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SELF-PROTECTIVE BEHAVIORS AND CAMPUS THREAT ASSESSMENT

By

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A DISSERTATION

Presented to the Faculty of the
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SELF-PROTECTIVE BEHAVIORS AND CAMPUS THREAT ASSESSMENT

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University of Nebraska, 2015

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Extreme acts of targeted violence on postsecondary campuses have prompted many institutions to commit more resources to increasing safety while maintaining an open and creative environment. Investigations after incidents of targeted violence on campuses have identified preincident behaviors, or “red flags,” that were observed before the perpetrator engaged in violence. Threat assessment is a proactive approach to preventing acts of targeted violence that was initially developed by members of the United States Secret Service (USSS), and has since expanded into the context of postsecondary campuses. Research has shown some individuals may engage in self-protective behaviors in order to reduce their risk for personal victimization. The current study utilizing a survey in a sample of undergraduate students examined self-protective behaviors in the context of campus threat assessment. Consistent with prior research, results suggest women report lower feelings of safety and engage in more self-protective behaviors. Approximately one-third of the sample reported observing preincident behaviors, though only 21.5% reported these behaviors to campus police. The most commonly cited reason for not reporting was that a dangerous situation did not appear immediate. Conversely, almost half of the individuals who observed preincident behaviors reported they consulted a friend about the incident.

DEDICATION

To the men, women, and children who have lost their lives from acts of targeted violence.

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CHAPTER 1: INTRODUCTION

The tragedies of the Virginia Tech shootings in 2006 and the Northern Illinois University shootings in 2008 sparked public outcry over increasing incidents of targeted violence within college campuses. Perpetrators of these terrible acts of violence are often thought to be disgruntled students, but educational settings are also vulnerable to attacks from employees, individuals who interact with the campus in some other capacity, and individuals with no apparent relationship with the institution (Scalora, Simons, & VanSlyke, 2010). This increasing terror concern became even more horrific when young children were injured and killed while at primary schools, with the 2007 shooting at a Pennsylvania Amish schoolhouse, and the more recent shootings at Sandy Hook Elementary in Connecticut in 2012.

In response to such tragic violent acts, researchers, school administrators, and law enforcement agencies have sought to understand more about targeted violence occurring on school and university campuses. Additionally, victimized academic institutions have faced scrutiny from the public and media after violent incidents. After the shootings at Virginia Tech in 2006, more details were uncovered about the shooter's anger, experience with firearms, and mental instability. In hindsight, people asked how the university could ignore this many red flags. In some instances, institutions may face lawsuits holding them liable and claiming they should have been able to prevent the attacks (Sokolow, Lewis, Keller, & Daly, 2008). Indeed, the law has held that post-secondary institutions have a duty to provide reasonable security and protection to students (Fisher, 1995).

Public misperceptions about crime are not limited to school violence, and reflect a general, though incorrect, belief that violent crime is dramatically increasing (Roberts & Stalans, 2000). Although rates of school and campus violence are still relatively low, expansive media coverage has generated doubt and uncertainty about the safety of educational settings (Fox & Savage, 2009; Hart & Miethe, 2011; Sloan & Fisher, 2011; U.S. Secret Service [USSS] & U.S. Department of Education [USED], 2002). Muschert and Carr (2006) suggest that in earlier incidents, media coverage focused on the impact on the local community, but that over time this has moved more to framing these events in terms of their impact more broadly on society. Of concern, media reports often highlight the sensational and dramatic aspects of campus and school violence may skew both the public's and the education systems' understanding of the issue (Muschert, 2007). Burns and Crawford (2000) suggest school violence has become a "moral panic," in which the heightened attention on the issue has led to widespread fear of the issue and disproportionate responses. Moreover, knee-jerk policy reactions from administrators have displayed an incomplete understanding of the issue, and could be ineffective in preventing acts of violence (Fox & Savage, 2009).

There are a number of educational institutions that have implemented what are known as "zero-tolerance" policies in order to take a firm stand against actions that indicate a potential threat to the safety of others. Many zero-tolerance policies refer specifically to bringing weapons onto school property (Mongan & Walker, 2012). In general, schools form these policies by outlining unacceptable conduct and the resulting punishment, such as expulsion, without flexibility or a consideration of the context or circumstances (Rice, 2009).

Although the aim of such policies is to reduce violence, the results have often incited public debate over an apparent lack of “common sense” that are inherent in the policies, particularly those proclaiming “zero tolerance.” In one notable case, a third-grade boy in Spokane, Washington was suspended for having miniature plastic toy guns that were for G.I. Joe action figures. The school’s zero-tolerance policy was overarching, and did not indicate what types or sizes of weapons were specifically banned (Leaming, 2004).

Scalora and colleagues (2010) assert that flexibility is key in an academic institution’s development and implementation of safety strategies. They caution “rigid policies” (e.g., zero-tolerance) do not necessarily promote secure environments and may contribute to outlandish applications of discipline that enrage and alienate the general campus populous” (Scalora et al., 2010, p. 5). Further, they posit that an unintended consequence of such policies may be bystanders’ hesitancy to report concerns about others to authorities in order to avoid the individual suffering harsh consequences as a result (Scalora et al., 2010).

After the Columbine High School shooting in 1999, the U.S. Department of Education began a partnership with the U.S. Secret Service to learn more about what prompts attackers to engage in school violence. This partnership, along with the involvement of other government agencies, resulted in the *Safe School Initiative*, a study that aimed at informing schools about targeted school violence, offering strategies for identifying warning signs of potential attackers. These findings could then aid schools in developing or adapting policies to most effectively prevent violence in schools (USSS & USED, 2002).

It is important to note that the postsecondary campus environment differs significantly from that of K-12 schools (Drysdale, Modzeleski, & Simons, 2010). For one, the proximity of students and faculty/staff is much different between a K-12 school and postsecondary institution. On postsecondary campuses, students likely have few regular interactions with educators outside of class, and spend less time under direct supervision of educators or administrators (Drysdale et al., 2010). Although research into school violence can provide useful insights and information, threat assessment and management on university campuses must also be studied separately in order to more accurately predict and prevent targeted violence in post-secondary settings (Drysdale et al., 2010). Incidents of violence in all settings should be examined so that the most appropriate and effective policies can be developed and put in place in order to increase safety and prevent future acts of violence (Baker & Boland, 2011).

Campus safety and threat assessment literature have highlighted a range of safety issues that impact campuses uniquely. Campus threat assessment principles center on taking action on observed warning signs for the prevention of targeted violence, and it is hoped that this paper will shed light onto the barriers and potential solutions for increasing reporting of concerning behavior on campuses.

Overview of Targeted Violence on Campus

One of the reasons university campuses may be particularly susceptible to targeted violence is due to the uniqueness of the setting. In general, campuses have open and penetrable physical environments where individuals move freely from both indoor and outdoor places (Rasmussen & Johnson, 2008; Scalora et al., 2010; Sulkowski & Lazarus, 2011). They may be spread over a large area and composed of many buildings,

compared to a much smaller location in K-12 schools, which are typically single buildings (Drysdale et al., 2010). In addition, campus settings have complex social environments due to their residential, educational, and recreational functions. Carrying weapons may be prohibited on most campuses, but a large-scale survey of more than 10,000 students at 119 public and private colleges found that approximately 4% of students reported having a firearm at school (Miller, Hemenway, & Wechsler, 2002). Students that reported having firearms were more likely to be male and live off campus. They also engaged in risky drinking behaviors, which led to more aggressive behavior than students who did not own guns (Miller et al., 2002). Though most of the students who reported owning weapons in this study reported it was for personal safety reasons, the results found such students reported that they were more likely to have been threatened with a gun (Miller et al., 2002). These findings suggest the presence of guns on campus may increase the risk for aggression and violence.

Types of campus targeted violence that have received attention from researchers and law enforcement include domestic violence, stalking, and sexual assault. However, such forms of violence are often underreported, making it more difficult to gather accurate statistics regarding the frequency of such acts (Buhi, Clayton, & Surrency, 2009; Emery, 2010; Fisher, Cullen, & Turner, 2002; Fisher, Daigle, Cullen, & Turner, 2003b; Truman & Planty, 2012). In a joint collaboration, the U.S. Secret Service, the U.S. Department of Education, and the Federal Bureau of Investigation, Drysdale et al. (2010) conducted a review of incidents of violence that had occurred at American postsecondary institutions from 1900 to 2008. The authors reviewed over 272 directed assaults that either included or had the potential to include lethal force. Data indicate that violent

incidents on campuses nearly doubled in the 1990s from the prior decade, and have continued to increase since then (Drysdale et al., 2010). Although the increase of enrollment in post-secondary institutions has risen, the reasons for the disproportionately marked increase in campus violence are not wholly understood.

Criminal statistics from the National Crime Victimization Survey (NCVS) reveal that college-aged individuals, from ages 18 to 24, showed the highest rates of violent victimization (such as physical assault, sexual assault, robbery, etc.) than any other age group studied, at the rate of 49 per 1,000 (Truman & Planty, 2012). However, statistics from the NCVS from 1995-2002 of the same age group suggests enrolled college students experience lower rates of violent victimization than same-aged peers who are nonstudents (Baum & Klaus, 2005). A study that used the NCVS sample found that a large majority of the reported violent incidents against college students occurred off-campus (Hart & Miethe, 2011). Such a finding does not preclude violence from external sources making its way to college campuses. The following sections will explore some of the main areas of victimization experienced by college students that have been identified in the literature.

Relationship Violence

Relationship violence is a prevalent problem on college campuses, perhaps despite common beliefs. Rates of intimate partner violence are difficult to accurately estimate because it is generally underreported (Emery, 2010). Studies have reported rates of violence within a relationship among college students at 24% (Porter & Williams, 2011), 31% (Straus & Ramirez, 2004), 39% (Bryant & Spencer, 2003), and 43% (Neufeld, McNamara, & Ertl, 1999). In one study of college participants, it was found

that the male and female participants did not report significant differences in the amount of violence experienced within the relationship, but women reported having more fear of harm from their partner than men (Hendy, Weiner, Bakerofskie, Eggen, Gustitus, & McLeod, 2003). Another study found that female college students reported being victimized in a dating relationship almost twice as much as male peers reported perpetrating dating violence (Follingstad, Wright, Lloyd, & Sebastian, 1991), suggesting that perpetration of relationship violence may be under-recognized and underreported. Length of the relationship has been found to have a significant relationship with interpersonal violence among college students. Mason and Smithey (2011) found that there were higher chances of physical, sexual, and psychological forms of violence between partners as the length of relationships increased.

Myths about interpersonal violence have also been shown to be present in college populations (Yamawaki, Ochoa-Shipp, Pulsipher, Harlos, & Swindler, 2012). Using a college sample, male students were significantly more likely than female students to blame the victim of interpersonal violence, as well as minimize the seriousness of the violent incident (Yamawaki et al., 2012). Myths and negative attitudes about physical and psychological violence within relationships may contribute to underreporting on campuses. In addition, stigma may prevent victims from acknowledging abuse (Emery, 2010), much less reporting it to campus authorities. Although intimate partner violence may be most often associated with family or domestic violence in the home, college populations are not immune from this type of targeted violence.

Stalking

Research estimates vary on the rates of stalking victimization on postsecondary campuses. Some research indicates as many as one in five female college students has experienced being stalked (Buhi et al., 2009). Others indicate 3.6% of students report stalking victimization (Baker & Boland, 2011). As part of the 1997 National College Women Stalking Victimization Survey of over 4,000 participants, 13% of respondents reported being stalked within the academic year (Fisher et al., 2002). However, students are not the only potential victims of stalking. Baker and Boland (2011) report that 7% of faculty members reported being stalked.

Although a common belief is that stalking is most often committed by strangers, female college students most frequently reported they were stalked by individuals who they knew (Buhi et al., 2009; Fisher et al., 2002), which is consistent with the general stalking literature (Douglas & Dutton, 2001; Spitzberg & Cupach, 2007; Tjaden & Thoennes, 1998; Tjaden & Thoennes, 2002). In most of the reported cases by college students, the stalker was a current or former intimate partner, friend, acquaintance, classmate, or co-worker (Buhi et al., 2009; Fisher et al., 2002).

Common stalking behaviors reported were being watched, followed, and receiving unwanted phone calls or emails (Buhi et al., 2009). Although these studies indicate stalking is a present and occurring threat on campuses, campus officials may have a severe underestimate of its pervasiveness, as less than 17% percent may be reported to police or campus security (Fisher et al., 2002). In one study, almost half of participants who endorsed being stalked reported they did not seek help from anyone, primarily because they did not think the situation was serious, because they wanted to handle it themselves, did not want others to get involved, or thought it was a personal

matter (Buhi et al., 2009). In some cases, the victims even feared retribution from the perpetrator (Buhi et al., 2009).

These low rates of reporting are alarming, especially as stalking has been linked to acts of severe physical violence (Spitzberg & Cupach, 2007). One study found that British police officers perceived stranger stalking as most constituting stalking behavior as compared to when the victim had a prior relationship with the offender (Weller, Hope, & Sheridan, 2013). This raises the concern that stalking cases may be more easily dismissed if the victim knows the perpetrator (Davis & Chipman, 2001). In a similar vein, a study of college students from Australia and the United Kingdom suggests stalking cases are perceived as most representative of stalking and in greatest need of police intervention if the perpetrators are strangers, followed by acquaintances, and then former intimate partners (Scott, Lloyd, & Gavin, 2010).

The use of cell phones, social media and GPS tracking on mobile devices have decreased levels of privacy and make individuals more accessible and detectable. In addition, technology seems to be impacting intimate relationships (Langhinrichsen-Rohling, 2012). This use of technology has implications for stalking (Buhi et al., 2009; Langhinrichsen-Rohling, 2012; Weller et al., 2013) and has been referred to as “cyberstalking.” Miller (2012) describes cyberstalking as “a set of behaviors that involve repeated threats, harassment, or other unwanted contact, by the use of a computer or other electronic communication-based technology that has the effect of making another person feel afraid, intimidated, or concerned for his or her safety” (p. 501).

Cyberstalking behaviors can include: sending excessively affectionate, harassing or threatening messages, attempting to obtain private information, and pretending to be

someone else (Spitzberg & Hoobler, 2002). College students may be at a higher risk for cyberstalking due to the close proximity with other students, and the relative availability of personal contact information (Finn, 2004). Factors identified as increasing one's likelihood of victimization include higher numbers of photos and updates on social media sites, having more social networking accounts, and use of instant messaging (Reyns, Henson, & Fisher, 2011). In one study with a college sample, few participants reported severe victimization or cyberstalking through social media sites, but the vast majority of participants reported experiencing at least one instance of unwanted or intrusive contact (Marquez & Scalora, 2012). Participants were more likely to report electronic harassment to police if it was perpetrated by strangers. However, reporting rates of electronic harassment appear to be low, as less than 7% of participants in one study reported online harassment to either an internet service provider or campus authority (Finn, 2004). Of those that did report, more than half were unsatisfied with the results, and were also more likely to experience additional harassment from strangers, significant others, and receive unwanted pornography.

Sexual Assault

There are inconsistent definitions in the literature about the definitions of sexual misconduct. It has been recognized as occurring on a continuum, ranging from milder forms of sexual activities to extreme and forceful incidents of sexual assault (Degue & DiLillo, 2005). Sexual coercion is a form of sexual assault that is problematic in college populations. Degue and DiLillo (2004) have highlighted the distinction between sexual coercion and sexual aggression. Whereas sexual aggression involves sexual assault through the use of physical force or threats, sexual coercion is defined as "inappropriate

male sexual behavior in which nonphysical tactics (e.g., deceit, threats to end the relationship, continual arguments, or ignoring verbal requests to stop) are utilized to obtain sexual intercourse with an unwilling partner” (Degue & DiLillo, 2004, p. 680). In the study, it was found that almost 32% of participants reported engaging in sexual coercion. The lack of equivalent reporting rates for male participants of sexual victimization studies may suggest that they do not interpret the behavior as coercive or nonconsensual (Koss et al., 1987).

The victimization literature has attempted to identify characteristics that may put one at higher risk for victimization. For example, female college students in one study who were victims of sexual assault reported lower self-control, and were more likely to spend more days on campus and more times partying, as well as were more likely to have engaged in drug sales (Franklin, Franklin, Nobles, & Kercher, 2012). However, such risk factors may vary among types of sexual victimization. Franklin (2010) found factors that were significantly predictive of sexual assault victimization often differed if the sexual assault was verbally coercive, alcohol-induced, or occurred through threats/ use of force. Though, a higher number of consensual sexual partners increased risk for victimization in each of the three categories (Franklin, 2010). Finally, women who are involved in fraternal organizations are more likely to experience sexual assault and completed rapes, though the reasons for why participation in a sorority puts one more at risk are not completely understood (Franklin, 2010; Kalof, 1993; Minow & Einolf, 2009).

Sexual assault awareness on college campuses has received much attention in the media and in the literature. Title IX prohibits sex-based discrimination on campuses that receive federal funding. This legislation has put increased responsibilities on academic

institutions to prevent and address sexual assault and sexual harassment on campuses, but victimization is still prevalent (National Women's Law Center, 2012). In one study, almost 54% of female college student participants reported experiencing some form of sexual victimization (Koss, Gidycz, & Wisniewski, 1987). It is estimated that one-fifth to one-fourth of college students will be victims of rape or attempted rape (Fisher et al., 2000). However, research indicates less than half of completed rapes are considered rapes by the victims (Fisher, Daigle, Cullen, & Turner, 2003a; Fisher et al., 2000). Large-scale surveys that continuously used the word "rape" may have led to underreporting of sexual victimization (Koss et al., 1987). The only factor found to significantly increase the likelihood that victims would consider their victimization a rape was their use of "forceful verbal resistance" (Fisher et al., 2003a, p. 565).

Among those who reported experiencing sexual victimization, most women did not report their victimization to law enforcement authorities (Fisher et al., 2003b; Koss, 1985). In a study of college women who reported experiencing sexual victimization, 38% reported assaults that met the legal definition of attempted or actual rape but only 4% reported the assault to the police (Koss, 1985). In another study, only 2% of sexual assault victims reported it to the police, and 4% reported it to campus authorities (Fisher et al., 2003b). Similar to stalking cases, many victims indicated they did not report the assault because they felt it was not serious enough. In addition, it was often reported that they did not report because they were not sure if the perpetrator had intended harm. Factors that increased the likelihood of reporting included: more serious incidents, actual sexual contacts (compared to threats), stranger perpetrators, occurrence on-campus, or having evidence of an assault, such as an injury (Fisher et al., 2003b). Demographic

variables such as age, race/ethnicity, education, and income level may also affect likelihood of reporting sexual victimization (Fisher et al., 2003b; Gartner & Macmillan, 1995; Lizotte, 1985; Pino & Meier, 1999; Thompson, Sitterle, Clay, & Kingree, 2007).

Overall, students on postsecondary campuses may experience lower rates of targeted violence than similar-aged nonstudents, but they are still at risk for victimization. Physical and sexual assault, intimate partner violence, and stalking are issues that have been identified as occurring on postsecondary campuses, though the rates are difficult to estimate. This difficulty may be due to underreporting, definitional differences in research studies, and wide ranges of reported victimization in the literature. Although rates of campus victimization may seem relatively stable, the occurrence of cyberstalking on campuses may continue to become worse as the number of social networking sites increases and new forms of technology become available.

Overview of Threat Assessment

Threat assessment was coined by the United States Secret Service (USSS) as a method of addressing threats made against public officials that were under their protection (Borum, Fein, Vossekuil, & Berglund, 1999; Fein & Vossekuil, 1998). Politicians have often been targets due to the public and political nature of their roles (Dietz, Matthews, Martell, Stewart, Hroudra, & Warren, 1991; Fein & Vossekuil, 1998). U.S. politicians and other prominent public figures have been approached, attacked, and even assassinated (Fein & Vossekuil, 1999; Meloy, James, Mullen, Pathé, Farnham, Preston, & Darnley, 2011). This may be in response to their positions on polarizing social and political issues, but mental illness is also a common motivation for contacting and fixating on politicians (Dietz et al., 1991; James, 2010; James, Mullen, Pathé, Meloy,

Preston, Darnley, & Farnam, 2009; Meloy et al., 2011; Mullen et al., 2008; Scalora, Baumgartner, & Plank, 2003).

Given the number of threatening and harassing communications as well as attempted physical approaches toward politicians, threat assessment was developed as a methodological approach for law enforcement to address individuals who pose a risk of violence, either openly or as indicated by their threatening behavior (Fein, Vossekuil, & Holden, 1995; Fein & Vossekuil, 1998). This method has been adopted by other law enforcement agencies, and evaluated in the literature (see Scalora et al., 2002a; Scalora et al., 200b).

A distinction in the threat assessment literature is drawn between those who threaten violence, and those who pose a threat of violence (Fein et al., 1995; Fein & Vossekuil, 1998; Meloy et al., 2004; Randazzo, Borum, Vossekuil, Fein, Modzeleski, & Pollack, 2006). To further explore this distinction, Calhoun and Weston (2009) discuss the concepts of “*hunters*” and “*howlers*,” which represent the types of individuals who are most likely to pose a threat of harm versus those who may *appear* to be most likely to cause harm (Calhoun & Weston, 2009).

Hunters are described as individuals who intend to commit an act of violence and engage in relevant planning and preparation behaviors. The literature suggests that in most cases, those who actually engage in violence do so after engaging in planning and preparatory behaviors, as compared to reacting emotionally “in the heat of the moment” (Meloy et al., 2004). In comparison, howlers are described as individuals who may communicate threateningly but do not act violently. Put simply, “The only behavior a howler engages in is howling,” (Calhoun & Weston, 2009, p. 28). Strategies for threat

assessment and management should attempt to harness resources in order to identify the hunters, who have the intention and capability of engaging in violent behavior without articulating direct threats.

Whereas traditional security measures are in place to react to immediate safety risks and acts of violence, threat assessment produces further protection through identifying and responding to concerning behaviors and threats (Borum et al., 1999; Calhoun & Weston, 2003; Fein et al., 1995; Fein & Vossekuil, 1998; Meloy et al., 2011). Threat assessment differs from profiling and other investigative techniques due to its preventive and proactive method (Fein & Vossekuil, 1998). Using this proactive approach within a protective intelligence program, potential threats can be identified and monitored, and a management strategy can be developed to reduce the level of risk (Calhoun & Weston, 2009; Fein & Vossekuil, 1998). The ultimate goal of threat assessment is to prevent threatened or attempted acts of targeted violence from occurring by “determin[ing] the nature and degree of risk a given individual may pose to an identified or identifiable target(s)” (Borum et al., 1999, p. 324).

Fein and Vossekuil (1998) identify the three most important functions of a threat assessment model as:

- **Identification** of the potential threat
- **Assessment** of the potential threat through an investigation
- **Case Management** until the individual no longer poses a threat

In order to accurately assess the level of risk to the identified target or targets and predict the imminence and likelihood of the threat, threat assessment professionals must attempt to seek and gather as much information as possible in order to learn more about

the subject as well as analyze their behavior and identify possible patterns (Borum et al., 1999; Calhoun & Weston, 2009; Meloy, Hoffmann, Guildimann, & James, 2012).

Identified behaviors should be documented and tracked to aid in identifying patterns as well as for future use of evidence, if needed (Fein & Vossekuil, 1998). Mental health professionals can be valuable contributors to the threat assessment approach by providing insight relating to mental illness, utilizing traditional risk assessment approaches if appropriate, and offering recommendations for risk management and violence prevention (Borum et al., 1999).

Campus Threat Assessment

Since its inception, threat assessment has extended to other applications of risk assessment, as well as different settings, including workplace violence (see Scalora, Washington, Casady, & Newell, 2003) and campus violence. Threat assessment was utilized in schools and on university campuses prior to the Virginia Tech shootings (Fein, Vossekuil, Borum, Pollack, Modzeleski, & Reddy, 2002; Reddy, Borum, Berglund, Vossekuil, Fein, & Modzeleski, 2001). In a post-secondary application, threat assessment attempts to recognize potential threats on campus or with individuals connected to the campus and take action before the subject engages in harmful behaviors.

Most media speculation and studies of campus violence highlight students as the primary source of threatening or violent behaviors (Cornell, 2010). Although students are not the only potential threats for engaging in acts of violence, much of campus threat assessment also concentrates on problematic students. Investigations have found that there is no clear profile of school shooters (O'Toole, 2000; Vossekuil et al., 2002).

Therefore, campus threat assessment focuses on the concerning behavior of students, not

personal characteristics, such as in profiling (Albrecht, 2010; Cornell, 2007; Fox & Savage, 2009; Reddy, Borum, Berglund, Vossekui, Fein, & Modzeleski, 2001).

O'Toole (2000) applies an important threat assessment principle to school violence, reiterating that students who may pose a threat do not necessarily make overt threats. And on the other hand, those who make threats do not necessarily pose one (Reddy et al., 2001). Threats can come in a variety of forms, and may not be obvious or direct. Four identified categories of threats include: direct threats (clear and specific threat of harm), indirect threats (ambiguous statements of unclear intention), veiled threats (implied threat that requires interpretation), and conditional threats (threat of harm under certain circumstances) (O'Toole, 2000).

As previously mentioned, campuses are very unique environments, making it important to understand threat assessment within a campus context and considering the types of threats that may be encountered. For example, on a daily basis, students may interact with professors, residence hall staff, significant, others, and other students on campus. Any one of those individuals may witness or observe threatening, concerning, or bizarre behavior that may draw attention to a potential safety issue (Albrecht, 2010; Drysdale et al., 2010). These types of concerning or threatening behaviors are also known as pre-incident behaviors (Hollister, Scalora, Hoff, & Marquez, 2014; Hollister, Scalora, Bockoven, & Hoff, under review).

While campuses may not adopt a pre-developed model of threat assessment, they are encouraged to adopt some kind of threat assessment model in order to recognize possible threats and take proactive steps to avoid any acts of violence (Albrecht, 2010; Cornell, 2011; Scalora et al., 2010). In some cases, states may *require* institutions to

have threat assessment teams, as is the case in Virginia (Cornell, 2009; 2010). One potential obstacle is that threat assessment models are not “one-size fits all.” Many threat assessment models for schools are generally related to K-12 institutions (See Cornell, 2007), whereas college and university campuses are distinctive environments, which require a very different kind of approach tailored to the individual institution.

Campus size can make a significant difference in the amount of resources available as well as the types of possible threats they may face. Campus security structure and number of personnel varies at different institutions, primarily based on the size of the campus and student population (Rasmussen & Johnson, 2008). Small institutions often have part-time or contracted civilian security personnel. Many universities have a campus security department, but they are made up of non-commissioned officers. Some institutions have university police departments made up of commissioned officers who are armed (Rasmussen & Johnson, 2008). Campus police/security should be incorporated within the institution’s administration in order to have an efficient stream of communication relating to matters of campus safety. Though a campus’s available resources to devote to security may not be ideal, partnership with local law enforcement agencies is mutually beneficial.

Regardless of size, postsecondary institutions should build relationships with and involve local law enforcement for a number of reasons. One reason being that individuals tied to the university are not always the subjects of threat assessment investigations. Postsecondary institutions who reported incidents of campus violence indicated that 30% of the cases dealt with individuals who where had no affiliation with

the institution, many of whom were current or former romantic partner of individuals who were affiliated with the institution (Drysdale et al., 2010).

If the institution does not have direct ties to the subject, local law enforcement can act as an additional resource for information gathering and safety planning. In addition, it was found that 20% of incidents against individuals affiliated with the institution took place off-campus (Drysdale et al., 2010). In such cases, local law enforcement officers are the first responders, and strong relationships with campus security departments will facilitate information sharing and crisis resolution, as well as improve safety planning for the targeted victim.

Due to the limits of campus boundaries and the number of off-campus facilities, local law enforcement agencies can also help reinforce and aid in campus threat assessment investigations (Scalora et al., 2010). They can aid in developing emergency response policy in the case that an incident of violence should occur on campus (Albrecht, 2010). If an emergency or crisis situation occurs on campus, law enforcement and emergency responders can be more involved and informed when participating in crisis management and follow-up. It is recommended that campus police and local law enforcement engage in practical exercises to rehearse responses to campus safety incidents, such as an active shooter scenario (Virginia Tech Review Panel, 2007).

Campus Threat Assessment Teams

Campus threat assessment often uses a team approach that involves the participation of campus mental health professionals, administrators in student affairs, law enforcement officers, and others (Fox, 2009; Reddy et al., 2001; Scalora et al., 2010; Virginia Tech Review Panel, 2007). Gaining threat assessment team members from a

number of different departments and agencies on campus is important because a team “with diverse representation often will operate more efficiently and effectively” (Scalora et al., 2010, p. 6). Rasmussen and Johnson (2008) found that 65% of surveyed postsecondary institutions reported having a team of faculty and/or staff members whose purpose is to meet regularly in order to discuss concerning students. With the availability of a team of others to help assess risk and discuss situations, individuals are not faced with sole responsibility for making decisions (Albrecht, 2010). Campus safety is not something that can be handled by a handful of people, especially since there is a wide range of potential threats and threatening situations that might occur (Scalora et al., 2010).

The role and preventive process of threat assessment teams should be well-defined. Albrecht (2010) identifies the five primary functions of a campus threat assessment team: (1) Information gathering, (2) Interviewing, (3) Evaluation, (4) Decision making, and (5) Follow-up.

Gathering information is a key part of threat assessment in order to make a more accurate judgment on the level of concern (Meloy et al., 2012). Information should be evaluated and integrated into the larger picture, even if individual red flags or warning signs (e.g., threatening statements on social media websites, interest in weapons, concerning behaviors, etc.) may not seem overly concerning by themselves (Scalora et al., 2010). Similarly, Fox and Savage (2009) caution against threat assessment teams drawing false conclusions or overreacting to harmless behaviors without considering the context in which they occurred. The assessment of risk should be a fluid and dynamic process as new information comes to light (Meloy et al., 2012). Also known as “warning

behaviors,” noticeable changes of behavior by the subject that indicates the presence of dynamic risk factors “are evidence of increasing or accelerating risk (Meloy et al., 2012, p. 260).

Threat assessment team members, often mental health professionals or campus security personnel, may gather information by interviewing the subject of the case investigation or consulting with others who can provide relevant information (Albrecht, 2010). Different team members may take the lead on particular cases depending on what actions need to be taken to manage the individual’s behavior (Albrecht, 2010). If needed, this individual can become the point of contact for the subject of the investigation so that expectations of behaviors are clear and understood. They may also be responsible for potential monitoring of the subject (Scalora et al., 2010). Close monitoring and reassessment of the potential threat should be continued even after engaging in interventions or if an immediate threat is deemed unlikely. Violence risk can increase or decrease over time (Meloy et al., 2012), especially in light of ever-changing environmental factors.

Threat assessment teams are responsible for assessing the severity and immediacy of a highlighted threat or potentially threatening individual. When assessing the level of risk for violence, threat assessment professionals must consider that threats occur on a continuum, and that “all threats are *not* created equal” (O’Toole, 2010, p. 5). Efforts at prevention may be best served by focusing on individuals who exhibit planning and threatening behaviors, compared to those who make direct threats (Meloy et al., 2004). However, while many direct and overt threats may not be intended seriously or acted on,

they must be taken seriously and investigated before a decision is reached (Meloy, 2011; Scalora et al., 2010).

In order to be most effective, campus threat assessment needs multiple stakeholders to “buy in” and provide support (Scalora et al., 2010). The ideal outcome in campus threat assessment is to avoid violence and provide assistance and support for the individual that may be posing a threat (Cornell, 2010; Scalora et al., 2010). “If the institution is able to help people who are upset, angry, depressed, or troubled in some way, many problems can be addressed before they rise to the level of a threat” (Cornell, 2010, p. 12). However, if those who are involved in behavioral or treatment interventions for such students identifies a threat or has safety concerns, they should report it to the threat assessment team (Cornell, 2010).

In order to address threatening or concerning behavior, threat assessment team members share information and work together to determine if an individual poses a threat to the campus, an individual, or him or herself (Albrecht, 2010). Throughout this process, various campus entities must be able to communicate in order to gather information about the subject. Due to the sensitive nature of threat assessment as well as student privacy rights, campus officials must be well educated about the limits of information disclosure as well as relevant exceptions (Norris, Scalora, Bulling, & Yardley, 2010).

Impact of Privacy Laws on Campus Threat Assessment

Two of the primary perceived legal challenges to proactive measures on campuses are privacy laws regarding student and mental health records (Virginia Tech Review Panel, 2007; Rasmussen & Johnson, 2008; Fox & Savage, 2009). The Family

Educational Rights and Privacy Act (FERPA), and the Health Insurance and Portability and Accountability Act of 1996 (HIPAA) are both privacy laws which apply to institutions that receive funding from the U.S. Department of Education. FERPA and HIPAA both have numerous circumstances of stating which records and information can be shared, when, with whom, and in what situation (McBain, 2008). These complex laws are often misunderstood by campus administrations due to misconceptions and misunderstandings, which may lead them to err on the side of caution and not share information internally or with outside parties, such as law enforcement (Rasmussen & Johnson, 2008).

A bulletin from the National Association of College and University Attorneys (NACUA) (2007) sheds light on common misconceptions of what FERPA restricts within postsecondary institutions. It noted that FERPA does not restrict any necessary communication of student information in an emergency in order to protect a student or others (NACUA, 2007). It postulated that institutions are unlikely to be liable for violating FERPA if they disclosed information in good faith based on the situation at hand. However, they suggested professionals in the scope of the emergency who are made aware of the situation make an educated decision of whether further disclosures are necessary or appropriate (NACUA, 2007).

Threatening Activity and Safety on Campus

Campus Security Measures

Since recent acts of violence on postsecondary campuses, campus security has become a much more public issue. While rates of campus violence may still be low, perceptions of campus security and campus safety likely vary depending on the size,

location, and level of security at any institution. Women have been found to perceive their risk of assault on campus as higher than men, especially relating to sexual assault (Lane, Gover, & Dahod, 2009). Another study found college women reported more fear of crime, were more likely to perceive the campus as unsafe, and perceived their risk of being victimized on campus as higher than college men (Jennings, Gover, & Pudrzynska, 2007), although men are more likely to be involved in acts of violence on campus (Hart & Miethe, 2011).

Pezza and Bellotti (1995) recommend campuses have a “consistent and rigorous endorsement of standards” in order to maintain credibility and deter violence (p. 118). Some institutions have responded to campus safety fears by expanding their campus police departments (Hughes, White, & Hertz, 2008). One study found that 88% of students reported feeling comfortable contacting campus police, with less than half of the student participants having had any contact with the campus police department (Griffith, Hueston, Wilson, Moyers, & Hart, 2004). Of these contacts, most were informal contacts, gaining assistance with a car, or asking for information. Less than 10% of contacts were due to being a witness to a crime or reporting being a victim of a crime (Griffith et al., 2004).

As part of a research initiative from the Midwestern Higher Education Compact, Rasmussen and Johnson (2008) sent a survey to all chief campus student affairs administrators and directors of security listed in the 2006 edition of *The Higher Education Directory*. They received over 300 responses from a wide variety of institutions. Most indicated their institutions had conducted some form of a security review of safety policies and procedures after the shootings at Virginia Tech—especially

the larger institutions (Rasmussen & Johnson, 2008). Although most people would likely agree that increasing campus safety and security is an important goal, monetary expense, privacy, and impact upon campus environment are factors that may give rise to conflict within the institution, or even the local community (Rasmussen & Johnson, 2008).

Maintaining campus security has changed with the rise in the use of technology on campuses. Sulkowski and Lazarus (2011) highlight some of the security technologies that postsecondary institutions have utilized to increase safety, including: video surveillance cameras, emergency phones, metal detectors, and automatic door locks. In the case of severe acts of violence, campus authorities need to be able to immediately warn the campus community through the use of an emergency alert. These “alerts” can be used to communicate threats to the rest of the campus community in order to prevent further harm and highlight areas of campus that need to be avoided (Rasmussen & Johnson, 2008). After the shootings at Virginia Tech, it was found that using institutional email addresses or landline telephone calls are not the most effective ways of contacting campus communities—especially students (Rasmussen & Johnson, 2008). Therefore, institutions have moved toward using personal email addresses and text messaging as the primary modes of communication for campus emergency notification systems.

Administration and campus police must work together to respond quickly and effectively in the event of an emergency in order to protect the safety of the campus community. The Virginia Tech Review Panel (2007) recommended that campus police should have the capability to send campus-wide emergency alerts after it was revealed that the Virginia Tech campus police were not permitted to do so without the approval of a policy committee. It was also recommended that campus police should be higher on the

decision-making hierarchy in the event of an emergency in order to avoid red tape and delays in response (Virginia Tech Review Panel, 2007). Efforts at maintaining campus safety should be comprehensive and coordinated among the various stakeholders (Pezza & Bellotti, 1995).

Some institutions have used social networking sites such as Facebook to communicate with students (Sulkowski & Lazarus, 2011). The inclusion of mobile phones in emergency notification systems increased from less than 5% to at least 75% of surveyed postsecondary institutions (Rasmussen & Johnson, 2008). One example of a revamped notification system was at Northern Illinois University, which sent a warning of a possible shooting by text message, emails, the university website, and telephones. Updates were sent in approximately 15-minute increments with updates of the situation and the cancellation of classes (Galuszka, 2008). Other institutions have installed outdoor systems that can emit sirens or spoken alerts in order to warn those on campus of potential danger (Young, 2008).

In addition to improvements to physical security and emergency notification systems, the literature has urged postsecondary institutions to increase awareness of threatening behaviors and develop reporting mechanisms to communicate any observations to campus authorities. Establishing security protocols that are simple yet effective are key to maintaining a safe atmosphere on campuses. Individuals on campus need to have a clear understanding of what behaviors are not tolerated at the institution, as well as what they should do if they observe such behaviors (Baker & Boland, 2011). Reporting mechanisms for those who observe pre-incident behaviors should be easy to

use. Several institutions have enacted web-based incident reporting systems in order to manage potential threats more proactively (Hughes et al., 2008).

Scalora et al. (2010) suggest campus authorities consider a confidential reporting option that could be done through mobile phones, e-mail, or websites. These types of efforts can begin with upfront communication about campus safety with incoming students, as well as “providing additional training and support to faculty and student staff to recognize and report unusual behavior” (Rasmussen & Johnson, 2008, p. 23). A wide range of behavior is expected on postsecondary campuses due to differences in ages, cultural backgrounds, and life experiences. Unusual behaviors or significant changes in behavior patterns may also be a sign of mental illness. It may not always be clear if observed unusual behavior may be related to individual factors or to mental illness.

Mental Illness on Campus

After the shooting at Virginia Tech, the topic of mental illness on postsecondary campuses was brought to the forefront of discussion on campus safety. It was reported that Cho Seung-Hui, the shooter, had a significant history of mental illness, including depression and anxiety (Friedman, 2009; Rasmussen & Johnson, 2008; Virginia Tech Review Panel, 2007). In addition, Steven Kazmierczak, the perpetrator of the shooting at Northern Illinois University in 2007, had a history of psychiatric hospitalizations and struggled with anxiety (Boudreau & Zamost, 2009). These examples highlight the importance of mental health issues related to concerning behaviors and campus safety, and raise the question of whether violence can be prevented if individuals’ mental health struggles are addressed and managed successfully (Dikel, 2012).

There are a number of stressors related to attending college, especially when moving away from home into a new environment (Drysdale et al., 2010). Coping methods students engage in to manage these stressors could be positive, such as seeking counseling or becoming involved in campus activities. On the other hand, students might engage in negative methods of coping, such as engaging in substance abuse or isolating (Drysdale et al., 2010).

Furthermore, the onset of severe mental illness¹ (e.g., schizophrenia) often occurs in the late teens, with the median age of an individual's first psychotic episode is in the mid-twenties for men and late twenties for women (American Psychiatric Association, 2000). This time period overlaps with the average ages of most college and graduate students, making mental illness a significant factor that postsecondary institutions need to consider when developing campus safety policies as well as forming threat management procedures and interventions.

Many institutions have counseling centers that provide mental health services for students. A study from a large public university counseling center studied data on the student clients across 13 years (Benton, Robertson, Tseng, Newton, & Benton, 2003). They reported that clients who were seen more recently tended to have more complex and severe problems. Across the time span of the study, rates of depression among clients doubled, and the number of clients with suicidal thoughts tripled (Benton et al, 2003). Another long-term study across 12 years suggests that mental illness has increased on campuses in both prevalence and severity (Guthman, Iocin, & Konstas, 2010). It was

¹ The term *severe mental illness* is used inconsistently in the literature. Here, it is referring to a primary diagnosis of either schizophrenia as well as major thought or affective disorders which leads to functional impairments (see Nebraska's Department of Health and Human Services 2003 definition of Severe and Persistent Mental Illness).

found that recent students had more pre-existing mental illness, and the rates of moderate to severe depression increased from 34% to 41% of students (Guthman et al., 2010).

In addition to students, there are also faculty, staff, and other individuals who may have a direct or indirect association with campus that may struggle with depression or other types of severe mental illness. Some institutions have screening measures in place to “attempt to identify prospective students whose past behavior or psychiatric care merits special attention to help ensure their well-being and the well-being of others on campus” (Rasmussen & Johnson, 2008, p.28). O’Toole (2000) indicates troubled students may display preoccupations with violence, nihilism, and be isolated. While others on campus may notice and recognize mood changes, bizarre statements or ideas, interest in weapons, and violent or suicidal ideation (Drysdale et al., 2010), they may not immediately recognize a potential underlying mental illness in the person from whom these signs are observed.

Faculty and especially students may have difficulty determining if a disruptive or agitated student is mentally ill or is temporarily upset (Becker, Martin, Wajeeh, Ward, & Shern, 2002). In one study, over half of the faculty members who participated indicated they would be uncomfortable intervening with a student who appeared to be mentally ill (Becker et al., 2002). Faculty members should be familiar with campus mental health resources in case a referral needs to be made. However, it was found that over a third of faculty members were unfamiliar with campus mental health resources or the services they provide (Becker et al., 2002).

A recognition or referral to campus mental health services could aid in getting a struggling individual professional help before their situation worsens. At one college, a

multidisciplinary team developed “The New Diversity Initiative” (Nolan, Ford, Kress, Anderson, & Novak, 2005). The goal of this campus wide program was to provide education about psychological issues that may affect college students, how to interact appropriately and safely with those who may experience mental illness, and what policies and resources are available when mental health issues become problematic or result in concerning behavior (Nolan et al., 2005).

Postsecondary institutions should have comprehensive procedures and safety nets in place so that individuals with mental illness do not fall through the cracks, so to speak. It is recommended to have a way of tracking pre-incident behaviors in order for institutions to recognize patterns and intervene more effectively (Baker & Boland, 2011). Some institutions have procedures in place to allowing the withdrawal students involuntarily when students have severe psychological issues that intervene with their safety and functioning on campus, as well as the safety of others (Rasmussen & Johnson, 2008). From a campus threat assessment perspective, students who return to campus after a psychiatric hospitalization should be identified, and provided with follow-up services or have monitoring in place (Rasmussen & Johnson, 2008).

Reporting tendencies

As previously discussed, the goal of campus threat assessment is to respond to potential threatening individuals or situations prior to an actual act or threat of violence. The ideal process involves individuals reporting concerns through the proper channels, such as to campus security, police, or directly to a campus threat assessment team in order to disrupt potential violence. However, this can only take place if the pre-incident behaviors are detected (Meloy et al., 2012), and then subsequently reported. The issue of

reporting is often studied in the context of crime and victimization (see Overview of Targeted Violence on Campus section above).

From a campus threat assessment perspective, it is essential to be aware of observable pre-incident behaviors, especially if they are occurring repeatedly and in more than one context (Drysdale et al., 2010; Rasmussen & Johnson, 2008; Scalora et al., 2010). Perpetrators of targeted violence “typically do not make direct threats to the targets, but they often ‘leak’ their intentions to a range of bystanders” (Scalora et al., 2010, p. 5). This leakage could occur through pre-incident behaviors such as “ominous and menacing verbal statements; violent-themed content posted on social networking sites; and written assignments saturated with hatred, despair, and rage” (Scalora et al., 2010, p. 5).

There is minimal research on the subject of reporting observed threats or behaviors in college samples (Sulkowski, 2011). Studies that have examined threat reporting have used vignettes that portray situations in which there are concerning situations or observed threats (Brank, Woolard, Brown, Fondacara, Luescher, Chinn, & Miller, 2007; Hollister et al., 2014; Sulkowski, 2011). In one study, college students were found to be more likely to report a threatening peer if they had more trust in the college support system and reported higher levels of campus connectedness (Sulkowski, 2011). This was reinforced by other findings that indicate willingness to report dangerous behaviors observed on campus was higher for those students who endorsed having positive feelings towards the campus police department (Hollister et al., 2014). No demographic variables were found to significantly relate to willingness to report in either study (Sulkowski, 2011; Hollister et al., 2014).

A report by the Federal Emergency Management Agency (FEMA) and the International Association of Chiefs of Police (IACP) conducted a review of what can increase awareness and reporting of suspicious activity, and concluded law enforcement should engage in public outreach to promote reporting, such as with the “If You See Something, Say Something” campaign (2012). In addition, the public should be informed about what types of behaviors should be reported, as well as how to report to law enforcement (FEMA & IACP, 2012). In general, rates of reporting violent and sexual victimization are low, with victims indicating they often refrain from reporting because they did not think the incident was serious enough, or because they fear being blamed (Thompson et al., 2007).

Baker and Boland (2011) found that few students took any action after being victimized, and that many either avoided the perpetrator, ignored the incident, or did nothing. This reinforces the importance for campus police and administrations to be informed about what might increase reporting in order to improve campus security (Hart & Colativo, 2011). It was found that higher levels of students’ level of social control and higher severity of the crime were related to more willingness to report. It is postured that students may avoid reporting to campus authorities because they feel like they are violating a social norm (Hart & Colativo, 2011).

Self-Protective Behaviors

Some studies have examined how individuals may engage in certain types of safety precautions in order to reduce their individual risk for victimization. A variety of terms have been used to describe these types of behaviors, including self-protective behaviors (Tewksbury & Mustaine, 1998; Tewksbury & Mustaine, 2003; Woolnough,

2009), prevention measures (Lane et al., 2009), constrained behaviors (Ferraro, 1996; Jennings et al., 2007; Liska, Sanchirico, & Reed, 1988), precautionary measures (Rountree, 1998), and precautionary behaviors (Hickman & Muehlenhard, 1997; Rountree & Land, 1996; Wilcox, 2007). In some cases, a distinction is made between active behaviors versus constrained behaviors, in that constrained behaviors usually refer to the limiting of social behaviors in order to avoid victimization (Liska et al., 1988). For the purpose of consistency, all of these precautions will be referred to as self-protective behaviors in the present study.

Research in self-protective behaviors occurs in a variety of disciplines, including criminology, psychology, and sociology. Due to differences of disciplines as well as the context of the studies, there is not a consistent definition of self-protective behaviors. Most studies measure self-protective behaviors as carrying an item for self-protection, avoiding certain areas, avoiding going out at night, limiting activities due to fear of crime, being aware of who can help, locking doors, and more (Liska et al., 2012; Lane et al., 2009; Orchowski et al., 2012; Rountree & Land, 1996; Wilcox et al., 2007).

Several studies of self-protective behaviors were measured specifically in college students and in the context of victimization on campus (Jennings, 2007; Lane et al., 2009; Orchowski et al., 2012; Tewksbury & Mustaine, 2003). Orchowski et al. (2012) found that women participants had a positive association with simple self-protective behaviors such as speaking assertively and informing a friend about their location in order to reduce their risk for sexual victimization. However, the use of these behaviors may depend on the individuals' relationship with a potential perpetrator, such as an intimate partner versus a stranger (Orchowski, et al., 2012). Hickman and Muehlenhard (1997) found that

women reported engaging in more self-protective behaviors because of a fear of rape by a stranger compared to an acquaintance, though victimization by an acquaintance is much more likely.

Another study found that proximity and exposure to threats are the best predictors of engaging in self-protective behaviors (Tewksbury & Mustaine, 2003). This is not surprising, given that risk for victimization is higher when engaging in risk-taking behaviors, and activities or exposure in certain areas place one in greater proximity to potential threatening individuals (Combs-Lane & Smith, 2002; Tewksbury & Mustaine, 1998). Previous victimization and feelings of risk have also been found to be predictive of engaging in self-protective behaviors (Rountree & Land, 1996).

Previous research has found that the use of self-protective behaviors has been linked to one's level of fear (Rountree, 1998), and could actually increase fear of crime (Ferraro, 1996; Liska et al., 1988). In a campus setting, women have been found to have higher levels of reported fear of crime victimization than men (Fisher & May, 2009; Lane et al., 2009), as well as engage in more self-protective behaviors (Jennings et al., 2007). Woolnough (2009) found that women are more likely to engage in self-protective behaviors, and are especially likely to do so when they have higher levels of fear of sexual assault or violent victimization. Lane et al. (2009) found that women who engaged in more self-protective behaviors were more afraid of assault. It was also found that men are more likely to carry self-protection devices, such as mace or knives (Woolnough, 2009).

The results of these studies suggest students, especially women, may proactively engage in self-protective behaviors if they report likelihood or fear of victimization.

Feelings of safety on campus (Jennings et al., 2007) and effectiveness of campus security policies (Woolnough, 2009) may impact students' use of self-protective behaviors.

Although in one study, students on average were found to engage in few self-protective behaviors while the average rating of fear on campus was moderate (Jennings et al., 2007).

Campus authorities may benefit from highlighting available safety resources and services instead of simply warning students of potential dangers they may be exposed to on campus (Jennings et al., 2009; Woolnough, 2009). Orchowski (2008) found that participants in a sexual assault risk reduction program engaged in more self-protective dating behaviors, indicating that increased education can encourage individuals to take more precautions and decrease risk for victimization. In addition, campuses can work to improve physical security and make observable changes, such as increasing lighting on campus, in order to increase feelings of safety (Jennings et al., 2009; Lane et al., 2009).

Implications for Future Research

Targeted violence at postsecondary institutions has been identified as a significant issue that affects campus communities. Administrators, threat assessment professionals, and members of law enforcement have been among those who are trying to learn more about this phenomenon in order to move toward the reduction, and hopefully the eventual elimination, of violent incidents. The threat assessment model for the prevention of targeted violence is still relatively new, especially at postsecondary institutions. More institutions are turning to this proactive approach in place of a purely reactive framework of campus security (Cornell, 2009; Cornell, 2010).

Although the base rates for severe violence on campuses remain relatively low, victimization rates of other types of targeted violence are much more common. Stalking, relationship violence, and sexual assault are among the safety issues that are present within postsecondary institutions. These types of targeted violence are not prominent in the media, which tends to focus narrowly on mass casualty incidents. Moreover, signs of victimization may be more difficult for campus authorities to recognize and subsequently intervene without increased bystander and victim reporting.

Research has identified the use of threats (Tjaden & Thoennes, 2000) and concerning behaviors (Calhoun & Weston, 2003) as pre-incident indicators of physical assault. By working toward finding new and better ways to identify and report concerning behavior, campus safety officials can increase their chances of detecting a potentially threatening individual. This opens up the opportunity to investigate and intervene in the situation before further intimidation or escalation continues. This early intervention is ideal in order to prevent targeted violence. However, a lack of reporting is an issue of concern in the literature. Most incidents of victimization are not reported to campus authorities or police, indicating the need for more research of potential barriers to reporting victimization.

Reporting might be impeded if individuals are not fully informed about campus authorities' functions, or are not aware of available resources or advocates on campus. In addition, the notion of contacting campus authorities might not be perceived as a viable option unless a harm has already occurred, as opposed to reporting behavior that might indicate a risk for potential harm. In that case, the burden is on the institution to spread awareness of what behaviors can and should be reported, such as expressed threats,

verbal or physical aggression, and suicidal or homicidal ideation. The University of Nebraska-Lincoln developed a threat awareness campaign targeted toward students that included posters with poignant images of threatening situations, key words for what types of issues to report, and the phone number to contact campus police (<http://police.unl.edu/new/safety-tm.shtml>). Further research of the effectiveness of such campaigns will help inform institutions and encourage the development of similar programs on their respective campuses.

Calhoun and Weston (2003) wrote, "Identifying individuals of violent intent first requires the threat manager to establish a good, dependable reporting process" (p. 89). In order to effectively increase reporting of pre-incident behaviors, future research needs to address the most effective reporting mechanisms on campuses. For instance, how many modes of reporting should an institution have? Research could also shed light on what effect anonymous reporting methods would have on reporting frequency, and whether an anonymous report decreased the ability of a threat assessment team to effectively intervene.

Research on self-protective behaviors has primarily focused on personal victimization and reduction of risk, often for specific types of victimization. In criminological studies, the measurement of self-protective behaviors has been examined as a secondary variable. To date, no known research has explored a potential relationship between engaging in self-protective behaviors and reporting behaviors. Measuring individuals' self-protective behaviors and their reporting tendencies could expand research in this area by bridging the personal action of engaging in self-protective

behaviors to the interpersonal action of reporting pre-incident behaviors on campus to authorities.

Knowledge of a potential relationship between self-protective behaviors and reporting of pre-incident behaviors could be useful in finding new ways for campus police to promote safety as well as to increase reporting. Exploring gender differences in self-protective behaviors and reporting could help institutions target specific audiences for awareness campaigns. Although engagement in self-protective behaviors could be attributable to a number of factors, learning more about individuals' perceptions of safety in a campus context could aid increase understanding of the context of these behaviors and the possible motivations for doing so.

Present Study

This study will attempt to address this gap in the literature by examining the link between self-protective behaviors and reporting activity of undergraduate students on postsecondary campuses. Self-protective behaviors on campuses are most often studied in relation to sexual victimization. This study aims to broaden the type and scope of self-protective behaviors to other forms of personal victimization and determine the prevalence of such behaviors on campus. Further, it is unknown what impact engaging in self-protective behaviors may have on the observation and reporting of potential threatening behavior on campus. Perceptions of campus security, attitudes of campus police, awareness of campus police resources, and reporting of observed threatening behaviors were measured in relation to participants' engagement in self-protective behaviors.

This study assesses, in part, how students perceive campus safety issues and campus police. More information about what types of incidents are unreported can inform campus police about potential threats on campus. In addition, the results of the study could aid in helping institutions develop more effective awareness campaigns to increase reporting by learning more about why students do and do not report observed threatening situations.

Hypotheses

Based upon the literature reviewed above, the following hypotheses are offered for the present study:

1. *Women will report engaging in more self-protective behaviors than men.* Self-protective behaviors (e.g., keeping apartment/dorm doors locked, not walking alone at night) will be measured as a cumulative score of participants' responses based on the level of rating for related questions. Previous research has found women are more likely to engage in self-protective behaviors (Woolnough, 2009).
2. *Women will report lower feelings of safety on campus than men.* Feelings of safety on campus will be measured by one question about the participants' response to their overall feeling of safety on campus. Secondary analyses will be conducted about what campus safety issues participants are most concerned about. In previous campus studies, women have reported higher levels of fear of crime victimization (Fisher & May, 2009; Jennings et al., 2007; Lane et al., 2009).
3. *Women will be more likely to observe pre-incident behaviors than men.* In a previous study, more female participants reported observing threatening behavior than male participants (Hollister et al., 2014).

4. *Women will be more likely to report observed pre-incident behaviors to authorities than men.* Women have been found to have higher willingness to report (Hollister et al., 2014). Responses will be coded for reporting if the participant endorsed reporting the behavior to campus police, local law enforcement, or a university faculty member or administrator (examples of threatening behaviors include: repeated unwanted face-to-face contacts, threatening gesture, and acquisition or interest in weapons). Secondary analyses will be performed in order to examine indirect reporting behaviors, such as talking to a friend about the observed threatening behaviors.
5. *Engaging in more self-protective behaviors will be associated with lower levels of perceived safety on campus.* Perceived safety on campus will be measured by responses to the question: “What is your overall feeling of safety on campus?”
6. *Engaging in more self-protective behaviors will be associated with higher levels of campus police awareness.* Awareness and knowledge of campus police will be measured by a cumulative score of participants’ responses of questions on the campus police awareness scale (e.g., I know the phone number for campus police, I have contacted campus police before).
7. *Participants who engage in more self-protective behaviors will perceive themselves as more willing to report observed pre-incident behaviors to campus police than their peers.*
8. *Participants who endorse witnessing pre-incident behaviors on campus will be more likely to engage in self-protective behaviors than those who have not observed pre-incident behaviors.* Tewskbury and Mustaine (2003) found that proximity and exposure to threats are the best predictors of engaging in self-protective behaviors.

9. *Observance of pre-incident behaviors on campus, gender, and campus police awareness will be significant predictors of engaging in self-protective behaviors.*
10. *Engaging in self-protective behaviors, campus police awareness, and attitudes toward campus police will be significant predictors of reporting pre-incident behaviors.*

CHAPTER 2: METHOD

Participants

Study participants consisted of 430 undergraduate students recruited from Psychology department classes offering research credit for participation via an online research participation tool (Sona). Woolnough (2009) highlights the predominance of female-based research in campus violence and victimization, and recommends future research use mixed-sex samples, although the majority of the postsecondary institution psychology research pool is made up of women. There are no established standards for effect sizes in this type of study. Therefore, a low to medium effect size ($r = .20$) was used in a power analysis to estimate an appropriate sample size for the proposed study. In order to achieve a statistical power level of .80 based on the effect size of .20 with the level of statistical significance at $p = .05$, a sample size of 191 was suggested. The final sample was made up of 430 participants (28.1% male, 71.9% female) ranging in age from 18 to 31 years old ($M = 20.1$ years; $SD = 1.7$ years). The year in school ranged from first to fifth ($M = 2.3$; $SD = 1.3$). The overall sample was primarily White (80.6%), though this is reflective of the local demographics. Table 1 includes additional demographic characteristics of the sample. The sample characteristics were not surprising based on the sampling approach used in the present study.

Table 1
Sample Demographic Characteristics

Variable	<i>n</i>	%
Gender	121	28.1
Male	309	71.9
Female		
Ethnicity		
White	349	81.2

Black/African American	12	2.8
Asian/Pacific Islander	26	6.0
Hispanic	20	4.7
Native American/Alaskan Native	1	0.2
Mixed racial background	21	4.9
Other	1	0.2
Year in School		
1 st year	168	39.1
2 nd year	98	22.8
3 rd year	79	18.4
4 th year	62	14.4
5 th year	23	5.3
Intended Major		
Social Sciences	186	43.3
Natural Sciences	41	9.5
Humanities	17	4.0
Health Sciences	81	18.8
Education	21	4.9
Business	54	12.6
Other	30	7.0
Residence		
On campus	238	55.3
Off campus	192	44.7

Procedure

Participants signed up for the study through Sona, and completed the survey using Qualtrics, an online survey tool. The study was portrayed as relating to campus safety and security. After signing up for the study, participants read an informed consent document. Participants could withdraw from the study at any time, as noted on the consent form. After agreeing to participate, participants were provided the online survey. Participants were not required to provide identifying information or names, though they were asked to answer basic demographic questions. At the end of the survey, participants viewed a debriefing form explaining the purpose of the survey, as well as providing examples of pre-incident behaviors that should be reported to campus police. Contact information for campus police was also provided.

Survey

A full-text version of the survey is included as Appendix A. The layout and background of the survey has a simple white background with black font to avoid any effects due to use of various colors (Tourangeau, Couper, & Conrad, 2007). The font used in the survey was 12-point Arial, because it has been found to be an appropriate and easily readable type of font and size (Crawford, McCabe, & Pope, 2005). Questions were in boldface, and answers were in regular type (Crawford et al., 2005). No images were be used, as they have been found to impact survey responses, and potentially bias the respondent (Couper, Tourangeau, & Kenyon, 2004; Crawford et al., 2005).

Questions were ordered in a logical progression, beginning with demographic information. Counterbalancing was not considered necessary due to the brevity of the survey. In addition, answering questions first about viewing pre-incident behaviors on campus may have impacted responses of self-protective behaviors. The survey was anticipated to take approximately 15 minutes to complete, though some participants took less time if their responses did not require the requisite follow-up questions. Since a relatively short amount of time was required for completion of the survey, it was not anticipated that participants would experience fatigue. Multiple pages were used in the survey due to the necessity for skip functions, which allowed participants to skip follow-up questions if their answer to the primary question made them not applicable. This function occurred automatically through the survey website so the participant only saw the questions that were applicable to their answer set. The multiple page option also allows for higher data quality, since respondents can be prompted to answer the question before moving on to the next page (Peytchev, Couper, McCabe, & Crawford, 2006).

Questions that are categorically grouped together may have appeared on the same screen, but the amount of questions per page was limited. It has been found that more missing items may appear as the number of questions on a page increases (Toepoel, Das, & Soest, 2009), suggesting that respondents' attention may decrease if the screen is overly crowded and more scrolling is required. In addition, satisfaction with the survey decreases if there are more items on a page. Respondents had the ability to navigate to previous pages, which has been attributed to increasing the survey's ease of use (Morrel-Samuels, 2003). Answer choices on the page will be spaced evenly to avoid vertical response biases (Tourangeau, Couper, & Conrad, 2004).

Survey responses were anonymously coded into a database maintained by this investigator. A portion of the survey has been adapted from the campus survey by Hollister et al (2014), including some questions relating to: demographic information, feelings of safety on campus, observance of threatening behaviors on campus, and attitudes toward campus police.

Survey Components

Demographic information: Demographic questions were asked to gain more information about the sample. Questions address: age, gender, ethnicity, year in school, if residence on or off campus, and intended major.

Feelings of safety on campus: Students answered questions about how safe they feel on campus during the day and at night, which were rated on the following 5-point Likert scale: 1 = *In no areas*, 2 = *In few areas*, 3 = *In some areas*, 4 = *In most areas*, 5 = *In all areas*. An overall rating of safety utilized the following 4-point Likert scale: 1 = *Very unsafe*, 2 = *Somewhat unsafe*, 3 = *Somewhat safe*, 4 = *Very safe*. Participants were asked

to rank the safety issues they are most concerned about (sexual assault, physical assault, stalking, intimate partner violence, and an active shooter), and the likelihood of these certain threats occurring on campus.

Self-protective behaviors scale: This scale was adapted from the scale used by Lane et al (2009). The scale includes questions about behaviors students may or may not engage in related to minimizing the risk for potential vulnerability to victimization. Examples include locking their door, having high privacy settings for social media sites, not walking alone at night, and not walking alone or while intoxicated. Items are rated on the following 5-point Likert scale: 1 = *Never*, 2 = *Seldom*, 3 = *Occasionally*, 4 = *Often*, 5 = *Almost always*. The scale score is measured as a cumulative score of participants' responses based on the level of rating for related questions, with some questions reverse-scored.

Observance of threatening behaviors on campus: Questions in this section were adapted from a survey used in Hollister et al., (2014). Participants were asked if they have ever become aware of an individual that made somebody intimidated or fearful for his or her safety while on campus. To clarify what types of behavior were being referred to by the question, examples were given, including: repeated unwanted contacts through email, phone, or face-to-face contact, physical following, vandalism or property theft, surveillance or monitoring, a threatening gesture, a threatening statement, acquisition or interest in weapons, physical assault, sexual assault or unwanted touching, suicidal statements or attempts, etc. If participants responded in the affirmative, they were asked follow-up questions about the specifics of the incident, including who was the potentially threatening individual and who was the potential victim. The participant was prompted

to answer the questions based on the most recent occurrence observed, in the case that they have witnessed multiple incidents. Those who endorsed observing threatening behavior were also asked how they responded, and if they would change anything about how they responded. If participants did not report the threatening behavior to campus police, they were asked what prevented them from reporting, perceived impediments to reporting, as well as what would have made reporting more likely. No endorsement of any observed threatening behaviors placed the participant in the group of students that were not aware of alarming behaviors while on campus.

Campus police awareness scale: This scale was intended to measure a student's awareness of campus police functions and contact information. Examples include having reported to campus police in the past, being informed of what should be reported to police, knowing the phone number to contact campus police, and having the campus police phone number programmed into a mobile phone. The scale score is measured as a cumulative score of participants' responses for related questions.

Attitudes toward campus police scale: This scale was composed of five questions pertaining to the participants' attitudes of the campus police at the university they attend. Examples include how well they believe campus police do their job, confidence in campus police, and whether they trust campus police to perform their duties as they should. Items are rated on the following 5-point Likert scale: 1 = *Completely disagree*, 2 = *Slightly disagree*, 3 = *Not sure*, 4 = *Slightly agree*, 5 = *Completely agree*. The scale score is measured as a cumulative score of participants' responses for related questions.

Peer comparison: Participants were asked how likely they believe it is that their peers would report threatening behaviors if they are observed on campus. Peers will be defined

as “other students on campus.” Participants will also be asked to compare their own likeliness to report threatening behaviors to campus police with that of their peers. This item will be rated using a 3-point Likert scale: 1 = Less likely to report, 2 = No difference, and 3 = More likely to report.

CHAPTER 3: RESULTS

Data was initially reviewed for outliers, and one case was removed completely from the analysis due to outlying scores on the Self-Protective Behaviors Scale, in addition to other missing data from the same case. One outlier on the same scale remained in the analysis because the ratings appeared to be reflective of the participant's self-rating of behavior. The final sample consisted of 429 participants, though three outliers' ratings on the Campus Police Attitudes Scale were removed due to sweeping scores of "1" on the scale, revealing inconsistent response styles. Two other outliers on the same scale remained in the analysis because their ratings appeared to be reflective of the participants' true opinions based on consistency within the scale despite some reverse-scored items. The following results will be organized by the proposed hypotheses.

Hypothesis 1

Hypothesis 1 predicted that women would report engaging in more self-protective behaviors than men. Self-protective behaviors were measured as a cumulative score of participants' responses based on the level of rating for related questions on the Self-Protective Behaviors Scale. A one-way analysis of variance test compared the total Self-Protective Behaviors scale score with gender. As hypothesized and consistent with previous research, women endorsed significantly higher levels of self-protective behaviors than men, $F(1,424) = 127.53$, $MSE = 3576.40$, $p < .001$. Overall, the most endorsed self-protective behaviors were: keeping door locked when gone ($M = 4.53$), keeping door locked when alone at night ($M = 4.53$) and during the day ($M = 3.99$), telling friends where he/she will be ($M = 3.47$), and keeping the highest security settings

on social media sites ($M = 3.34$). Mean differences revealed women reported a higher likelihood of self-protective behaviors than men on all items of the Self-Protective Behaviors Scale. Only one item, using “Google” to look up information about potential partners/associates, did not show a significant mean difference. Gender comparisons for items of the Self-Protective Behaviors Scale are highlighted in Table 2 below.

Table 2
Gender Differences in Self-Protective Behavior Scale Items

Self-Protective Behaviors Scale Items	Gender		<i>F</i>	<i>p</i>
	Male	Female		
Door locked when gone	4.30(1.15)	4.61(1.00)	7.915	.005
Door locked when alone (day)	3.62(1.50)	4.14(1.34)	12.237	.001
Door locked when alone (night)	4.28(1.15)	4.63(1.00)	10.044	.002
Walk alone at night*	2.43(0.85)	3.16(0.91)	57.315	<.001
Walk alone with headphones at night*	3.23(1.25)	4.19(1.11)	60.120	<.001
Walk alone while intoxicated*	3.83(1.14)	4.48(0.84)	42.219	<.001
Carry mace, pepper spray, or other weapon	1.48(1.06)	1.85(1.30)	7.457	.007
Avoid certain campus areas at night	1.76(0.92)	2.86(1.08)	95.210	<.001
Highest security settings on social media	2.84(1.28)	3.53(1.30)	24.676	<.001
Tell friends where you will be	2.97(1.16)	3.66(1.01)	37.732	<.001
“Google” romantic partners/ associates	1.58(1.00)	1.69(1.10)	0.922	.337

Note: Standard deviations are in parentheses

*Item means were reverse-scored and recoded

Hypothesis 2

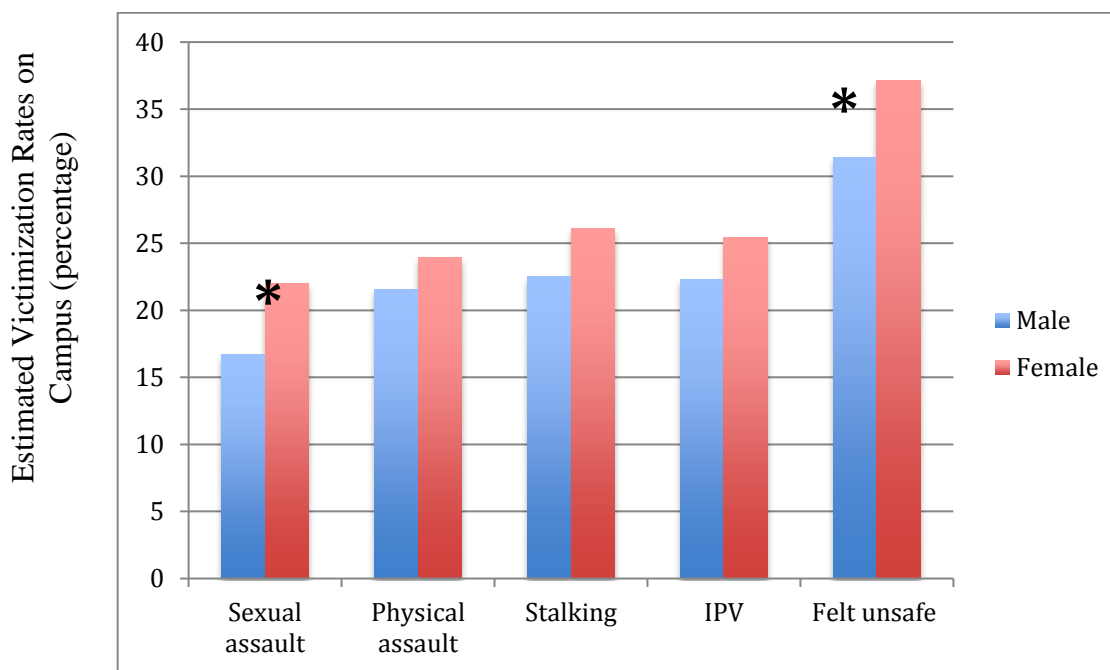
Hypothesis 2 predicted that women would report lower feelings of safety on campus than men. As hypothesized, female participants reported lower overall feelings of safety on campus, $F(1, 427) = 14.55$, $MSE = .43$, $p < .001$, especially at night, $F(1, 427) = 89.06$, $MSE = .58$, $p < .001$. However, there were no significant gender differences for feelings of safety during the day $F(1, 428) = 1.123$, $MSE = .22$, $p = .29$. Previous

studies have indicated women have reported higher levels of crime victimization on campuses (Jennings et al., 2007; Fisher & May, 2009; Lane et al., 2009). In terms of prediction, female participants also estimated significantly higher victimization rates on campus for sexual assault $F(1, 426) = 10.23, MSE = 236.99, p < .001$ and feeling unsafe because of threatening behavior, $F(1, 424) = 5.79, MSE = 484.66, p = .02$, though there were not significant gender differences for predictions of physical assault $F(1, 427) = 1.81, MSE = 276.56, p = .18$, intimate partner violence $F(1, 424) = 2.64, MSE = 316.41, p = .11$, or stalking victimization on campus $F(1, 423) = 3.03, MSE = 361.98, p = .08$.

Figure 1 displays the gender differences in estimated rates of victimization on campus.

Figure 1

Gender Differences in Estimated Rates of Campus Victimization



Note: * Mean difference is $p < .05$

IPV = Intimate Partner Violence

Felt unsafe = Felt unsafe because of the concerning or threatening behavior of another person

Participants were asked to rank five campus safety issues from those which they were most concerned down to those with which they were least concerned. There were significant gender differences among all five rankings. On average, female participants ranked sexual assault as their highest concern, $F(1, 392) = 92.37$, $MSE = 121.29$, $p < .001$, whereas male participants ranked physical assault as their top concern, $F(1, 392) = 28.09$, $MSE = 23.75$, $p < .001$. Full comparisons of gender differences in rankings are displayed in Table 3.

Table 3
Gender Differences in Ranking Campus Safety Issues

Campus Safety Issue	Gender		<i>F</i>	<i>p</i>
	Male	Female		
Sexual Assault	3.30 (1.24)	2.05 (1.11)	92.371	<.001
Physical Assault	1.88 (0.93)	2.43 (0.91)	28.09	<.001
Stalking	2.88 (1.27)	2.59 (1.22)	4.31	0.04
Intimate Partner Violence	3.81 (1.10)	4.10 (1.11)	5.45	0.02
Active Shooter	3.14 (1.68)	3.84 (1.39)	17.85	<.001

Note: Standard deviations are in parentheses

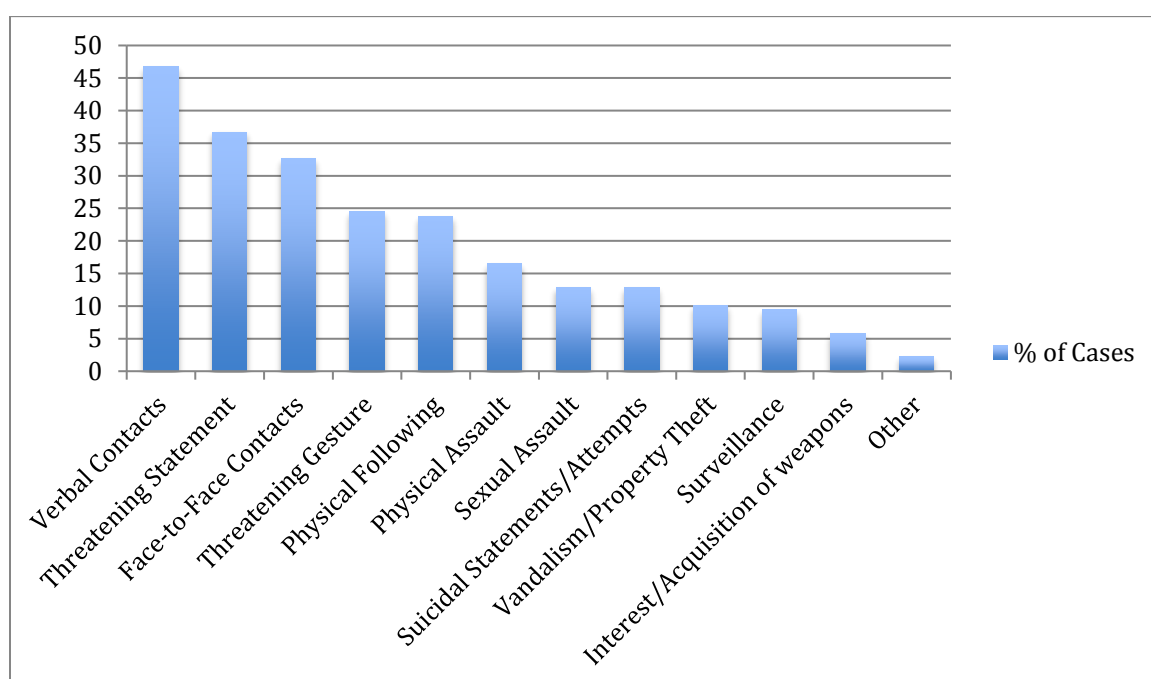
Hypothesis 3

Hypothesis 3 predicted that women would be more likely to observe pre-incident behaviors than men. Overall, 32.6% ($N = 140$) of participants reported they became aware of an individual who made somebody intimidated or fear for his or her safety while on campus. The most commonly endorsed pre-incident behaviors observed were repeated unwanted verbal contacts through email or phone (46.8%), followed by threatening statements (36.7%) and repeated unwanted face-to-face contacts (32.7%). An overview of the types of pre-incident behaviors reported by all participants is shown in Figure 2. In support of the hypothesis, 37.2% of female participants and 20.8% of male

participants endorsed observance of pre-incident behaviors. A comparison of means through Pearson's chi-square was conducted, indicating the difference was statistically significant, $X^2(1) = 10.55, p = .001$. This finding is consistent with previous research (Hollister et al., 2014). Note that participants could select multiple behaviors related to the same incident, when applicable.

Figure 2

Percentages of Observed Pre-incident Behaviors



Hypothesis 4

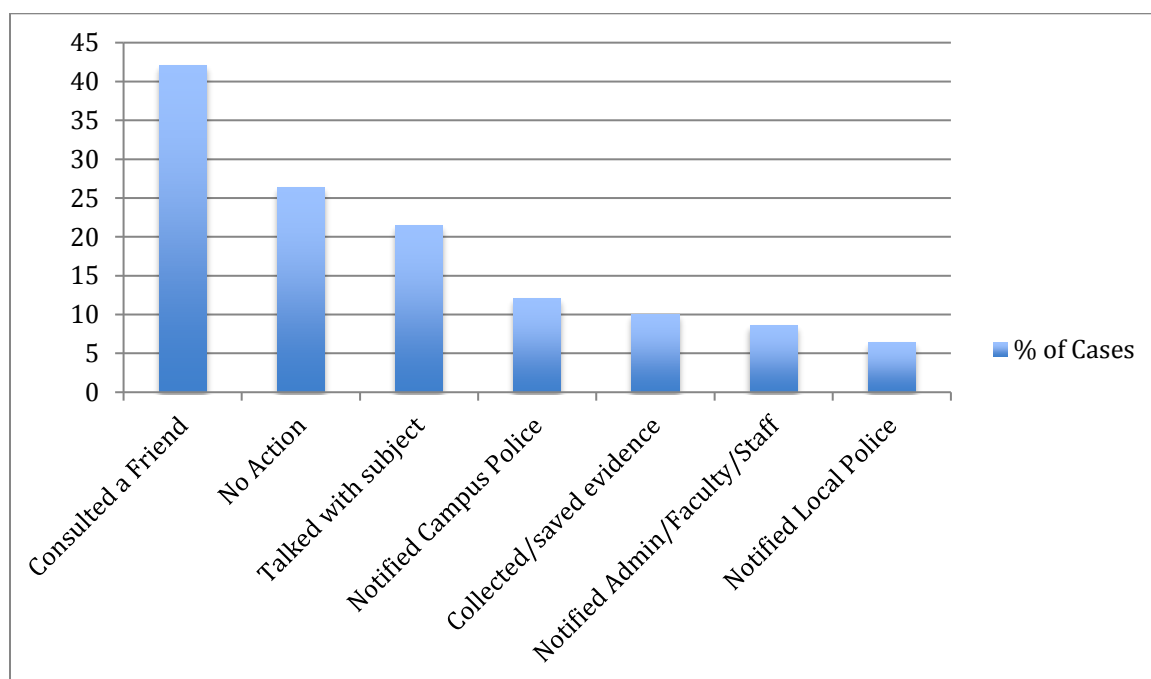
Hypothesis 4 predicted women would be more likely to report observed pre-incident behaviors than men. For the purposes of the study, “reporting” was coded if the participant endorsed reporting the behavior to campus police, local law enforcement, or a university faculty member or administrator. Results did not support the hypothesis or previous findings. Though female participants exhibited a higher rate of reporting (22.7%, $N = 25$) than male participants (16%, $N = 4$), the difference was not statistically

significant, $X^2(1) = .547, p = .46$. Overall, the rate of reporting for individuals that endorsed awareness of pre-incident behaviors was at 21.5% ($N = 29$).

Secondary analyses were performed to examine indirect reporting behaviors. It was found that 42.1% ($N = 59$) of participants who knew of pre-incident behaviors endorsed consulting a friend as either a primary or additional action in response to the behaviors, making it the most utilized action. Though there was some overlap in cases which the participant endorsed both actions, the results indicate participants who were aware of pre-incident behaviors were twice as likely to consult friends about the situation as compared to reporting the behavior to campus or local law enforcement authorities. In addition, “no action” was the second-most endorsed action at 26.4% ($N = 37$), followed by talking to the subject at 21.4% ($N = 30$). Figure 3 displays overall frequencies of actions taken in response to pre-incident behaviors.

Figure 3

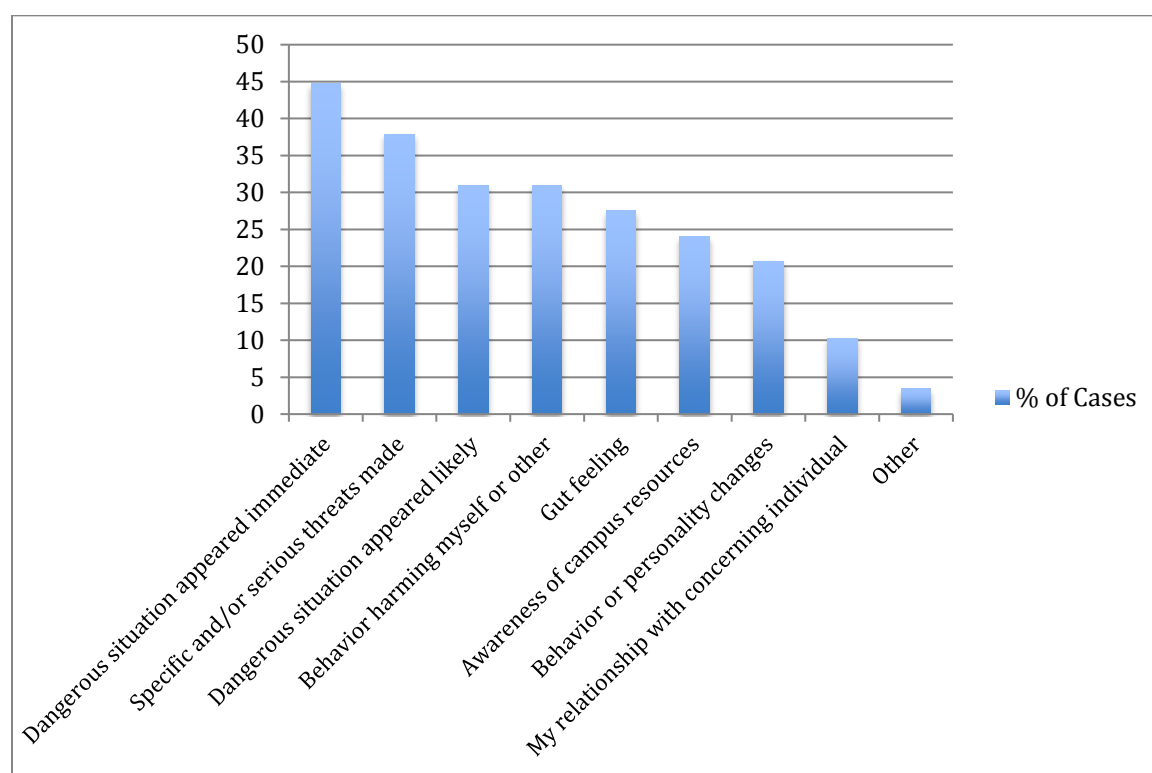
Frequencies of Actions Taken in Response to Pre-incident Behaviors



There were no significant gender differences in reasons for reporting or not reporting pre-incident behaviors. The most frequently endorsed reasons for reporting pre-incident behaviors included: a dangerous situation appeared immediate (44.8%), potentially dangerous individual made specific and/or serious threats (37.9%), a dangerous situation appeared likely (31%), and having a gut feeling that the individual was going to be dangerous (27.6%). Figure 4 displays the reasons given for choosing to report pre-incident behaviors.

Figure 4

Frequencies of Reasons Given for Choosing to Report Pre-incident Behaviors

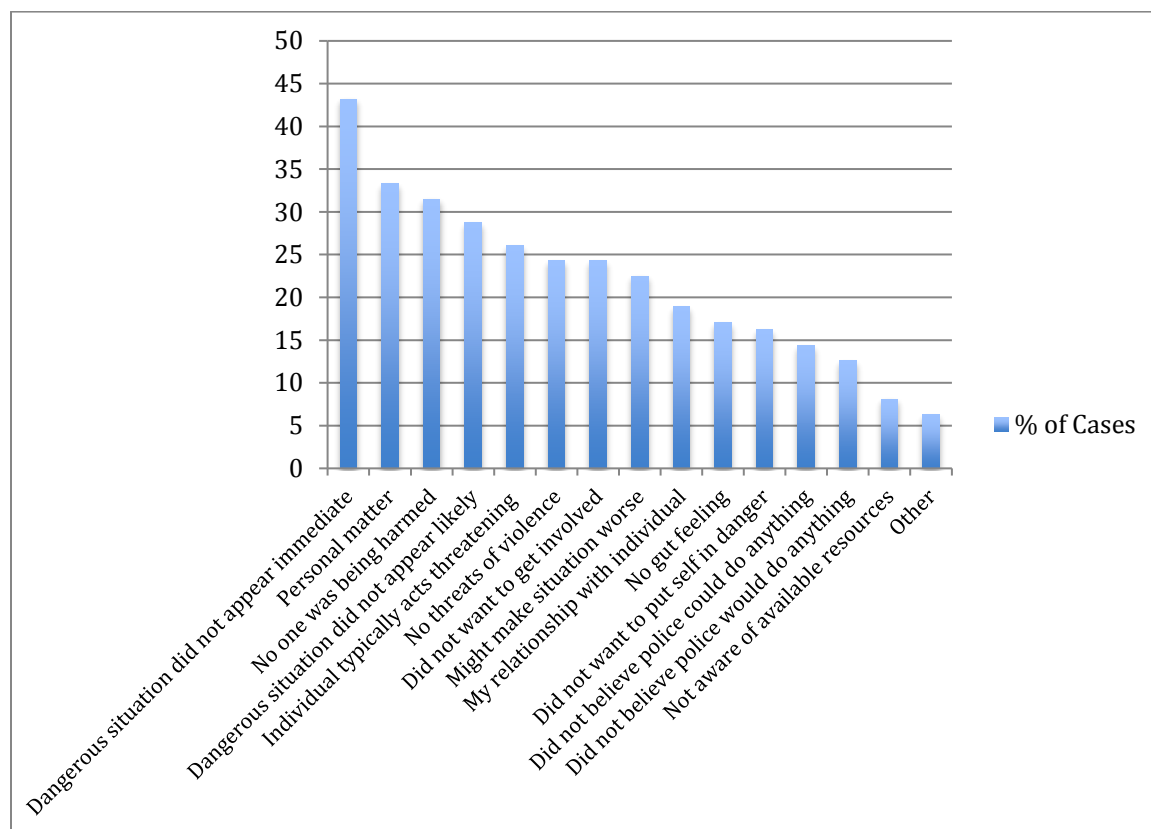


The most frequently endorsed reasons for *not* reporting pre-incident behaviors included: a dangerous situation did not appear immediate (43.2%), it was a personal matter (33.3%), no one was being harmed (31.5%), and a dangerous situation did not appear likely (28.8%). Seventy-two percent of participants who did not report indicated

they would have been more likely to report if the situation had been more serious. Figure 5 displays the reasons given for choosing not to report pre-incident behaviors. When asked if participants would change anything about how they responded, 23.7% responded “Yes,” and 34.4% of that group indicated they would have notified campus police.

Figure 5

Frequencies of Reasons Given for Choosing Not to Report Pre-incident Behaviors



Hypothesis 5

Hypothesis 5 predicted that engaging in more self-protective behaviors would be associated with lower levels of perceived safety on campus. Pearson’s correlation was used to compare participants’ total scores on the Self-Protective Behaviors Scale with their ratings for their overall feeling of perceived safety on campus. The analysis found a

significant negative correlation in support of the hypothesis, $r = -.13, p = .009$. This indicates that as self-protective behaviors increase, perceived safety on campus decreases.

Hypothesis 6

Hypothesis 6 predicted that engaging in self-protective behaviors would be associated with higher levels of campus police awareness. Pearson's correlation was used to compare participants' total scores on the Self-Protective Behaviors Scale with their total scores on the Campus Police Awareness Scale. The hypothesis was not supported, as no significant relationship was found between self-protective behaviors and campus police awareness, $r = .02, p = .72$.

Hypothesis 7

Hypothesis 7 predicted that participants who engaged in more self-protective behaviors would perceive themselves as more willing to report observed pre-incident behaviors to campus police than their peers (other students on campus). A one-way ANOVA was used to compare mean differences on the Self-Protective Behaviors Scale with the participants' self-rating of willingness to report to campus police. There were significant mean differences in the amount of self-protective behaviors among the three groups of peer comparisons (less likely to report, no difference, more likely to report), $F(2, 422) = 6.63, MSE = 35.50, p = .001$. Pairwise comparisons using LSD only partially supported the hypothesis. As hypothesized, participants who indicated they were more likely to report and no difference in reporting concerning behavior to campus police than their peers endorsed more self-protective behaviors in comparison with those who indicated they were less likely to report. However, there was not a significant mean difference of self-protective behaviors between those who indicated they were more

likely to reported and those who indicated there was no difference in likelihood to report. The average estimate of peers that would report observed pre-incident behaviors was 41.4% ($SD = 22.58$).

Hypothesis 8

Hypothesis 8 predicted that participants who endorsed witnessing pre-incident behaviors on campus would be more likely to engage in self-protective behaviors than those who have not observed pre-incident behaviors. A one-way ANOVA was used to compare the mean differences on the Self-Protective Behaviors Scale. Those who did endorse observing pre-incident behaviors had a mean scale score of 20.0 ($SD = 6.10$), whereas those who did not had a mean scale score of 18.55 ($SD = 5.95$). As hypothesized, those who endorsed observing pre-incident behaviors had significantly higher scores on the Self-Protective Behaviors Scale than those who did not, $F(1, 424) = 5.48$, $MSE = 36.01$, $p = .02$.

Hypothesis 9

Hypothesis 9 predicted that observance of threatening behavior on campus, gender, and campus police awareness would be significant predictors of engaging in self-protective behaviors. A multiple regression analysis was used to measure the unique contribution of observance of pre-incident behavior, participants' gender, and the Campus Police Awareness Scale scores' unique contributions to engagement in self-protective behaviors. Table 4 summarizes the analysis results. The hypothesis was only partially supported, as gender was the only variable significantly correlated with the criterion ($\beta = .48$, $p < .001$). Since the regression weight is in the positive direction (coded as 1 = male, 2 = female), it indicates female participants are expected to engage in

more self-protective behaviors than male participants, after controlling for the other variables in the model. The regression model with all three predictors was significant accounting for 24% of the variance ($R^2 = .244$, $F(3, 421) = 45.077$, $MSE = 27.78$, $p < .001$).

Table 4

Summary of Regression Analysis for Self-Protective Behaviors

Variable	B	SE(B)	β	t	Sig. (p)
Observed threatening behavior on campus	.368	.562	.029	.655	.513
Gender	6.447	.585	.478	11.023	<.001
Campus Police Awareness Scale	.160	.199	.035	.804	.422

Hypothesis 10

Hypothesis 10 predicted that engaging in self-protective behaviors, campus police awareness, and attitudes toward campus police would be significant predictors of reporting observed threatening behaviors. A multiple regression analysis was used to measure the unique contribution of the Self-Protective Behaviors Scale scores, Campus Police Awareness Scale scores, and Attitudes Toward Campus Police Scale scores' unique contributions to reporting observed threatening behaviors to campus police, local law enforcement, or a university faculty member or administrator. Overall, the model was not significant, $R^2 = .043$, $F(3, 128) = 1.932$, $p = .128$. Only the Campus Police Awareness Scale ($\beta = .22$, $p = .022$) was significantly correlated to the criterion,

indicating that higher levels of campus police awareness are associated with reporting behaviors. Table 5 summarizes the results of the analysis.

Table 5

Summary of Regression Analysis for Reporting Behaviors

Variable	B	SE(B)	β	<i>t</i>	Sig. (<i>p</i>)
Self-Protective Behaviors Scale	.003	.006	.045	.514	.608
Campus Police Awareness Scale	.067	.029	.216	2.323	.022
Campus Police Attitudes Scale	-.004	.010	-.042	-.448	.655

CHAPTER 4: DISCUSSION

The recent increase of highly publicized acts of violence at academic institutions has highlighted the need to understand more about violence in campus settings. More knowledge about what drives these tragic incidents can help postsecondary campus administrators and law enforcement to develop strategies for detecting warning signs in order to prevent violence. The central goal of the present study was to learn more about students' engagement in self-protective behaviors, perceptions of campus safety issues and campus police, and observance/reporting of pre-incident behaviors.

Self-Protective Behaviors

In the present study, the most frequently endorsed self-protective behaviors were keeping door locked when gone, keeping door locked when alone at night and during the day, telling friends where he/she will be, and keeping the highest security settings on social media sites. There were gender differences all items except one that pertained to performing internet searches on potential romantic partners or associates. This brings up a question of whether male participants may be engaging in the behavior for different reasons than women, specifically if they are engaging in the behavior for self-protective purposes or have an alternate motivation. Overall, in line with previous findings (Woolnough, 2009) and as hypothesized, female participants were more likely than male participants to engage in self-protective behaviors. This falls in line with female participants' reported lower feelings of safety. Research indicates women have reported higher levels of fear of victimization (Fisher & May, 2009; Jennings et al., 2007; Lane et al., 2009). If women feel they are more likely to be victimized on campus, they may engage in more behaviors to reduce their personal risk for victimization.

However, it is difficult to determine exactly what type of victimization may be driving students to engage in self-protective behaviors, especially since perceptions of campus safety issues differed male and female participants. On average, females ranked sexual assault as the campus safety issue they were most concerned about, and estimated sexual assault victimization rates on campus to be an average of 22% of students. On the other hand, males ranked physical assault highest. Estimated rates of feeling unsafe because of threatening behavior were higher for female participants. Concern of an active shooter on campus was, on average, ranked third among males and fourth among females, suggesting that other campus safety concerns are more salient and likely more relevant to self-protective behaviors. Although these rankings shed light onto perceptions of significant campus safety issues, it is unclear if they are based upon a particular subset of concerning behaviors or generalized concern about safety on campus.

Results indicated that participants who observed pre-incident behaviors engaged in more self-protective behaviors. Though the full nature of this relationship must be explored further, these results suggest individuals may be more aware of safety risks on campus or possibly engage in more self-protective behaviors as a result of observing certain pre-incident behaviors.

Reporting Behaviors

Overall, approximately one-third of participants endorsed being aware of an incident of concerning or threatening behavior, with female participants significantly more likely to do so, which is consistent with previous research (Hollister et al., 2015). This gender disparity could be the result of several factors. For example, women may feel more likely to be victimized, thus leading to feeling more unsafe (Jennings et al.,

2007). Also, women may be more observant of concerning behaviors or have a different threshold related to concerning behavior that may not be outwardly aggressive or violent but could be perceived as threatening in nature.

Contrary to the hypothesis, there was no significant gender difference for reporting incidents to university officials or law enforcement. However, the results highlighted the importance of peer dialogue related to reporting campus safety issues. Some incidents of concerning or threatening behavior were not directly observed by the participant, but were learned secondhand through by peers. In fact, consulting a friend was the most endorsed action taken by almost half of participants who knew of an incident. These findings suggest that students are more likely to consult a peer rather than report pre-incident behaviors to law enforcement. This is consistent with findings from a study of K-12 violent acts that indicated substantial portions of student bystanders (students who had prior knowledge of attack) were friends (34%) or acquaintances (29%) of the attacker (Pollack, Modzeleski, & Rooney, 2008).

The second most endorsed action by participants who observed pre-incident behaviors was taking “no action.” This finding emphasizes the importance of starting and maintaining a dialogue about how to respond when one becomes aware of an individual on campus exhibiting pre-incident behaviors. Although reporting to campus law enforcement would be ideal, the likelihood is still low, especially for occurrences students may feel are innocuous. Again, the word “reporting” will refer to reporting an incident to a member of the university faculty/staff administration, or a member of law enforcement.

Overall reporting rates were 21.5% for individuals who were aware of pre-incident behavior. This is significantly lower than the 41.4% average estimated rate of reporting. These findings suggest there is a disparity between students' perceptions of what types of pre-incident behaviors should and will be reported versus the actual rates of reporting. Participants who did report pre-incident behaviors most often cited doing so because a dangerous situation appeared immediate and specific and/or serious threats were made. These results suggest students' threshold for reporting is more related to the perceived immediacy rather than the possibility of a future threat. Given the growing research related to "leakage" and investigations of acts of violence on campuses, observed pre-incident behaviors can be the key to increasing safety if they are reported to campus authorities. This allows campus stakeholders, or preferably threat assessment teams, to monitor and intervene if necessary in order to prevent escalation and potential violence.

Hollister et al. (2015) found incidents that did not involve an identifiable victim were related to lower willingness to report. When non-reporting participants were asked why they did not report pre-incident behaviors, the most endorsed reasons were beliefs that a dangerous situation did not appear immediate, and that the observed incident was a personal matter. This finding suggests students are hesitant to report pre-incident behaviors because they subjectively judged the immediate situation rather than the potential for future harm based on the observed behaviors.

The threat assessment model is based on identifying pre-incident behaviors to prevent escalation and risk for targeted violence, and if students do not report behaviors as they occur, threat assessment teams cannot monitor the case and develop potential

intervention strategies. Shifting campus safety to a proactive rather than reactionary approach requires preventive interventions. The only way these can effectively take place is if pre-incident behaviors are reported. The barriers to reporting found in the literature and in the present study identify a number of areas to target to facilitate reporting. Providing students and faculty/staff with examples of concerning behaviors that should be reported can increase cognizance and recognition of situations or behaviors that could escalate. This would also aid in expanding individuals' preconceived ideas about the purpose and role of campus law enforcement as well as the potential significance of behaviors they may interpret as "red flags" or "warning signs."

In addition, the belief that pre-incident behaviors should not be reported if they are perceived as personal matters may reflect an unwillingness to draw attention to an interpersonal issue if the observer is a bystander or third party. However, violence most often occurs within the context of relationships, so this contextual factor should ideally not decrease reporting. Strategies to facilitate reporting should address this hesitancy to report situations. Encouraging those on campus to report *all* pre-incident behaviors may help minimize the subjective aspect of determining threshold for reporting. Anonymous methods of reporting may increase bystander reporting, as well as in situations in which individuals do not want to be identified as reporting a friend or acquaintance. In addition, concerns regarding the nature of the potential response by campus authorities may also inhibit reporting (Hollister et al, 2015). Providing better detail to stakeholders regarding the assistance oriented approach to any threat assessment may also address hesitance to report. Disciplinary policies should be flexible and nonreactionary so that individuals are

not withholding from reporting due to concerns that the subject will be seriously punished (Scalora et al., 2010).

Campus Police Awareness

The present study examined a number of factors related to awareness of the campus police department, including how to get a hold of the department, previous contacts with the department, and awareness of what types of issues should be reported. Though it may seem like individuals who take more of an interest in minimizing risk for personal victimization would be more aware of campus safety resources, no significant relationship was found between self-protective behaviors and awareness of campus police. This is problematic because individuals who endorsed higher amounts of self-protective behaviors were more likely to observe or be made aware of more pre-incident behaviors.

Analyses also identified higher scores on the Campus Police Awareness Scale as a significant predictor of reporting. This finding underscores the potential implications of raising awareness on campuses about the purposes and functions of campus law enforcement in order to facilitate higher rates of reporting. Awareness campaigns on campuses can increase visibility of the campus law enforcement presence, and inform students about *how* and *what* to report. Strategies for awareness campaigns may differ greatly depending on the size of the institution as well as the type of campus law enforcement presence (police departments, campus security offices, etc.). Campaigns can use relevant images to capture attention and post contact information for campus police (<http://police.unl.edu/new/safety-tm.shtml>).

In-person presentations could also be used to encourage self-protective behaviors and increase campus police awareness. Specific presentations could be targeted toward groups of students who are more likely to view pre-incident behaviors and/or are less likely to report (Hollister et al., 2014; McMahon & Dick, 2011). Education about reducing personal risk has been found to increase individuals' self-protective behaviors (Orchowski, 2008). Presentations could also be developed for a staff and faculty audience, who have been found to exhibit a higher willingness to report (Hollister et al., 2015). As campus communication becomes more technology driven, web-based interventions using videos or social media may help in reaching a larger proportion of the campus community. Use of social media could also serve as an outlet for establishing relationships with individuals on campus and opening lines of communication that may aid in making campus law enforcement more approachable.

Staff and faculty likely have contact with many students every day, and efforts should be made to encourage facilitating reporting if students confide in them about observed pre-incident behaviors. Involvement of campus law enforcement officers in campus awareness and education efforts could help foster communication, trust, and positive attitudes towards reporting. Peer education is also a strategy for raising awareness, especially for students highly connected to campus (Hollister et al., 2014). These students may be aware of more pre-incident behaviors, either through their own observation or from reports of other students.

Implications for Campus Violence Prevention

Though postsecondary campuses are generally seen as safe places, results from the present study suggest undergraduate students have real concerns about various safety

issues and may engage in self-protective behaviors to reduce their individual risk for victimization. On average, participants estimated that slightly more than one-third of students had felt unsafe because of threatening behavior. As previously discussed, the present study found that nearly one-third of participants endorsed being made aware of at least one instance of pre-incident behavior, but only a small portion were reported to law enforcement. This indicates that campus law enforcement is unaware of a large number of pre-incident behaviors, and emphasizes the importance of observing and reporting these occurrences to prevent acts of violence.

Even if postsecondary institutions succeed in raising awareness of campus safety issues and encourage reporting of pre-incident behaviors by faculty, staff, and students, safety can only be improved if they have the necessary resources to appropriately investigate and respond to reports. Institutions differ greatly in both size and available resources, but all should have the goal of forming a Threat Assessment Team that includes interdisciplinary stakeholders (Fox, 2009; Reddy et al., 2001; Scalora et al., 2010; Virginia Tech Review Panel, 2007).

Pre-incident behaviors may vary widely and cross a number of campus safety issues, such as stalking, intimate partner violence, sexual assault, and suicide. Campuses are more equipped to respond to pre-incident behaviors by proactively establishing connections across stakeholder groups and forming relationships with internal and external resources. Investigating reports and developing comprehensive intervention strategies is consistent with the goal of preventing pre-incident behaviors from escalating into acts of violence and providing assistance to the individual posing a threat (Cornell, 2010; Scalora et al., 2010).

Policies and regulations at postsecondary institutions should reflect an ongoing emphasis on campus safety and violence prevention. Increased guidelines and oversight by institutions on these issues may assist with Title IX compliance. The National Women's Law Center (NWLC) (2012) suggests sexual harassment policies as well as the types of harassment identified and prohibited, should be clear. Overall, institutional policies that reflect an ongoing commitment to proactively addressing safety concerns may lead to a culture shift that is more supportive and encouraging of awareness of safety concerns and potentially increase reporting of them to campus authorities.

Limitations of the Present Study

The current study had a number of limitations. Social desirability may have inflated endorsements of self-protective behaviors since they could be viewed as proactive and positive behaviors. Research has shown individuals' survey responses are impacted by social desirability of behaviors (Phillips & Clancy, 1972). The survey was taken online, but a recent meta-analysis has found there are no significantly different effects in social desirability response effects in computer versus paper surveys (Doudou & de Winter, 2014). In addition, the present source of data was online self-report, thus its accuracy cannot be verified. One study has found complete anonymity may decrease the social desirability response bias, but may also decrease the accuracy of the data due to participants responding more carelessly (Lelkes, Krosnick, Marx, Judd, & Park (2012). However, attempts to identify outliers were made and one entire case was removed from the analysis, while three other participants' ratings on the Campus Police Awareness Scale were removed due to an inconsistent response style.

The sample was composed only of undergraduate students enrolled in an introductory-level psychology course. While the underrepresentation of males in the sample is consistent with psychology research participation pools, the gender disparity may have affected the results—especially related to gender differences. In addition, the sample was largely made up of younger students taking an introductory course. Many participants had only been a student on campus for only one semester prior to taking the present survey, essentially limiting their timeframe for observing preincident behaviors. Since the sample was made up predominantly of Psychology majors, it is possible they may be more sensitive to others' behavior related to the survey contents, as well as possibly more susceptible to social desirability when answering survey questions. Also, the sample is lacking in ethnic/racial diversity, though it is representative of the surrounding geographical population. The geographical make-up of the student body also introduces possible limitations with the generalizability of the sample, as many students who attend the university are come from rural areas of the state. Students from a rural upbringing compared to an urban one may perceive campus safety issues differently.

Another limitation relates to the survey's description of pre-incident behavior. Though examples were provided, the description may not have aligned with participants' experiences and understanding of concerning or threatening behaviors and individuals they may have observed. This could lead to an underestimate of individuals who have observed pre-incident behaviors. While approximately one-third of participants endorsed awareness of an incident of concerning or threatening behavior, follow-up analyses were

only related to the most recent incident. Having more cases of individuals who observed threatening incidents would increase the power of these analyses.

Regarding the survey questions about pre-incident behaviors, it could not be distinguished if the event discussed was directly observed or the participant became aware of the incident indirectly. If this distinction were made in future surveys, it would be helpful to ask participants *how* they became aware of an incident, such as being told by a friend or observing concerning behavior in person. Also, the survey question regarding one's action(s) taken in response to the pre-incident behaviors allowed multiple responses but did not differentiate the primary action from secondary, tertiary, etc. actions. This data would be helpful in identifying participants' first or primary reaction, especially if it precedes reporting.

Future directions

The present study is the first known study to measure self-protective behaviors in the context of campus threat assessment. Campus threat assessment research is in its infancy, and continuing incidents of targeted violence on postsecondary campuses impresses the need for ongoing research. The present study identified a number of areas in which more detailed and specific research is needed.

While the present study had a sample of undergraduate students, the field would benefit from learning more about faculty and staff experiences of self-protective behaviors, observance of pre-incident behaviors, and reporting tendencies. Faculty and staff perceptions of campus safety issues could add insight into what types of behaviors they may be more likely to see as concerning. As employees of the institution, perhaps

there is more responsibility for faculty and staff to be familiarized with potential pre-incident behaviors and aware of campus reporting procedures.

While the sample of this study was of a large, public university, campus safety issues vary greatly among different types of universities. Postsecondary campus threat assessment research must continue to compare postsecondary institutions across domains such as public versus private, small to large student populations, and various geographical locations. Across institutions, there is wide heterogeneity of types of campus security or police departments. Though all types of campus law enforcement can adopt a threat assessment model, the makeup of officers and allocated resources can vary significantly. Future studies could compare student perceptions of campus safety issues, engagement in self-protective behaviors, attitudes and awareness of campus law enforcement, as well as their experiences observing and reporting pre-incident behaviors across these institutional domains. In addition, postsecondary students arrive at college with a wealth of past experiences, potentially involving exposure to pre-incident behaviors. Research could explore students' pre-exposure to safety issues either in K-12 or outside of an academic setting.

Future research could also delve further into the phenomenon of self-protective behaviors on campuses. Although students were asked about their engagement in self-protective behaviors, future research could examine the motivation behind these behaviors as well as the context of their use. In addition, research could explore other types of self-protective behaviors that were not measured in the present study.

Participants in the present study were only asked to estimate victimization rates on campus, and perhaps future studies could ask participants to estimate their own risk for

victimization and how that compares to their peers. Similar to pre-exposure to pre-incident behaviors, students may have engaged in self-protective behaviors prior to attending the postsecondary institution. Future studies could measure past patterns of self-protective behaviors and if they influence students' engagement in them once on campus.

The results of the present study uncovered a number of gender differences related to views of campus safety issues and engagement in self-protective behaviors. Future studies can explore these differences further in order to gain more understanding of how men and women view violence and safety differently, especially in a campus context. Further research is needed to determine if gender-specific methods may increase the effectiveness of targeted campus interventions to increase awareness and reporting of pre-incident behaviors.

As the results of the study showed, rates of reporting pre-incident behaviors to law enforcement are low. More research is needed in order to identify effective ways to increase reporting on campuses. Studies could determine if the relationship an individual has with the subject engaging in pre-incident behaviors (e.g., stranger, friend, or acquaintance) impacts their likelihood of reporting. While the present study identified several reasons why participants refrained from reporting, there is much more to be learned about potential barriers in order to find ways to overcome them, possible alternative methods that may be viewed as less intimidating.

Future research can also examine whether various types of reporting mechanisms may increase reporting. For example, if use of online, text message, or other possible modes would influence reporting rates compared to the most common available method

of calling law enforcement over the telephone. In addition, studies could examine if anonymous reporting increases reporting rates by alleviating concerns about retribution or being directly involved in the situation or with law enforcement.

Finally, if institutions implement campus-wide campaigns to increase awareness of campus safety issues, promote self-protective behaviors, and/or encourage reporting, pre- and post- campaign data could be collected to study the effectiveness of such campaigns. Specifically, determining what types of interventions lead to increased awareness and higher levels of reporting could assist institutions in developing campus threat assessment programs.

Conclusion

Targeted violence is not a new phenomenon on postsecondary campuses. There is a wide body of literature studying campus sexual and physical assault, as well as burgeoning research in the areas of campus stalking and intimate partner violence. However, growing media exposure has brought active shooter attacks to the forefront of the national conversation on campus safety issues. While the base rate of this extreme form of targeted violence remains low, highly publicized incidents such as the shootings at Virginia Tech led to public outcry about how numerous “red flags” could be ignored. In the context of this increased awareness of campus safety, the present study aimed to explore students’ perceptions of safety issues, engagement in self-protective behaviors to reduce their own risk for victimization, awareness and attitudes about campus law enforcement, and exposure to pre-incident behaviors. The results reinforced the need for increased education and awareness in order to increase students’ awareness and reporting of pre-incident behaviors. Further research in this area is greatly needed in order to

develop interventions and strategies to increase the safety of postsecondary campuses and prevent acts of targeted violence.

References

- Albrecht, S. (2010). Threat assessment teams: Workplace and school violence prevention. *FBI Law Enforcement Bulletin*, 79(2), 15-21.
- Amar, A. F., Sutherland, M., & Kesler, E. (2012). Evaluation of a bystander education program. *Issues in Mental Health Nursing*, 33, 851-857.
- American Psychological Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- Baker, K. & Boland, K. (2011). Assessing safety: A campus-wide initiative. *College Student Journal*, 45, 683-699.
- Baum, K. & Klaus, P. (January, 2005). *Violent victimization of college students, 1995-2002* (NCJ-206836). U.S. Department of Justice. Washington, D.C.: Government Printing Office.
- Becker, M., Martin, L., Wajeeh, E., Ward, J., & Shern, D. (2002). Students with mental illnesses in a university setting: Faculty and student attitudes, beliefs, knowledge, and experiences. *Psychiatric Rehabilitation Journal*, 25, 359-368.
- Benton, S. A., Robertson, J. M., Tseng, W., Newton, F. B., & Benton, S. L. (2003). Changes in counseling center client problems across 13 years. *Professional Psychology: Research and Practice*, 34, 66-72.
- Borum, R., Fein, R., Vossekuil, B., & Berglund, J. (1999). Threat assessment: Defining an approach for evaluating risk of targeted violence. *Behavioral Sciences and the Law*, 17, 323-337.
- Boudreau, A. & Zamost, S. (2009, February 13). CNN Exclusive: Secret files reveal NIU killer's past. *CNN*. Retrieved from

<http://www.cnn.com/2009/CRIME/02/13/niu.shooting.investigation/index.html?eref=onion>.

Brank, E. M., Woolard, J. L., Brown, V. E., Fondacaro, M., Luescher, J. L., Chinn, R. G., & Miller, S. A. (2007). Will they tell? Weapons reporting by middle-school youth. *Youth Violence and Juvenile Justice*, 5, 125-146.

Bryant, S. A., & Spencer, G. A. (2003). University students' attitudes about attributing blame in domestic violence. *Journal of Family Violence*, 18, 369-376.

Buhi, E. R., Clayton, H., & Surrency, H. H. (2009). Stalking victimization among college women and subsequent help-seeking behaviors. *Journal of American College Health*, 57, 419-425.

Burn, S. M. (2009). A situational model of sexual assault prevention through bystander intervention. *Sex Roles*, 60, 779-792.

Burns, R. & Crawford, C. (2000). School shootings, the media, and public fear: Ingredients for a moral panic. *Crime, Law & Social Change*, 32, 147-168.

Calhoun, F. S. & Weston, S. W. (2003). *Contemporary threat management: A practical guide for identifying, assessing and managing individuals of violent intent*. San Diego: Specialized Training Services, Inc.

Calhoun, F. S. & Weston, S. W. (2009). *Threat assessment and management strategies: Identifying the howlers and hunters*. Boca Raton: CRC Press.

Combs-Lane, A. M. & Smith, D. W. (2002). Risk of sexual victimization in college women: The role of behavioral intentions and risk-taking behaviors. *Journal of Interpersonal Violence*, 17, 165-183.

- Cornell, D. G. (2007). *The Virginia model for student threat assessment*. Presented at the Public Entity Risk Institute Conference.
- Cornell, D. G. (2009). *Recommended practices for Virginia college threat assessment*. Virginia Department of Criminal Justice Services. Retrieved from www.dcjs.virginia.gov.
- Cornell, D. G. (2010, January/February). Threat assessment in college settings. *Change*. Retrieved from www.changemag.org.
- Cornell, D. G. (2011). A developmental perspective on the Virginia Student Threat Assessment Guidelines. *New Directions for Youth Development*, 129, 43-59.
- Couper, M. P., Tourangeau, R., & Kenyon, K. (2004). Picture this!. *Public Opinion Quarterly*, 68, 255-266.
- Davis, J. A., & Chipman, M. A. (2001). Stalkers and other obsessional types: A review and forensic typology of those who stalk. In J. A. Davis (Ed.), *Stalking crimes and victim protection: Prevention, intervention, threat assessment, and case management* (pp. 3-18). Boca Raton, FL: CRC Press.
- Degue, S. & DiLillo, D. (2004). Understanding perpetrators of nonphysical sexual coercion: Characteristics of those who cross the line. *Violence and Victims*, 19, 673-688.
- Degue, S. & DiLillo, D. (2005). "You would if you loved me": Toward an improved conceptual and etiological understanding of nonphysical male sexual coercion. *Aggression and Violent Behavior*, 10, 513-532.

- Dietz, P. E., Matthews, D. B., Martell, D. A., Stewart, T. M., Hrouda, D., R., & Warren, J. (1991). Threatening and otherwise inappropriate letters to members of the United States Congress. *Journal of Forensic Sciences*, 36, 1445-1468.
- Dikel, W. (2012). *School shootings and student mental health – What lies beneath the tip of the iceberg*. National School Board Association Council of School Attorneys. Retrieved from <https://www.nsba.org/sites/default/files/School%20Shootings%20and%20Student%20Mental%20Health.pdf>.
- Doudou, D. & de Winter, J. C. F. (2014). Social desirability is the same in offline, online, and paper surveys: A meta-analysis. *Computers in Human Behavior*, 36, 487-495.
- Douglas, K. S. & Dutton, D. G. (2001). Assessing the link between stalking and domestic violence. *Aggression and Violent Behavior*, 6, 519-546.
- Drysdale, D., Modzeleski, W., & Simons, A. (April, 2010). *Campus attacks: Targeted violence in institutions of higher education*. U.S. Secret Service, U.S. Department of Homeland Security, Office of Safe and Drug-Free Schools, U.S. Department of Education, and Federal Bureau of Investigation, U.S. Department of Justice. Washington, D.C.: Government Printing Office.
- Emery, C. R. (2010). Examining an extension of Johnson's hypothesis: Is male perpetrated intimate partner violence more underreported than female violence? Item non-response in the Project on Human Development in Chicago neighborhoods. *Journal of Family Violence*, 25, 173-181.
- Family Educational Rights and Privacy Act, 20 U.S.C § 1232g, 34 CFR Part 99.

- Federal Emergency Management Agency & International Association of Chiefs of Police (2012). *Improving the public's awareness and reporting of suspicious activity: Key research findings from literature review, household surveys, focus groups and interviews*. FEMA P-903. Catalog No. 11327-1.
- Fein, R. A., & Vossekuil, B. (1998). *Protective intelligence and threat assessment investigations: A guide for state and local law enforcement officials*. U.S. Secret Service. Washington, D.C.
- Fein, R. A. & Vossekuil, B. (1999). Assassination in the United States: An operational study of recent assassins, attackers, and near-lethal approachers. *Journal of Forensic Sciences*, 44, 321-333.
- Fein, R., Vossekuil, B., Borum, R., Pollack, W. S., Modzeleski, W., & Reddy, M. (2002, May). *A guide to managing threatening situation and to creating safe school climates*. Washington, DC: United States Secret Service and United States Department of Education.
- Fein, R. A., Vossekuil, B., & Holden, G. (1995). Threat assessment: An approach to prevent targeted violence. *Research in Action*. Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.
- Ferraro, K. F. (1996). Women's fear of victimization: Shadow of sexual assault? *Social Forces*, 75, 667-690.
- Finn, J. (2004). A survey of online harassment at a university campus. *Journal of Interpersonal Violence*, 19, 468-483.
- Fisher, B. S. (1995). Crime and fear on campus. *Annals of the American Academy of Political and Social Science*, 539, 85-101.

- Fisher, B. S., Cullen, F. T., & Turner, M. G. (2000). *The sexual victimization of college women*. U.S. Department of Justice, National Institute of Justice, and Bureau of Justice Statistics. Washington, D.C.: Government Printing Office.
- Fisher, B. S., Cullen, F. T., & Turner, M. G. (2002). Being pursued: Stalking victimization in a national study of college women. *Criminology & Public Policy, 1*, 257-308.
- Fisher, B. S., Daigle, L. E., Cullen, F. T., & Turner, M. G. (2003a). Acknowledging sexual victimization as rape: Results from a national-level study. *Justice Quarterly, 20*, 535-574.
- Fisher, B. S., Daigle, L. E., Cullen, F. T., & Turner, M. G. (2003b). Reporting sexual victimization to the police and others: Results from a national-level study of college women. *Criminal Justice and Behavior, 30*, 6-38.
- Fisher, B. S. & May, D. (2009). College students' crime-related fears on campus: Are fear-provoking cues gendered? *Journal of Contemporary Criminal Justice, 25*, 300-321.
- Fox, J. A. & Savage, J. (2009). Mass murder goes to college: An examination of changes on college campuses following Virginia Tech. *American Behavioral Scientist, 52*, 1465-1485.
- Franklin, C. A. (2010). Physically forced, alcohol-induced, and verbally coerced sexual victimization: Assessing risk factors among university women. *Journal of Criminal Justice, 38*, 149-159.

- 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, 1296-1315.
- Friedman, E. (2009, August 19). Va. Tech shooter Seung-Hui Cho's mental health records released. *abcNEWS*. Retrieved from <http://abcnews.go.com/US/seung-hui-chos-mental-health-records-released/story?id=8278195>.
- Galuszka, P. (2008). Emergency notification in an instant. *Diverse: Issues in Higher Education*, 25(2), 14-17.
- Gartner, R. & Macmillan, R. (1995). The effect of victim-offender relationship on reporting crimes of violence against women. *Canadian Journal of Criminology*, 37, 393-429.
- Griffith, J. D., Hueston, H., Wilson, E., Moyers, C., & Hart, C. L. (2004). Satisfaction with campus police services. *College Student Journal*, 38, 150-156.
- Guthman, J. C., Iocin, L., & Konstas, D. D. (2010). *Increase in severity of mental illness among clinical college students: A 12-year comparison*. Paper presented at the American Psychological Association conference, San Diego, CA.
- Hart, T. C. & Colativo, V. (2011). College student victims and reporting crime to the police: The influence of collective efficacy. *Western Criminology Review*, 12(3), 1-19.
- Hart, T. C. & Miethe, T. D. (2011). Violence against college students and its situational contexts: Prevalence, patterns, and policy implications. *Victims and Offenders*, 6, 157-180.
- Health Insurance Portability and Accountability Act of 1996, 42 U.S.C. § 1320d-9

(2010).

Hendy, H. M., Weiner, K., Bakerofskie, J., Eggen, D., Gustitus, C., & Mcleod, K. C.

(2003) Comparison of six models for violent romantic relationships in college men and women. *Journal of Interpersonal Violence, 18*, 645-665.

Hickman, S. E. & Muehlenhard, C. L. (1997). College women's fears and precautionary behaviors relating to acquaintance rape and stranger rape. *Psychology of Women Quarterly, 21*, 527-547.

Hollister, B. A., Scalora, M. J., Bockoven, J., & Hoff, S.H. (2015). Campus stakeholder reporting of pre-incident behaviors. *Manuscript currently under review.*

Hollister, B. A., Scalora, M. J., Hoff, S., & Marquez, A. (2014). Exposure to pre-incident behavior and reporting in college students. *Journal of Threat Assessment and Management, 1*, 129-143.

Hughes, S., White, R. J., & Hertz, G. (2008). A new technique for mitigating risk on US college campuses. *Journal of Higher Education Policy and Management, 30*, 309-318.

James, D. V., (2010). Protecting the prominent? A research journey with Paul Mullen. *Criminal Behavior and Mental Health, 20*, 242-250.

James, D. V., Mullen, P. E., Pathé, M. T., Meloy, J. R., Preson, L. F., Darnley, B., & Farnham, F. F. R. (2009). Stalkers and harassers of royalty: The role of mental illness and motivation. *Psychological Medicine, 39*, 1479-1490.

Jennings, W. G., Gover, A. R., & Pudrzynska, D. (2007). Are institutions of higher learning safe? A descriptive study of campus safety issues and self-report

- victimization among male and female college students. *Journal of Criminal Justice Education*, 18, 191-208.
- Kalof, L. (1993). Rape-supportive attitudes and sexual victimization experiences of sorority and nonsorority women. *Sex Roles*, 29, 11-12.
- Koss, M. P. (1985). The hidden rape victim: Personality, attitudinal, and situational characteristics. *Psychology of Women Quarterly*, 9, 193-212.
- Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology*, 55, 162-170.
- 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, 172-192.
- Langhinrichsen-Rohling, J. (2012). Gender and stalking: Current intersections and future directions. *Sex Roles*, 66, 418-426.
- Latané, B. & Darley, J. M. (1968). Group inhibition of bystander intervention in emergencies. *Journal of Personality and Social Psychology*, 10, 215-221.
- Leaming, S. (2004, January 27). Toy guns get boys suspended. *The Spokesman-Review*. Retrieved from <http://www.spokesmanreview.com>.
- Lelkes, Y., Krosnick, J., Marx, D. M., Judd, C. M., & Park, B. (2012). Complete anonymity compromises the accuracy of self-reports. *Journal of Experimental Social Psychology*, 48, 1291-1299.

- Liska, A. E., Sanchirico, A., & Reed, M. D. (1988). Fear of crime and constrained behavior: Specifying and estimating a reciprocal effects model. *Social Forces*, 66, 827-837.
- Lizotte, A. J. (1985). The uniqueness of rape: Reporting assaultive violence to the police. *Crime & Delinquency*, 31, 169-190.
- Marquez, A. J., Scalora, M. J. (2012). Victimization of university students on social networking sites. *Unpublished manuscript*.
- Mason, B. & Smithey, M. (2011). The effects of academic and interpersonal stress on dating violence among college students: A test of classical strain theory. *Journal of Interpersonal Violence*, 27, 974-986.
- McBain, L. (2008, Winter). Balancing student privacy, campus security, and public safety: Issues for campus leaders. *Perspectives*. American Association State Colleges and Universities.
- McMahon, S. & Dick, A. (2011). "Being in a room with like-minded men": An exploratory study of men's participation in a bystander intervention program to prevent intimate partner violence. *The Journal of Men's Studies*, 19, 3-8.
- Meloy, J. R. (2011). Approaching and attacking public figures: A contemporary analysis of communications and behavior. In Chauvin, C. *Threatening communications and behavior: Perspectives on the pursuit of public figures*. Washington, DC: The National Academies Press.
- Meloy, J. R., Hoffmann, J., Guldemann, A., & James, D. (2012). The role of warning behaviors in threat assessment: An exploration and suggested typology. *Behavioral Sciences and the Law*, 30, 256-279.

- Meloy, J. R., James, D. V., Farnham, F. R., Mullen, P. E., Pathe, M., Darnley, B., & Preston, L. (2004). A research review of public figure threats, approaches, attacks, and assassinations in the United States. *Journal of Forensic Sciences*, 49(5), 1-8.
- Meloy, J. R., James, D. J., Mullen, P. E., Pathé, M. T., Farnham, F. R., Preston, L. F., & Darnley, B. J. (2011). Factors associated with escalation and problematic approaches toward public figures. *Psychiatry and Behavioral Sciences*, 56, S128-S135.
- Minow, J. C. & Einolf, C. J. (2009). Sorority participation and sexual assault risk. *Violence Against Women*, 15, 835-351.
- Mongan P. & Walker, R. (2012). “The road to hell is paved with good intentions”: A historical, theoretical, and legal analysis of zero-tolerance weapons policies in American schools. *Preventing School Failure*, 56, 232-240.
- Morrel-Samuels, P. (2003). Web surveys' hidden hazards. *Harvard Business Review*, (July), 16-17.
- Mullen, P. E., James, D. V., Meloy, J. R., Pathe, M. T., Farnham, F. R., Preston, L., & Darnley, B. (2008). The role of psychotic illness in attacks on public figures. In Meloy J.R., Sheridan L, Hoffmann J. (Eds). *Stalking, threats, and attacks against public figures*. New York: Oxford University Press.
- Muschert, G. W. (2007). Research in school shootings. *Sociology Compass*, 1, 60-80.
- Muschert, G. W. & Carr, D. (2006). Media salience and frame changing across events: Coverage of nine school shootings, 1997-2001. *Journalism & Mass Communication Quarterly*, 83, 747-766.

- National Association of College and University Attorneys (2007, August 6). FERPA and campus security. *NACUA Notes*, 5(4). Retrieved from www.nacua.org.
- National Women's Law Center (June, 2012). *Title IX:40 years and counting*. Retrieved from www.nwlc.org/sites/default/files/pdfs/nwlcharassbullying_titleixfactsheet.pdf.
- Nebraska Department of Health and Human Services. (2003). Definition of severe and persistent mental illness. *Nebraska HHS finance and support manual*, 35-001.01.
- Neufeld, J., McNamara, J. R., Ertl, M. (1999). Incidence and prevalence of dating partner abuse and its relationship to dating practices. *Journal of Interpersonal Violence*, 14, 125-137.
- Nolan, J. M., Ford, S. J. W., Kress, V. E., Anderson, R. I., & Novak, T. C. (2005). A comprehensive model for addressing severe and persistent mental illness on campuses: The New Diversity Initiative. *Journal of College Counseling*, 8, 172-179.
- Norris, S. M., Huss, M. T., & Palarea, R. E. (2011). A pattern of violence: Analyzing the relationship between intimate partner violence and stalking. *Violence and Victims*, 26, 103-115.
- Norris, S. M., Scalora, M. J., Bulling, D., & Yardley, O. (2010). *Managing campus violence: A consideration of legal and policy issues*. Paper presented at the American Psychology and Law Society conference, Vancouver, Canada.
- Orchowski, L. M., Untied, A. S., & Gidycz, C. A. (2012). Reducing risk for sexual victimization: An analysis of the perceived socioemotional consequences of self-protective behaviors. *Journal of Interpersonal Violence*, 27, 1743-1761.

- O,Toole, M. E. (2000). *The school shooter: A threat assessment perspective*. Quantico, VA: National Center for the Analysis of Violent Crime, Federal Bureau of Investigation.
- Peytchev, A., Couper, M. P., McCabe, S. E., & Crawford, S. D. (2006). Web survey design: Paging versus scrolling. *Public Opinion Quarterly*, 70, 596-607.
- Pezza, P. E. & Bellotti, A. (1995). College campus violence: Origins, impacts, and responses. *Educational Psychology Review*, 7, 105-123.
- Phillips, D. L. & Clancy, K. J. (1972). Some effects of “social desirability” in survey studies. *American Journal of Sociology*, 77, 921-940.
- Pino, N. W. (1999). Gender differences in rape reporting. *Sex Roles*, 40, 979-990.
- Pollack, W. S., Modzeleski, W., Rooney, G. (2008, May). *Prior knowledge of potential school-based violence: Information students learn may prevent a targeted attack*. Washington, DC: United States Secret Service and United States Department of Education.
- Porter, J. & Williams, L. M. (2011). Intimate violence among underrepresented groups on a college campus. *Journal of Interpersonal Violence*, 26, 3210-3224.
- Potter, S. J. & Stapleton, J. G. (2012). Translating sexual assault prevention from a college campus to a United States military installation: Piloting the Know-Your-Power bystander social marketing campaign. *Journal of Interpersonal Violence*, 27, 1593-1621.
- Randazzo, M. R., Borum, R., Vossekuil, B., Fein, R., Modzeleski, W., & Pollack, W. (2006). Threat assessment in schools: Empirical support and comparison with other approaches. In S. R. Jimerson & M. J. Furlong (Eds.), *Handbook of school*

- violence and school safety: From research to practice* (pp. 147-156). Mahwah, NJ: Lawrence Erlbaum.
- Rasmussen, C., Johnson, G. (2008). *The ripple effect of Virginia Tech: A report from the Midwestern Higher Education Compact*. Retrieved from <http://www.mhec.org>.
- Reddy, M., Borum, R., Berglund, J., Vossekuil, B., Fein, R., & Modzeleski, W. (2001). Evaluating risk for targeted violence in schools: Comparing risk assessment, threat assessment, and other approaches. *Psychology in the Schools, 38*(2), 157-172.
- Reyns, B. W., Henson, B., & Fisher, B. S. (2011). Being pursued online: Applying cyberlifestyle-routine activities theory to cyberstalking victimization. *Criminal Justice and Behavior, 38*, 1149-1169.
- Rice, S. (2009). Education for toleration in an era of zero tolerance school policies: A Deweyan analysis. *Educational Studies, 45*, 556-571.
- Roberts, J. V. & Stalans, L. J. (2000). *Public opinion, crime, and criminal justice*. Boulder, CO: Westview Press.
- Rountree, P. W. (1998). A reexamination of the crime-fear linkage. *Journal of Research in Crime and Delinquency, 35*, 341-372.
- Rountree, P. W. & Land, K. C. (1996). Burglary victimization, perceptions of crime risk, and routine activities: A multilevel analysis across Seattle neighborhoods and census tracts. *Journal of Research in Crime and Delinquency, 33*, 147-180.
- Scalora, M. J., Baumgartner, J. V., & Plank, G. L. (2003). The relationship of mental illness to targeted contact behavior toward state government agencies and officials. *Behavioral Sciences and the Law, 21*, 239-249.

- Scalora, M. J., Baumgartner, J. V., Zimmerman, W., Callaway, D., Hatch-Maillette, M. A., Covell, C. N., . . . Washington, D. O. (2002a). An epidemiological assessment of problematic contacts to members of Congress. *Journal of Forensic Sciences, 47*(6), 1360-1364.
- Scalora, M. J., Baumgartner, J. V., Zimmerman, W., Callaway, D., Hatch-Maillette, M. A., Covell, C. N., . . . Washington, D. O. (2002b). Risk factors for approach behavior toward the U.S. Congress. *Journal of Threat Assessment, 2*, 35-55.
- Scalora, M. J., Washington, D. O., Casady, T., & Newell, S. P. (2003). Nonfatal workplace violence risk factors: Data from a police contact sample. *Journal of Interpersonal Violence, 18*(3), 310-327.
- Scalora, M., Simons, A., & VanSlyke, S. (2010). Campus safety: Assessing and managing threats. *FBI Law Enforcement Bulletin, 79*(2), 1-10.
- Scott, A. J., Lloyd, R., & Gavin, J. (2010). The influence of prior relationship on perceptions of stalking in the United Kingdom and Australia. *Criminal Justice and Behavior, 37*, 1185-1194.
- Sloan, J. J. & Fisher, B. S. (2011). *The dark side of the ivory tower: Campus crime as a social problem*. New York: Cambridge University Press.
- Sokolow, B. A., Lewis, W. S., Keller, J. A., & Daly, A. (2008). College and university liability for violent campus attacks. *Journal of College and University Law, 34*, 319-347.
- Spitzberg, B. H. & Cupach, W. R. (2007). The state of the art of stalking: Taking stock of the emerging literature. *Aggression and Violent Behavior, 12*, 64-86.

- Spitzberg, B. H., & Hoobler, G. (2002). Cyberstalking and the technologies of interpersonal terrorism. *New Media Society, 4*, 71-92.
- Sulkowski, M. L. (2011). An investigation of students' willingness to report threats of violence in campus communities. *Psychology of Violence, 1*, 53-65.
- Swahn, M. H., Simon, T. R., Hertz, M. F., Arias, I., Bossarte, R. M., Ross, J. G., . . .
Hamburger, M. E. (2008). Linking dating violence, peer violence, and suicidal behaviors among high-risk youth. *American Journal of Preventive Medicine, 34*, 30-38.
- Tewksbury, R. & Mustaine, E. E. (1998). Victimization risks at leisure: A gender-specific analysis. *Violence & Victims, 13*, 231-249.
- 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 & Behavior, 30*, 302-327.
- Thompson, M., Sitterle, D., Clay, G., & Kingree, J. (2007). Reasons for not reporting victimizations to the police: Do they vary for physical and sexual incidents? *Journal of American College Health, 55*, 277-282.
- Tjaden, P. & Thoennes, N. (1998). *Stalking in America: Findings from the National Violence Against Women Survey*. Washington, DC: U.S. Department of Justice, National Institute of Justice.
- Tjaden, P. & Thoennes, N. (2000). *Extent, nature, and consequences of intimate partner violence: Findings from the National Violence Against Women survey*. U.S. Department of Justice, Office of Justice Programs, National Institute of Justice: Washington, D.C.

- Tjaden, P. & Thoennes, N. (2002). The role of stalking in domestic violence crime reports generated by the Colorado Springs Police Department. In K. D. Davis, I. H. Frieze, & R. D. Maiuro (Eds.), *Stalking: Perspectives on victims and perpetrators* (pp. 330-350). New York, Springer Publishing.
- Toepel, V., Das, M., & Soest, A. V. (2006). Design of web questionnaires: The effects of the number of items per screen. *Field Methods, 21*, 200-213.
- Tourangeau, R., Couper, M. P., & Conrad, F. (2007). Color, labels, and interpretive heuristics for response scales. *Public Opinion Quarterly, 71*, 91-112.
- Tourangeau, R., Couper, M. P., & Conrad, F. (2004). Spacing, position, and order. *Public Opinion Quarterly, 68*, 368-393.
- Truman, J. L., & Planty, M. (2012). Criminal Victimization, 2011. *Bureau of Justice Statistics Bulletin*. Washington, DC. Bureau of Justice Statistics.
- Turchik, J. A. & Wilson, S. M. (2010). Sexual assault in the U.S. military: A review of the literature and recommendations for the future. *Aggression and Violent Behavior, 15*, 267-277.
- U.S. Secret Service & U.S. Department of Education. (May, 2002). *The final report and findings of the Safe School Initiative: Implications for the prevention of school attacks in the United States*. By Vossekuil, B., Fein, R. A., Reddy, M., Borum, R., & Modzeleski, W. Washington, D.C.: Government Printing Office.
- U.S. Secret Service & U.S. Department of Education. (May, 2002). *Threat assessment in schools: A guide to managing threatening situations and to creating safe school climates*. By Fein, R. A., Vossekuil, B., Pollack, W. S., Borum, R., Modzeleski, W., & Reddy, M. Washington, D.C.: Government Printing Office.

- Virginia Tech Review Panel (2007). Virginia Tech Review Panel Report.
- Weller, M. Hope, L., & Sheridan, L. (2013). Police and public perceptions of stalking: The role of prior victim-offender relationship. *Journal of Interpersonal Violence*, 28, 320-339.
- 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-Clery era. *Crime & Delinquency*, 53, 219-254.
- Woolnough, A. D. (2009). Fear of crime on campus: Gender differences in use of self-protective behaviors at an urban university. *Security Journal*, 22, 40-55.
- Yamawaki, N., Ochoa-Shipp, M., Pulsipher, C., Harlos, A., & Swindler, S. (2012). Perceptions of domestic violence: The effects of domestic violence myths, victim's relationship with her abuser, and the decision to return to her abuser. *Journal of Interpersonal Violence*, 27, 3195-3212.
- Young, J. R. (2008). For emergency alerts, some colleges try sirens. *Chronicle of Higher Education*, 54(31), 22.

APPENDIX A
CAMPUS SAFETY SURVEY

Demographic

What is your age (in years): (box for number entry)

What is your year as student at UNL?

- 1st
- 2nd
- 3rd
- 4th
- 5th
- Other _____

What gender do you identify as?

- Man
- Woman
- Trans*
- Other _____
- Prefer not to answer

What is your race/ethnicity?

- White
- Black/African American
- Asian/Pacific Islander
- Hispanic
- Native American/Alaskan Native
- Mixed racial background
- Other _____

What is your intended major?

- Social sciences (psychology, sociology, etc.)
- Natural sciences (biology, chemistry, etc.)
- Humanities (english, philosophy, history, etc.)
- Health sciences (nutrition, physical science, nursing, etc.)
- Education
- Business
- Other _____

Do you live on campus? (Yes/No)

- Do you keep the door to your room locked? (Yes/No)
 - o IF NOT: Why?
 - Inconvenient
 - Want friends to be able to come in

- Don't need to

IF ON CAMPUS:

- What type of residence do you live in?
 - Sorority/Fraternity housing
 - Dormitory
 - Other_____

IF OFF CAMPUS:

- What type of residence do you live in?
 - House
 - Apartment
 - Duplex
 - Other
- How do you travel to campus?
 - Bus/shuttle
 - Car
 - Bike
 - Walk
- How much of the day are you on campus?
 - Just for class
 - Mornings
 - Most of the day
 - Evenings
 - All the time

Feelings of safety on campus

Please indicate your overall impressions about your safety on campus.

I feel safe on campus during the day.

- In no areas
- In few areas
- In some areas
- In most areas
- In all areas

I feel safe on campus at night.

- In no areas
- In few areas
- In some areas
- In most areas
- In all areas

What is your overall feeling of safety on campus?

- Very unsafe
- Somewhat unsafe
- Somewhat safe
- Very safe

What campus safety issues are you most concerned about? (Please rank in order of most concerned to least concerned)

- Sexual assault
- Physical assault
- Stalking
- Intimate partner violence
- Active shooter

What percentage of students do you think have been victims of sexual assault on campus?

- Insert percentage

What percentage of students do you think have been victims of sexual assault on campus?

- Insert percentage

What percentage of students do you think have been victims of stalking on campus?

- Insert percentage

What percentage of students do you think have been victims of intimate partner violence on campus?

- Insert percentage

What percentage of students do you think has ever felt unsafe because of the concerning or threatening behavior of another person? (Such as an ex-intimate partner, friend, stranger, etc.)

- Insert percentage

Have you ever been victimized by a crime while on campus? (Yes/No)

IF YES:

- What type of crime? (Please select all that apply)
 - Property crime
 - Theft/robbery
 - Physical assault
 - Intimate partner violence
 - Sexual assault
 - Stalking
 - Other _____

Self-protective behaviors scale

Please respond to the following items based about how often you engage in these behaviors:

1 = *Never*, 2 = *Seldom*, 3 = *Occasionally*, 4 = *Often*, 5 = *Almost always*.

- Keep my dorm or apartment door locked when gone
- Keep my dorm or apartment door locked when alone during the day
- Keep my dorm or apartment door locked when alone at night
- Walk alone at night
- Walk alone with headphones on at night
- Walk home alone while intoxicated
- Carry mace, pepper spray, or other weapon
- Avoid certain areas of campus at night
- Have the highest security settings for social media sites
- Tell friends where you will be (excluding social media updates)
- “Google” search potential romantic partners or associates

Observed threatening behaviors

During your time as a student at this university, have you ever become aware of an individual who made somebody intimidated or fear for his or her safety while on campus?

Examples can include, but are not limited to: repeated unwanted contacts through email, phone, or face-to-face contact, physical following, vandalism or property theft, surveillance or monitoring, a threatening gesture, a threatening statement, acquisition or interest in weapons, physical assault, sexual assault or unwanted touching, suicidal statements or attempts, etc. (Yes/No)

IF YES: How many incidents of concerning or threatening behavior have you witnessed? (bo for number entry)

IF YES: If more than one threatening individual has been observed, please focus on the most recent incident and answer the following questions:

- How would you describe the level of concern/severity you felt applied to this incident? (5-point Likert scale ranging from Least severe to Most severe)
- Where did the incident occur?
 - On campus
 - Off campus
- What was your relationship with the potentially dangerous individual?
 - Previous or current intimate partner

- A friend's previous or current romantic partner
- Friend
- Acquaintance
- Classmate
- University faculty, administration, or staff
- Involved in the same organization
- Stranger (student)
- Stranger (other)
- Other_____
- What was the gender of the potentially dangerous individual?
 - Man
 - Woman
 - Trans*
 - Don't know
 - Other_____
- What was the race/ethnicity of the potentially dangerous individual?
 - White
 - Black/African/American
 - Asian/Pacific Islander
 - Hispanic
 - Native American/Alaskan Native
 - Mixed racial background
 - Other_____
- Who was at risk? (Please select all that apply)
 - I was at risk
 - Previous or current intimate partner
 - A friend's previous or current intimate partner
 - Friend
 - Acquaintance
 - Classmate
 - University faculty, administration, or staff
 - Involved in the same organization
 - Stranger (student)
 - Stranger (other)
 - Other_____
- What were the behaviors of the potentially dangerous individual? (Please select all that apply)
 - Repeated unwanted verbal contacts through email or phone
 - Repeated unwanted face-to-face contact
 - Physical following
 - Vandalism or property theft
 - Surveillance or monitoring
 - Threatening gesture

- Threatening statement
 - Acquisition or interest in weapons
 - Physical assault
 - Sexual assault or touching
 - Suicidal statements or attempts
 - Other_____
- What was the context of these behaviors? (Please select all that apply)
- An individual romantically/sexually interested in someone
 - Related to an intimate relationship
 - Interpersonal argument
 - Concerns about grades
 - Suspension or expulsion
 - Workplace dismissal
 - Drawing attention to self or issue
 - Suspected/known mental health issues
 - Revenge for perceived wrongdoing
 - Motivated by bias (e.g., racism, sexism, homophobia, etc.)
 - Other_____
- What action did you take once you observed the situation? (Please select all that apply)
- None
 - Changed personal security (e.g., change locks or phone numbers)
 - Talked with the potentially dangerous individual
 - Notified university police
 - Notified Lincoln Police Department
 - Notified the university administration or faculty member
 - Collected or saved evidence (e.g., photo, email, text message, etc.)
 - Consulted a friend
 - Other_____
- IF NOTIFIED AUTHORITIES OR ADMIN/FACULTY MEMBER:
- What circumstances were important in deciding your actions? (Please select all that apply)
 - A dangerous situation appeared immediate
 - A dangerous situation appeared likely
 - Behavior or personality changes in the potentially dangerous individual
 - The potentially dangerous individual's behavior was harming myself or someone else
 - My relationship with the potentially dangerous individual
 - I had a "gut feeling" that an individual was going to be dangerous
 - The potentially dangerous individual had made serious and/or specific threats

- My awareness of available campus resources
- Other_____
- Would you change anything about how you responded?
 - Yes
 - No
- IF YES: What would you do differently? (Please select all that apply)
 - Change personal security (e.g., change locks or phone numbers)
 - Talk with the potentially dangerous individual
 - Notify university police
 - Notify Lincoln Police Department
 - Notify the university administration or faculty member
 - Collect or save evidence (e.g., photo, email, text message, etc.)
 - Consult a friend
 - Other_____
- IF DID NOT NOTIFY AUTHORITIES OR ADMIN/FACULTY MEMBER:
 - What circumstances were important in deciding your actions? (Please select all that apply)
 - A dangerous situation did not appear immediate
 - A dangerous situation did not appear likely
 - The individual typically acts threatening without committing violence (such as venting)
 - No one was being harmed by the potentially dangerous individual
 - My relationship with the potentially dangerous individual
 - I did not have a “gut feeling” that the individual was going to be dangerous
 - The potentially dangerous individual did not make serious and/or specific threats of violence
 - I was not aware of available campus resources
 - It was a personal matter
 - It was not serious enough
 - I did not believe the police could do anything
 - I did not believe the police would do anything
 - I thought it might make the situation worse
 - Did not want the authorities or university officials involved
 - I did not want to get involved
 - I did not want to put myself in danger
 - Other_____
 - What would have made you more likely to report to campus police?
 - Nothing
 - If the situation was more serious

- Knowing what should be reported to police
 - Knowing the number to call
 - Anonymous reporting
 - Online reporting
 - Other_____

- What was the outcome of the situation? (Please select all that apply)
 - The potentially dangerous individual received assistance from campus/other resources
 - The potentially dangerous individual was expelled or suspended from campus
 - The potentially dangerous individual was arrested
 - The potentially dangerous individual reduced or stopped their behavior
 - The potentially dangerous individual's threatening behavior became more severe
 - The potentially dangerous individual attempted violence toward someone
 - The potentially dangerous individual damaged property
 - Authorities were notified
 - Not sure
 - Other_____

- How satisfied were you with the results?
 - Very dissatisfied
 - Dissatisfied
 - Somewhat dissatisfied
 - Neither satisfied nor dissatisfied
 - Somewhat satisfied
 - Satisfied
 - Very satisfied

- Would you change anything about how you responded?
 - Yes
 - No

 - IF YES: What would you do differently? (Please select all that apply)
 - Change personal security (e.g., change locks or phone numbers)
 - Talk with the potentially dangerous individual
 - Notify university police
 - Notify Lincoln Police Department
 - Notify the university administration or faculty member
 - Collect or save evidence (e.g., photo, email, text message, etc.)
 - Consult a friend
 - Other_____

Campus police awareness scale

I know the phone number for campus police. (Yes/No)

IF YES: Please type in the campus phone number. (Box for number entry)

I have the phone number for campus police programmed in my cell phone. (Yes/No)

I know what types of things should be reported to campus police. (Yes/No)

I have contacted campus police before. (Yes/No)

Attitudes toward campus police

Please respond to the following items about your general beliefs about the UNL campus police using the scale below.

1 = *Completely disagree*, 2 = *Slightly disagree*, 3 = *Not sure*, 4 = *Slightly agree*, 5 = *Completely agree*.

- Campus police do their job well
- Campus police are not adequately trained to deal with safety issues
- The basic rights of people like me are well protected by campus police
- My confidence in campus police is high
- I trust campus police to perform their duties

Peer comparison

What percentage of peers (other students on campus) do you believe would report threatening behaviors to campus police if they were observed on campus? (Percentage)

How likely are you to report threatening behaviors to campus police compared to your peers (other students on campus)?

- Less likely to report
- No difference
- More likely to report.