822	-.553	2.87
Defensive Behavior – Property	7.45e-10	.771	-4.59	.497
Avoidance Behavior	6.58-10	.688	-1.62	1.32

**Measures & Analysis**

For the present study, ordinary least squares regression (OLS) is used to account for the influence of our selected predictors on protective action. Given the number of measures included in the survey to gauge the use of protective actions, we employ principal component analysis to identify three specific forms of protective action: defensive behaviors involving a weapon, defensive behaviors over property and avoidance behaviors. Here we test the impact of eight independent variables on these three factors. Explanations of the operationalization of the independent and dependent variables are discussed in detail below.

The influence of eight independent variables are tested on the use of avoidance action among campus housing residents (see Table 1). It is well established that gender and ethnicity influence both fear of crime and the use of different forms of protective action. Here these are captured by responses to items that asked respondents to self-identify their gender and their ethnicity. Gender was reported and recorded as

a dichotomous measure (0=male; 1=female). Ethnicity was collected by asking “What race do you consider yourself?” with respondents selecting from seven possible response categories (White, African-American/Black, Hispanic/Latino/Latina, Asian/Asian-American, Native American/Alaska Native, Multi-racial, and Other). These responses were recoded into a dichotomous measure representing Non-White (0) and White (1) respondents.<sup>5</sup>

In addition, prior research suggests that younger or newer college students express more fear than their older/experienced peers, theoretically making them more likely to engage in protective actions (Fisher & Sloan, 2003; Kaminski et al., 2010). To account for this, the analysis includes measures of tenure for on-campus residency, as well as class standing. Residential tenure in university housing was measured using an open-ended question that asked respondents to report how many semesters they had lived in university housing (including the current term). The measure was collapsed into a dichotomous variable representing one academic year or less (i.e., 2 or fewer

semesters) and more than one academic year (3 or more semesters). Class standing provides an alternative way to account for maturity and exposure to the campus environment. Respondents were asked to report their current class standing (First-Year = 1 to Senior = 4), and those responses were recoded into a dichotomous measure of First-Year (1) and other (0).

Prior research indicates that perceptions of personal safety can influence the use of protective actions (Tomsich et al., 2011). Perceptions of safety are quantified with two measures – assessments of personal safety and reported fear of crime at night. Students were presented with three questions assessing sentiments of personal safety. The questions asked students how safe they feel on campus and housing: “Overall, I feel safe in my residence hall; Overall, I feel safe in my residence room; and Overall, I feel safe at this campus.” There were five response options for each question that range from strongly disagree (1) to strongly agree (5). These items were summed into a scale with values that range from 3 to 15 ( $\alpha = 0.87$ ).

Given the established connection between fear and use of protective action, the survey asked respondents to report levels of fear of crime during the day and night. Only the measures gauging fear at night are used because of the correlation between the two metrics and because prior research argues that reported levels at night are better representations of sentiments of actual fear (Skogan & Maxfield, 1981; Warr, 1984, 1990). Fear at night was derived from nine questions that asked participants to rate their fear of specific incidents happening to them while in university housing at night. The items include having a textbook stolen, having an electronic device stolen, having a wallet or purse stolen, having property vandalized, being stalked, being raped or sexually assaulted, being robbed or mugged, being physically beaten up, and being harassed or intimidated. The response options range from not at all fearful (1) to very fearful (10). A summative index was created with these items with values that range from 9 to 90 ( $\alpha = 0.96$ ).

Research suggests that prior victimization experiences may influence the use of protective behaviors (Ferraro, 1995; Hale, 1996). Six items were used to measure prior victimization while in university housing. Students were asked if they had experienced five different forms of victimization at any time from August of 2012 up to the survey administration period (April 2013). The types of victimization asked about included (1) threatened or actual harm; (2) physical attack resulting in bruises, scratches or more serious injury; (3) threatened or actual break-in of dormitory room; (4) attempted or actual theft while in university housing; and (5) harassment or intimidation while in university housing. A question inquiring about

vicarious victimization was also included.<sup>6</sup> The response options were no (0) and yes (1). Victimization experiences were collapsed into one measure by creating a summative index with responses ranging from 0 (no victimization reported) to 6 (all forms of victimization reported;  $\alpha = 0.64$ ).

Last, we included two measures to gauge sentiments of self-help – satisfaction with campus public safety and beliefs about victim responsibility. Police satisfaction was captured by a question that asked about the satisfaction of campus police in keeping university housing safe and orderly. Respondents were able to select from five response categories that ranged from 1 to 5 (very satisfied to very dissatisfied). This measure was collapsed into a dichotomous measure representing dissatisfied (0) and satisfied (1).<sup>7</sup> Beliefs about victim responsibility come from two questions that ask about the agreement with the statement that victims could have prevented violent and non-violent victimizations (5=Strongly Agree to 1=Strongly Disagree). Responses to these questions were combined into a summative index ranging from 2 (indicated strong disagreement) and 10 (indicated strong agreement;  $\alpha=0.762$ ).

The dependent variable was selected and created using exploratory factor analysis on a series of question asking about the employment of ten different protective actions by respondents. The protective action questions were derived from a vetted list of questions used in prior research.<sup>8</sup> The factor analysis determined that the 10 protective actions could be reduced to represent three dependent variables. The variables are represented in Table 2, which lists the three factors identified in the analysis, the questions that loaded for each factor, and the descriptive statistics of each.

The first factor is derived from questions asking about defensive behaviors involving a weapon. Four questions that asked about the carrying or storing of weapons such as mace and/or pepper spray as well as knives, clubs, and guns are included. The descriptive statistics demonstrate that a low proportion of the sample ( $\leq 19.0\%$ ) reported engaging in any of these actions. As expected, the most common of the weapon involved behaviors is carrying mace and/or pepper spray. Questions that load on the second factor seem to center on behaviors pertaining to the defense of one’s property – either on their person or in their living spaces. Unlike the weapon-related defensive actions, a high majority of respondents (87.3% or more) report participating in these actions. The final factor identified involves actions of avoidance. The participation in these actions was much less skewed – between 55% and 67% of students reported using these approaches.

**Table 2 – Details of Factored Dependent Variables (N=490)**

Measure	Yes	%	No	%
<b>Defensive Behaviors – Weapon</b>				
Carry Mace/Pepper Spray	93	19.0	397	81.0
Carry Knife, Club or Gun	52	10.6	438	89.4
Keep weapon (mace, knife, club, or gun) in room	68	13.9	422	86.1
Keep weapon (mace, knife, club or gun) in car	57	11.6	433	88.4
<b>Defensive Behaviors – Property</b>				
Shut door when leaving room	480	98.0	10	2.0
Lock door when leaving room	459	96.7	31	6.3
Carry personal property with them when leaving room	457	93.3	33	6.7
Do not leave property unattended in residence hall	428	87.3	62	12.7
<b>Avoidance</b>				
Avoid certain parts of university housing considered dangerous	270	55.1	220	44.9
Attempt to walk in groups as much as possible	294	60.0	196	40.0
Ask someone to watch my property when I leave it unattended in residence hall	328	66.9	162	33.1

**Results**

Analyses for the present study were run in STATA 12. Three separate regression models were run to evaluate the independent impacts of the selected predictors on the three different types of protective action (i.e., defensive behaviors involving a weapon, defensive behaviors over property, and avoidance behaviors). While our results suggest that two of the models are not good fitting models (R2 of 0.05 and 0.03 respectively), we think this may be more to do with the low variation in the dependent variables, which is likely influenced by our specific sample population, rather than the lack of relationship between the predictors and dependent variables. The results examining the influence of the predictors on the protection actions of weapons use and defense of property are included in the Appendix.

Here we chose to focus on the results for the avoidance action, which are presented in Table 3. The explained variance in the model is moderate (.20), signifying that these factors do a better job of predicting avoidance behaviors than the defensive behaviors of students who live in a campus housing environment. Gender as well as ethnicity significantly impact the use of avoidance behaviors by campus residents (p values of .000 and .003 respectively). Female students as well as white students more commonly engage in the use of avoidance behaviors. Specifically, female respondents engage in the use of avoidance actions by a factor of .449 more than men. White respondents report the increased use of avoidance actions by a factor of .179. These results

conform to our earlier predictions and reflect those found in past studies.

Fear at night is also significant (p=.001) and in the expected direction. Students who report higher levels of fear also report significantly higher use of avoidance actions. More specifically, as the fear at night index score increases by 1, the reported use of avoidance action increases by a factor of .005. These results are not surprising and support the findings of past research on the connection between fear and the use of protective action. Last, the results indicate that prior victimization positively and significantly (p=.005) influences the use of avoidance behaviors. Table 3 indicates that as the number of prior victimizations reported increases by 1, the reported use of avoidance actions increases by a factor of .08. Thus, as reported victimization experiences increase, so does the use of reported avoidance behaviors. Again, the directionality and significance of the relationship is as anticipated given the prior literature.

It is worth noting that a number of variables we include do not adequately predict the use of avoidance behaviors by campus residents. While these results are not exactly surprising, we think their lack of influence may have more to do with the limitations of the sample population. Specifically, we are looking at a very specific, targeted sample (i.e., residents of campus housing) that generally is of the same age that experiences low levels of victimization and reports reasonably high perceptions of personal safety satisfaction with campus police and reasonably low levels of fear. Given the restrictions of the sample, we believe these variables should not be disqualified in future studies



Table 3 – OLS Results, Avoidance (N=490)

Adjusted $R^2 = .195$			
	<i>B</i>	<i>SE</i>	<i>p</i>
Female	.449	.058	.000
White	.179	.059	.003
Residential Tenure (3+ semesters)	-.100	.089	.274
First-Year	.047	.080	.560
Prior Victimization	.080	.029	.005
Public Safety	.063	.072	.381
Personal Safety	.001	.015	.971
Fear at Night	.005	.001	.000
Victim Blame	.254	.018	.167
Constant	-0.771	.222	.001

### Discussion

This study examines the use of protective action, specifically avoidance behaviors, of students residing on campus. While it adds to the current literature on student fear of crime and perceived risk of victimization, as well as the use of protective behaviors, it also adds some perspective to how these operate among students living specifically in the campus environment. Understanding what influences the use of protective behaviors among student residents can provide new information to aid in decisions about campus safety initiatives.

Here we find that women are significantly more likely to engage in avoidance. While preliminary, it is likely that this finding is a reflection of the shadow of sexual assault hypothesis. Overall, our findings are consistent with prior research that argues that women often believe that they are incapable of defending themselves (Dobbs et al., 2009; Ferraro, 1995, 1996; Fisher & Sloan, 2003; Hilinski, 2009; Kelly & Torres, 2006; Lane et al., 2009), potentially moving them to engage in avoidance as a way of reducing potential victimization. Second, our results indicate that White students residing on campus were significantly more likely to engage in avoidance behaviors. These results are somewhat contrary to our expectations, but the result is not surprising given the mixed literature on ethnicity and protective action of crime (Ferraro, 1995; Hale, 1996; Kanan & Pruitt, 2002; Rountree & Land, 1996). In this context, we can only assume that this finding is in some way influenced by the high percentage of White students who originated from rural and suburban communities throughout the state. This background perhaps influences assessments of risk and protective action simply because these students are less accustomed to living with or near thousands of people. While we can only speculate on

this relationship, the finding is notable and worthy of future evaluation.

Our results indicate a significant affiliation between fear at night and avoidance behaviors. This finding supports previous literature and corresponds with the relationship between fear at night and defensive behaviors. Simply stated, fear at night is a consistent predictor for some defensive and avoidance behaviors. Interestingly, perceptions of personal safety did not significantly impact avoidance actions. One possible explanation for this finding involves the notion that avoidance behaviors are not a product of personal safety concerns but instead are socially learned. In other words, individuals engage in avoidance behaviors as “creatures of habit” rather than as a response to fearing for one’s safety.

Finally, prior victimization significantly predicts avoidance behaviors. While previous literature on the relationship between prior victimization and outcomes is mixed (Hale, 1996; Rader et al., 2007; Skogan, 1987; Smith & Hill, 1991), our study provides some insight into how this relationship may work in a campus residential setting. It is not far-fetched to consider that those students who report prior victimization would increase caution, leading them to engage in avoidance actions, particularly to situations that they deem risky.

It is worth noting that several factors we included did not significantly influence reported avoidance measures. Here we find that perceptions of both personal and public safety, as well as victim blaming, have little influence over “self-help” behaviors in the form of avoidance. We speculate that the lack of significance in this relationship may be a direct result of the sample population. College students who reside on campus are a transient population. They live on campus for relatively short periods of time and are often residentially mobile throughout enrollment.

Black's (1983) self-help theory posits that if individuals perceive social control to be ineffective, then they may be more inclined to engage in protective behaviors. Based on the transient nature of the population, however, it is possible that students residing on campus do not experience long enough tenures on campus in order to build perceptions about public safety. The fact that residential tenure has no significant influence on protective actions here furthers that speculation.

While this study provides further insight into protective action by student residents, there are some limitations. These data come from one Midwestern university, limiting the generalizability of our findings. College students tend to be young and feel largely invulnerable to risk. A residential population intermingles this invulnerability with the fact that the totality of their lives (i.e., residence, classes, social life, and employment) occurs in the same environment. The invulnerability of youth, coupled with life in the "ivory tower," may actually lead to situations where fear and risk are undervalued, leaving students more vulnerable to victimization because of a lack of protective action. A second limitation is that the data are cross-sectional, precluding the ability to establish the temporal sequence between fear of crime and the use of protective behaviors. For instance, research suggests that the use of protective measures may actually influence levels of fear (Hale, 1996). Finally, although the factor analyses produced three new variables, it is uncertain if these variables are the best representation of protective action by students. Previous research tends to combine protective behavior items into a summative scale without distinguishing specific protective action (see Jennings et al., 2007; Woolnough, 2009). While on one hand this may be a strength of our study, it may also be a limitation in that these factors are new concepts and not widely tested.

### Conclusion

This study provides several policy implications of use to college administration. Most notably, the primary concerns associated with students' perceptions of crime while residing on the college campus involves whether or not perceived risk outweighs actual risk. Some students who perceive a disproportionately high risk may engage in avoidance behaviors that are detrimental to academic progress, preclude social integration into the university culture and community, and reduce the students' overall quality of life (Fernandez & Lizotte, 1995). The Clery Act was enacted with the intention of informing students about crime on campus; however, it is possible that the only information that students receive

about campus crime is alerts about crime events. This could result in skewed perceptions of dangers on campus, resulting in the adoption of misdirected protective actions and avoidance behaviors.<sup>9</sup> One potential remedy could involve not only notification, but also training and education on actual risk and appropriate responses. It is possible that the current push to provide students with greater notifications, while an important action and laudable goal, could be creating new concerns that institutions must recognize and seek to manage or mitigate.

The findings regarding female students might suggest the need for colleges to reconsider their policies and educational programs, as well. Female students reported engaging in higher levels of avoidance behaviors relative to their male peers. The reliance on avoidance measures could suggest that female students are operating under misconceptions of their victimization risk by focusing on avoiding areas where they could be prone to quintessential stranger-on-stranger attacks, rather than seeing the risk from acquaintances or for their personal property. Appendix A suggests that female students were more likely to carry weapons (cf. Jang et al., 2015), which could further suggest that female students are misunderstanding their actual risks. Perhaps college educational and crime reduction efforts not only focus on simply achieving compliance with federal requirements (see Woodward et al., 2016) but are misdirected in educating students about reporting protocols over empirically sound risk avoidance strategies. Self-defense courses, while seemingly common, are offered in times and places that female students find less convenient (Burgess-Proctor et al., 2016) and might be better framed in a way that encourages all attendees to use more appropriate strategies to mitigate risks. Institutions would be well served to also understand the needs of students who do experience personal crimes, as evidence suggests that they are at an elevated risk of being victimized again in the future (Gilmore et al., 2016).

In addition, there are a number of implications for future research involving student populations. Further delineation of certain variables may be fruitful in identifying the predictors of protective action. In reflection, we can see how assessing experiences prior to coming to college might play a role in the use of protective action. For example, protective actions taken by students may be a direct imitation of protective actions that they may have witnessed and not necessarily be a product of fear. Including additional measures may provide insight into the complicated connection between fear and protective action. Research on weapon carrying behaviors have tended to group both assault and defensive weapons together in analyses (see Jang et al., 2015); greater

specification might inform a more nuanced understanding of which types of students carry what types of weapons, recognizing that weapon carrying in most studies is a relatively uncommon behavior. While efforts such as these may be time-consuming and expensive, they can potentially provide a wealth of information, which may ultimately reduce misperceptions about the risk of victimization, equalize the proportion of avoidance behaviors in relation to risk, and improve the quality of life for students on campus.

### References

- Barberet, R., & Fisher, B. S. (2009). Can security beget insecurity and quest: Security and crime prevention awareness and fear of burglary among university students in the East Midlands. *Security Journal*, 22(1), 3–23. doi: 10.1057/sj.2008.9
- Barberet, R., Fisher, B. S., & Taylor, H. (2004). *University student safety in the East Midlands*. London, England: Home Office.
- Baum, K., & Klaus, P. (2005). *Violent victimization of college students, 1995-2002*. Washington, DC: Bureau of Justice Statistics.
- Black, D. (1983). Crime as social control. *American Sociological Review*, 48(1), 34–45.
- Bromley, M. L. (1992). Campus and community crime rate comparisons: A statewide study. *Journal of Security Administration*, 15(2), 49–64.
- Burgess-Proctor, A., Pickett, S. M., Parkhill, M. R., Hamill, T.S., Kirwan, M., & Kozak, A. T. (2016). College women's perceptions of and inclination to use campus sexual assault resources: Comparing the views of students with and without sexual victimization histories. *Criminal Justice Review*, 41, 204–218. doi: 10.1177/0734016816634786
- Carvalho, I., & Lews, D. A. (2003). Beyond community: Reactions to crime and disorder among inner-city residents. *Criminology*, 41(3), 779–812. doi: 10.1111/j.1745-9125.2003.tb01004.x
- Dobbs, R. R., Waid, C. A., & Shelley, T. O. (2009). Explaining fear of crime as fear of rape among college females: An examination of multiple campuses in the United States. *International Journal of Social Inquiry*, 2(2), 105–122.
- Fernandez, A., & Lizotte, A. (1995). An analysis of the relationship between campus crime and community crime: Reciprocal effects? In J. Sloan & B. Fisher (Eds.), *Campus crime: Legal, social, and policy contexts* (pp. 79–102). Springfield, IL: Charles Thomas Publisher.
- Ferraro, K. F. (1995). *Fear of crime: Interpreting victimization risks*. Albany, NY: SUNY Press.
- Ferraro, K. F. (1996). Women's fear of victimization: Shadow of sexual assault? *Social Forces*, 75(2), 667–690. doi: 10.1093/sf/75.2.667
- Fisher, B. S. (1995). Crime and fear on campus. *The Annals of the American Academy of Political and Social Science*, 539(1), 85–101. doi: 10.1177/0002716295539001007
- Fisher, B. S., Daigle, L. E., & Cullen, F. T. (2010). *Unsafe in the ivory tower: The sexual victimization of college women*. Thousand Oaks, CA: Sage.
- Fisher, B. S., Daigle, L. E., Cullen, F. T., & Turner, M. G. (2003). Reporting sexual victimization to the police and others: Results from a national-level study of college women. *Criminal Justice and Behavior*, 30(1), 6–38. doi: 10.1177/0093854802239161
- Fisher, B. S., & May, D. (2009). College students' crime-related fears on campus: Are fear-provoking cues gendered? *Journal of Contemporary Criminal Justice*, 25(3), 300–321. doi: 10.1177/1043986209335013
- Fisher, B. S., & Nasar, J. L. (1992). Fear of crime in relation to three exterior site features prospect, refuge, and escape. *Environment and Behavior*, 24(1), 35–65. doi: 10.1177/0013916592241002
- Fisher, B. S., & Sloan, J. J. III. (2003). Unraveling the fear of victimization among college women: Is the "shadow of sexual assault hypothesis" supported? *Justice Quarterly*, 20(3), 633–659. doi: 10.1080/07418820300095641
- Fisher, B. S., & Sloan, J. J., III (2013). *Campus crime: Legal, social, & policy perspectives* (3<sup>rd</sup> ed.). Springfield, IL: Charles C. Thomas Publisher, LTD.
- Fisher, B. S., Sloan, J. J., III, Cullen, F. T., & Chunmeng, L. (1998). Crime in the ivory tower: The level and sources of student victimization. *Criminology*, 36(3), 671–710. doi: 10.1111/j.1745-9125.1998.tb01262.x

- Fisher, B. S., & Wilkes, A. R. P. (2003). A tale of two ivory towers: A comparative analysis of victimization rates and risks between university students in the United States and England. *British Journal of Criminology*, 43(3), 526–545. doi: 10.1093/bjc/43.3.526
- Fox, K. A., Nobles, M. R., & Piquero, A. R. (2009). Gender, crime victimization and fear of crime. *Security Journal*, 22(1), 24–39. doi: 10.1057/sj.2008.13
- Franklin, C. A. (2016). Sorority affiliation and sexual assault victimization: Assessing vulnerability using path analysis. *Violence Against Women*, 22(8), 895–922. doi: 10.1177/1077801215614971
- Franklin, C. A., Franklin, T. W., Nobles, M. R., & Kercher, G. A. (2012). Assessing the effect of routine activity theory and self-control on property, personal, and sexual assault victimization. *Criminal Justice and Behavior*, 39(10), 1296–1315. doi: 10.1177/0093854812453673
- Gilmore, A. K., Maples-Keller, J. L., Pinsky, H. T., Shepard, M. E., Lewis, M. A., & George, W. H. (2016). Is the use of protective behavioral strategies associated with college sexual assault victimization? A prospective examination. *Journal of Interpersonal Violence*. Advance online publication. doi: 10.1177/0886260516628808
- Hale, C. (1996). Fear of crime: A review of the literature. *International Review of Victimology*, 4(2), 79–150. doi: 10.1177/026975809600400201
- Henson, B., & Reys, B. W. (2015). The only thing we have to fear is fear itself...and crime: The current state of the fear of crime literature and where it should go next. *Sociology Compass*, 9(2), 91–103. doi: 10.1111/soc4.12240
- Henson, V. A., & Stone, W. E. (1999). Campus crime: A victimization study. *Journal of Criminal Justice*, 27(4), 295–307. doi:10.1016/S0047-2352(99)00003-3
- Hilinski, C. M. (2009). Fear of crime among college students: A test of the shadow of sexual assault hypothesis. *American Journal of Criminal Justice*, 34(1-2), 84–102. doi: 10.1007/s12103-008-9047-x
- Hummer, D., & Preston, P. (2006). Target hardening the college campus through stakeholder input: Merging community and the security survey. *Crime Prevention and Community Safety: An International Journal*, 8(2), 118–136. doi: 10.1057/palgrave.cpcs.8150015
- Jackson, J., & Gray, E. (2010). Functional fear and public insecurities about crime. *British Journal of Criminology*, 50(1), 1–22. doi: 10.1093/bjc/azp059
- Jang, H., Kang, J. H., Dierenfeldt, R., & Lindsteadt, G. (2015). Weapon possession among college students: A study from a Midwestern University. *International Journal of Offender Therapy and Comparative Criminology*, 59(11), 1239–1259. doi: 10.1080/07448489709595580
- Janosik, S. M. (2001). The impact of the Campus Crime Awareness Act of 1998 on student decision-making. *NASPA Journal*, 38(3), 348–360. doi: 10.2202/1949-6605.1149
- Jennings, W. G., Gover, A. R., & Pudrzynska, D. (2007). Are institutions of higher learning safe? A descriptive study of campus safety issues and self-reported campus victimization among male and female college students. *Journal of Criminal Justice Education*, 18(2), 191–208. doi: 10.1080/10511250701383327
- Jordan, C. E. (2014). The safety of women on college campuses: Implications of evolving paradigms in postsecondary education. *Trauma, Violence, & Abuse*, 15(3), 143–148. doi: 10.1177/1524838014520635
- Kanan, J. W., & Pruitt, M. V. (2002). Modeling fear of crime and perceived victimization risk: The (in) significance of neighborhood integration. *Sociological Inquiry*, 72(4), 527–548. doi: 10.1111/1475-682X.00033
- Kaminski, R. J., Koons-Witt, B. A., Stewart Thompson, N., & Weiss, D. (2010). The impacts of the Virginia Tech and Northern Illinois University shootings on fear of crime on campus. *Journal of Criminal Justice*, 38(1), 88–98. doi:10.1016/j.jcrimjus.2009.11.011
- Kelly, B. T., & Torres, A. (2006). Campus safety: Perceptions and experiences of women students. *Journal of College Student Development*, 47(1), 20–36. doi: 10.1353/csd.2006.0007
- King, R. (2009). Women's fear of crime on university campuses: New directions? *Security Journal*, 22(1), 87–99. doi: 10.1177/0013916594266002

- Lane, J., Gover, A. R., & Dahod, S. (2009). Fear of violent crime among men and women on campus: The impact of perceived risk and fear of sexual assault. *Violence and Victims, 24*(2), 172–192. doi: 10.1891/0886-6708.24.2.172
- Lavrakas, P. (1985). Citizen self-help and neighborhood crime prevention policy. In L. A. Curtis (Ed.), *American violence and public policy* (pp. 87–115). New Haven, CT: Yale University Press.
- McDowell, D., & Loftin, C. (1983). Collective security and the demand for legal handguns. *American Journal of Sociology, 88*(6), 1146–1161.
- Melde, C., Esbensen, F. A., & Taylor, T. (2009). ‘May piece be with you’: A typological examination of the fear and victimization hypothesis of adolescent weapon carrying. *Justice Quarterly, 26*(2), 348–376. doi: 10.1080/07418820802290488
- Miller, J. L., & Pan, M. J. (1987). Student perceptions of campus police: The effects of personal characteristics and police contacts. *American Journal of Police, 6*(2), 27–44
- Mustaine, E. E., & Tewksbury, R. (1998). Predicting risks of larceny theft victimization: A routine activity analysis using refined lifestyle measures. *Criminology, 36*(4), 829–857. doi: 10.1111/j.1745-9125.1998.tb01267.x
- Nasar, J. L., Fisher, B., & Grannis, M. (1993). Proximate physical cues to fear of crime. *Landscape and Urban Planning, 26*(1-4), 161–178. doi: 10.1016/0169-2046(93)90014-5
- Nasar, J., Hecht, P., & Wener, R. (2007). ‘Call if you have trouble’: Mobile phones and safety among college students. *International Journal of Urban and Regional Research, 31*(4), 863–873. doi: 10.1111/j.1468-2427.2007.00759.x
- Patton, R. C., & Gregory, D. E. (2014). Perceptions of safety by on-campus location, rurality, and type of security/police force: The case of the community college. *Journal of College Student Development, 55*(5), 451–460. doi: 10.1353/csd.2014.0049
- Perumean-Chaney, S. E., & Sutton, L. M. (2013). Students and perceived school safety: The impact of school security measures. *American Journal of Criminal Justice, 38*(4), 570–588. doi: 10.1007/s12103-012-9182-2
- Pritchard, A. J., Jordan, C. E., & Wilcox, P. (2015). Safety concerns, fear and precautionary behavior among college women: An exploratory examination of two measures of residency. *Security Journal, 28*(1), 16–38. doi: 10.1057/sj.2012.39
- Rader, N. E., & Haynes, S. H. (2014). Avoidance, protective, and weapons behaviors: An examination of constrained behaviors and their impact on concerns about crime. *Journal of Crime & Justice, 37*(2), 197–213. doi: 10.1080/0735648X.2012.723358
- 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*(5), 475–505. doi: 10.1080/02732170701434591
- 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*(4), 1353–1376. doi: 10.1093/sf/74.4.1353
- Schildkraut, J., Elsass, H. J., & Stafford, M. C. (2015). Could it happen here? Moral panic, school shootings, and fear of crime among college students. *Crime, Law and Social Change, 63*(1), 91–110. doi: 10.1007/s10611-015-9552-z
- Skogan, W. G. (1987). The impact of victimization on fear. *Crime & Delinquency, 33*(1), 135–154. doi: 10.1177/0011128787033001008
- Skogan, W. G. (1989). Communities, crime, and neighborhood organization. *Crime & Delinquency, 35*(3), 437–457. doi: 10.1177/0011128789035003008
- Skogan, W. G., & Maxfield, M. G. (1981). *Coping with crime: Individual and neighborhood reactions*. Beverly Hills, CA: Sage Publications.
- Sloan, J. J. (1992). Campus crime and campus communities: An analysis of crimes known to campus police and security. *Journal of Security Administration, 15*(2), 31–47.
- Smith, L. N., & Hill, G. D. (1991). Victimization and fear of crime. *Criminal Justice and Behavior, 18*(2), 217–239. doi: 10.1177/0093854891018002009
- Smith, D. A., & Uchida, C. D. (1988). The social organization of self-help: A study of defensive weapon ownership. *American Sociological Review, 53*(1), 94–102.



- Snedker, K. A. (2015). Neighborhood conditions and fear of crime: A reconsideration of sex differences. *Crime & Delinquency*, *61*(1), 45–70. doi: 10.1177/0011128710389587
- Steinmetz, N. M., & Austin, D. M. (2014). Fear of criminal victimization on a college campus: A visual and survey analysis of location and demographic factors. *American Journal of Criminal Justice*, *39*(3), 511–537. doi: 10.1007/s12103-013-9227-1
- Tewksbury, R., & Mustaine, E. E. (2003). College students' lifestyles and self-protective behaviors: Further considerations of the guardianship concept in routine activity theory. *Criminal Justice and Behavior*, *30*(3), 302–327. doi: 10.1177/0093854803030003003
- Tomsich, E. A., Gover, A. R., & Jennings, W. G. (2011). Examining the role of gender in the prevalence of campus victimization, perceptions of fear and risk of crime, and the use of constrained behaviors among college students attending a large urban university. *Journal of Criminal Justice Education*, *22*(2), 181–202. doi: 10.1080/10511253.2010.517772
- Volkwein, J. F., Szelest, B. P., & Lizotte, A. J. (1995). The relationship of campus crime to campus and student characteristics. *Research in Higher Education*, *36*(6), 647–670. doi: 10.1007/BF02208249
- Walsh, S. (2015). Safety spheres: Danger mapping and spatial justice. *Race, Gender & Class*, *22*(1/2), 122–142.
- Warr, M. (1984). Fear of victimization: Why are women and the elderly more afraid? *Social Science Quarterly*, *65*(3), 681–702.
- Warr, M. (1990). Dangerous situations: Social context and fear of victimization. *Social Forces*, *68*(3), 891–907. doi: 10.1093/sf/68.3.891
- Wilcox, P., Jordan, C. E., & Pritchard, A. J. (2007). A multidimensional examination of campus safety victimization, perceptions of danger, worry about crime, and precautionary behavior among college women in the Post-Cleary Era. *Crime & Delinquency*, *53*(2), 219–254. doi: 10.1177/0097700405283664
- 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*(4), 502–529. doi: 10.1080/07418820600985362
- Winkel, F. W. (1986). Reducing fear of crime through police visibility: A Field Experiment. *Criminal Justice Policy Review*, *1*(4), 381–398. doi: 10.1177/088740348600100402
- Woodward, V. H., Pelletier, D., Giffin, O. H. III, & Harrington, J. R. (2016). University policies and programs for crime prevention and awareness: An examination of online reports and resources. *Criminal Justice Review*, *41*(2), 140–158. doi: 10.1177/0734016816634783
- Woolnough, A. D. (2009). Fear of crime on campus: Gender differences in use of self-protective behaviours at an urban university. *Security Journal*, *22*(1), 40–55. doi: 10.1057/sj.2008.11
- Yuan, Y., & McNeeley, S. (2015). Reactions to crime: A multilevel analysis of fear of crime and defensive and participatory behavior. *Journal of Crime & Justice*. Advance online publication. doi: 10.1080/0735648X.2015.1054297

### About the Authors

**Julie Hibdon** is an Assistant Professor in the Department of Criminology and Criminal Justice at Southern Illinois University Carbondale. Her research interests include crime and place, environmental criminology, fear of crime, crime prevention and policing.

**Joseph A. Schafer** is a Professor in the Department of Criminology & Criminal Justice at Southern Illinois University Carbondale. His research examines police leadership, organizational change and innovation, citizen attitudes toward crime and police, and emerging and future issues in policing.

**Charern Lee** is a doctoral candidate in the Department of Criminology & Criminal Justice at Southern Illinois University Carbondale. His research interests include delinquency and criminological theory testing.

**Monica Summers** is a doctoral candidate in the Department of Criminology & Criminal Justice at Southern Illinois University Carbondale. She focuses on gender studies, particularly as they relate to corrections and victimization.

### Appendix: OLS Results, Defensive with Weapon and Defensive over Property (N=490)

Adjusted R <sup>2</sup>	Defensive - Weapon		Defensive - Property	
	B	SE	B	SE
	.052		.027	
Female	.244***	.075	-.039	.072
White	.113	.077	.136	.073
Residential Tenure (3+ sem.)	-.122	.115	-.107	.109
First-Year	-.066	.104	.016	.099
Prior Victimization	.003	.037	-.037	.035
Public Safety	-.086	.094	.039	.089
Perception of Safety	-.037	.020	-.051**	.019
Fear at Night	.003	.002	.003*	.002
Victim Blame	-.001	.024	.014	.022
Constant	.267	.289	.367	.274

### ENDNOTES

- <sup>1</sup> Wilcox, May, & Roberts (2006) examined parallel issues of weapon carrying by public school students in Kentucky. These authors found fear and victimization did not predict weapon carrying when analyses controlled for relevant predictors, including a history of delinquent behavior. Additional insights on adolescent weapon carrying are found in Melde, Esbensen, & Taylor (2009), who noted weapon carrying was most common among youth who expressed fear and those who had a history of involvement in offending behavior; in the case of the latter, weapon carrying seemed more a utilitarian consideration.
- <sup>2</sup> Some forms of protective behavior have been associated with greater risk taking; that is, students indicating a greater likelihood of going into places they perceive to be more dangerous when, for example, carrying a cell phone (Nasar, Hecht, & Wener, 2007).
- <sup>3</sup> Once controlling for fear of rape, fear of other crimes declined to the point there was no sex difference between fear among men and women (Dobbs et al., 2009)
- <sup>4</sup> The university afforded students the option to reside with students sharing select similar interests, primarily based on the student's chosen major (e.g., engineering).
- <sup>5</sup> We chose to combine the responses which reported a race other than White. This follows the convention set forth by prior literature examining avoidance and protective actions. Second, given the lower number of responses to the many of the original response options, we chose to collapse the measure into a dichotomous variable. Specifically, the sample consisted of White (58.8%), African-American/Black (24.5%), Hispanic/Latino/Latina (5.3%), Asian/Asian-American (1.8%), Native-American/Alaska-Native (0.6%), Multi-racial (6.3%), and Other (2.7%).
- <sup>6</sup> Respondents were asked a single item inquiring if a close friend had experienced any of the five forms of victimization while in university housing over the past academic year.
- <sup>7</sup> The question response included the option "don't know." All "don't know" responses (N=46) were coded as 0, labeling them as dissatisfied.
- <sup>8</sup> Principal component factor analysis with orthogonal rotation was used to inform the data reduction. All factor loadings were greater than or equal to 0.45. The Eigenvalue for two of the three factors was above the conventional threshold of 1.0. One factor, avoidance, was slightly below at 0.91 but was included because it accounts for more than 24% of the variance.
- <sup>9</sup> As one example, students might learn that a sexual assault has occurred on campus, with no further information. Institutions generally perceive that they have a mandate to report such crimes and are understandably reluctant to share further information in order to protect victims and the integrity of prosecution efforts. Female students

---

might receive this notification and fear that there is a risk of being assaulted by a stranger while walking on campus at night. This information could lead to avoidance (e.g., not enrolling in night classes) or weapon carrying (e.g., acquiring pepper spray). If the original crime was an acquaintance rape, the protective actions of other female students could be misdirected and create a false sense of security in circumstances where vigilance might actually insulate those students from real risk (i.e., accepting a drink from someone at a party).