Are Institutions of Higher Learning Safe? A Descriptive Study of Campus Safety Issues and Self-Reported Campus Victimization among Male and Female College Students

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This descriptive study provides an empirical examination of issues related to campus safety including college students' perceptions of fear and perceived risk of crime as reported by a convenience sample of 564 undergraduate students at a large southeastern university. Students also reported their use of constrained behavior in an attempt to reduce their likelihood of victimization. Prevalence estimates of personal, property, and sexual assault victimizations are reported. Results indicated that there were significant gender differences in perceptions of fear, safety, perceived risk, and involvement in constrained behavior. Significant gender differences were also found in self-reported sexual assault and property crime victimization. Directions for risk reduction and prevention strategies for campus victimization are discussed along with concluding remarks about the importance of these campus-related issues to educators and to the campus community as a whole.

Introduction

"The college campus is no longer perceived as a place with a special, erudite atmosphere protected from worldly happenings" (Morriss 1993:5). As the media focused its attention on several violent crimes that occurred on campuses across the country during the 1980s, researchers took interest in studying campus crime. Similarly, legislators showed their concern about campus safety issues by passing the Crime Awareness and Campus Security Act of 1990. Prior to this Act, campus crime incident reports and statistics were protected as educational records. This legislation made colleges and universities responsible for publicly

reporting their annual prevalence and incidence of crime. More specifically, this Act provided federal funds to postsecondary institutions to assist in the required reporting of incidences of personal and property crime, as well as arrests for certain illegal activities such as liquor law violations, drug use/abuse violations, and weapon possessions (Fisher 1995).

The Act was originally designed to educate students, parents, staff, and faculty about the incidence of crime on campus and also to provide the first step in addressing crime problems on college campuses. Similar to many policies in higher education, however, this congressional effort has not been insulated from criticism, including arguments related to the types of crimes that are required to be reported, the entity responsible for reporting the crimes, the mechanisms by which crimes are reported, and the dissemination of campus crime statistics to the public (Fisher 1995). Notwithstanding these criticisms, the Act led to greater awareness of campus crime problems, the development and implementation of campus crime prevention programs, and institutional resource allocation, all of which have had an impact on the daily behaviors of students, faculty, and administrators alike.

Campus crime is indeed a serious issue of concern for current university students, parents of prospective students, campus law enforcement personnel, and the campus community as a whole (including faculty and staff). High campus crime rates may discourage prospective students from attending certain universities, and may similarly dissuade parents from paying tuition to send their children to institutions that could be regarded as unsafe (Fisher and Nasar 1992). Campus crime can also be seen as an issue that destabilizes the core principles of higher education itself, and according to Tseng, Duane, and Hadipriono (2004:23), "criminal activities on campus not only undermine the quality of the learning environment, but also reduce the positive activities of people associated with the campus."

Literature Review

Campus Victimization

Fox and Hellman (1985) and McPheters (1978) were among the first scholars to empirically examine campus crime issues and explore factors associated with its occurrence. Relying on data from 75 universities, McPheters (1978) found that the proportion of students living in dormitories and the proximity of the campus to urban areas with high unemployment rates were strong predictors of campus crime. Similarly, Fox and Hellman (1985) expanded the scope of their study to include 200 universities, and found that campus size and scholastic quality were also significantly related to higher rates of campus crime.

More recent campus crime research has focused on other campus characteristics that were not examined previously. Morriss (1993) found significant relationships between the intensity of deterrents, level of public transportation,

and campus crime rates. Consistent with the two aforementioned studies (Fox and Hellman 1985; McPheters 1978), location (i.e., urban versus rural) was not found to be a significant predictor of campus crime rates. Morriss suggested that the lack of an observed relationship between campus location and crime rates provides an indication that "no higher education institution can consider itself immune to crime" (1993:20).

Other more recent research has shown that the campus environment may actually be safer than that of the local community where it resides. Volkwein, Szelest, and Lizotte (1995) reported that although the national violent crime rates (particularly juvenile crime) were increasing in the early 1990s, violent crime rates on college and university campuses were in fact *decreasing*. This trend was true for property crime rates as well, where Volkwein et al. (1995) found that campus property crime rates began decreasing after 1985, while property crime rates were increasing nationally. Further, most scholars agree that violent crime comprises a somewhat small proportion of crime that occurs on college and university campuses. Sloan (1994) reported that 64 percent of the crimes on campus consisted of burglaries and theft, whereas about 10 percent of crime was violent in nature. It is important to note, however, that these estimates reflect crime reported to law enforcement, and it is suspected that crime occurring on college campuses is reported to law enforcement at even lower rates than crime reported in the general population (Sloan 1994).

In contrast to the aforementioned research, Sloan, Lanier, and Beer's (2000) comprehensive review of the campus crime literature points out that rates of violence against women on campus may actually be greater than off-campus rates. They also note that alcohol and drugs are connected to many of the violent and sex-related crimes that occur on campus. Additionally, Sloan et al. (2000:7) argue that students whose lifestyles are characterized by "partying" experience an increased risk of victimization, which points to the idea that there are "hot spots" and "hot times" for campus crime to occur.

Perceptions of Safety and Fear of Crime on Campus

The increase in scholarly attention to campus crime issues has included a focus on perceptions of safety and fear of crime among members of the campus community. Brantingham and Brantingham (1994:162) emphasize that people utilize the campus throughout various times during the day and night, and they argue that "nighttime activity appears to convert natural fear into fear of crime." They also suggest that students and faculty may face a dual victimization risk, being that they are vulnerable to crime committed by outsiders as well as insiders within the campus community.

Fear of crime research that has accumulated over the past several decades indicates that fear of crime is a complicated phenomenon, one that is influenced by a host of variables including personal factors (e.g., age, race, and sex)

and contextual factors (e.g., neighborhood or campus characteristics, location of residence, and time of day) (Warr 1990). Studies focusing on public perceptions of crime have suggested that the public actually has a fairly accurate impression of official crime rates, but that people tend to overestimate the incidence of serious but relatively infrequent crime, and underestimate the occurrence of less serious but more prevalent crime (Warr 1980).

A variety of other personal and contextual factors ranging from vulnerability to the adequacy of lighting on campus have been found to influence fear of crime in college samples (Day 1994). Fisher and Nasar (1992) found that fear of crime on campus stems from fear in relation to low prospect, lack of escape, and high refuge, meaning that students on campus will be more fearful of crime when there is low prospect (such as lack of a clear open view of the area), lack of escape from a potential offender, and a high possibility of refuge for the offender to hide. Tseng et al. (2004:21) examined perceptions of safety in campus parking garages and note that it is the "dread of violent crime in parking garages that instills fear in those who must routinely use public parking garages, especially late at night."

McCreedy and Dennis (1996) found that approximately 86 percent of students surveyed reported a high level of concern about being a victim of violence. More specifically, among victims of "other sexual offenses" (i.e., indecent exposure or inappropriate grabbing of body parts), 95 percent reported a very high fear of crime. According to Sloan et al.'s (2000) review of the extant literature, students, faculty, and other members of the campus community tend to be more fearful of crime at night than during the day. They suggested that there are differences in fear across the groups comprising the campus community and that their reported levels of fear are primarily a function of age, gender, race, and prior victimization experiences. Furthermore, they also provide evidence indicating that women have a greater fear of crime than men, regardless of their member status in the campus community (whether they were students, faculty, or staff) (Sloan et al. 2000).

Several other studies have also found evidence supporting Sloan et al.'s (2000) findings regarding gender differences in perceptions of crime and fear of crime on campus. Turner and Torres (2006:26) found that many women were afraid of crime simply because they were women and they felt that "being a woman meant thinking about personal safety on a daily basis." Brantingham and Brantingham (1994) found that males were more likely than females to think that the campus was safe after dark. Eighty-eight percent of the males surveyed perceived the campus to be safe after dark, while only 48 percent of the females perceived the campus to be safe at night. Brantingham and Brantingham's (1994) results also suggested that gender predicted higher levels of fear on campus after dark. Fisher and Sloan (2003) found that women, compared to men, were over twice as fearful of face-to-face victimization at night. According to McCreedy and Dennis (1996:77), "these high figures [of fear of crime] for victims of personal crime, suggest a perception—real or imagined, that the campus is not a safe environment."

Perceived Risk of Crime

Initial research on fear of crime was problematic in that some studies did not distinguish between perceived risk, which is a cognitive assessment of the risk of victimization, and fear, which is an emotional reaction to risk or other factors related to crime. Consequently, researchers in the field now generally recognize the importance of including perceived risk as a predictor and differentiating between types of crime when asking respondents about fear. Research indicates that objective risk and fear often do not coincide, yet universities often take special precautions to protect students (e.g., have information pamphlets, escorts or call boxes on campus, etc.), which may make students more aware of their risk of victimization than they otherwise might have been (Day 1994; Fisher, Sloan, Cullen, and Lu 1997). Fisher and Sloan (2003) found that women felt significantly more at risk for all measured crime than did men, and for rape, females felt almost twice as likely to be victimized. Fisher and Nasar (1992) found that many students were afraid of crime on campus and that women are especially afraid at night. Students worried both about crime on campus and in the surrounding areas. Fisher, Sloan, and Wilkins (1995) found that female students felt much more at risk of victimization than males did. Results also indicated that the more nights students were on campus, the less at risk and afraid they felt. These authors concluded that those who took classes or worked at night may have been more comfortable due to their increasing familiarity with the area. In addition, Fisher et al. (1995) argued that women may feel more at risk at night and therefore may be more afraid than men.

Constrained Behavior

Extending from the growing research evidence of the occurrence of campus crime and the relatively high levels of fear of crime on campus, scholars have started to identify certain behavioral changes or actions that individuals purposefully make in hopes of reducing their victimization risk. These changes are commonly referred to as *constrained behavior*. Research has shown that fear of crime and constrained behavior are strongly related, and specifically that fear of crime is a strong predictor of constrained behavior (Hickman and Meuhlenhard 1997). Some examples of constrained behavior engaged in by students include carrying keys in a defensive manner or asking someone to walk with them as an escort for safety reasons (Fisher and Sloan 2003).

According to the majority of prior studies (Currie 1994; Griffith, Hueston, Wilson, Moyers and Hart 2004; Klodawsky and Lundy 1994; McCreedy and Dennis 1996; Tewksbury and Mustaine 2003; Turner and Torres 2006), students and other members of the campus community engage in constraining behavior in their daily lives in response to their fear of crime. McCreedy and Dennis (1996) reported that 27 percent of college students sampled said that they would avoid night classes because of fear of crime. More specifically, 36 percent of students

who were victims of rape or attempted rape said they would avoid nighttime classes because of their fear. Among students who were victims of "other sexual offenses," 43 percent said that their fear causes them to avoid nighttime classes. In a similar study, Griffith et al. (2004) found that only eight percent of male and female students surveyed reported that they actually changed their daily activities because of fear of crime.

Previous studies have also shown gender differences among the use of constrained behavior. Turner and Torres (2006) suggested that the inability for women to feel safe in their residence halls is an example of how women do not have equal access to services on college campuses. Currie (1994) found that many women would curtail daily activities because of fear of crime on campus and a significant percentage of the female students reported avoiding certain campus buildings including libraries, parking lots, and the student union. Currie (1994) also argued that the practice of participating in constrained behavior prevents female students from being fully involved in activities offered to students on campuses. In a similar study of college women, Klodawsky and Lundy (1994) found that nearly two thirds of the female student body restricted their movements due to fear of crime. Many female students said that they had to adopt precautionary safety strategies in order to simply attend the university as students, and these strategies in turn restricted their participation in scholarly activities on campus.

Other precautionary measures, such as carrying a gun or mace, have also been a form of constrained behavior engaged in by students to reduce their victimization risk. Tewksbury and Mustaine (2003) found that 22 percent of college students sampled reported carrying mace for self-protection and 17 percent of the sample reported carrying guns. Although, Tewksbury and Mustaine (2003:316) argue that feeling fearful and vulnerable appears to be less important in predicting the use of precautionary measures, such as carrying a gun or mace, than one's actual level of vulnerability. Tewksbury and Mustaine (2003) also linked the use of safety measures to drug and alcohol use and found that students who used crack, but not other types of drugs or alcohol, were more likely to use self-protective measures than students who did not use crack. Their research also showed that students who used alcohol and drugs (other than crack) were just as likely to perceive a need for precautions to avoid potential victimization as students who did not use alcohol and drugs.

Methods

Data and Sample

In the current study, surveys were administered to a convenience sample of 564 undergraduate students enrolled in criminology courses in a large southeastern university during the Fall 2005 semester. The survey instrument was administered to students at the beginning or end of class meetings by the

research team. Researchers explained the purpose of the survey to the students and emphasized that participation was anonymous and completely voluntary. The survey comprised 97 questions regarding the students' demographic and socioeconomic characteristics, personality indicators, and questions relating to the students' fear and perceived risk of crime. The survey also contained questions that asked about involvement in certain criminal activities and/or deviant behaviors, along with questions asking about campus-specific crime victimization experiences.

The descriptive statistics for the demographic characteristics of the sample and other measures of campus-related issues (i.e., fear of crime, safety, perceived risk, and constrained behavior) are presented in Table 1. The sample of undergraduate students was predominantly White (72 percent), and female students made up a slight majority of the sample (56 percent); however, there was still a fairly equivalent gender composition to allow for the investigation of gender differences. The average age of the students was 20.41 years ($SD = 2.47$), and the range was 16–33 years. Data were not missing for the demographic

Table 1   Descriptive statistics of college student sample ($n = 564$)

Variables	M	SD	N	%
Demographic measures				
Gender				
Male			251	44.5
Female			313	55.5
Race				
White			403	71.5
Non-White			161	28.5
Age				
20 and under			314	55.7
21 and over			250	44.3
Campus-related issues				
Fear of crime	2.58	0.93	562	
Safety	3.87	0.77	564	
Perceived risk of crime	3.39	1.34	562	
Constrained behavior	1.97	0.71	563	
Victimization prevalence				
Direct victimization				
Overall			121	21.5
Personal			23	4.1
Sexual assault			14	2.5
Property			98	17.4
Indirect victimization				
Overall			259	45.9
Person			128	22.7
Property			232	41.1

variables. In addition, there were very few missing data (less than 1 percent) for the measures used to assess the prevalence of self-reported campus victimization and for items used to construct the composite measures discussed below.

Measures

Campus Victimization

Following the guidance of Fisher and Sloan (2003), a series of measures were used to assess the overall prevalence of self-reported campus victimization. Prevalence measures were dummy coded responses where (1) indicated that at least one campus victimization was reported and (0) indicated that no campus victimization was reported, since enrolling at the university for the following crimes: robbery, sexual assault, assault, battery, burglary, theft, and fraud. Campus victimization was also disaggregated into a personal victimization measure where (1) indicated that the student reported being either robbed, assaulted, or battered on campus at least once, and (0) represented no reported personal campus victimizations. The property victimization measure was created with the same method as the personal victimization measure and included burglary, theft, and fraud. The sexual assault measure was a dummy coded response to whether the student reported experiencing at least one sexual assault victimization since enrolling at the university.

Remaining consistent with Fisher and Sloan (2003), measures of indirect victimization were included by asking students if they knew anyone who had been a victim of crime on campus (personal or property) within the previous year. These measures were dummy coded as (1) if the student reported knowing a victim and (0) if the student did not report knowing a victim. In addition, an overall indirect measure of victimization was included by combining personal and property indirect victimization and was coded as (1) if the student reported having known a victim of a personal or property campus crime in the past year and (0) if the student reported that they did not know a victim of personal or property campus crime during the past year.

Fear of Crime

Earlier research found two important distinctions that should be empirically noted when examining fear of crime among college students. First, college students are more fearful of crime during the night compared to levels of fear during the day (Fisher and Nasar 1995; Walsh et al. 2001). Second, research points to the need to measure crime-specific fear, especially fear of sexual victimization (see Ferraro 1995, 1996). The fear of crime measure in this study was a three-item additive scale of student responses to the following Likert-type statements ranging from (1) strongly disagree to (5) strongly agree: "I am

generally more afraid of being a victim of crime during the night;" "I am afraid of having my property stolen;" and "I am afraid of being raped or sexually assaulted." The Cronbach's alpha value was .69, and higher scale scores indicated a greater fear of crime on campus.

Safety

While some prior research has shown that a large proportion of students may report feeling safe in general (McConnell 1997), other research has shown that many students also report significant levels of fear (Fisher and Nasar 1992). Therefore, scholars suggest that it is important to distinguish between domain-specific fear of victimization or whether the potential incident location is driving the fear (see Fisher and Sloan 2003). Therefore, students' perceptions of the relative safety of the campus environment was measured with three-items that had Likert-type responses to statements such as: "I feel safe at this University;" "I feel the University has sufficient safety measures to protect students;" and "I feel safe at night on campus" where all responses ranged from (1) strongly disagree to (5) strongly agree. The Cronbach's alpha value was .73, and higher scale scores indicated stronger perceptions of a safe campus environment.

Perceived Risk of Crime

To maintain consistency with Ferraro's (1995, 1996) and Fisher and Sloan's (2003) measurement of perceived risk of crime, the perceived risk measure comprised responses to eight items that asked respondents to gauge the likelihood that they would be victims of the following crimes on campus, ranging from (1) being the least likely and (10) being the most likely for: "Being approached by a beggar or panhandler;" "Being sexually assaulted;" "Being assaulted by someone with a weapon;" "Being mugged;" "Having someone break into your place of residence while you are there;" "Having someone break into your place of residence while you are *not* there;" "Having your car stolen;" and "Having your property stolen." The Cronbach's alpha value for perceived risk of crime was .83, and higher scale scores indicated a higher perceived victimization risk.

Constrained Behavior

Similar to measures used in prior research to investigate students' use of constrained behavior (Ferraro 1995, 1996; Fisher and Sloan 2003; Tewksbury and Mustaine 2003), a series of questions were included to represent whether or not students engaged in a variety of constrained behavior with the intent to reduce their risk of victimization. Using Likert-type response options ranging from (1)

strongly disagree to (5) strongly agree, students were asked to respond to the following statements: "I try to avoid going out alone at night because of crime;" "Within the past year I have limited or changed my activities because of crime;" "I always keep a weapon in my place of residence for protection;" "When I go out at night, I usually carry pepper spray, mace, or other weapons;" and "I avoid taking nighttime classes because of being afraid of crime." The Cronbach's alpha value for this five-item measure was .72, and higher scale scores indicated a greater use of constrained behavior.

The analyses that follow begin with a description of the prevalence estimates of the self-reported direct campus victimization (i.e., overall, personal, sexual assault, and property) and indirect campus victimization (i.e., overall, personal, and property). Also reported are the summary statistics for measures used to represent campus-related issues, including: perceptions of fear, safety, risk, and the students' reported use of constrained behavior. These results are followed by a series of bivariate analyses, chi-square, and t tests that examine whether campus victimization rates and campus-related issues vary by gender.

Results

Prevalence of Campus Victimization

Approximately 22 percent of the respondents reported that they had been victims of at least one type of crime (i.e., robbery, sexual assault, assault, battery, theft, burglary, or fraud) since enrolling at the university. These victimizations occurred either on or near campus. These reports produced a campus victimization rate of a little more than 20 out of every 100 students being victimized on campus. Dividing the aggregate victimization rate into crime types provides a clearer picture with respect to the prevalence of *crime-specific* campus victimization. According to the self-reported campus sexual assault estimates, 2.5 per 100 students reported having been a victim of a sexual assault while on campus. Separate prevalence estimates of property versus personal victimization indicated that a greater proportion of students reported being victims of property crime (approximately 17 per 100) compared to personal crime (approximately 4 per 100). Thus, college students experienced property crime victimization approximately four times as often as personal crime victimization.

A comparison of these direct campus victimization estimates with the indirect campus victimization estimates indicates that campus victimization is much more widespread than the self-reported victimization figures of this sample specifically illustrate. The results showed that 46 percent of students reported having known someone who had been the victim of crime on campus within the previous year. More specifically, 41 percent of the sample reported having known a victim of a property crime, and 23 percent reported having known a

victim of a personal crime on campus within the previous year. Although the prevalence estimates reported here are slightly higher than those reported in previous research, overall these findings are consistent with prior research that has shown that approximately one-third of college students will be victimized on campus during their time of attendance (Fisher 1995; Fisher, Sloan, Cullen, and Lu 1998).

The findings in the current study indicate that while overall direct victimization was a relatively frequent event, sexual assault and personal victimization prevalence was low. These findings begged the question of whether the lower prevalence estimates of crimes that tend to illicit greater perceptions of fear or safety would produce lower levels of general fear and greater levels of perceived safety on campus. Also, since reported levels of direct victimization were rare, it is interesting to examine whether respondents also report lower levels of perceived risk and use of constrained behavior, since an individual's perceptions of risk and changes in their behavior tend to be responses to victimization experiences.

Campus-Related Issues

The fear of crime and perceived campus safety measures range from 1 (low perception of fear and safety) to 5 (high perception of fear and safety). The following results are found in Table 1. Overall, the average level of fear reported among these college students was 2.58, indicating that these students typically had moderate levels of fear of crime on campus. Similarly, the average score for the perceived safety scale was 3.87, which provided additional evidence that students perceived the campus to be a moderately safe environment. In comparison, students' average score on the perceived risk scale was 3.39 with a range of 1 (low perceived risk of victimization) to a high of 7.63 (high perceived risk of victimization). These results indicated that respondents had moderate perceptual levels of their likelihood of being victimized on campus.

In addition to perceptions of fear and safety, the current study assessed respondents' participation in constrained behavior for purposes of reducing their likelihood of victimization. With a range of 1 (little to no behavioral changes) to 5 (several behavioral changes), the average score for the constrained behavior scale was 1.97. This finding indicated that on average, students did not engage in many changes in behavior to reduce their risk of victimization.

Gender Differences in Campus Victimization and Campus-Related Issues

The final component of the analysis presented here was conducted in two phases. First, based on consistent findings from previous research about gender

differences in victimization (Gottfredson 1986; Hindelang 1976; Hindelang, Gottfredson, and Garofalo 1978; Laub 1990) and particularly with respect to campus victimization (Fisher 1995; Schreck 1999), this analysis relied on a series of chi-square tests to determine if gender was associated with campus victimization and, if so, whether differences were observed across all dimensions of victimization (i.e., direct, indirect, overall, personal, sexual assault, and property). The second part of the analysis focused on investigating whether or not gender differences were present for levels of fear, safety, perceived risk, and constrained behavior. These issues were addressed by examining the results of a sequence of *t* tests.

Table 2 presents the results of the chi-square analyses that examine the nature of the association between gender and campus victimization. Overall, once campus victimization rates were disaggregated by gender, it appeared that being male was significantly associated with campus victimization, meaning that males were more likely to have been victims of crimes on campus since enrolling in the university. While this finding is consistent with prior research on gender differences in victimization (see Schreck 1999), in order to ascertain whether aggregate campus victimization rates mask further gender differences in *crime-specific* campus victimization it was necessary to examine gender differences within personal, sexual assault, and property campus victimization.

Consistent with expectations, being male was associated not only with overall campus victimization, but also with personal and property campus victimization, which shows that a significantly greater proportion of males report both types of campus victimization compared to females. In contrast, more than twice as many females than males reported being victims of sexual assault since enrolling at the university. The prevalence of sexual assault, however, was not large enough to detect significant differences across gender. With regard to the comparable measures of indirect campus victimization, almost equivalent proportions of male and female students reported having known victims of personal and property campus crime in the previous year.

Higher victimization rates among male students may reasonably suggest that males would be more afraid of crime and that they perceive themselves to be at a greater risk for crime compared to females. It also seems plausible that male students would report feeling that the campus does not provide a safe environment and show greater involvement in the use of constrained behavior.

As logical as these statements seem, prior research has indicated that gender (i.e., female) is the most robust predictor of an elevated fear of victimization (see Warr 2000). Fisher (1995) found that college women were more fearful of campus victimization and were more likely to perceive themselves as having a greater potential for becoming a victim while on campus compared to college men. Walsh et al.'s (2001) results also indicated that college women were more fearful of campus victimization, with more than twice the amount of women than men reporting being fearful. Ferraro (1995,1996) has also suggested that women are more inclined to engage in constrained behavior to reduce their likelihood of victimization because of their overall fear of rape (see Lane and

Table 2 Gender Differences in Self-Reported Campus Victimization

Campus Victimization	Overall (Direct)		Personal (Direct)		Sexual Assault (Direct)		Property (Direct)		Overall (Indirect)		Personal (Indirect)		Property (Indirect)	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
n	62	59	15	8	4	10	53	45	112	147	56	72	104	128
%	24.7	18.8	6.0	2.6	1.6	3.2	21.1	14.4	44.6	47.1	22.3	23.1	41.4	41.0
χ^2	2.83[+]		4.17*		1.48		4.06*		0.35		0.05		0.01	

[+]$p < .10$
*$p < .05$

Table 3 Gender differences in perceptions of fear, safety, perceived risk, and use of constrained behavior on campus

Variables	Fear		Safety		Perceived risk		Constrained behavior	
	Male	Female	Male	Female	Male	Female	Male	Female
M	2.08	2.99	4.12	3.66	3.19	3.56	1.76	2.14
SD	.76	.85	.69	.77	1.21	1.41	.65	.71
t	13.33***		−7.43***		3.39***		6.68***	

***$p < .001$.

Meeker 2003, for a review of the "shadow hypothesis"). Similarly, the findings in the current study indicate that, in fact, females were significantly more afraid of crime, perceived the campus environment to be unsafe, perceived their risk of campus victimization to be higher, and engaged in constrained behavior at higher rates to reduce their victimization risk compared to males (see Table 3). These contrasting findings insofar as the disconnect between students' actual direct victimization and their perceptions are indeed of vital importance to researchers, students, and the campus community as a whole, and it is to this issue that our attention now turns.

Discussion and Conclusion

Findings from previous research and those reported in the current study suggest that more effort from the campus community (i.e., university police, students, faculty, administrators) is necessary to raise awareness and promote prevention of campus victimization. Campuses could also benefit from structural changes (i.e., lighting, student escort services, centrally located walkways, etc.) to reduce the likelihood of victimization on campus, since some research indicates that structural changes can be preventative (Turner and Torres 2006). For example, Tseng et al. (2004) found that illumination is the most significant factor that affects perceptions of safety and the incidence of crimes in campus parking garages. They also found access control (whether the garage is easily accessible to outsiders) to have a significant influence on campus parking garage safety. Fisher and Nasar (1992) also stress the importance of structural changes in order to increase campus safety. They argue that compared to personnel and students, the physical arrangements of buildings, parking garages, etc., tend to be relatively permanent; therefore, although the campus population is transient, any physical or structural changes that can be made to improve public safety are likely to have long-term effects.

Efforts to make campuses safer must include a focus on both structural and social changes. Day (1994) points out that the responses of many colleges and universities toward sexual assault on campus often fail to help women. The

solutions of some universities tend to be based on gendered social norms that reinforce patriarchal standards of behavior and fail to get at the root causes of the problem (Day 1994). Also, some institutions do not have direct service programs that address the needs of women who have already been sexually assaulted. This is of particular concern because women who have a history of sexual assault are more at risk of being victimized again (Gidycz, Hanson, and Layman 1995; Milhausen, McBride, and Jun 2006). Schools of higher education must begin using educational programs to raise awareness and safety among college and university students (Turner and Torres 2006). Although educational programs will not eliminate crime, they could be utilized for prevention purposes (McCreedy and Dennis 1996). For example, McCreedy and Dennis (1996) propose the use of emergency phones and security lighting campus-wide as a preventive measure to promote safety on campus. They also stress that administrative policies and procedures aimed at crime prevention are perhaps the best solution for reducing the number of sexual and personal crimes on campus.

Fisher (1995) describes ways in which different universities across the country have implemented security measures. She says that most schools have implemented student and employee educational procedures and programs, victim services, changes in law enforcement styles, and changes in the physical environment of the campuses. Numerous campuses have installed or updated blue-light emergency telephones and alarms to improve safety among students (Fisher 1995). Many universities have made it more difficult for intruders to enter residential halls by installing alarms and key-card entry systems. Some campuses also offer escort services for students at nighttime.

Specifically regarding sexual assault, some universities provide information about what constitutes sexual assault, what to do when sexual assault occurs, and types of victim services offered. Other examples of crime prevention/awareness programs include courses on how crimes are handled by both the university system and the criminal justice system, so that victims know what to expect if they decide to report the crime to the authorities. Crime prevention programs may also offer information about alcohol and substance abuse laws and campus regulations. In addition, some universities offer transportation services to increase safety among students. One example is the Student Nighttime Auxiliary Patrol (SNAP), a door-to-door transportation service that students can take during the late nighttime hours. SNAP employees are equipped with a police radio and picture ID, and their communications are monitored by the University's police department. Campus police departments typically provide a list of safety tips for students such as:

> Be aware of your surroundings and of the behavior of the people around you; follow your intuition; and trust your feelings about a situation. Always keep an eye on your purse, backpack, briefcase, laptop computer, and other electronics; and do not take a break and leave your belongings unattended. Practice the buddy system; walk with a friend whenever possible; let someone know where you are going, when you plan to return, what routes you will take, and how you can be reached.

Similarly, some university police departments report crime statistics, contact information for reporting emergencies, information about the consequences of victimization, and provide literature discussing various alcohol and personal safety prevention programs. Nevertheless, there is still much to know about the impact of different security measures on campus crime rates or fear of crime (Fisher 1995). Brantingham and Brantingham (1994) suggest using surveys and official reports in order to evaluate the effectiveness of programs implemented by colleges and universities to make their campuses safer.

Overall, the findings from this study suggest that aggregate and offense-specific rates of campus victimization are well above the zero threshold and vary by gender, thus illustrating that college campuses are not areas insulated from crime as once believed. Second, the finding of a disconnect between actual victimization experiences and corresponding levels of perceived fear, safety, risk, and constrained behavior highlights the importance of educating students on their group-specific (i.e., gender) rates of victimization. Males are more likely to be victimized for both overall and personal and property crime and more females reported being victims of sexual assault, yet males reported feeling safer, having lower levels of fear, a lower perceived likelihood of being a victim of crime, and using constrained behavior less often than females. Third, the findings additionally exposed the rather high indirect victimization rates; therefore, it appears that direct campus victimization estimates from self-reports of victimization may grossly underestimate the "true" rates of campus crime.

It is important to note that these findings are based on results from a convenience sample of undergraduate students from a large southeastern university. These findings therefore may not necessarily generalize to other college campuses; however, the results suggest that campus victimization and campus-related issues are something that cannot be ignored. It is the responsibility of educators, campus administrators, campus law enforcement, and the campus community as a whole to provide education, promote awareness of these issues, and develop and implement effective measures to address the apparent sources (personal and contextual) of campus victimization and fear of crime. What better arena for exposing and discussing these issues than in the classroom, especially in classrooms that already deal with these topical areas such as in criminology and criminal justice courses? Indeed, the research evidence appears to be mounting in the direction indicating that institutions of higher learning are not as safe as once perceived; therefore, there is a need for a concerted effort from the campus community to help reduce the collective levels of campus victimization and also to increase perceptions of safety and use of constrained behavior in an effort to reduce individual susceptibility to campus crime.

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