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## EXPOSURE AND RESPONSES TO PRE-INCIDENT BEHAVIOR IN A COLLEGE

## STUDENT SAMPLE

by

Brandon A. Hollister

## A DISSERTATION

Presented to the Faculty of

The Graduate College at the University of Nebraska

In Partial Fulfillment of the Requirements

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Under the Supervision of Professor Mario J. Scalora

Lincoln, Nebraska

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## EXPOSURE AND RESPONSES TO PRE-INCIDENT BEHAVIOR IN A COLLEGE STUDENT SAMPLE Brandon A. Hollister, Ph.D.

University of Nebraska, 2015

Advisor: Mario J. Scalora

Campus threat assessment has included gathering, assessing, and intervening in situations with pre-incident behavior. However, with limited general population examination, concerns regarding the prevalence, assault correspondence, and reporting of pre-incident behavior exist. With an undergraduate student sample (n = 1,063), this dissertation utilized a survey regarding exposure and response to campus safety concerns. In comparison to students not witnessing concerns, students seeing problematic behavior had higher self-reported antisocial history and campus connectedness. Students witnessing physical assault were more likely to see multiple pre-incident behaviors, multiple incidents of pre-incident behavior, threatening statements, and threatening gestures from the perpetrator than students witnessing sexual assault / touching or safety issues besides assault. In comparison to students not informing authorities upon exposure to concerning behavior, reporting students indicated observing more types of concerning behavior and victims. Reporting students were more likely to be male and less likely to be freshmen. These students had less self-reported antisocial involvement and more campus connectedness. Additionally, in comparison to students not informing authorities upon exposure to concerning behavior, reporting students indicated having more contact with campus police, more positive contact with campus police, and greater ability to recall slogans from campus police advertisements. Overall, campus assaults appeared

rare with diverse locations and offenders. Most assaults included observed pre-incident behavior from the perpetrator, and pre-incident behavior significantly corresponded with witnessed physical assault. Thus, pre-incident behavior appeared to relate to heightened campus violence risk, and further application of campus threat assessment to an array of problem areas appears warranted. Additionally, this dissertation had implications for preincident reporting improvement efforts and suggested messaging regarding precursors to violence could be incorporated into existing community policing outreach and bystander training for sexual assault prevention.

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#### Chapter 1 - Introduction

Campus targeted violence includes a perpetrator posing an identifiable or potentially identifiable threat to an individual, group, or organization prior to an attack (Fein, Vossekuil, & Holden, 1995) and has occurred on college campuses throughout history, affecting students, faculty, and staff across the United States (Drysdale et al., 2010). Attacks at Virginia Tech and Northern Illinois universities resulted in numerous deaths and nationwide concern about targeted violence (Scalora, Van Slyke, & Simons, 2010), which prompted several intervention strategies (e.g., physical security measures).

A behavioral "path to intended violence" (Calhoun & Weston, 2003, p.58) represents a significant factor preceding nearly all targeted attacks (Fein & Vossekuil, 1999; Meloy et al., 2004), and one of the best options for prevention (i.e., campus threat assessment) includes professional attempts to gather, assess, and intervene upon noticeable threatening behaviors signifying foreseeable violence (Cornell et al., 2004; Deisinger, Randazzo, O'Neill, & Savage, 2008; Meloy, 2011; Scalora et al., 2002a). Nonetheless, in collegiate settings, limited examination of pre-incident pathway behaviors has occurred (Hollister & Scalora, in press; Hollister, Scalora, Hoff, & Marquez, 2014; Sulkowski, 2011), which has corresponded with concerns regarding the applicability of threat assessment to general campus safety concerns (Gisburne, 2003; Goodwin, 2014). With a large college student sampling, this dissertation explored observations and reporting of pre-incident behavior. The findings from this dissertation suggested threat assessment techniques are applicable to general campus safety concerns and promoted unified interventions that could improve campus violence prevention. The Effects of Campus Targeted Violence

1

Several aspects of campus life have the potential for targeted violence, as grievances regarding workplace dismissals, romantic difficulties, and academic conflicts have motivated past campus attacks. Although statistically rare (i.e., 272 discoverable instances between 1900 and 2008; Drysdale et al., 2010), the substantial impact of targeted violence on family members, loved ones, and the collegiate learning environment warrants continued empirical advancement of effective prevention options (e.g., threat assessment). The subsequent media distribution of these events can generate widespread fear, with negative physical and emotional symptoms being seen in the general public following publicized incidents (Meloy, Hoffman, & Sheridan, 2008). These large-scale attacks have been cited as motivation by other perpetrators attempting to copy the act (Flynn & Heitzmann, 2008; Kiilakoski & Oksanen, 2011; Muschert, 2007; Scalora et al., 2010), with desires for fame being seen in many of these offenses (Fein & Vossekuil, 1999). Therefore, many public safety professionals and researchers have explored prevention options for this specific type of type of violence, due to the breadth of malevolent outcomes following these attacks (Muschert, 2007).

Administrators have often opted to combat targeted violence risk through expensive physical security measures (e.g., metal detectors, emergency phones) and zerotolerance policies with suspensions or expulsions of numerous non-problematic students (Asmussen & Cresswell, 1995; Muschert, 2007; Reddy et al., 2001; Sulkowksi & Lazarus, 2011). These strategies may not be sufficient to address the infrequent, goaldirected behavior of targeted violence, as the types of individuals, locations, and weapons used in these attacks vary (Drysdale et al., 2010). Thus, targeted violence has a longlasting impact, and attempts at prevention have included expensive, ineffective security options limiting the creative collegiate learning environment (Scalora et al., 2010). *The Development of Campus Threat Assessment* 

Campus targeted violence prevention utilizing relevant empirical findings related to targeted attacks have increased effectiveness. Investigations of public figure assassinations (Fein & Vossekuil, 1999), threatening contacts to political officials (Scalora et al., 2002a; Scalora et al., 2002b; Scalora, Baumgartner, & Plank, 2003), K-12 school shootings (Fein, Vossekuil, Pollack, Borum, Modzeleski, & Reddy, 2001; Vossekuil, Fein, Reddy, Borum, & Modzeleski, 2001), and planned workplace violence (Scalora, Washington, Casady, & Newell, 2003) have yielded fairly consistent results about targeted attacks that have been used to develop the threat assessment approach (Jenkins, 2009).

Regardless of setting, targeted violence appears to be a rare-occurring behavior. In the United States, 43 acts of attempted assassinations toward prominent individuals (e.g., politicians, celebrities; Fein & Vossekuil, 1999) occurred between 1949 and 1996. Twenty-three known attacks on British Royalty happened between 1778 and 1994 (Mullen et al., 2008), and three federal US judges were attacked since 1979 (Calhoun, 2001). In K-12 educational settings, 37 targeted attacks occurred between 1974 and 2000 (Vossekuil et al., 2002). Therefore, targeted violence is relatively infrequent even when proxy behaviors for violence are used in analyses (e.g., approach of a congressional official) within samples of concern (e.g., those expressing threats to congressional officers; Scalora et al., 2002a). The low-frequency and high-saliency of targeted attacks has resulted in general risk assessment techniques (e.g., base-rates and static risk factors) wrongly identifying numerous individuals and failing to identify dynamic potentially violent situations with substantial consequences (Reddy et al., 2001).

The lack of a profile for perpetrators of targeted violence is another consistent finding. A review of attackers of prominent individuals explored demographic, personality, and previous criminal, substance abuse, or mental health histories of subjects and found substantial offender differences for each of these characteristics (Fein & Vossekuil, 1999). Similar findings were seen in analyses of perpetrators of targeted violence in K-12 school settings (Vossekuil et al., 2002), threateners of US Members of Congress officials (Scalora et al., 2002a), and those committing violence toward British Royalty (Mullen et al., 2008). Demographic differences did not predict the likelihood of approach in samples of those threatening celebrities (Dietz et al., 1991b), US Members of Congress members (Dietz et al., 1991a; Scalora et al., 2002a; Scalora et al., 2002b), and British Royalty (James et al., 2009). Thus, reliance on measures of offender demographics and personality (e.g., profiling; general risk assessment) is viewed as a questionable strategy of targeted violence prevention (Fein & Vossekuil, 1999; Reddy et al., 2001), as these variables do not correspond with risk of targeted violence. Approaches focused on offender characteristics tend to target several individuals that have no intentions of engaging in targeted violence (i.e., due to the low base rate), while ignoring legitimate threats that do not "fit" the stereotype (Reddy et al., 2001, p.162).

Targeted violence impacts a range of individuals and locations. Political figures, intimate partners, judges, business executives, celebrities, teachers, students, and employees have been victimized by targeted violence (Meloy, Sheridan, & Hoffmann, 2008; Calhoun & Weston, 2012). Attacks have occurred in business offices, event

proceedings, meeting places, hotels, homes, and classrooms without a specific location or time including heightened risk (Calhoun & Weston, 2003). Perpetrator grievances include personal complaints regarding decision-making by authority figures, interpersonal difficulties, and delusional beliefs. Additionally, indiscriminate target selection has been seen, as attempts to gain fame or attention for an issue have been primary motivators in some targeted violent acts (Calhoun & Weston, 2012; Fein & Vossekuil, 1999). Therefore, increasing protection at potential locations of violence, crime mapping, and random police crackdowns in high-crime areas, which assist in combating general delinquency (Samaha, 2006), would appear to be ineffective in targeted violence prevention (Reddy et al., 2001). Physical security is unlikely to thwart motivated perpetrators that plan strategic assault.

Unlike less calculated or more impulsive types of violence (Meloy et al., 2014), behavioral commonalities tend to precede targeted attacks (Calhoun & Weston, 2003). In nearly all targeted violence, evidence of planning was noticed by associates of the perpetrator, target, or target's protection services. For instance, only 1 of 34 public figure attackers was known to have not planned the violence (Fein & Vossekuil, 1999). "Almost all...had histories of grievances and resentments", and "many...had taken action in response to a grievance, such as writing a letter or visiting an office" (p.325). Moreover, 77% of these individuals had expressed threats about the target to family, friends, coworkers, or others. Many perpetrators had performed other concerning actions, such as reading materials about assassinations, surveillance of a target, and expressions of suicidal ideation. Nearly all K-12 school attackers (93%) had calculated the events for at least one or two days prior to the act (Vossekuil et al., 2002) and had recent noticeable loss in status, relationship, or physical condition (98%). Moreover, 93% had behavioral indications of planning, such as gathering weapons, discussing intentions with friends, and making threats toward targeted individuals. An adult expressing concern was seen in 88% of cases, and 81% of school attacks were preceded by a friend, schoolmate, or sibling being aware of the plans. Reviews of attacks towards judicial officials (Calhoun, 2001), planned workplace violence (Jenkins, 2009), and intended domestic violence have similar findings. Thus, certain behaviors are considered indicative of foreseeable violence and have been termed "pre-incident behavior" (Drysdale et al., 2010, p.18).

Subsequent to high-profile incidents of campus targeted violence (Drysdale et al., 2010), a thorough review of open-source material regarding campus attacks between 1900 and 2008 was performed by the Federal Bureau of Investigation (FBI), United States Secret Service (USSS), and Department of Education. As expected, these events were rare (i.e., 272 discoverable incidents) and involved different locations and perpetrator characteristics. Attacks were perpetrated by students, employees, alumni, and indirect affiliates of the school (e.g., a significant other of a staff member); however, around 10% of attacks involved individuals with no known connection to the school. Different motivations for the attack were observed, including intimate relationship difficulties (34%), retaliation for wrongdoing (14%), response to academic struggles (10%), and workplace dismissal or sanction (6%). The majority of incidents included indications of planning, as 73% involved the perpetrator targeting specific individuals. Threatening statements, stalking, harassing behavior, and/or physical aggression preceded targeted violence in 31% of cases. These pre-incident actions were observed by

family, friends, employees, or the target. Moreover, 5% of the attacks included other prior alarming behavior, such as misconduct resulting in psychiatric hospitalization and/or criminal charges. The authors noted pre-incident behavior could have been observed and not relayed to law enforcement or media sources used in the study. Thus, the behavioral pathway preceding targeted attacks was replicated in this examination of campus targeted violence.

These public figure assassinations, K-12 school shootings, workplace targeted violence, and campus targeted violence investigations supported an approach specific to the prevention of targeted violence, which has typically been called threat assessment (Fein & Vossekuil, 1998). Threat assessment focuses on noticing and assessing behavior on the "path to intended violence" (Calhoun & Weston, 2003, p.58), which includes escalating behavior resulting in planned attacks. Perpetrators of targeted violence initially demonstrate a grievance and violent ideation before an attack through statements and actions demonstrating a sense of "injustice, mission, loss, or destiny", desire for "revenge, recognition, or fame", interest in weapons or past assailants, and fixation on violence and a particular individual (Calhoun & Weston, 2003, p.60). These perpetrators research and plan attack options, which are displayed through stalking, questioning others, reading about a target, or exploring attack methods. Then, these perpetrators decide on a method of attack and prepare by gathering necessary supplies, setting up transportation, and acting in a manner that exhibits perceived finality (i.e., as most attackers plan to die as a result of their attack). Finally, these perpetrators must breech target security prior to completing the intended violence. Threat assessment includes training professionals to identify individuals displaying behaviors on the "path to

intended violence" (p.57). These professionals have skills in gathering additional information (e.g., interviewing the subject) and assessing behavioral patterns to comprehend risk of targeted violence once concerning behaviors are noticed (Meloy, Hoffman, Roshdi, Glaz-Ocik, & Guildimann, 2014b; Van Der Meer & Diekhus, 2014). This comprehensive understanding allows threat assessment professionals to perform risk-mitigating interventions in situations possessive of foreseeable violence (Calhoun & Weston, 2003; Calhoun & Weston, 2009), such as assisting concerning individuals with their grievances or ask third parties to monitor behavior from the subject (i.e., nonconfrontational approaches) or seeking legal methods (e.g., mental health board commitment or arrest) for addressing the subjects' behavior.

Most concerns related to pre-incident behavior can be addressed through assistive, non-confrontational intervention techniques. High schools employing a threat assessment approach were less likely to resolve targeted violent concerns through long-term suspension or alternative school placement than schools employing a "business-as-usual disciplinary approach" (Cornell, Allen, & Fan, 2012, p.100). The use of threat assessment techniques has had significant success resolving dangerous situations in an appropriate manner for K-12 schools (Cornell et al., 2004; Cornell, Sheras, Gregory, & Fan, 2009; Cornell, 2012), government protection agencies (Phillips, 2008; Scalora et al., 2002a; Scalora, Zimmerman, & Wells, 2008), planned workplace violence (White & Meloy, 2007), and domestic homicide concerns (deBecker, 1998; Jenkins, 2009). Threat assessment corresponded with positive ratings of school climate and greater trust in authorities in K-12 educational settings (Cornell et al., 2009). Thus, threat assessment is frequently recommended as a strategy of choice for the prevention of targeted violence on college campuses (Cornell, 2010; Deisinger et al., 2009; Scalora et al., 2010). *Pre-Incident Reporting and Campus Threat Assessment* 

The first step of the threat assessment approach is to identify threatening individuals through observation of pre-incident behaviors (Drysdale et al., 2010; Fein & Vossekuil, 1998), which are rarely provided directly to protection authorities (Calhoun & Weston, 2009; Meloy, 2011; Pollack et al., 2008). Several case examples of completed campus targeted violence would demonstrate the importance of pre-incident behavior reporting in effective prevention responses (Calhoun & Weston, 2009). Bystanders reported one student was physically and mentally abusive toward his girlfriend for about one year prior to fatally shooting her and himself at a campus parking lot (Drysdale et al., 2010). The student had held a knife to the girlfriend's throat, tied her hands with a scarf, and threatened her life four months prior to the shooting. No reporting to the authorities was noted until after the shooting. Another incident included a former student that targeted and shot four individuals. He had written five letters for news organizations expressing frustration about his lack of academic success and inability to find work. He had discussed his planned actions in the letters, but no pre-incident reporting was noted. Many other examples of bystanders lacking appropriate reaction to pre-incident behavior are included in the general and campus threat assessment literature (Calhoun & Weston, 2003; Calhoun & Weston, 2009; Deisinger et al., 2008; Drysdale et al., 2010; Vossekuil et al., 2002). Reviews from prevented attacks have also revealed the importance of bystanders in targeted violence preclusion. Of averted K-12 school shooting attempts (i.e., news articles regarding prevented school attacks), 57% were uncovered due to

students alerting authority figures (Daniels, Buck, Croxall, Gruber, Kime, & Govert, 2007). Half of these reporting students were confided in by the perpetrator, and one-fourth disclosed information after overhearing threats regarding their safety. The remaining preventions included staff members noticing alarming behavior (25%), police receiving tips from citizens or parents (18%), and staff members hearing rumors of the attack (14%). Thus, concerned bystanders were the initial step in the preclusion of nearly all of these potential acts. These findings would appear to generalize to averted targeted violence on campus (Scalora et al., 2010). Case examples include students and staff informing authorities after observances of disturbing comments on social networking sites, threats following the dismissal of an employee, and excessive weapon acquisition and practice. In each of these situations, campus threat assessment teams investigated the case, noticed substantial risk, appropriately intervened, and prevented foreseeable violence. Therefore, empirical and anecdotal evidence has identified pre-incident reporting as a vital piece of an effective threat assessment approach.

Pre-incident observances from bystanders would appear especially important in campus threat assessment (Scalora et al., 2010). The campus environment involves a diversity of potentially threatening situations, including concerns from loosely affiliated or non-affiliated individuals (Drysdale et al., 2010). College students are involved in a lifestyle with greater independence and are subject to less supervision than other protected settings (e.g., work environments, K-12 schools; Scalora et al., 2010), and campus settings typically include large and publicly accessible grounds. Thus, campus authorities can be greatly assisted through the reporting of pre-incident observances from collegiate stakeholders.

Improvements in pre-incident reporting would be expected to relate to increased effectiveness in the targeted violence prevention of threat assessment. Threat assessment professionals have discussed the difficulty of preventing "black swan" events (i.e., unpredictable acts with catastrophic consequences; Meloy, 2011, p.108), as dangerous situations can exist outside the awareness of protective resources. A planful perpetrator has motivation to prevent authority figures from viewing problematic forewarning actions (Calhoun & Weston, 2008); yet, pre-incident behavior is often revealed to friends, family, and acquaintances (e.g., coworkers; Pollack et al., 2008). Even if authorities identify a potential threat, several individuals could have viewed pre-incident behavior and not reported their concerns (Calhoun & Weston, 2003), which would hinder comprehensive assessment. A clear progression toward targeted violence could exist, but authorities may only have a portion of this information to form threat assessment decisions. Therefore, research providing an understanding of pre-incident reporting tendencies would allow campus threat assessment teams to develop informed strategies generating authority notification of threatening activity, which would improve threat identification, assessment, and management processes.

#### Increasing Support in Campus Threat Assessment

The importance of pre-incident reporting has been discussed since the development of the threat assessment approach. Attempting to increase reporting to authorities from citizens observing concerning behavior was discussed in pioneering threat assessment materials (deBecker, 1998; Fein & Vossekuil, 1998). Resolving broader social issues related to failure to report, like media influences (deBecker, 1998) and police distrust (Levitt, 1998), has been repetitively described as important piece of

violence prevention efforts. Threat assessment professionals have requested individuals most likely to observe potential threats (e.g., a politician's district office secretary or a company's call center workers) be effectively trained to notice and extend pre-incident behavior to threat assessment teams (Calhoun & Weston, 2009). Thus, the importance of pre-incident reporting has been noted throughout the threat assessment literature.

Yet, in the general population, exposure to pre-incident behaviors and the reporting of pre-incident behavior has received limited review (Hollister et al., 2013; Sulkowski, 2011), which has generated concerns regarding the threat assessment approach. The general predictive qualities of pre-incident behaviors have not been examined (Meloy et al., 2014b), as frequency of these acts without accompanying violence remains uninvestigated (Gisburne, 2003). Thus, the efficiency of gathering and analyzing pre-incident behavior has been questioned, as some suggest pathway behavior (e.g., threatening statements) are common in the general population (Frey, 2007). This issue has also related to questions about the ethics of threat assessment, as nearly all individuals may engage in these pre-incident behaviors and only a portion (i.e., a biased sample) subjected to security review (Gisburne, 2003). Additionally, the unknown predictiveness of pre-incident behavior has related to suggestions that certain actions precede all instances of targeted violence, which would reduce the importance of gathering the full range of pre-incident activities. Some targeted violence prevention models include psychotic mental illness as a "first order" factor (James et al., 2009, p.21) and consider improvements in the general treatment of severe mental illness as an important part of alleviating targeted violence risk (James et al., 2009; James et al., 2010; James, Farnham, & Wilson, 2014). Some efforts have indicated case studies of school

attacks involve unique risk factors in each situation, and gun access is the only consistent prerequisite to targeted violence (Muschert, 2007). This viewpoint relates to gun control strategies being recommended, rather than threat assessment techniques. Other researchers have discussed the accessibility of a school shooting cultural script (i.e., displayed through books, music, films), which socially influences marginalized groups seeking defiance from conformity (Kiilakoski & Oksanen, 2011). Media outlets are recommended to modify this problematic cultural schema through limiting references to social identities promoting school shootings and preventing notoriety of those completing targeted attacks (de Becker, 1998; Kiilakoski & Oksanen, 2011). Moreover, the campus resources necessary to conduct proper threat assessment are also needed for sexual assault (Paul & Grey, 2011), stalking (Buhi, Clayton, & Surrency, 2009), and general criminal activity (Selwyn, 2008) prevention. Further support of threat assessment techniques would occur if pre-incident behavior was shown to predict general campus violence. Also, the campus threat assessment approach would have additional weaknesses if low reporting of pre-incident behavior occurred, as authorities would not be aware of several potentially dangerous situations on campus. Therefore, several empirical directions using general population samples could clarify, improve, and increase support for campus threat assessment techniques.

#### Campus Threat Assessment Bystander Findings

Nonetheless, comprehensive investigations of pre-incident observations and preincident reporting are limited (Hollister et al., 2012; Hollister et al., 2013; Sulkowski, 2011). Most reporting reviews use vignettes, which have questionable applicability to actual pre-incident decisions (Baumeister, Vohs, & Funder, 2007; Shaffer, Peller, Laplante, Nelson & Labrie, 2010), as reactions to hypothetical scenarios typically include participants' ignorance of relevant situational influences and overestimation of helpfulness. Additional empirical techniques have included an attempt to use retrospective interviews with pre-incident observers of K-12 targeted violence, which struggled to gain participants and evaluate hypotheses (Pollack et al., 2008). A larger review with a high school sample investigated personal experiences of explicit threats of harm and examined the outcomes of these situations (Nekvasil & Cornell, 2012); however, this analysis did not evaluate the range of pre-incident behaviors threat assessment teams investigate. Therefore, larger questions regarding the predictive nature of pre-incident behavior and the effectiveness of current threat assessment procedures have remained unanswered in existing research (Meloy, Hoffman, Roshdi, Glaz-Ocik, & Guldimann, 2014; Van Der Meer & Diekhuis, 2014).

Nonetheless, prior pre-incident studies have revealed information that can guide extensive investigation of pre-incident exposure and reporting in a general sample. The first investigation of pre-incident behavior reporting involved attempts to interview known observers of averted or completed K-12 school attacks (n = 128; Pollack et al., 2008). However, obtaining this information was highly difficult, and only 15 observers participated fully. The interviewed participants described viewing multiple concerning actions from one individual (e.g., seeing the perpetrator possessing weapons at school, making repetitive threatening statements, and discussing fascination with bombs and killings). These viewers often reported being accompanied by other observers and seeking advice from adults prior to deciding to inform authorities. Those who reported their observances expressed support from adults, trust in authorities, and concern due to

publicized attacks influenced their decision. Those failing to inform authorities indicated fearing negative responses from school officials, disbelieving targeted violence would occur, and misjudging the immediacy of attack. Other analyses in this study did not require an interview and involved additional participants (n = 119). Observers of preincident behavior tended to be friends (39%), acquaintances (29%), or family members (6%). Most bystanders viewed pre-incident behavior directly from the perpetrator (82%) days prior to targeted violence (59%). Therefore, this retrospective study displayed several important findings regarding pre-incident behavior, despite significant methodological concerns due to low response rates in some analyses.

A large review of high school students (n = 3756) included examination of their personal experiences of explicit threats of harm in the past 30 days (Nekvasil & Cornell, 2011). Few students (n = 464; 12%) were threatened, and most of these individuals expressed threats were not serious (n = 357; 77%) and not acted upon (n = 422; 91%). Few students (26%) reported the threats to authorities, as even individuals victimized by completed threats of violence typically did not report their experiences (i.e., 69% of victims of violence did not report). Specific threats of violence were more likely to be acted upon and more likely to be reported to authorities. Therefore, this study demonstrated the lack of reporting for a specific pre-incident behavior (i.e., explicit threat), even if this factor was accompanied by violence.

Research analyzing pre-incident reporting by collegiate stakeholders has included responses to hypothetical scenarios of threatening behavior. One study included 967 college students displaying willingness to report following vignettes of grievances and multiple threats from hypothetical individuals (Sulkowski, 2011). In each of the four vignettes, approximately 70% of students were willing to inform authorities. Students possessing trust in campus services and connection to campus were more likely to report, while those with self-reported delinquency were less likely to report. Another study included college students, faculty, and staff (Hollister et al., 2012) responding to less-descriptive vignettes (i.e., describing one, two, or three risk factors without accompanying explanation). Large variability was seen in willingness to inform authorities across situations (i.e., 9% - 91% for students; 39% - 100% for faculty/staff), and students, faculty, and staff were more willing to inform authorities after viewing multiple behaviors, direct threats, and/or weapons. Moreover, faculty/staff seemed to have higher reporting rates than students regardless of the scenario. Therefore, the factors involved in pre-incident reporting decisions by collegiate stakeholders have been clarified through vignette research, and multiple directly threatening behaviors are most likely to be extended to authorities.

Recently, information about the prevalence and distribution of campus preincident behavior observations has been examined (Hollister et al., 2013). In a sample of college students (n = 450), 35% reported viewing pre-incident activity on campus. These individuals did not differ from those that had not seen threatening behavior in most measured variables (e.g., age, gender, ethnicity, self-reported delinquency), except higher campus connectedness related to an increased likelihood of observing concerning behavior. Those willing to report had greater trust in campus police, less feelings of safety on campus, and less self-reported delinquency. Campus connectedness and peer loyalty did not appear to influence willingness to report. Therefore, the observation of pre-incident behavior appeared somewhat frequently in this sample, and no demographic differences were significantly related to increased likelihood of pre-incident observance.

In these studies, the need of reporting improvement efforts within the threat assessment approach has been frequently recommended, as a substantial portion of collegiate stakeholders are unwilling to report threatening circumstances, even in vignettes with an individual expressing multiple threats and a clear grievance (Sulkowski, 2011). Generating a positive, connected campus environment through allowing students and faculty to participate in mutual goals (e.g., service-learning opportunities, interest groups) and ensuring students are treated in a non-judgmental, genuine manner is often proposed (Pollack et al., 2008; Sulkowski, 2011). Challenging antisocial norms in the campus community (e.g., disproving rape myths; Sulkowski, 2011) is often promoted as an option for generating greater trust in campus services and greater awareness of the importance of pre-incident reporting. Permitting anonymous reporting and advertising a single point of contact for reporting pre-incident behavior have also been suggested (Scalora et al., 2010). Informing college stakeholders about the types of actions requiring authority notification and the pro-social effects of campus threat assessment assistance has been recommended (Hollister et al., 2013; Pollack et al., 2009), as these presentations could alleviate fears preventing reporting (e.g., concerns about negative reactions from staff, overreactions from authorities) and include promises of confidentiality and appropriate administrative actions to threats. Interventions aimed at improving preincident reporting have typically been explained as a campus-wide effort toward the general student population through poster displays in frequented areas (Bartling, Yardley, & Evans, 2010) or presentations during student orientations (Pollack et al., 2009;

Sulkowski, 2011). However, directing material to specific groups unlikely to report (e.g., males, delinquent students; Hollister et al., 2013) has also been hypothesized as helpful. With fewer targeted individuals, reporting interventions could review more intensive material and employ small discussion groups that may correspond with greater behavioral change. Therefore, pre-incident reporting interventions and collegiate policy changes enhancing campus openness have been described as options for improving the campus threat assessment approach.

Nonetheless, the only discoverable review of a pre-incident reporting intervention included a campaign in a large, Midwestern university (Bartling et al., 2010). Visual displays (e.g., posters, advertisements) were placed in frequently visited campus areas, student newsletters, parent newsletters, and the department website. These efforts incorporated text emphasizing an active, compassionate team approach toward keeping campus safe (i.e., "You have the power to help someone cope", p.32) with "edgy...visual cues" (p.16) and the police's contact information. The reviewers of this intervention reported subjective interpretations of positive results, without empirical information. Thus, no statistical review of campus attempts at pre-incident reporting improvement efforts has occurred, and the current pre-incident reporting literature has generated only untested suggestions about techniques for reporting improvements.

Current pre-incident analyses do not address several important campus threat assessment questions regarding exposure to pre-incident behavior and the reporting of pre-incident behavior. The predictive nature of pre-incident behavior in the general campus population and the ability of campus threat assessment teams to improve preincident reporting have not been explored. The relationship between threat assessment and other campus prevention efforts (e.g., sexual assault, stalking) also lacks review. Thus, further examination of pre-incident behavior and pre-incident reporting should address these concerns in an attempt to inform current threat assessment procedures.

Existing studies may have failed to fully evaluate concerns related to pre-incident behavior due to several assumptions about targeted violence. For one, threat assessment is presumed to be fully distinctive from other violence prevention efforts (Meloy et al., 2008; Meloy et al., 2014); yet, several pre-incident behaviors involve empiricallyexamined criminal offending (Calhoun & Weston, 2003; Calhoun & Weston, 2009). Since targeted attacks are rare (Drysdale et al., 2010; Fein & Vossekuil, 1999; Reddy et al., 2001), the corresponding pre-incident behaviors are assumed to be uncommon and highly predictive (Pollack et al., 2008; Sulkowski, 2011). Yet, many pre-incident behaviors and threatening situations occur at relatively high rates in the campus community (e.g., stalking; Buhi et al., 2009). Thus, assumptions about the lack of applicable research for pre-incident behavior hypothesizing have occurred (Hollister et al., 2012; Sulkowski, 2011). A comprehensive examination of pre-incident behavior and pre-incident reporting would evaluate the veracity of these assumptions.

Advancements in the threat assessment approach would occur if these assumptions were refuted. Threat assessment procedures may be able to inhibit several problematic behaviors on campus (e.g., stalking, bullying, intimate partner violence), and pre-incident reporting improvement efforts may include similar processes as existing campus bystander intervention techniques. These possibilities could increase the effectiveness and efficiency of campus criminal prevention processes (e.g., threat assessment teams) and promote unique methodologies examining pre-incident behavior on campus. Specifically, this dissertation utilizes a survey of student exposure to preincident behavior and assault and student pre-incident reporting to explore these assumptions and to clarify, improve, and increase support for campus threat assessment techniques.

#### Additional Examinations of Specific Pre-Incident Behaviors

The empirical approach of this dissertation would resolve concerns related to the unknown prevalence and predictiveness of pre-incident behaviors in the campus community (e.g., Gisbune, 2003; Frey, 2007) and potentially extend the problem-solving abilities of the threat assessment approach to other campus concerns (e.g., general crime prevention). For instance, stalking/harassing actions, which can include repetitively contacting the target, damaging property of the target, and/or harassing family or friends of the target (Catalano, 2012), are gathered, evaluated, and managed by campus threat assessment teams (Scalora et al., 2010). These behaviors are relatively rare, as NCVS (i.e., National Crime Victimization Study) data indicated 4.4% of 20 to 24 year-olds reported being stalked/harassed in the last year (Catalano, 2012), and approximately 13 property crimes per 100 participants was observed in the NCVS national sampling (Rand & Robinson, 2011). These rates appear descriptive for most college student samples (Buhi et al., 2009; Selwyn, 2008), and the necessity of stalking concerns being provided to police are repetitively discussed. Stalking victims experience increased risk of being physically and sexually assaulted by a perpetrator (Buhi et al., 2009), especially if the concerning individual has psychosis, intimacy-seeking motivations, and repetitive intrusive communication (James et al., 2010b). Thus, authority notification of these relatively infrequent behaviors is a goal shared by general police efforts and campus

threat assessment teams, and the increased risk of violence related to stalking pre-incident behavior has been empirically displayed (Buhi et al., 2009; James, 2010; James et al., 2010b).

Campus threat assessment teams investigate threatening statements or writings about causing harm to a target (Drysdale et al., 2010; Scalora et al., 2010). In a K-12 school system of 32,000 students, 201 students were reported by authorities to have made a threat of violence over the course of one school year (Cornell, 2012). Another K-12 school system of 118,000 students included 209 instances of threatening statements assessed by school professionals during 2009 (Strong & Cornell, 2008). Further replication with this age group has shown similar rates (Cornell et al., 2004; Cornell et al., 2009; Nekvasil & Cornell, 2013). These threats corresponded with increased risk of violence, as 9% were acted upon within a month of being overheard (i.e., in a high school sample; Nekvasial & Cornell, 2013). Therefore, threats appear predictive of violence and are not overly common.

Physically aggressive acts (e.g., assault or intimidating weapon use) also preceded campus targeted violence (Drysdale et al., 2010). According to the Federal Bureau of Investigation (FBI)'s Uniform Crime Reporting Program (UCR), approximately 3 reported violent crimes per 10,000 enrolled students happen each year (FBI, 2011). Aggravated assault and robbery were the most frequently-occurring offenses within these categories. The NCVS indicated approximately 49 violent victimizations per 1,000 persons 18 to 24 years-of-age occur (Truman & Planty, 2012), and similar to rates observed with college samplings (Thompson et al., 2009). Few students (2%) of one college sample reported being threatened by a weapon on campus (Miller, Hemenway, & Wechsler, 2002). The majority of violent offending is committed by individuals at highrisk for subsequent criminal activity, such as those with psychopathic and antisocial tendencies (Tiihonen et al., 2008; Wong & Gordon, 2003). Therefore, physically aggressive acts on campus are relatively rare and correspond with risk of subsequent violence (Drysdale et al., 2010).

Additional examinations of specific pre-incident behaviors (e.g., suicidal ideation, weapon acquisition, major mental illness) could reveal similar information about violence prediction and likelihood of reporting, but some actions (e.g., target research, interests in assassins, final act behaviors) may be highly difficult to examine.

#### Empirical Directions Regarding Specific Pre-Incident Behaviors

Recent findings support informing campus threat assessment through examining specific pre-incident behaviors. A general campus sample (n = 1075) was asked if they had observed an individual displaying any of a range of pre-incident behaviors, and 38% (n = 413) indicated seeing at least one pre-incident behavior on campus (Hollister, Scalora, & Bockoven, 2014a). Inquiries about responses revealed these situations are infrequently extended to police (i.e., about 25% of observers informed authorities). However, reporting rates of specific pre-incident behaviors could be ascertained, and instances of acquisition or interest in weapons (43%), suicidal statements or attempts (40%), repetitive face-to-face contact (37%), and/or assault (36%) were the most frequently reported. Situations with vandalism or property theft (22%), threatening statements (25%), and/or threatening gestures were the most unlikely to be extended to authorities. Therefore, the prevalence of pre-incident behaviors and the reporting tendencies related to each behavior could be gained through participant self-report of

actual concerning situations. The study displayed a "communication gap" (Sulkowski, 2011, p.54) in actual concerning campus incidents and clarified the role of pre-incident characteristics in actual reporting decisions.

The predictive nature of pre-incident behavior for instances of campus assault has been reviewed through self-reports from collegiate stakeholders (Hollister, Scalora, & Hoff, 2014b). Four-hundred and thirteen students (i.e., 38% of the original sample) observing an individual engaging in pre-incident behaviors were separated into individuals that viewed physical assault (Group 1; n = 45), viewed sexual assault (Group 2; n = 52), or viewed pre-incident behavior but neither physical nor sexual assault (Group 3; n = 322). Most Group 1 participants (n = 45; 84%) observed pre-incident behaviors in addition to assault. Physical following, repetitive unwanted face-to-face contact, threatening gestures, and threatening statements were viewed significantly more often in Group 1 than Group 3. Approximately half of Group 2 participants (n = 29; 56%) observed pre-incident behaviors in addition to assault. However, no significant differences in pre-incident behavior observations were seen between Group 2 and Group 3. Thus, concerning behaviors appeared to precede the majority of assaults on campus, and specific pre-incident behaviors were significantly indicative of physical assault (i.e., in comparison to a control group).

As a whole, these recent findings displayed the usefulness of campus threat assessment in general campus violence prevention. These findings address concerns about pre-incident behaviors being unanimously present in the general population (i.e., Gisburne, 2003; Frey, 2007) and unassociated with violent concerns (i.e., Meloy et al., 2012; Meloy et al., 2014b). Moreover, these studies contradict models that include one behavior or risk factor (i.e., rather than using a range of pre-incident behavior) preceding nearly all targeted attacks (e.g., gun control, mental illness). Thus, these investigations partially resolve concerns about the effectiveness of the threat assessment approach.

These studies demonstrated the necessity of employing reporting improvement efforts for pre-incident behaviors. The infrequent reporting of behaviors corresponding with assault is a potentially resolvable issue, and improvements in pre-incident reporting would be expected to correspond with authorities having an increased ability to prevent campus violence. Additional research clarifying the predictive nature and reporting of specific pre-incident behavior would be expected to further improve the efficiency and effectiveness of threat assessment procedures.

#### Additional Examinations of Contexts of Pre-Incident Behavior

The empirical approach of this dissertation would potentially extend threat assessment techniques to other violence prevention efforts. Situations with multiple alarming acts have been reviewed in bullying (Polanin et al., 2012), workplace violence (Jenkins, 2009; Romano, Levi-Minzi, Rugala, & Van Hasselt, 2011), intimate partner violence (Yamawaki et al., 2012), and stalking research (James et al., 2010a). These groupings of behavior often include persistent focus on targeted individuals (Fagan & Mazerolle, 2008; Lauritsen et al., 2012), and preventive processes similar to threat assessment are often suggested, such as identifying situations with concerning behavior and employing problem-solving approaches. Thus, the preventative processes of threat assessment would appear to apply to these contexts of concerning behavior (Jenkins, 2009; Romano et al., 2011; James et al., 2010b). These research areas can provide information about the contexts, development, and reporting of pre-incident behavior. Approximately 1% of the victim-reported crime (i.e., on the NCVS) included "series victimization" (i.e., 6 or more reports of victimization in the past 6 months; Lauritsen et al., 2012, p.3). Series victimizations are typically perpetrated by the same individual and involve mostly intimate partner violence and bullying of school children. Thus, like targeted violence (Pychon & Borum, 1999; Reddy et al., 2001), repetitive offending behavior from one perpetrator represents a unique issue dissimilar from general violence prevention (Fagan & Mazerolle, 2011; Lauritsen et al., 2012).

For instance, bullying research has examined (i.e., in mostly K-12 samples) a specific subset of violence that includes targeted harassing behavior and assault (Fagan & Mazerolle, 2011; Polanin et al., 2012). In a sample of Australian school children, 36% reported engaging in violent offending behavior, and 17% indicated repetitively using violence (Fagan & Mazerolle, 2011). Repeat offenders were more likely to be male, live with single or no parents, and move frequently when compared to non-repeat offenders. These repetitive offenders reported less respect for authority, more peer delinquency, and less self-control. Individuals most likely to be victimized by this behavior tended to be male, have delinquent peers, lack respect for authority, and lack self-control. Thus, in this sample, certain psychosocial risk factors appeared to create risk of victimization and offending, which suggested social learning and retaliatory responses followed victimization. In a sample of American students, 34% indicated engaging in physical or verbal aggression toward a weaker target (Frey, Hirschstein, Edstrom, & Snell, 2009). Aggressive reactions from bystanders and victims often followed bullying behavior (i.e., unless interventions generate appropriate responses; Polanin et al., 2012), and students engaging in bullying tended to act similarly for multiple years and escalate violent

behavior (e.g., date abuse, street violence). These processes and motivations have been seen in a portion of campus targeted attacks (Drysdale et al., 2010), as 13.7% of perpetrators were motivated by "retaliation for specific actions" (p.18). Thus, repetitive violent acts (e.g., bullying) and victim reactions to this behavior would appear to account for a portion of the pre-incident behavior campus threat assessment teams attempt to gather and assess.

Repetitive interpersonal conflicts have also been explored within workplace settings (Jenkins, 2009; Paull, Omari, & Standen, 2012). In employee samples, 22% reported being bullied at the workplace through harassment, physical attacks, and/or threats (Jenkins, 2009). Individuals most likely to engage in this behavior are males and those with prior violence in the workplace (Scalora, Washington, Casady, & Newell, 2003). Triggering events, such as "perceived mistreatment" (p.315), monetary disputes, and relationship related disputes (e.g., intimate partner disputes), tend to precede repetitive violence at the workplace. These findings appear applicable to homicidal workplace incidents (Romano et al., 2011), which affect college campuses (Drysdale et al., 2010).

Additionally, intimate partner violence typically includes repetitive acts of preincident behavior and assault (Drysdale et al., 2010; James et al., 2010; Jenkins, 2009; Lauritsen et al., 2012; Yamawaki et al., 2013). Approximately 28% of women experience severe physical domestic abuse (Rath, Jarratt, & Leonardson, 1989), and 66% of these victims re-experience abuse from their partner within the next year (Kuijpers, van der Knapp, & Winkel, 2012). Perpetrators engaging in domestic abuse tend to also make threats, destroy the victim's property, and display suicidal gestures (Jenkins, 2009). Their actions have been considered an attempt at controlling their victims, and perpetrators of domestic violence have reported feelings of underachievement and deficiency in status. Victim characteristics affecting this control, such as avoidant attachment, anger toward the perpetrator, and violent retaliation, have been linked to increased severity of repeat offending (Kuijpers et al., 2012). Intimate partner homicide typically occurs after estrangement (Jenkins, 2009), and is preceded by assaultive behavior, threats to kill, and access of weapons. Intimate partner violence appears highly relevant to campus threat assessment, as 34% of campus targeted attacks included homicides related to intimate relationships (Drysdale et al., 2010).

Stalking also includes multiple displays of concerning behaviors that often result in physical or sexual assault (deBecker, 1998; James et al., 2009; Meloy, 2001; Meloy et al., 2008), as stalking includes repetitive behavior directed toward an unwilling victim that causes fear of safety, such as physical following, spying, unwanted phone calling, and unwelcome gifting (Catalano, 2012). Although in isolation these incidents may not be illegal, multiple instances from one individual often generates substantial concern (James et al., 2009), and harmful stalking behavior can be highly persistent, as approximately 60% of victims reported concerning contact occurred for over 6 months (Catalano, 2012). Further concerns, such as psychotic mental illness, criminal history, and highly personal fixation on a target/cause (James et al., 2009; Marquez & Scalora, 2011), tend to increase the persistence and severity of this behavior. Stalking perpetrators typically have a relationship with the victim (e.g., former intimate, former friend) prior to the concerning behavior, but this crime is also committed by strangers toward average citizens, public officials, and celebrities (James et al., 2009; Marquez & Scalora, 2011; Meloy et al., 2008). Regardless of the relationship, stalking has been linked to further problematic behavior, such as increasingly intrusive contact, violence, and sexual assault (Buhi et al., 2009; James et al., 2009). Stalking occurs relatively frequently, as 1.5% persons above 18 years of age expressed being stalked during a 12month period (Catalano, 2012). This type of pre-incident behavior is highly relevant to campus targeted attacks, as 10% of perpetrators were motivated by "refused advances or obsession with a target" (Drysdale et al., 2010, p.18).

Thus, contexts of multiple instances of pre-incident behavior and subsequent violence have received extensive review that appear highly applicable to understanding behavior preceding targeted attacks on campus (Drysdale et al., 2010). Campus violence prevention efforts could be increasingly informed through exploring nuances between campus threat assessment and these other disciplines. The application of these empirical findings to campus threat assessment would be expected to increase support of threat assessment procedures and promote efficient and collaborative violence prevention efforts.

### Empirical Directions Regarding Contexts of Pre-Incident Behavior

A recent investigation evaluated contextual influences on the "path to intended violence" (Calhoun & Weston, 2003, p.58). A review of activities preceding targeted violence revealed eight typologies of warning behavior (Meloy et al., 2012), which are not unanimously present across different samples of targeted attacks (Meloy et al., 2014b). All school shooters (n = 9) informed third parties about intentions to commit an attack, while this action was infrequently seen in German public figure attackers (i.e., 2 of 12; 17%) and perpetrators of intimate partner homicide (i.e., 23 of 62; 37%). Energy

burst behavior (i.e., "an increase in the frequency and variety of any noted activities related to the target"; p.40) was common in German public figure attackers (i.e., 8 of 12; 67%), but not in other samples. Direct threats were seen in perpetrators of intimate partner homicide (i.e., 44 of 64; 69%), but not in other targeted attack groupings. Fixation (i.e., "pathological preoccupation with a person or cause"; p.39) occurred in nearly all targeted attacks, and behaviors demonstrating research or planning of an attack were also frequently viewed across samples (i.e., except for those involving intimate partner homicides [i.e., 26 of 66; 39%]). This review highlighted the behavioral pathways of targeted violence in distinct contexts. Certain types of pre-incident behavior may be included in situations of intimate partner homicide and public figure assassination (e.g., stalking; James et al., 2009), but unrelated to most motives of K-12 school shooters (e.g., retaliation for bullying, identification with assassins). Certain types of pre-incident behavior may be seen as descriptive throughout contexts (e.g., fixation, pathway behavior; Meloy et al., 2014b).

Moreover, in this study, the predictive nature of several typologies of behavior was demonstrated through comparing situations with targeted violence and threatening situations without violence. School threateners (i.e., without accompanying violence) tended to inform others about intentions to attack and directly threaten protective resources, but did not display other pathway behavior. Thus, this study displays collections of pre-incident behavior relevant to distinctive contexts, while demonstrating the ubiquity and predictiveness of general pathway to violence behavior.

Campus targeted violence would appear include several contexts of concern (Drysdale et al., 2010), and the nature and predictiveness of pre-incident behaviors in each of these situations will be examined in this dissertation. Observations of preincident behavior and assault can be separated based on the relationships between the concerning individual and the target. The motivations of the concerning individual could be understood by student observers, as well. These explorations could reveal specific concerns in different campus contexts, which could inform threat assessment procedures in each situation.

Alternatively, these analyses may reveal unified prevention procedures that improve the efficiency of campus violence prevention. For instance, if stalking in intimate relationships is underreported and predictive of targeted violence on campus, then stalking reporting improvement efforts could be combined with campus threat assessment attempts to increase authority notification of pre-incident behavior. Efforts to reduce and improve reporting for violence against women could also involve discussions of the homicide sometimes follow observation of these actions. Therefore, threat assessment research examining contexts of multiple pre-incident behaviors has the ability to improve the efficiency and effectiveness of campus violence prevention.

## Additional Examinations of Pre-Incident Reporting

The empirical approach of this dissertation will provide a thorough review of relevant victim, bystander, offender, and situational reporting influences (Goudriaan, Wittebrood, & Nieuwbeerta, 2006; Fischer et al., 2011; Weller, Hope, & Sheridan, 2013). Additionally, attitudinal (e.g., rape myths) and societal (e.g., community policing) components of reporting will be investigated (Pottter, Moynihan, Stapleton, & Banyard, 2009; Schnebly, 2008). These findings will generate awareness of student reporting processes, which can inform campus threat assessment procedures reliant on pre-incident reporting and efforts to enhance pre-incident reporting.

Most incidents of concerning behavior include bystanders (i.e., non-authority figures not directly involved in perpetration or victimization) observing or being informed about the situation. According to the NCVS, bystanders observed 64% of violent crimes (Bosick, Rennison, Gover, & Dodge, 2012). Victims of domestic violence attempt to leave their relationship with the perpetrator an average of five times, often seeking assistance from family and friends (Yamawaki et al., 2012), and victims of stalking on campus informed family and friends in approximately half of these situations (i.e., in comparison to 4% that informed police; Buhi et al., 2009). In K-12 schools, 80% of bullying perpetrations involved observing witnesses (Polanin et al., 2012), and 30% of an Australian employee sample reported observing instances of workplace bullying (Paull et al., 2012). Therefore, understanding victim and bystander responses is highly important to violence prevention processes throughout contexts of campus pre-incident behaviors (Calhoun & Weston, 2009; Fein & Vossekuil, 1998; Scalora et al., 2010).

Overall, approximately 40% of criminal activity is reported to police (Bosick et al., 2012; Truman & Planty, 2012), with those directly victimized providing the criminal report about two-thirds of the time. As additional witnesses typically observe criminal acts, some suggest this finding demonstrates bystanders lack willingness to inform authorities (Bosick et al., 2012; Goudriaan et al., 2006; Polanin et al., 2012). For instance, in a stringent Naval Academy setting, 5.1% of students had reported another peer's misconduct, despite most students stating that misconducts, such as lying and cheating, occur regularly (Pershing, 2003). Approximately 50% of students used peer

counseling to resolve misconduct issues. Attitudes of victim-blaming and minimization of the offense have been shown to occur for the majority of participants when exposed to a criminal act (Weller et al., 2013; Yamawaki et al., 2012), which often results in the incident remaining unreported. Nonetheless, many field studies of concerning behavior and responses to hypothetical situations (e.g., rape, carrying a weapon on school grounds, property crime) include reporting rates much higher than 50% (Brank et al., 2007; Fischer et al., 2011; Hollister et al., 2013; Sulkowski, 2011). Thus, reporting of preincident actions appears relatively inconsistent between studies (Fischer et al., 2011), and several moderating factors impact general reporting findings.

The characteristics of the offending behavior appear highly important to victim and bystander reporting decisions. Serious crimes, such as offenses involving victim injury or property loss, tend to be highly reported (Goudiraan et al., 2006; Tarling & Morris, 2010). For example, 67% of aggravated assaults were reported to authorities in 2011, while 43% of simple assaults were reported (Truman & Planty, 2010). Eightythree percent (83%) of motor vehicle thefts were provided to police; yet, 30% of general thefts included authority notification. Perpetration with weapon use also involves higher reporting rates than general crime (Truman & Planty, 2012), as offender behavior with clearer displays of wrongful conduct is more likely to be extended to authorities (Weller, Hope, & Sheridan, 2013). Moreover, completed offenses are more likely to be reported than attempted criminal acts, and apparent criminal conduct (e.g., robbery, assault) corresponds with higher likelihood of reporting than offenses with less palpability (e.g., stalking). Thus, the influence of clarity and severity on reporting decisions appears pervasive and most likely applies to authority notification of pre-incident behavior (Hollister et al., 2014a).

Certain victim characteristics correspond with heightened reporting. Individuals suffering revictimization are less likely to report each subsequent incident, which relates to low reporting rates for domestic violence and rape (Thompson et al., 2009). Victims that possess insurance are more likely to report criminal activity that may include their compensation (Tarling & Morris, 2010). Youthful victims are the least likely to report criminal occurrences (Bosick et al., 2012), with some college samples having 1.4% of sexual assaults and 2.2% of physical assaults being extended to police (Thompson et al., 2009). Younger victims are especially unlikely to report if the offender is older than them (Bosick et al., 2012), which has corresponded with college students being unwilling to report concerning actions committed by faculty or staff. Thus, the characteristics of targeted victims most likely impacts the reporting of pre-incident behavior.

The victim-offender relationship affects victims' responses to criminal activity. Individuals victimized by acquaintances are most likely to report the incident to authorities (Tarling & Morris, 2010), as victims can provide useful information to the police while not being overly concerned with protecting the offender. Offenses committed by strangers are also quite frequently reported to police, as many reporting inhibitions tend to correspond with close relationships between a victim and offender. Criminal acts with the lowest reporting rates involve victims that are intimate partners or friends with the offender. These victims express having a sense of loyalty to the offending peer, fearing retaliation from a peer or peer group, and viewing the crime as a private or personal matter not requiring police assistance (Brank et al., 2007; Buhi et al., 2009; Sulkowski, 2011; Tarling & Morris, 2010; Thompson et al., 2009). Therefore, relational influences appear highly relevant to the pre-incident reporting decision-making by victims.

The victim-offender relationship also impacts bystander reporting decisions (Hollister et al., 2012; Weller et al., 2013). For instance, a vignette of a direct threat between intimate partners included 16% of college students and 39% of college faculty/staff being willing to report, while direct threats in other scenarios involved over 80% of the samples expressing willingness to report (Hollister et al., 2012). In a staged attack on a female, participants were significantly more likely to intervene if the dispute appeared to be between strangers (65%), instead of married partners (19%; Weller et al., 2013). Participants were more likely to excuse domestic violence if the offender and victim were married, rather than acquaintances (Yamawaki et al., 2012). Police officers and general community members were less likely to consider stalking behavior as criminal if the victim and offender were ex-intimates or acquaintances (i.e., in comparison to a stranger condition; Weller et al., 2013). Thus, the victim-perpetrator relationship likely impacts pre-incident bystander reporting decisions.

Bystander relationships with the victim and offender are also highly important to reporting decisions. Bystanders may be hesitant to inform authorities if the offender is a loved one (Brank et al., 2007; Pershing, 2003). For instance, with a middle school sample, 70% of participants indicated being willing to report a student carrying a weapon; however, this reduced to 58% if the weapon-carrying individual was described as a friend (Brank et al., 2007). The students unlikely to report had similar traits (e.g., delinquency, poor parental attachments) as those wielding weaponry at school. College

students failing to report peer misconduct most often expressed "friendship or peer loyalty" as the most important factor in their decision (Pershing, 2003, p.160). Nonetheless, if the victim is a loved one, bystanders are more likely to seek police assistance. When victims do not report, police typically become aware of criminal acts by other household members (Bosick et al., 2012). Bystanders were significantly more likely to provide helping behavior in dangerous situations (e.g., viewing physical attacks) if a friend, rather than a stranger, was being victimized (Fischer et al., 2011). Thus, bystander pre-incident reporting decisions are likely impacted by bystander-victim and bystander-offender relationships.

In addition to incident and relational impacts, perceptions of the abilities and the motivations of protective agencies are influential in reporting decisions. People are most likely to report when possessing a positive view of police (Goudriaan et al., 2006; Tarling & Morris, 2010), and those who report criminal activity express confidence in the police's ability to prevent revictimization, apprehend the offender, and reduce community crime. Positive past experiences with police increase willingness to report subsequent issues (Levitt, 1998; Schnelby, 2008). Groups having poorer relationships with police (e.g., individuals with low socioeconomic status, males, minorities, youth; Reiman, 2007) are less likely to report criminal acts (Goudriaan et al., 2006; Schnelby, 2008; Tarling & Morris, 2010). Individuals failing to report often believe the police could not do anything about the situation or would not take the information seriously (Thompson et al., 2009). Therefore, community relations with a police force would appear to represent a significant influence on pre-incident reporting decisions (Goudriaan et al., 2006; Oliver, 2001; Samaha, 2006).

Perceptions of criminal behavior also impact the likelihood of a victim or bystander informing authorities. Victims feeling partially responsible for the criminal activity are unlikely to report (Tarling & Morris, 2010), and bystanders assuming victim fault act similarly (Yamawaki et al., 2012). Thus, bystanders endorsing problematic inaccuracies about criminal behavior, such as rape is only perpetrated by a stranger or a victim deserved harm due to his/her intoxication (Potter, Moynihan, Stapleton, & Banyard, 2009; Zavala, 2010), represents a significant roadblock to proper victim assistance. The "just world hypothesis" (i.e., believing the world is ultimately fair; Weller et al., 2013, p.324) has been viewed as an underlying cognition attached to several victim-blaming statements corresponding with problematic beliefs, such as thinking the offender is entitled to engage in the criminal behavior, the victim could end the situation if he/she desired, or the victim has an "unconscious desire to be abused" (Yamawaki et al., 2012, p.3198). These types of reporting-inhibiting cognitions have been observed across pre-incident behaviors and relate to the minimization, justification, or denial of the wrongfulness of the perpetrators' behavior (Sulkowski, 2011).

Judgments of normative behavior (i.e., group norms) by potential reporters impact decisions regarding authority notification (Fabiano, Perkins, Berkowitz, Linkenbach, & Stark, 2003; Paul & Gray, 2011; Perkins, Craig, & Perkins, 2011). Generally, normative judgments overestimate risky behaviors and underestimate protective actions, as social conversations and media overemphasize extreme and remarkable events. These views can inhibit reporting of concerning behavior, as bystanders can view problematic actions as socially appropriate and justifiable (Neighbors et al., 2010). The interpretation of group norms about sexual consent influenced willingness to intervene against acts of sexual violence in a sample of male college students (Fabiano et al., 2003). High-school students' overestimation of peer involvement in misconduct corresponded with unwillingness to inform school authorities of bullying and harassing behavior (Paluck & Shepherd, 2012; Perkins et al., 2011). These normative judgments have been shown to affect drug use (DeJong et al., 2006), reactions to sexist comments (Paul & Gray, 2011), and intimate partner violence (Neighbors et al., 2010); therefore, reporting of various pre-incident behaviors would appear to be affected by these evaluations of group norms.

The range of reporting research reveals complex influences most likely included in pre-incident reporting decisions by collegiate stakeholders. An awareness of these factors would be vital in developing effective campus threat assessment reporting improvement efforts. Therefore, campus threat assessment research should explore these several, interacting reporting influences to improve campus violence prevention efforts. *Empirical Directions Regarding Pre-Incident Reporting* 

Currently, the impact of these factors on campus threat assessment has mostly been viewed in participants' willingness to report vignettes describing threatening behavior (Hollister et al., 2012; Hollister et al., 2013; Sulkowski, 2011). General criminal reporting findings tend to be supported in these threat assessment investigations. However, recent analyses have used collegiate stakeholders' self-reported encounters with pre-incident behavior and subsequent reporting decisions to view influential variables (Hollister et al., 2014a). The directness of a pre-incident behavior was measured through participant observation of threatening statements and/or multiple concerning behaviors; however, neither of these factors significantly influenced the likelihood of participants informing authorities of the situation. The impact of severity was measured through participant observation of property loss or assault. Students seeing assaultive preincident behavior were significantly more likely to report than students viewing other pre-incident behavior; however, observation of property loss did not affect the likelihood of authority notification. This study examined only a portion of the many factors that influence reporting decisions. This dissertation will investigate actual reporting decisions, while measuring relational (i.e., bystander, victim, offender relationships), attitudinal (e.g., perceptions of police and campus norms), and situational (e.g., offense characteristics) influences. Multiple regression models will be used to evaluate the interaction of these factors in pre-incident reporting decisions.

These analyses can improve the recognition and evaluation of threatening individuals. Threat assessment professionals would have enhanced awareness of situations and behaviors that are unlikely to be disclosed, which could guide threat investigations and management decisions. Important focal points for pre-incident reporting improvement efforts would include individuals unlikely to report, attitudes corresponding with unwillingness to report, and pre-incident behaviors that are often not extended to authorities.

#### Additional Examinations of Reporting Improvement Efforts

The empirical approach of this dissertation will advance the understanding of preincident reporting improvement interventions. Reporting improvement techniques have been employed in bullying, sexual assault, and stalking contexts (Bosick et al., 2012; Fischer et al., 2011; Levitt, 1998; McMahon, Postmus, & Koenick, 2011; Paul & Gray, 2011; Polanin et al., 2012; Potter et al., 2009; Weller et al., 2013), and exploration of these findings would inform campus threat assessment reporting improvement efforts. Approximately 60% of colleges have safety-related educational programs, and significant differences between intervention strategies are repetitively found (Paul & Gray, 2011). The utilized techniques vary considerably with brochures, posters, and presentations being used to influence reporting behavior.

Appropriately formulated material is a highly important piece of successful reporting interventions (Foubert & Perry, 2010). Information within the intervention should provide memorable instructions accessible when exposed to the concerning behavior. Attention-grabbing examples (e.g., violent criminal acts; Foubert, 2000) and statistics (e.g., in one hour 99 women have been sexually abused) are used in successful interventions (Foubert & Perry, 2010; McMahon & Dick, 2011). Engaging participants in multiple levels of learning (e.g., writing exercises, discussion, role plays) relates to generalized and personalized understandings (Paul & Gray, 2011), especially if the information appeals to students' pre-existing conceptualizations (Foubert & Perry, 2010). Therefore, applying bystander intervention material to small, like-minded groups corresponds with greater increases in willingness to intervene (Foubert & Perry, 2010; McMahon & Dick, 2011; Paul & Gray, 2011; Paluck & Shepherd, 2012), as the material can be made relevant and applicable to a specific group within the larger campus population. For instance, collegiate sexual assault interventions focused on male fraternity members and male athletes (i.e., those most likely to possess rape-supportive attitudes) related with lasting attitudinal and behavioral change. Small group interventions are most effective if facilitated by peer educators respected by participants, as these group leaders provide memorable cues about group norms (Paluck & Shepherd, 2012; Paul & Gray, 2011). Therefore, the proper structuring of reporting improvement

efforts appears highly important in providing memorable intervention material generating willingness to report pre-incident behavior (Hollister et al., 2013).

As attitudinal differences distinguish reporters from non-reporters, most interventions for stalking (Weller et al., 2013), bullying (Frey et al., 2009), sexual assault (Foubert & Perry, 2010), and general crime prevention emphasize correcting inaccurate stereotypes and myths about criminal behavior. A bullying prevention campaign displayed accurate reflections of student attitudinal norms (e.g., "94% of Middle School students believe students should NOT shove, kick, hit, trip, or hair pull another student"; Perkins et al., 2011, p.709), which greatly increased willingness to report harassment. An anti-harassment effort displayed accurate norms of student-wide beliefs and specific clique attitudes, and significant reductions in harassing behavior and increases in student preventions of bullying situations followed (Paluck & Shepherd, 2012). Collegiate sexual assault prevention programs correcting rape myths and demonstrating the consequences of rape in a non-judgmental manner relates to large, enduring attitudinal and behavioral changes (Paul & Gray, 2011). Improvements in authority notification of intimate partner violence occur if misperceptions regarding peer acceptance of hostility toward females and justification of the violent acts are challenged (Neighbors et al., 2010; Yamawaki et al., 2012). Police departments have generated trust and increased reporting of criminal conduct through inclusion of community members in problem-solving and resource allocation strategizing (Greene & Heilbrun, 2010; Oliver, 2001), which addresses general reporting-reducing factors (i.e., feelings of alienation and separation between the police and the community). Each of these effective bystander intervention techniques followed the identification of attitudes differentiating those

willing and those unwilling to report concerning behavior. Thus, following recognition of reporting influences, similar attitudinal variables could be successfully applied in preincident reporting improvement efforts.

A review of appropriate bystander behavior also occurs in effective reporting improvement interventions (Paul & Gray, 2011). Although some efforts include weeks of classroom criteria about assertiveness and problem-solving (Frey et al., 2009), most include a brief review of appropriate behavioral responses to criminal acts at the conclusion of the intervention presentation (Foubert, 2000; Foubert & Perry, 2010). When coinciding with efforts of attitudinal changes, both options have resulted in increases in willingness to report (Frey et al., 2009; Paul & Gray, 2011). In pre-incident reporting improvement efforts, the goal of providing pre-incident behaviors to police would need to be effectively displayed (Pollack et al., 2008).

Thus, pre-incident reporting interventions could employ similar techniques. Attitudes preventing reporting of pre-incident behavior could be explored further, and these influences may be like the beliefs inhibiting appropriate bystander behavior in stalking, sexual assault, and bullying situations. Individuals most likely to be unwilling to report (e.g., males, delinquent students; Hollister et al., 2013) could be reviewed, and options for appropriately challenging these groups' problematic viewpoints, while appealing to pre-existing outlooks, could be investigated.

## Empirical Directions Regarding Reporting Improvement Efforts

Campus threat assessment pre-incident reporting improvement techniques utilizing the successes of other reporting enhancement efforts should be explored. For instance, a campus-wide one- or three-session intervention that includes members of campus protective services and material teaching students to confront antisocial norms and provide observations of pre-incident behavior to police has been suggested (Sulkwoski, 2011). A brief peer education effort (i.e., 30 to 60 minutes) with a small group of like-minded participants (i.e., those likely to view pre-incident behavior and not report) and social referents respected by this group (e.g., fraternity presidents, athletic team captains) has also been described (Hollister, Scalora, Hoff, & Marquez, 2014c). Allowing anonymous reporting and advertising a single point of contact for pre-incident reporting have also been recommended (Scalora et al., 2010). The effectiveness of these techniques could be reviewed through pre- and post-test comparisons of willingness to report in campus stakeholders affected by the pre-incident intervention (e.g., the general campus community or the small discussion group). Campuses with and without these pre-incident efforts could be compared on a willingness to report variable, as well. Between-campus analyses could also explore self-reported pre-incident situations encountered by stakeholders and examine the rates of authority notification. Similar baseline findings of these campuses and subsequent pre-incident reporting differences would greatly increase support of reporting improvement recommendations. Therefore, several empirical strategies for advancing the effectiveness of pre-incident reporting improvement efforts are accessible.

Effective threat evaluation and management cannot occur with professionals being aware of concerning situations (Calhoun & Weston, 2009; Fein & Vossekuil, 1998; Van Der Meer & Diekhus, 2014); thus, pre-incident reporting improvement efforts are an important piece of the threat assessment approach, as the majority of pre-incident behavior observations are not extended to campus authorities (Hollister et al., 2014c). Therefore, further development of pre-incident reporting improvement efforts would relate to successful targeted violence prevention and increase empirical support for the campus threat assessment approach.

## Hypotheses and Data Analysis Plan

Pre-incident reporting is highly important to collegiate violence prevention efforts, as observations of concerning action precede nearly all targeted attacks and most instances of assault (Drysdale et al., 2010; Hollister et al., 2014b; Scalora et al., 2010). Initial attempts to empirically explore the prevalence of pre-incident behavior and the factors involved in reporting decisions struggled to gain comprehensive understanding (Hollister et al., 2012; Hollister et al., 2013; Meloy et al., 2014b; Sulkowski, 2011). However, these studies may not have considered the expansive literature analyzing specific pre-incident actions, contexts of repetitive alarming behavior, victim and bystander reporting, and efforts at increasing reporting to authorities. Recent explorations in the threat assessment field have considered these additional research areas and produced results increasing support in the threat assessment approach and specific recommendations for advancement of threat assessment techniques (Hollister et al., 2014a; Hollister et al., 2014b; Hollister et al., 2014c; Meloy et al., 2014b). These efforts are further extended in this dissertation with the following hypotheses:

Regarding exposure to pre-incident behavior on campus, it is hypothesized that:

• Students with high campus connectedness (e.g., residence hall advisors) will be more likely to observe pre-incident behavior on campus (i.e., Hypothesis 1).

- Students with high self-reported antisocial involvement will be more likely to observe or be victimized by non-intimate pre-incident behavior on campus (i.e., Hypothesis 2).
- Males will be more likely to observe or be victimized by non-intimate preincident behavior than females (i.e., Hypothesis 3).
- Females will be more likely to observe or be victimized by intimate pre-incident behavior on campus than males (i.e., Hypothesis 4).

These hypotheses will be examined through asking a college student sample about observations of pre-incident behavior. Between-groups analysis of variances will be used to analyze most differences between students observing pre-incident behavior on campus and students not observing pre-incident behavior on campus (e.g., campus connectedness, self-reported antisocial involvement). A Pearson's Chi-Square Test of Independence will be used review categorical influences on observation (e.g., gender). Additionally, preincident observations will be separated based on the context of the threatening situation (i.e., intimate or non-intimate). A between-groups analysis of variances and Pearson's Chi-Square Test of Independence will be used to analyze differences between students observing non-intimate pre-incident behavior on campus and students not observing nonintimate pre-incident behavior on campus. Between-groups analysis of variances and Pearson's Chi-Square Test of Independence will be used to analyze differences between students observing intimate pre-incident behavior on campus and students not observing intimate pre-incident behavior on campus. Thus, in this dissertation, hypotheses regarding exposure to pre-incident behavior will be examined with between-group

analysis of variances and Pearson's Chi-Square Test of Independences comparing observers and non-observers of pre-incident behavior.

Regarding the predictive nature of pre-incident behavior, it is hypothesized:

- Regardless of context (i.e., intimate, non-intimate), witnessed assaults on campus will correspond with observation of multiple types of pre-incident behavior (i.e., Hypothesis 5).
- Regardless of context (i.e., intimate, non-intimate), witnessed assaults on campus will correspond with observation of multiple incidents of pre-incident behavior (i.e., Hypothesis 6).
- Regardless of context (i.e., intimate, non-intimate), witnessed assaults on campus will correspond with stalking/harassing actions, threatening statements, and threatening gestures (i.e., Hypothesis 7).

This hypothesis will be reviewed in a subset of a college student sample (i.e., students observing pre-incident behavior). Pearson's Chi-Square Tests of Independence will be used to compare pre-incident behaviors between groups of students that witnessed concerning behavior but not assault, physical assault, and sexual assault / touching. Similar analyses will be used to examine only pre-incident behaviors within intimate contexts and only pre-incident behaviors within non-intimate contexts. In each, multiple types of pre-incident behaviors, multiple incidents of pre-incident behavior, stalking/harassing actions, threatening statements, and threatening gestures are expected to be more prevalent in the groups of students witnessing physical assault or sexual assault / touching. Thus, in this dissertation, the predictiveness of pre-incident behavior will be reviewed with Pearson's Chi-Square Tests of Independence comparing pre-

incident observations in students witnessing non-assaultive concerns, physical assault, or sexual assault / touching.

Regarding reporting of pre-incident behavior, it is hypothesized:

- Males will be less likely to report than females (i.e., Hypothesis 8).
- Pre-incident behavior directed toward a friend of the observer will relate to greater likelihood of reporting than other observer-victim relationships (i.e., Hypothesis 9).
- Non-intimate victim-perpetrator relationships will relate to greater likelihood of reporting than intimate victim-perpetrator relationships (i.e., Hypothesis 10).
- Those directly victimized by pre-incident behaviors will be more likely to report than bystanders (i.e., Hypothesis 11).
- An acquaintanceship between observers and perpetrators will relate to greater likelihood of reporting than stranger or friend relationships (i.e., Hypothesis 12).
- Students lacking trust in campus police will be less likely to report (i.e., Hypothesis 13).
- Students endorsing beliefs in the "just world hypothesis" (Weller et al., 2013, p.324) will be less likely to report (i.e., Hypothesis 14).
- Students accompanied by additional bystanders upon exposure to pre-incident behavior will be less likely to report (i.e., Hypothesis 15).
- Students perceiving greater peer involvement in misconduct, negative peer attitudes about campus police, or unwillingness of peers to report will be less likely to inform authorities of pre-incident behavior (i.e., Hypothesis 16).

- Observers are more likely to report pre-incident behavior with assault, multiple concerning acts, or multiple victims (i.e., Hypothesis 17).
- Students feeling more responsible for helping victims will be more likely to report (i.e., Hypothesis 18).
- Students with higher campus connectedness will be more likely to report (i.e., Hypothesis 19).
- Students with self-reported antisocial involvement will be less likely to report (i.e., Hypothesis 20).
- Students endorsing beliefs of rape myths will be less likely to report (i.e., Hypothesis 21).

These hypotheses will be reviewed with a subset of a college student sample (i.e., students observing pre-incident behavior). Between-groups analysis of variances will be used to analyze most differences between participants reporting observations to authorities and participants failing to report observations to authorities. Categorical reporting influences (e.g., observer-perpetrator relationship, observer-victim relationship, observing multiple victims or single victims) will be investigated with Pearson's Chi-Square Tests of Independence (i.e., rather than a between-groups analysis of variance). A logistical regression model will be used with a binary variable related to observer reporting decision (i.e., did report to authorities or did not report to authorities) as the criterion. Relevant categorical reporting influences will be included as binary variables (i.e., yes or no). Thus, in this dissertation, the reporting of pre-incident behavior will be examined in participants viewing pre-incident behavior with between-groups analysis of variances (i.e., separating participants that do report and participants that do not report),

Pearson's Chi-Square (i.e., report versus no report and qualitative outcome variables), and logistical regressions (i.e., using a binary reporting criterion variable).

Regarding pre-incident reporting and police activity, it is hypothesized:

- Students with awareness of the non-emergency phone number for campus police will be more likely to report pre-incident behavior to authorities (i.e., Hypothesis 22).
- Students having positive prior contact with campus police will be more likely to report pre-incident behavior to authorities (i.e., Hypothesis 23).
- Students endorsing exposure and remembrance of campus police poster displays will be more likely to report pre-incident behavior to authorities (i.e., Hypothesis 24).

These hypotheses will be reviewed with a subset of a college student sample (i.e., students observing pre-incident behavior). Between-groups analysis of variances will be used to analyze differences between participants reporting observations to authorities and participants failing to report observations to authorities. Pearson's Chi-Square Tests of Independence will be used to analyze categorical reporting influences (e.g., prior positive contact with police or no prior positive contact with police) with these groups. Thus, in this dissertation, hypotheses regarding reporting improvement efforts will be examined with between-group analysis of variances comparing reporters and non-reporters of pre-incident behavior.

Thus, based on general criminological and crime prevention findings, several hypotheses were formed to guide investigation of the campus threat assessment model in a general student sample. Overall, if supported, these hypotheses would address concerns about the prevalence, predictiveness, and reporting of pre-incident behavior, while encouraging innovative applications of the existing campus threat assessment model.

#### Chapter 2 - Method

In the current dissertation, undergraduate students (n = 1,063, average age = 20.40) from a psychology department subject pool selected to participate using an online survey tool (i.e., Sona). Prior to the survey, participants received information about the study and agreed to a statement of consent (i.e., Appendix A). Then, students were provided with the questionnaire (i.e., Appendices B - M) with scales presented in a randomized order. Upon completion, students were provided debriefing material (i.e., Appendix N).

The participants surveyed were compared to the general University of Nebraska-Lincoln undergraduate student population (n = 19,979). Table 1 displays demographic comparisons between the sample of the current dissertation and the general undergraduate student body (i.e., as noted in Ericson [2014] and University of Nebraska [2014]). In contrast to the general undergraduate population, participants were more often female ( $X^2(1) = 278.18$ , p < .001), white ( $X^2(1) = 10.13$ , p < .001), and psychology majors ( $X^2(1) = 2873.47$ , p < .001). Participants reported higher GPAs than the general undergraduate population (t(1018) = 18.192, p < .001). However, freshman class standing did not differ between the general undergraduate population and the sample ( $X^2(1) = 1.63$ , p = .202).

### Table 1

	Group		
Demographic Variables	Sample	Undergraduate Population	
	(n = 1,063)	(n = 19,979)	
Male	303 (28%)	10,834 (54%)	
White	886 (83%)	15,635 (78%)	
Freshman	262 (25%)	4,652 (23%)	
Psychology Major	385 (36%)	813 (4%)	
Grade Point Average	3.34	3.06	

Demographic characteristics between sample and general student body

Note. The shaded boxes correspond with significant differences between the sample and the campus population (p < .05).

#### Survey Overview

Participant questionnaires included queries regarding observations of concerning campus behavior (i.e., Appendix B-D), the Self-Report Delinquency Scale (i.e., Appendix E), the Campus Connectedness Scale (i.e., Appendix F), the Diffusion Scale (i.e., Appendix G), the Institutional Trust in Police Scale (i.e., Appendix H), the Motive Based Trust of Police Scale (i.e., Appendix I), the Just World Scale (i.e., Appendix J), the

Illinois Rape Myth Acceptance Scale Short Form (i.e., Appendix K), social norms (i.e.,

Appendix L), and campus police interventions (i.e., Appendix M).

All participants were asked, "Have you ever viewed an individual that displayed any of the following behaviors while on campus? If more than one observed individual has displayed these behaviors, please focus on the most recent instance in selection. Select all applicable actions." followed by potential campus safety concerns: repeated unwanted verbal contacts through email or phone, repeated unwanted 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 touching, suicidal statements or attempts, or other. If participants endorsed observation of pre-incident behavior on campus, then questions regarding relational factors, contextual factors, reporting decision-making, and outcome were provided.

The Self-Report Delinquency Scale assessed students' reported engagement in criminal behavior in the previous 12 months (Piquero, MacIntosh, & Hickman, 2002). Although originally nine items, most researchers use four inquiries due to limited variability between categories (Sulkowski, 2011). The four-item measure has had good internal consistency with college student samples ( $\alpha = .81$ ), but, with the current sample, had low internal consistency ( $\alpha = .21$ ).

The Campus Connectedness Scale reviewed students' attachment to the campus community (Summers, Beretvas, Svinicki, & Gorin, 2005) and includes 14 Likert-type questions (1 = *strongly disagree*; 6 = *strongly agree*) partially adapted from the Social Connectedness Scale (Lee & Robbins, 1995). Higher scores represent greater connections with the campus community. The Campus Connectedness Scale has had high internal consistency with college student samples ( $\alpha$  = .93; Sulkowski, 2011) and had excellent internal consistency with the current sample ( $\alpha$  = .94).

The Diffusion Scale (i.e., Appendix G) measures perceived personal responsibility to assist others (Cameron & Payne, 2011). This scale possesses two questions, with good internal consistency with collegiate samples (r = .48). In the current study, these questions were adjusted to reflect participants' perceptions of aiding police (i.e., "How much do you feel it is your moral responsibility to help the police?"; "How much do you feel that others are responsible for helping the police?") and were followed

by a Likert-type scale (1 = *not at all*; 7 = *extremely*). The Diffusion Scale had excellent internal consistency with the current sample ( $\alpha$  = .94).

Increased scores on the Institutional Trust in Police Scale correspond with greater trust and perceptions of legitimacy for police operations, which would affect reporting of pre-incident behavior to police (Tyler, 2005). Participants rate eight items on a fourpoint scale (1 = low; 4 = high) with good internal consistency ( $\alpha = .82$ ) in general samplings. This scale has significant correlation with assistance of the New York Police Department (r = .32). The current study asked about the University of Nebraska-Lincoln Police Department, and the scale had good internal consistency with the current sample ( $\alpha = .89$ ).

Higher scores on the Motive-Based Trust in Police Scale correspond with greater perceptions of fairness and honesty in police operations, , thus increasing the likelihood of reporting to police (Tyler, 2005). Three items are rated on a four-point scale (1 = low; 4 = high) with good internal consistency in general samples ( $\alpha = .84$ ). This scale is significantly correlated with cooperation with police (r = .14), and questions included participants' reports of the University of Nebraska-Lincoln Police Department. The Motive-Based Trust in Police Scale possessed acceptable internal consistency with the current sample ( $\alpha = .78$ ).

The Just World Scale measured participants' beliefs in an inherently fair world (Hollister, Hoff, Hodges, Scalora, & Marquez, 2015) with 9 Likert-type questions (1 = *not at all true*; 2 = *a little true*; 3 = *moderately true*; 4 = *very true*; 5 = *completely true*). Higher scores relate to greater just world beliefs. This scale has had excellent internal consistency in collegiate samples ( $\alpha$  = .92). The Illinois Rape Myth Acceptance Scale – Short Form measured participants' endorsement of beliefs supportive of male sexual violence toward women (Payne, Lonsway, & Fitzgerald, 1999). This scale includes 20 Likert-type (1 = not at all agree; 7 = very much agree) items that have high internal consistency with college student samples ( $\alpha = .87$ ). Higher scores have been shown to correspond with hostility toward women (r = .56) and acceptance of interpersonal violence (r = .67). This scale had excellent internal reliability with the current sample ( $\alpha = .90$ ).

Regarding social norm inquiries, participants were requested to estimate the percentage of University of Nebraska-Lincoln students that engaged in the concerning behaviors, the percentage of University of Nebraska-Lincoln students that viewed campus police positively, and the percentage of University of Nebraska-Lincoln students that would report observations of concerning behavior to university administration, staff, or police upon exposure. Each question was followed by: 1 = 0-10%; 2 = 10-20%; 3 = 20-30%; 4 = 30-40%; 5 = 40-50%; 6 = 50-60%; 7 = 60-70%; 8 = 70-80%; 9 = 80-90%; 10 = 90-100%.

Regarding exposure to campus police, participants were asked "During your time as a student, have you had contact with campus police in any form?" If answering *yes* to this question, participants were asked "How would you describe your contact with campus police?" and provided a Likert-type scale (1 = very negative; 2 = negative; 3 = neither positive nor negative; <math>4 = positive; 5 = very positive).

Regarding campus police advertisements, participants were asked "How many campus police advertisements have you seen?" and provided a Likert-type scale (1 = *none*, 2 = few, 3 = some, 4 = many). Following this question, participants were told to

"Briefly describe what the advertisement(s) said." Regarding knowledge of the nonemergency campus police phone number, participants were asked, "Besides 911, what phone number can be used to report concerning activity to campus police?"

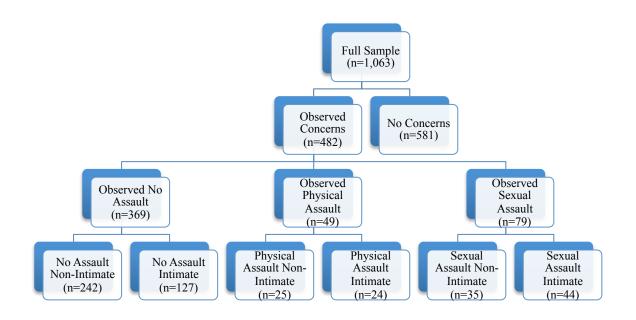
#### Chapter 3 - Results

## Formation of Comparison Groups

As displayed in Figure 1, concerning behavior questions were used to separate participants into groups based on types of observed concerning behaviors. When asked about exposure to concerns, 45% (n = 481) of participants noted seeing at least one individual displaying problematic behavior, and 10% (n = 47) indicated seeing more than one. Within this Observed Concerns group (n = 481), when asked about the behaviors of the most recent concerning individual, 35% (n = 369) indicated witnessing neither physical nor sexual assault / touching from the perpetrator. Ten percent (n = 49) noted seeing physical assault, and 16% (n = 79) expressed observing sexual assault / touching. Within the Observed Concerns group, when asked about the context of the concerning behavior, 63% (n = 302) noted romantic / sexual obsession or intimate relationship issues corresponded with the concerns, and 37% (n = 179) reported these contextual factors were not relevant to the perpetrator misconduct. The types and contexts of witnessed concerns were used to separate participants observing concerns into 3 groups (i.e., No Assault, Physical Assault, Sexual Assault) and 6 sub-groups (i.e., No Assault Non-Intimate, No Assault Intimate, Physical Assault Non-Intimate, Physical Assault Intimate, Sexual Assault Non-Intimate, Sexual Assault Intimate), and Table 2 exhibits the demographic characteristics of each.

# Figure 1

Participant groups based on concerns observed



Note. The Physical Assault and Sexual Assault groups share 15 participants that viewed physically and sexually assaultive behaviors. The Physical Assault Non-Intimate and Sexual Assault Non-Intimate groups share 7 participants that viewed non-intimate physically and sexually assaultive behaviors. The Physical Assault Intimate and Sexual Assault Intimate groups share 8 participants that viewed intimate physically and sexually assaultive behaviors.

#### Table 2

	Demographic Variables					
Group	Male	White	Freshmen	Psychology Major	Grade Point Average	
FS $(n = 1,063)$	303 (28%)	886 (83%)	262 (25%)	385 (36%)	3.34	
$OC \\ (n = 482)$	144 (29%)	411 (85%)	122 (25%)	167 (35%)	3.33	
NC (n = 581)	159 (27%)	475 (82%)	140 (24%)	218 (38%)	3.36	
NA (n = 369)	120 (33%)	314 (85%)	90 (24%)	125 (34%)	3.36	
PA (n = 49)	14 (29%)	41 (84%)	12 (25%)	15 (31%)	3.25	
SA (n = 79)	11 (14%)	68 (86%)	23 (29%)	32 (41%)	3.37	
NANI (n = 242)	91 (38%)	208 (86%)	58 (24%)	77 (32%)	3.34	
NAI (n = 127)	29 (23%)	106 (84%)	32 (25%)	48 (38%)	3.39	
$\begin{array}{c} PANI\\ (n=25) \end{array}$	9 (36%)	21 (84%)	7 (28%)	7 (28%)	3.22	
$\begin{array}{c} PAI\\ (n=24) \end{array}$	5 (21%)	21 (84%)	5 (21%)	8 (33%)	3.28	
$\begin{array}{c} \text{SANI} \\ (n = 35) \end{array}$	6 (17%)	20 (83%)	8 (23%)	12 (34%)	3.32	
SAI (n = 44)	5 (11%)	29 (83%)	15 (34%)	20 (46%)	3.41	

Demographic characteristics of participant groups based on concerns observed

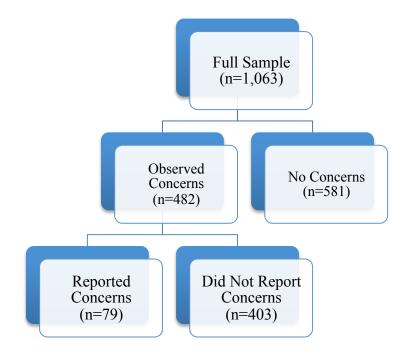
Note. Listed percentages correspond with the amount of each group (i.e., FS, OC, NC, NA, PA, SA, NANI, NAI, PANI, PAI, SANI, or SAI) selecting each response. FS = Full Sample; OC = Observed Concerns; NC = No Concerns; NA = Observed No Assault; PA = Observed Physical Assault; SA = Observed Sexual Assault; NANI = No Assault Non-Intimate; NAI = No Assault Intimate; PANI = Physical Assault Non-Intimate; PAI = Physical Assault Intimate; SANI = Sexual Assault Non-Intimate; SAI = Sexual Assault Intimate.

Additionally, as displayed in Figure 2, for participants witnessing concerning behavior, participants were separated based on reporting responses. When asked about reactions to concerning observations, 16% of observers (n = 79) noted notifying university administration, university faculty, and / or police, and 84% (n = 403) indicated

not engaging in this authority notification. These responses were used to separate observers of concern into two groups (i.e., Reported Concerns and Did Not Report Concerns), and Table 3 exhibits the demographic characteristics of each.

Figure 2

Participant groups based on reporting responses



## Table 3

Demographic characteristics of participant groups based on reporting responses

	Participant Group		
Demographic Variables	Reported concerns	Did not report concerns	
	(n = 79)	(n = 403)	
Male	12 (15%)	132 (33%)	
White	68 (86%)	343 (85%)	
Freshman	9 (11%)	113 (28%)	
Psychology Major	29 (37%)	138 (34%)	
Grade Point Average	3.37	3.27	

Note. Listed percentages correspond with the amount of each group (i.e., Reported Concerns or Did Not Report Concerns) selecting each choice.

Variables from Concerning Behavior Questions

As displayed in Table 4, witnesses of concerning behavior (n = 482) answered questions regarding behaviors observed, responses to the behaviors, and outcomes of the behaviors. Half (n = 244; 50%) witnessed two or more concerning behaviors from the perpetrator, and the mean number of concerning behaviors viewed was 2 (mean = 1.98, standard deviation = 1.38). As 15 participants witnessed the perpetrator engage in physical and sexual assault, 23% (n = 113) saw perpetrator involvement in some type of assault. About one-fourth (21%) indicated witnessing multiple concerning incidents from the perpetrator.

## Table 4

Perpetrator behaviors, participant responses, and reported outcomes of concerns observed

Perpetrator Behaviors Observed				
Repetitive email / phone contact	125 (12%)			
Repetitive face-to-face contact	93 (9%)			
Physical following	101 (10%)			
Vandalism / property theft	100 (9%)			
Surveillance / monitoring	31 (3%)			
Threatening gesture	120 (11%)			
Threatening statement	154 (15%)			
Acquisition / interest weapons	14 (1%)			
Physical assault	79 (7%)			
Sexual assault / touching	49 (5%)			
Suicidal statements	61 (6%)			
Other	25 (2%)			
None observed	581 (55%)			
Participant Responses to Concerns Observed				
No response	191 (40%)			
Changed personal security	23 (5%)			
Talked to perpetrator	77 (16%)			
Third party talked to perpetrator	59 (12%)			
Talked to perpetrator friend	90 (19%)			
Informed university staff	36 (8%)			
Informed police	57 (12%)			
Collected / saved evidence	22 (5%)			
Other	26 (5%)			
Reported Outcome				
Perpetrator campus assistance	45 (9%)			
Perpetrator expelled / suspended	16 (3%)			
Perpetrator arrested	22 (5%)			
Perpetrator reduced / stopped	213 (44%)			
Perpetrator behavior more severe	7 (2%)			
Perpetrator attempted violence	10 (2%)			
Perpetrator damaged property	13 (3%)			
Authorities notified	78 (16%)			
Not sure	154 (32%)			
Other	33 (7%)			

Note. Participants were informed to select all applicable choices and could select multiple. On the Behaviors Observed section, listed percentages correspond with the amount of the full sample (n = 1,063) selecting each behavior. On the Responses to Observed Concerns and Reported Outcomes sections, listed percentages correspond with the amount of the Observed Concerns group (n = 482) selecting each response or outcome.

As displayed in Table 5, witnesses of concerning behavior (n = 482) answered questions regarding relational and contextual factors. Most (n = 230; 48%) noted the perpetrator was a stranger, while 19% (n = 93) indicated having a friendship with the perpetrator and 15% reported having an acquaintanceship with the perpetrator. 10% (n = 49) described being personally victimized, and 36% (n = 175) noted witnessing the victimization of a friend. Participants typically noted seeing only 1 type of victimization (mean = 1.15, standard deviation = 0.55). Observers noted being accompanied by approximately 2 additional bystanders (mean = 1.67; standard deviation = 2.94), although the maximum value for this variable was set at 10 due to large variability in answers (e.g., "the whole university," "the entire sorority").

#### Table 5

Relationship with Perpetrator				
Previous / current Partner	23 (5%)			
Friend's previous / current partner	30 (6%)			
Friend	93 (19%)			
Acquaintance	72 (15%)			
Stranger	231 (48%)			
University staff	2 (< 1%)			
Other	12 (2%)			
Relationship	with Victim			
No victim	54 (11%)			
Personal victimization	49 (10%)			
Previous / current partner	14 (3%)			
Friend's previous / current partner	14 (3%)			
Friend	176 (37%)			
Acquaintance	71 (15%)			
Stranger	130 (27%)			
University staff	55 (11%)			
An organization	15 (3%)			
The university	20 (4%)			
Cont	ext			
Romantic / sexual obsession	114 (24%)			
Intimate relationship	103 (21%)			
Academic concerns	17 (4%)			
Suspension / expulsion	11 (2%)			
Workplace dismissal	8 (2%)			
Draw attention to self / issue	91 (19%)			
Mental health difficulties	63 (13%)			
Revenge for perceived wrongdoing	61 (13%)			
Related to bias	23 (5%)			
Other	92 (19%)			

Contexts of concerns observed and participant relationships with perpetrators and victims

Note. Listed percentages correspond with the amount of the Observed Concerns group (n = 482) selecting each relationship or context.

### Reasons for Reporting Responses Upon Exposure to Concerning Behavior

As shown in Table 6, the Observed Concerns group was asked to clarify reasons for responses to concerning behavior. In this group, about one-third (39%; n = 189) of participants engaged in no protective actions following exposure to concerning behavior, most frequently citing danger not being likely (i.e., noted by 43% of non-responders), not wanting to get involved (37%), and not perceiving any harm caused by the perpetrator (29%). About one-half (44%; n = 214) of participants reported participating in some protective action upon exposure to concerning behavior that did not include reporting to university administration, university faculty, campus police, or other law enforcement. These participants considered danger likely (i.e., noted by 35% of informal responders) and indicated having gut feelings regarding danger (34%), but also deemed the situation a personal matter (36%) that could be made worse by informing police (30%). Following exposure to concerning behavior, few participants (n = 79; 16%) notified authorities. Reporters indicated having gut feelings regarding danger (i.e., noted by 34% of reporters), with danger being immediate (37%) and likely (37%).

## Table 6

## Reasons for responses to concerning behaviors

		Group	
Reason	Non-Responders (n = 189)	Informal Responders (n = 214)	Reporters (n = 79)
Immediate danger	-	20 (9%)	29 (37%)
Likely danger	-	75 (35%)	29 (37%)
Perpetrator behavior / personality change	-	48 (22%)	17 (22%)
Perpetrator harming others	-	33 (15%)	25 (32%)
Relationship prompted action	-	43 (20%)	8 (10%)
Gut feeling regarding danger	-	72 (34%)	27 (34%)
Serious / specific threats	-	24 (11%)	8 (10%)
Awareness of campus resources	-	22 (10%)	18 (23%)
Other prompted action	-	13 (6%)	6 (8%)
Danger not immediate	69 (37%)	63 (29%)	-
Danger not likely	81 (43%)	36 (17%)	-
Perpetrator threatens without violence	24 (13%)	31 (15%)	-
No harm by perpetrator	55 (29%)	53 (25%)	-
Relationship prompted no police	10 (5%)	24 (11%)	-
No gut feeling regarding danger	29 (15%)	24 (11%)	-
Perpetrator made no serious / specific threats	38 (20%)	48 (22%)	-
Unaware of campus resources	4 (2%)	14 (7%)	-
Personal matter	48 (25%)	78 (36%)	-
Police could not do anything	14 (7%)	35 (16%)	-
Police would not do anything	18 (10%)	29 (14%)	-
Might make the situation worse	20 (11%)	64 (30%)	-
Did not want to get involved	69 (37%)	35 (16%)	-
Did not want to put self in danger	25 (13%)	13 (6%)	-
Other prompted no police	27 (14%)	23 (11%)	-

Note. Participants were informed to select all applicable reasons and could select multiple. Dashes indicate the selection not being provided to the group. The Non-Responders were not provided questions about motivations to engage in protective action.

Reporters were not provided questions about unwillingness to report to authorities. Listed percentages correspond with the amount of participants within each category (i.e., Non-Responders, Informal Responders, Reporters) selecting each reason.

#### *Hypotheses 1 – 4: Analyses Regarding Observation of Concerning Behavior*

Regarding exposure to pre-incident behavior, the Observed Concerns and No Concerns groups were compared to test Hypothesis 1 (i.e., students with high campus connectedness will be more likely to observe pre-incident behavior on campus) and Hypothesis 2 (i.e., students with high self-reported antisocial involvement will be more likely to observe pre-incident behavior on campus). A 2 (observed concerns, did not observe concerns) x 2 (presence or absence of variable) Pearson's Chi-Square Test of Independence reviewed gender, ethnicity, class standing, and college major differences between these groups. Table 2 exhibits the distribution of these variables between Observed Concerns and No Concerns groups. None were significantly dissimilar: Male, White, Freshman, Psychology Major. With between-groups analysis of variance (BGANOVA), no significant differences were observed for Grade Point Average between groups. The Self-Report Delinquency Scale and Campus Connectedness Scale were also examined between Observed Concerns and No Concerns groups with BGANOVAs. The Observed Concerns group (mean = 5.49, standard deviation = 2.38) had significantly greater Self-Report Delinquency Scale scores (F (1, 1061) = 27.69, Mse = 4.21, p < .001, r = .16) than the No Concerns group (mean = 4.82, standard deviation = 1.72). The Observed Concerns group (mean = 74.08, standard deviation = 14.47) had significantly greater Campus Connectedness Scale scores (F (1, 1060) = 22.25, Mse = 225.25, p < .001, r = .14) than the No Concerns group (mean = 69.72, standard deviation = 15.43). Thus, consistent with Hypothesis 1, students with higher campus

connectedness were more likely to observe concerning behavior. Consistent with Hypothesis 2, students with higher self-reported antisocial involvement were more likely to witness concerning behavior.

To test Hypothesis 3 (i.e., males will be more likely to observe or be victimized by non-intimate pre-incident behavior than females) and Hypothesis 4 (i.e., females will be more likely to observe or be victimized by intimate pre-incident behavior on campus than males), comparisons between the No Concerns group, intimate concerning behavior observers, and non-intimate concerning behavior observers were conducted. With 3 (No Concerns group, intimate concerning behavior observers, non-intimate concerning behavior observers) x 2 (presence or absence of variable) Pearson's Chi-Square Tests of Independence, distributions of gender, ethnicity, class standing, and college major were analyzed. Ethnicity, class standing, and college major were not significantly dissimilar. However, gender significantly differed between groups ( $X^2(2) = 14.50$ , p < .001, r = 0.12). In follow-up analyses, this significant difference included the non-intimate concerning behavior observers having more males than the No Concerns group  $(X^2(1) =$ 6.80, p = .01, r = .09) and intimate concerning behavior observers ( $X^2(1) = 13.31$ , p < .001, r = .17), but the No Concerns group and intimate concerning behavior observers did not differ  $(X^2(1) = 3.68, p < .05, r = .07)$ . Thus, consistent with Hypothesis 3, males witnessed more non-intimate concerning behavior than females; however, contrary to Hypothesis 4, females were not more likely to see more intimate concerning behavior than males.

*Hypotheses* 5 – 7: *Pre-Incident Behavior Comparisons between No Assault, Physical Assault, and Sexual Assault Groups*  Regarding the correspondence of pre-incident behavior with assault, within the Observed Concerns group, pre-incident behavior observations (i.e., concerning behavior besides assault) of the No Assault, Physical Assault, and Sexual Assault groups were compared. Additionally, to explore contextual influences, pre-incident behavior observations of No Assault Non-Intimate, Physical Assault Non-Intimate, and Sexual Assault Non-Intimate groups were compared, as were No Assault Intimate, Physical Assault Intimate, and Sexual Assault Intimate groups.

To test Hypothesis 5 (i.e., regardless of context [i.e., intimate, non-intimate], witnessed assaults on campus will correspond with observation of multiple types of preincident behavior), the amounts of participants seeing two or more pre-incident behaviors were compared with 2 (group) x 2 (presence or absence of multiple observed pre-incident behaviors) Pearson's Chi-Square Test of Independence. As shown in Table 7, the Physical Assault group included 80% observing pre-incident behavior from the perpetrator, and 60% viewing two or more pre-incident behaviors. The Sexual Assault group included 54% observing pre-incident behavior from the perpetrator, and 39% viewing two or more pre-incident behaviors. Since the No Assault group included participants not seeing assaultive behavior from the perpetrator, the entirety of this group selected at least one pre-incident behavior (i.e., these participants would have been categorized in the No Concerns group if not observing at least one pre-incident behavior). In the No Assault group, 44% indicated observing two or more pre-incident behaviors from the perpetrator. The Physical Assault group indicated observing multiple preincident behaviors significantly more often than the No Assault group  $(X^2 (1) = 4.07, p =$ .04, r = .10). The No Assault and Sexual Assault groups did not significantly differ ( $X^2$ 

(1) = 0.58, p = .45, r = .04). Additionally, the Physical Assault Non-Intimate group included 72% observing pre-incident behavior from the perpetrator, and 52% viewing two or more pre-incident behaviors. The Sexual Assault Non-Intimate group included 51% observing pre-incident behavior from the perpetrator, and 37% viewing two or more pre-incident behaviors. In the No Assault Non-Intimate group, 39% indicated observing two or more pre-incident behaviors from the perpetrator. The No Assault Non-Intimate and Physical Assault Non-Intimate groups did not significantly differ  $(X^2 (1) = 1.63, p =$ .20, r = .08). The No Assault Non-Intimate and Sexual Assault Non-Intimate groups also did not significantly differ ( $X^2(1) = 0.04$ , p = .85, r = .01). Moreover, the Physical Assault Intimate group included 87% observing pre-incident behavior from the perpetrator, and 66% viewing two of more pre-incident behaviors. The Sexual Assault Intimate group included 57% observing pre-incident behavior, and 41% viewing two or more pre-incident behaviors. In the No Assault Intimate group, 53% indicated observing two or more pre-incident behaviors from the perpetrator. The amount of participants seeing two or more pre-incident behaviors in the No Assault Intimate and Physical Assault Intimate groups did not significantly differ  $(X^2(1) = 1.41, p = .24, r = .10)$ . The No Assault Intimate and Sexual Assault Intimate groups also did not significantly differ  $(X^{2}(1) = 0.41, p = .52, r = .05)$ . Thus, consistent with Hypothesis 5, participants witnessing physical assault saw more types of pre-incident behaviors from the perpetrator than participants witnessing non-assaultive concerns. However, contrary to Hypothesis 5, this relationship was not observed between non-assaultive observers versus sexual assault observers. Moreover, no significant differences regarding multiple types of preincident behaviors were found between No Assault Non-Intimate, Physical Assault NonIntimate, and Sexual Assault Non-Intimate groups or between No Assault Intimate,

Physical Assault Intimate, and Sexual Assault Intimate groups.

Table 7

Number of perpetrator pre-incident behaviors observed between gro	ups
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Number of					Group				
Pre- Incident Behaviors	NA (n=369)	PA (n=49)	SA (n=79)	NANI (n=242)	PANI (n=25)	SANI (n=35)	NAI (n=127)	PAI (n=24)	SAI (n=44)
Zero	-	10 (20%)	36 (46%)	-	7 (28%)	17 (49%)	-	3 (13%)	19 (43%)
One	207 (56%)	10 (20%)	12 (15%)	148 (61%)	5 (20%)	5 (14%)	59 (47%)	5 (21%)	7 (16%)
Two	95 (26%)	8 (16%)	13 (16%)	59 (24%)	4 (16%)	5 (14%)	36 (28%)	4 (17%)	8 (18%)
Three	37 (10%)	11 (22%)	7 (9%)	25 (10%)	6 (24%)	4 (11%)	12 (9%)	5 (21%)	3 (7%)
Four	22 (6%)	5 (10%)	4 (5%)	7 (3%)	2 (8%)	1 (3%)	15 (12%)	3 (13%)	3 (7%)
Five	4 (1%)	1 (2%)	2 (3%)	3 (1%)	0 (0%)	2 (6%)	1 (1%)	1 (4%)	2 (5%)
Six	3 (1%)	1 (2%)	3 (4%)	0 (0%)	0 (0%)	0 (0%)	3 (2%)	1 (4%)	1 (2%)
Seven	1 (< 1%)	3 (6%)	2 (3%)	0 (0%)	0 (0%)	0 (0%)	1 (1%)	2 (8%)	1 (2%)
Eight	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (4%)	1 (3%)	0 (0%)	0 (0%)	0 (0%)
Nine	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Ten	0 (0%)	-	-	0 (0%)	-	-	0 (0%)	-	-

Note. The formation of groups is displayed in Figure 1. NA = No Assault; PA = Physical Assault; SA = Sexual Assault; NANI = No Assault Non-Intimate; PANI = Physical Assault Non-Intimate; SANI = Sexual Assault Non-Intimate; NAI = No Assault Intimate; PAI = Physical Assault Intimate; SAI = Sexual Assault Intimate. Pre-incident behavior was defined as concerning behavior besides assault. The No Assault, No Assault Non-Intimate, and No Assault groups included each participant selecting at least one pre-incident behavior, while this selection was not a requirement for participants in the Physical Assault, Physical Assault Non-Intimate, and Sexual Assault Non-Intimate, Sexual Assault, Sexual Assault, Non-Intimate, and Sexual Assault Intimate groups. For the No Assault, No Assault Non-Intimate, and No Assault Intimate groups, 1 is the minimum number of pre-incident behaviors, and 10 is the maximum. For the Physical Assault, Non-Intimate, Physical Assault Intimate, Sexual Assault, Physical Assault Non-Intimate, Physical Assault Intimate, Sexual Assault, Non-Intimate, and Sexual Assault Intimate, Sexual Assault, Non-Intimate, Sexual Assault Intimate, Sexual Assault,

To test Hypothesis 6 (i.e., regardless of context [i.e., intimate, non-intimate], witnessed assaults on campus will correspond with observation of multiple incidents of pre-incident behavior), 2 (group) x 2 (presence or absence of multiple incident observation) Pearson's Chi-Square Tests of Independence were used to explore differences in the amount of participants seeing multiple incidents. Most participants in the No Assault (80%), Physical Assault (58%), and Sexual Assault (73%) groups did not indicate observing multiple concerning incidents from the perpetrator. The Physical Assault group included significantly greater amounts of participants with observation of multiple concerning incidents than the No Assault group ( $X^2(1) = 11.68$ , p < .001, r = .17). The Sexual Assault and No Assault groups did not significantly differ ( $X^2(1) =$ 1.81, p = .18, r = .06). Additionally, most participants in the No Assault Non-Intimate (84%), Physical Assault Non-Intimate (64%), and the Sexual Assault Non-Intimate (69%) groups did not indicate observing multiple concerning incidents from the perpetrator. The Physical Assault Non-Intimate group included significantly greater amounts of participants with observation of multiple concerning incidents than the No Assault Non-Intimate group  $(X^2 (1) = 6.44, p = .01, r = .16)$ . The Sexual Assault Non-Intimate group also included significantly greater amounts of participants with observation of multiple incidents of concern than the No Assault Non-Intimate group  $(X^2)$ (1) = 5.19, p = .02, r = .14). Moreover, most participants in the No Assault Intimate (72%), Physical Assault Intimate (71%), and the Sexual Assault Intimate (84%) groups did not indicate observing multiple concerning incidents. The No Assault Intimate and Physical Assault Intimate groups did not differ ( $X^2(1) = 0.03$ , p = .87, r = .01). The No Assault Intimate and Sexual Assault Intimate groups also did not differ  $(X^2 (1) = 2.39, p)$ 

= .12, r = .12). Thus, consistent with Hypothesis 6, participants witnessing physical assault observed multiple concerning incidents from the perpetrator significantly more often than participants witnessing non-assaultive concerns, and participants witnessing non-intimate physical assault and / or sexual assault observed multiple incidents of concerning behavior from the perpetrator significantly more often than participants witnessing non-intimate non-assaultive concerns. However, contrary to Hypothesis 6, this relationship was not observed between non-assaultive observers and sexual assault observers, and no significant differences regarding multiple incidents of concerning behavior were found between No Assault Intimate, Physical Assault Intimate, and Sexual Assault Intimate groups.

For testing of Hypothesis 7 (i.e., regardless of context [i.e., intimate, nonintimate], witnessed assaults on campus will correspond with stalking/harassing actions, threatening statements, and threatening gestures), 2 (group) x 2 (presence or absence of each pre-incident behavior listed in Table 8) Pearson's Chi-Square Tests of Independence were performed to assess the prevalence of pre-incident behaviors between groups. As shown in Table 8, in comparison to the No Assault group, participants in the Physical Assault group indicated witnessing more threatening gestures ( $X^2$  (1) = 15.51, p < .001, r = .19) and threatening statements ( $X^2$  (1) = 3.83, p = .05, r = .10). Several pre-incident behaviors did not differ between these groups, as noted in Table 8. In comparison to the No Assault group, participants in the Sexual Assault group indicated witnessing fewer threatening statements ( $X^2$  (1) = 4.82, p = .03, r = .10) and other concerning behaviors ( $X^2$  (1) = 5.67, p = .02, r = .11). Several pre-incident behaviors did not differ between these groups, as noted in Table 8. In comparison to the No Assault Non-Intimate group,

the Physical Assault Non-Intimate group indicated witnessing more physical following  $(X^{2}(1) = 8.63, p = .003, r = .18)$  and surveillance / monitoring  $(X^{2}(1) = 3.03, p = .08, r = .08)$ .11). Several pre-incident behaviors did not differ between these groups, as noted in Table 8. No pre-incident behaviors significantly differed between the No Assault Non-Intimate and Sexual Assault Non-Intimate groups. In comparison to the No Assault Intimate group, the Physical Assault Intimate group indicated witnessing more threatening gestures ( $X^2$  (1) = 31.88, p < .001, r = .46) and threatening statements ( $X^2$  (1) = 6.76, p = .01, r = .21) and less physical following (X<sup>2</sup> (1) = 3.33, p = .07, r = .15). Several pre-incident behaviors did not differ between these groups, as noted in Table 8. In comparison to the No Assault Intimate group, the Sexual Assault Intimate indicated witnessing more threatening gestures ( $X^2(1) = 5.20$ , p = .02, r = .17) and less repetitive email / phone contact ( $X^2$  (1) = 10.15, p = .001, r = .24), repetitive face-to-face contact  $(X^{2}(1) = 3.18, p = .07, r = .14)$ , and physical following  $(X^{2}(1) = 6.40, p = .01, r = .19)$ . Several pre-incident behaviors did not differ between the No Assault Intimate and Sexual Assault Intimate groups, as noted in Table 8. Thus, consistent with Hypothesis 7, participants witnessing physical assault observed significantly more threatening gestures and statements from perpetrators than participants witnessing non-assaultive concerns. Participants witnessing non-intimate physical assault observed more stalking / harassing actions from the perpetrator than participants witnessing non-intimate non-assaultive concerns. Participants witnessing intimate physical assault observed significantly more threatening gestures and statements than participants witnessing intimate non-assaultive concerns, and participants witnessing sexual assault observed significantly more threatening gestures than participants witnessing intimate non-assaultive concerns.

However, contrary to Hypothesis 7, several stalking / harassing actions did not differ between Physical Assault and No Assault groups, and no significant differences regarding stalking / harassing actions, threatening gestures, threatening, or threatening statements were seen between Sexual Assault and No Assault groups. Participants witnessing non-intimate physical assault did not observe significantly more threatening gestures or statements from the perpetrator than participants witnessing non-intimate nonassaultive concerns, and no significant differences regarding stalking / harassing actions, threatening gestures, threatening, or threatening statements were seen between nonintimate non-assaultive observers and non-intimate sexual assault observers. Participants witnessing intimate physical assault did not witness more staking / harassing behaviors than participants witnessing intimate non-assaultive concerns, and participants witnessing non-intimate sexual assault did not observe significantly more stalking / harassing actions or threatening statements than non-intimate non-assaultive observers.

## Table 8

# Types of perpetrator pre-incident behaviors observed between groups

		Group			
Pre-Incident Behavior	NA (n = 369)	PA (n = 49)	SA (n = 79)		
Repetitive email / phone contact	101 (27%)	13 (27%)	18 (23%)		
Repetitive face-to-face contact	73 (20%)	14 (29%)	12 (15%)		
Physical following	78 (21%)	13 (27%)	14 (18%)		
Vandalism / property theft	81 (22%)	10 (20%)	14 (18%)		
Surveillance / monitoring	23 (6%)	5 (10%)	6 (8%)		
Threatening gesture	84 (23%)	24 (49%)	21 (27%)		
Threatening statement	121 (33%)	23 (47%)	16 (20%)		
Acquisition / interest weapons	10 (3%)	2 (4%)	3 (4%)		
Suicidal statements	45 (12%)	7 (14%)	13 (16%)		
Other	25 (7%)	0 (0%)	0 (0%)		
	NANI (n = 242)	PANI ( $n = 25$ )	SANI (n = 35)		
Repetitive email / phone contact	31 (13%)	3 (12%)	6 (17%)		
Repetitive face-to-face contact	32 (13%)	6 (24%)	4 (11%)		
Physical following	39 (16%)	10 (40%)	8 (23%)		
Vandalism / property theft	69 (29%)	5 (20%)	6 (17%)		
Surveillance / monitoring	10 (4%)	3 (12%)	3 (9%)		
Threatening gesture	66 (27%)	8 (32%)	8 (23%)		
Threatening statement	82 (34%)	9 (36%)	8 (23%)		
Acquisition / interest weapons	8 (3%)	1 (4%)	2 (6%)		
Suicidal statements	27 (11%)	1 (4%)	5 (14%)		
Other	20 (8%)	0 (0%)	0 (0%)		
	NAI (n = 127)	PAI (n = 24)	SAI (n = 44)		
Repetitive email / phone contact	70 (55%)	10 (42%)	12 (27%)		
Repetitive face-to-face contact	41 (32%)	8 (33%)	8 (18%)		
Physical following	39 (31%)	3 (13%)	5 (11%)		
Vandalism / property theft	12 (9%)	5 (21%)	8 (18%)		
Surveillance / monitoring	13 (10%)	2 (8%)	3 (7%)		
Threatening gesture	18 (14%)	16 (67%)	13 (30%)		
Threatening statement	39 (31%)	14 (58%)	8 (18%)		
Acquisition / interest weapons	2 (1%)	1 (4%)	1 (2%)		
Suicidal statements	18 (14%)	6 (25%)	8 (18%)		
Other	5 (4%)	0 (0%)	0 (0%)		

Note. The formation of groups is displayed in Figure 1. NA = No Assault; PA = Physical Assault; SA = Sexual Assault; NANI = No Assault Non-Intimate; PANI = Physical Assault Non-Intimate; SANI = Sexual Assault Non-Intimate; NAI = No Assault Intimate; PAI = Physical Assault Intimate; SAI = Sexual Assault Intimate. Listed percentages correspond with the amount of the group noting the perpetrator engaging in each pre-incident behavior. For the first three listed groups, shaded regions signify significant or near significant differences between the Physical Assault and No Assault groups or the Sexual Assault and No Assault Non-Intimate groups. For the next three listed groups, shaded regions signify significant or near significant differences between the Physical Assault Non-Intimate and No Assault Non-Intimate groups. For the last three listed groups, shaded regions signify significant or near significant differences between the Physical Assault Non-Intimate and No Assault Non-Intimate groups. For the last three listed groups, shaded regions signify significant or near significant differences between the Physical Assault Intimate and No Assault Intimate groups or the Sexual Assault Intimate and No Assault Intimate groups or the Sexual Assault Intimate and No Assault Intimate groups or the Sexual Assault Intimate and No Assault Intimate groups or the Sexual Assault Intimate and No Assault Intimate groups or the Sexual Assault Intimate and No Assault Intimate groups or the Sexual Assault Intimate and the No Assault Intimate groups. Participants were informed to select all applicable behaviors and could select multiple.

#### Hypotheses 8 – 21: Analyses of Reporting Responses

To explore Hypotheses 8 – 21, within the Observed Concerns group, reporting decisions upon exposure to concerning behavior were examined. For Reported Concerns and Did Not Report Concerns groups, Table 3 displays the distribution of demographic variables, and 2 (Reported Concerns, Did Not Report Concerns) x 2 (presence or absence of each categorical variables) Pearson's Chi-Square Tests of Independence were used to compare categorical demographic variables. The Reported Concerns group included fewer males ( $X^2$  (1) = 9.73, p = .002, r = .14) and fewer freshmen ( $X^2$  (1) = 9.68, p = .002, r = .14) than the Did Not Report Concerns group; thus, Hypothesis 8 (i.e., males will be less likely to report than females) was supported in binary analyses. The amount of white participants and psychology majors did not differ. Table 9 exhibits additional categorical variables compared between Reported Concerns and Did Not Report Concerns groups. Several categorical variables did not differ, and, in binary analyses, Hypothesis 9 (i.e., pre-incident behavior directed toward a friend of the observer will relate to greater likelihood of reporting than other observer-victim relationships) and

Hypothesis 10 (i.e., non-intimate victim-perpetrator relationships will relate to greater likelihood of reporting than intimate victim-perpetrator relationships) were not supported. However, in comparison to the Did Not Report Concerns group, the Reported Concerns group included significantly more participants personally victimized by concerning behavior ( $X^2$  (1) = 5.91, p = .02, r = .11) and significantly fewer participants with acquaintanceships to the perpetrator ( $X^2$  (1) = 4.01, p = .05, r = .09). Therefore, Hypothesis 11 (i.e., those directly victimized by pre-incident behaviors will be more likely to report than bystanders) was supported, but significant findings opposite of prediction were found for Hypothesis 12 (i.e., an acquaintanceship between observers and perpetrators will relate to greater likelihood of reporting than stranger or friend relationships).

#### Table 9

Cotogorical Variables	Group			
Categorical Variables	Did report ( $n = 79$ )	Did not report ( $n = 403$ )		
Perpetrator Assault	23 (29%)	90 (22%)		
Multiple Incidents	16 (20%)	84 (21%)		
Romantic with Perpetrator	4 (5%)	19 (5%)		
Friend with Perpetrator	20 (25%)	73 (18%)		
Acquaintance with Perpetrator	6 (8%)	66 (16%)		
Stranger with Perpetrator	37 (47%)	193 (48%)		
Personal Victimization	14 (18%)	35 (9%)		
Friend Victimization	34 (43%)	141 (35%)		
Intimate Context	33 (42%)	154 (38%)		

Categorical reporting influences between Reported Concerns and Did Not Report Concerns groups

Note. Listed percentages correspond with the amount of each group (i.e., Reported Concerns or Did Not Report Concerns) noting the presence of the variable. Shaded regions signify significant or near significant differences between groups.

For continuous hypothesized reporting influences, BGANOVAs (i.e., Reported Concerns, Did Not Report Concerns) were used. Demographically, the mean Grade Point Averages for the Reported Concerns and Did Not Report Concerns groups (i.e., shown in Table 3) did not differ. Table 10 exhibits the descriptive statistics of additional continuous variables reviewed. Some of these variables did not differ between Reported Concerns and Did Not Report Concerns groups, as noted in Table 10. Hypothesis 13 (i.e., students lacking trust in campus police will be less likely to report) and Hypothesis 14 (i.e., students endorsing beliefs in the "just world hypothesis" [Weller et al., 2013, p.324] will be less likely to report), which suggested police trust and rape myth adherence would influence reporting, were not supported. Hypothesis 15 (i.e., students accompanied by additional bystanders upon exposure to pre-incident behavior will be less likely to report) and Hypothesis 16 (i.e., students perceiving greater peer involvement in misconduct, negative peer attitudes about campus police, or unwillingness of peers to report will be less likely to inform authorities of pre-incident behavior), which predicted bystanders and social norms impacting reporting, were also not supported. However, in comparison to the Did Not Report Concerns group, the Reported Concerns group observed perpetrators engaging in more concerning behaviors (F (1,480) = 5.82, Mse = 1.89, p = .02, r = .11) toward more victim types (F (1,480) = 13.31, Mse = 0.30, p < .001, r = .16). Thus, Hypothesis 17 (observers are more likely to report pre-incident behavior with assault, multiple concerning acts, or multiple victims) was partially supported, as the amount of concerning behaviors and victim types related to heightened reporting, but perpetrator assault did not. The Reported Concerns group had higher campus connectedness (F (1,480) = 6.56, Mse = 207.04, p = .01, r = .12) and perceived personal responsibility to help others (F (1,480) = 6.39, Mse = 7.26, p = .01, r = .11) than the Did Not Report Concerns group. Thus, Hypothesis 18 (i.e., students feeling more responsible for helping victims will be more likely to report) and Hypothesis 19 (i.e., students with higher campus connectedness will be more likely to report) were supported. The Report Concerns group had lower self-reported antisocial involvement (F (1,480) = 4.64, Mse = 5.63, p = .03, r = .10) and less adherence to rape myths (F (1.480) = 2.88, Mse = 178.56, p = .09, r = .07) than the Did Not Report Concerns group. Thus, Hypothesis 20 (i.e., students with self-reported antisocial involvement will be less likely

to report) and Hypothesis 21 (i.e., students endorsing beliefs of rape myths will be less

likely to report) were supported.

Table 10

Continuous reporting influences between Reported Concerns and Did Not Report Concerns groups

Continuous Variables	Group		
Continuous Variables	Did report ( $n = 79$ )	Did not report ( $n = 403$ )	
Total Concerning Behaviors	2.32 (1.78)	1.91 (1.28)	
Total Victim Types	1.35 (0.64)	1.11 (0.53)	
Number of Other Observers	3.81 (3.34)	3.63 (3.43)	
Self-Report Delinquency Scale	4.96 (1.85)	5.59 (2.46)	
Campus Connectedness Scale	77.87 (12.63)	73.34 (14.71)	
Diffusion Scale	10.47 (2.45)	9.63 (2.74)	
Institutional Trust in Police Scale	24.25 (4.10)	24.09 (3.82)	
Motive Based Trust in Police Scale	8.59 (1.96)	8.48 (1.56)	
Just World Scale	24.91 (4.77)	24.33 (5.20)	
Illinois Rape Myth Acceptance Scale Short Form	28.49 (11.85)	31.29 (13.64)	
Misbehavior Estimate	3.47 (1.86)	3.58 (1.81)	
Positive Views of Campus Police Estimate	5.52 (2.24)	5.90 (2.22)	
Reporting Estimate	3.99 (2.13)	3.87 (1.88)	

Note. Standard deviations for each mean are in parentheses. Shaded regions correspond with significant or near significant differences between Reported Concerns and Did Not Report Concerns groups.

The interaction of factors significantly or nearly significantly related to reporting

in bivariate analyses was reviewed with Pearson Product-Moment Correlation

Coefficients (r). Table 11 displays these findings. In general, campus connectedness

significantly positively corresponded with perceived personal responsibility for helping

other and significantly negatively related to self-reported antisocial involvement and rape

myth adherence. Males tended to have higher self-reported antisocial involvement and

rape myth acceptance. Personal victimization significantly related to more types of

concerning behavior and victim types observed. Total concerning behaviors observed

significantly positively corresponded with total witnessed victim types.

Table 11

Correlations between significant and near significant bivariate reporting factors

	Male	Fresh	PA	PV	TCB	TVT	SRDS	CCS	DS
Male	-								
Fresh	.03	-							
PA	01	.08	-						
PV	11	.03	02	-					
TCB	01	07	.04	.12	-				
TVT	10	.01	.02	.12	.25	-			
SRDS	.22	02	.01	02	.08	.01	-		
CCS	04	01	.01	07	02	04	16	-	
DS	17	.04	05	.03	.04	.12	24	.23	-
IRMA	.27	.06	02	14	.01	12	.14	14	24

Note. Fresh = freshman observer; PA = observer with acquaintanceship with perpetrator; PV = observer personally victimized by perpetrator; TCB = total number of concerning behaviors observed; TVT = total number of victim types observed; SRDS = Self-Report Delinquency Scale; CCS = Campus Connectedness Scale; DS = Diffusion Scale; IRMA = Illinois Rape Myth Acceptance Scale Short Form. Shaded regions signify significant correlations (p < .05).

#### Multivariate Reporting Variable Analysis

A binary logistic regression was conducted to review the interaction of predictors on actual reporting decisions (i.e., classification between the Reported Concerns and Did Not Report Concerns groups). All demographic, categorical reporting influences (i.e., as shown in Table 9), and continuous reporting influences (i.e., as shown in Table 10) variables were used as predictors. Versus an intercept-only model, a full model with these factors was significantly more predictive of reporting classification ( $X^2$  (27) = 75.59, p < .001, r = .34). With an overall success rate of 85%, the full model correctly classified 98% of the Did Not Report Concerns group and 20% of the Reported Concerns group. As shown in Table 12, after controlling for other predictors, participants observing more types of concerning behavior (B = 0.19, p = .09) and victims (B = 0.44, p = .09) were more likely to report, and participants with greater campus connectedness (B = .03, p = .01) were also more likely to report. After controlling for other predictors, males (B = -1.06, p = .01) and freshman (B = -1.31, p = .002) were less likely to report. Additionally, after controlling for other predictors, higher GPA (B = -0.94, p = .002), self-reported antisocial involvement (B = -0.19, p = .03), and estimation of positive views of police in the student body (B = -0.21, p = .01) corresponded with less likelihood of reporting. Several predictors did not have significant contributions to the model, as shown in Table 12.

#### Table 12

Predictors		Regressi	on Values	
1 redictors	В	SE (B)	Wald's $X^2$	Odds Ratio
Male	-1.06	0.42	6.49	0.35
Freshmen	-1.31	0.42	9.60	0.27
Psychology	0.14	0.30	0.21	1.15
White	0.56	0.43	1.66	1.75
GPA	-0.94	0.30	9.65	0.39
PerpA	0.07	0.35	0.04	1.07
PerpMI	0.19	0.37	0.28	1.21
PerpRom	-0.76	0.80	0.90	0.47
PerpFri	0.54	0.51	1.13	1.72
PerpAcq	-0.80	0.62	1.66	0.45
PerpStr	0.06	0.47	0.02	1.06
PersVic	0.76	0.47	2.60	2.14
FVic	-0.18	0.33	0.28	0.84
IP	-0.08	0.31	0.07	0.92
TCB	0.19	0.11	2.84	1.21
TVT	0.44	0.26	2.82	1.55
NumOthers	0.00	0.04	0.00	1.00
SRDS	-0.19	0.09	4.71	0.83
CCS	0.03	0.01	6.66	1.03
DS	0.10	0.06	2.47	1.11
ITPS	-0.05	0.06	0.55	0.96
MBTPS	0.17	0.14	1.43	1.19
JWS	-0.00	0.03	0.02	1.00
IRMASSF	0.01	0.01	0.35	1.01
MisbehaviorSN	-0.10	0.08	1.34	0.91
PositiveCPSN	-0.21	0.08	6.78	0.81
ReportSN	0.11	0.08	1.59	1.11

Binary regression for reporting responses by observers of concerning behavior

Note. GPA = grade point average; PerpA = perpetrator engaged in assault; PerpMI = multiple incidents of concern from perpetrator observed; PerpRom = observer with prior / current romantic involvement with perpetrator; PerpFri = observer with friendship to perpetrator; PerpAcq = observer with acquaintanceship with perpetrator; PerpStr = observer personally victimized by perpetrator; FVic = observer with friendship to at least one victim; IP = concerns within intimate context. TCB = total number of concerning behaviors observed; TVT = total number of victim types observed; NumOthers = number of others (i.e., besides participant) observing concerning behavior from the perpetrator; SRDS = Self-Report Delinquency Scale; CCS = Campus Connectedness Scale; DS = Diffusion Scale; ITPS = Institutional Trust in Police Scale; MBTPS = Motive Based Trust of Police Scale; JWS = Just World Scale; IRMASSF = Illinois Rape Myth Acceptance Scale Short Form; MisbehaviorSN = participant estimation of University of Nebraska-Lincoln students

engaging in misbehavior; PositiveCPSN = participant estimation of University of Nebraska-Lincoln students viewing campus police positively; Report SN = participant estimation of University of Nebraska-Lincoln students that report observations of concerning behavior to university administration, staff, or police upon exposure. Shaded regions correspond with predictors having significant or near significant regression weights.

GPA and participant estimation of student campus police views significantly corresponded with reporting decisions in multivariate analyses, but not in bivariate comparisons. The interaction of these factors with significant or nearly significant factors in bivariate reporting analyses was reviewed with Pearson Product-Moment Correlation Coefficients (r). Table 13 exhibits results. Higher GPA significantly related to less self-reported antisocial involvement, less rape myth acceptance, and greater campus connectedness. More positive estimates of student campus police views significantly corresponded with greater perceived personal responsibility for helping others and less self-reported delinquency.

Table 13

	GPA	PositiveCPSN
Male	09	05
Fresh	02	.02
PerpA	07	.02
PersVic	02	.03
TCB	04	.03
TVT	01	.02
SRDS	19	12
CCS	.22	.05
DS	.09	.29
IRMASSF	16	03
GPA	-	.03
PositiveCPSN	.03	-

Correlations between GPA, participant estimation of student campus police views, and significant or near significant bivariate reporting factors

Note. GPA = grade point average; PerpAcq = observer with acquaintanceship with perpetrator; PersVic = observer personally victimized by perpetrator; TCB = total number of concerning behaviors observed; TVT = total number of victim types observed; SRDS = Self-Report Delinquency Scale; CCS = Campus Connectedness Scale; DS = Diffusion Scale; IRMASSF = Illinois Rape Myth Acceptance Scale Short Form; PositiveCPSN = participant estimation of University of Nebraska-Lincoln students viewing campus police positively. Shaded regions signify significant correlations (p < .05).

#### Hypotheses 22 – 24: Analyses of Reporting Encouragement Variables and Reporting

To test Hypotheses 22 – 25, 2 (Reported Concerns, Did Not Report Concerns) x 2 (presence or absence of each categorical variables) Pearson's Chi-Square Tests of Independence were used to compare Reported Concerns and Did Not Report Concerns groups on reporting encouragement variables. As shown in Table 14, poster exposure and ability to recall the non-emergency campus police phone number did not differ between groups. Thus, Hypothesis 22 (i.e., students with awareness of the nonemergency phone number for campus police will be more likely to report pre-incident behavior to authorities) was not supported. However, in comparison to the Did Not Report Concerns group, the Reported Concerns group included more participants with campus police contact ( $X^2$  (1) = 10.76, p = .001, r = .15), positive campus police contact  $(X^{2}(1) = 10.80, p = .001, r = .15)$ , and an ability to recall relevant phrasing from campus police advertisements ( $X^2$  (1) = 3.56, p = .06, r = .09). Thus, Hypothesis 23 (i.e., students having positive prior contact with campus police will be more likely to report preincident behavior to authorities) was supported. Hypothesis 24 (i.e., students endorsing exposure and remembrance of campus police poster displays will be more likely to report pre-incident behavior to authorities) was partially supported, as exposure to posters did not relate to reporting, but remembrance of poster slogan phrasing did.

#### Table 14

Reporting Encouragement	Group			
Variables	Did report (n = $79$ )	Did not report ( $n = 403$ )		
Campus Police Contact	49 (62%)	169 (42%)		
Positive Campus Police Contact	32 (41%)	92 (23%)		
Poster Exposure	64 (81%)	315 (78%)		
Poster Remembrance	11 (14%)	30 (7%)		
Phone Number Remembrance	33 (41%)	147 (37%)		

Reporting encouragement variables between Reported Concerns and Did Not Report Concerns groups

Note. Listed percentages correspond with the amount of each group (i.e., Reported Concerns or Did Not Report Concerns) with the presence of each reporting encouragement variable. Shaded regions signify significant or near significant differences between groups.

#### Multivariate Reporting Encouragement Variables Analysis

A binary logistic regression was conducted to review the interaction of reporting encouragement variables on reporting decisions (i.e., classification between the Reported Concerns and Did Not Report Concerns groups). Table 15 displays the results. Versus an intercept-only model, a full model with these factors was significantly more predictive of reporting classification ( $X^2$  (5) = 13.92, p = .02, r = .17). With an overall success rate of 84%, the full model correctly classified 100% of the Did Not Report Concerns group and 0% of the Reported Concerns group. After controlling for other factors, participants with campus police contact (B = 0.56, p = .09) were more likely to report. However, positive campus police contact, exposure to campus police advertisements, ability to recall the non-emergency campus police phone number, and awareness of the nonemergency campus police phone number did not significantly contribute.

Table 15

Binary regression for reporting responses with reporting encouragement variables

Reporting	<b>Regression Values</b>					
Encouragement Variables	В	SE (B)	Wald's X <sup>2</sup>	Odds Ratio		
Campus Police Contact	0.56	0.33	2.82	1.75		
Positive Campus Police Contact	0.35	0.35	1.05	1.43		
Poster Exposure	-0.03	0.32	0.01	0.97		
Poster Remembrance	0.54	0.40	1.81	1.71		
Phone Number Remembrance	0.12	0.26	0.19	1.12		

Note. Shaded regions signify near significant contributions to the model.

Correlations between Reporting Influences and Reporting Encouragement Variables

To further examine reporting encouragement variables, the relationship between hypothesized reporting influences listed in Table 12 and the reporting encouragement variables listed in Table 14 were explored with Pearson Product-Moment Correlation Coefficients (r). Table 16 exhibits these analyses. In general, prior campus police contact did not appear to have significant positive relationships with hypothesized reporting influences. However, other intervention variables corresponded with increased trust in campus authorities, connectedness with campus, and perceived personal responsibility in assisting police. Positive interactions with campus police and awareness of the non-emergency campus police phone number also related to less self-reported antisocial involvement. Exposure to campus police advertisements corresponded with increased estimations in peers' support of campus police and willingness to report concerning behavior.

Table 16

Reporting	<b>Reporting Encouragement Variables</b>				
Influences	CPCont	PosCPCont	PosExp	PosRem	PhoneRem
Male	.05	09	03	.00	06
Freshmen	15	11	02	.06	.07
Psychology	.00	.04	.01	.00	.07
White	.03	01	06	.02	.01
GPA	05	.01	04	.00	.08
PerpA	.01	.02	.04	.04	.06
PerpMI	.01	.01	.06	.11	02
PerpRom	01	02	.07	.00	03
PerpFri	.05	.00	.04	.06	01
PerpAcq	01	01	01	.00	02
PerpStr	02	.02	.08	07	.01
PersVic	.07	.01	11	.02	.00
FVic	.05	.08	.06	01	.05
IP	.02	.02	15	.02	.00
TCB	.07	.06	.00	.03	.03
TVT	.10	.07	.07	.02	.04
NumOthers	.02	04	06	05	05
SRDS	.07	14	03	05	13
CCS	.03	.10	.11	.10	.12
DS	08	.10	.08	.12	.17
ITPS	13	.19	.11	.13	.12
MBTPS	08	.20	.09	.11	.14
JWS	07	.06	.13	.02	.03
IRMASSF	.03	.00	.02	04	05
MisbehaviorSN	04	.02	01	.04	.03
PositiveCPSN	09	.07	.10	.02	.11
ReportSN	03	.06	.11	03	.02

Correlations between hypothesized reporting influences and reporting encouragement variables

Note. CPCont = participants' contact with campus police; PosCPCont = participants' positive contact with campus police; PosExp = participants' exposure to campus police

advertisements; PosRem = participants' ability to recall slogans from campus police advertisements; PhoneRem = participants' ability to recall the non-emergency campus police phone number. GPA = grade point average: PerpA = perpetrator engaged in assault; PerpMI = multiple incidents of concern from perpetrator observed; PerpRom = observer with prior / current romantic involvement with perpetrator; PerpFri = observer with friendship to perpetrator; PerpAcq = observer with acquaintanceship with perpetrator; PerpStr = observer with stranger relationship with perpetrator; PersVic = observer personally victimized by perpetrator; FVic = observer with friendship to at least one victim; IP = concerns within intimate context. TCB = total number of concerning behaviors observed; TVT = total number of victim types observed; NumOthers = number of others (i.e., besides participant) observing concerning behavior from the perpetrator; SRDS = Self-Report Delinquency Scale; CCS = Campus Connectedness Scale; DS = Diffusion Scale; ITPS = Institutional Trust in Police Scale; MBTPS = Motive Based Trust of Police Scale; JWS = Just World Scale; IRMASSF = Illinois Rape Myth Acceptance Scale Short Form; MisbehaviorSN = participant estimation of University of Nebraska-Lincoln students engaging in misbehavior; PositiveCPSN = participant estimation of University of Nebraska-Lincoln students viewing campus police positively; Report SN = participant estimation of University of Nebraska-Lincoln students that report observations of concerning behavior to university administration, staff, or police upon exposure. Shaded regions signify significant correlations (p < .05).

#### Chapter 4 - Discussion

In the current dissertation, examining campus threat assessment with a broader violence prevention framework allowed review of generally-unexplored questions regarding the prevalence, assault correspondence, and reporting or pre-incident behavior. *Benefits of the Current Sample* 

Unlike record reviews of known, completed targeted attacks (Drysdale et al., 2010; Fein & Vossekuil, 1998; Vossekuil et al., 2002), the current dissertation contained several incidents that were not reported to involve violence or police notification. Only 16% of participants observing concerns indicated police were notified, and 23% described witnessing perpetrator assault. Unlike bystander explorations with witnesses of pre-incident behavior noted in record reviews (e.g., 8% participation rate in Pollack et al., 2008), the current dissertation had limited attrition and contained students witnessing a range of pre-incident concerns besides attacks with weapons. Nearly all students (97%) that started the survey finished, and most observers of campus safety concerns (97%) did not indicate viewing acquisition or interest in weapons. Thus, compared to prior targeted violence investigations, this campus threat assessment exploration was more likely to address concerns regarding the prevalence, predictiveness, and reporting of pre-incident behavior in the general collegiate student population (Frey, 2007; Gisburne, 2003; Goodwin, 2014).

## Support for the Threat Assessment Approach

With a general student survey, in support of the campus threat assessment model, pre-incident behaviors appeared rare and related to subsequent violence. Assaults were infrequent and diverse, as 5% of participants witnessed physically assaultive behavior on

campus, and 7% observed sexual assault / touching. No demographic variables significantly distinguished students exposed to campus safety concerns from unexposed students. Campus safety concerns were reported to occur across intimate relationship disputes, academic struggles, and workplace conflicts, and assaultive perpetrations were seen throughout, as 20% of non-intimate concerns and 35% of intimate concerns included assaultive behavior. Thus, similar to police and media record reviews (Drysdale et al., 2010; Pollard et al., 2012; Randazzo & Cameron, 2012), campus assaults appeared rare and not limited to particular types of locations and perpetrators.

Moreover, with a general student survey, pre-incident behaviors appeared to precede assault. Of participants witnessing physical assault, 80% saw pre-incident behaviors from the perpetrator, and 60% saw two or more types of pre-incident behaviors. Of participants witnessing sexual assault / touching, 54% saw pre-incident behavior from the perpetrator, and 39% saw two or more types of pre-incident behaviors. Thus, like targeted attacks explored in police and media record reviews (Calhoun & Weston, 2003; Fein & Vossekuil, 1998; Vossekuil et al., 2002), the majority of campus assaults appeared to include noticeable, forewarning pre-incident behavior displayed by perpetrators.

Similar to prior K-12 examinations (Cornell et al., 2009; Cornell et al., 2012), in the current dissertation, threat assessment seemed to relate to a positive campus environment and non-confrontational management of perpetrator risk. The University of Nebraska-Lincoln Police Department has developed posters emphasizing the campus threat assessment approach (Bartling et al., 2010), and students seeing these posters and recalling poster slogans indicated having greater connection to the campus community and trust in campus police. Additionally, of participants reporting concerning behavior to authorities, only 8% indicated suspension or expulsion of the perpetrator was enacted, and only 17% reported an arrest was used; yet, 20% noted the perpetrator was provided assistive campus resources. Thus, in the current dissertation, with students reporting administrative use of flexible, problem-oriented violence prevention tactics, campus threat assessment appeared to relate to positive student perceptions of collegiate safety professionals.

#### Addressing Concerns Regarding the Nature of Pre-Incident Behavior

The current dissertation addressed concerns regarding the prevalence of preincident behaviors. Assertions of pre-incident behaviors being like "hundreds, even thousands, of messages and behaviors communicated and experienced by individuals daily..." (Gisburne, 2003, p.7) were not supported, as 55% of participants did not indicate observing any pre-incident or assaultive behavior on campus. Only 19% of participants described observing multiple types of pre-incident behaviors, and 25% expressed observing multiple concerning incidents. Only 10% of participants that viewed concerns reported seeing additional perpetrators display pre-incident actions. No specific category of pre-incident behavior was seen by more than 15% of the sample. Thus, claims regarding the ubiquity of pre-incident behaviors (Gisburne, 2003; Goodwin, 2013) were not supported.

Moreover, the current dissertation reviewed concerns regarding the correspondence of pre-incident behavior with assault. As existing threat assessment examinations have been noted to have little information regarding base rates of preincident behaviors in the general population (Meloy et al., 2014), these behaviors have sometimes been described as possessive of "high error rates" (Goodwin, 2013, p.253) and unrelated to targeted violence risk (Frey, 2007; Meloy et al., 2014). The current dissertation utilized a comparison group of participants observing pre-incident behavior but not assault (i.e., the No Assault group). This group signified the base rates of preincident behaviors without subsequent assault and was contrasted with students witnessing physically assaultive (i.e., the Physical Assault group) or sexually assaultive (i.e., the Sexual Assault group) behaviors. In comparison to the No Assault group, the Physical Assault group was more likely to view multiple types of pre-incident behaviors and multiple incidents of concern from the perpetrator. In non-intimate contexts, the Physical Assault group saw significantly more perpetrator involvement in physical following and surveillance / monitoring than the No Assault group. In intimate contexts, the Physical Assault group saw significantly more threatening gestures and threatening statements than the No Assault group. Pre-incident behaviors were frequently seen prior to assault in the Sexual Assault group; but, in comparison to the No Assault group, the Sexual Assault group did not observe more types or incidents of pre-incident behavior. Thus, with a general student sample, pre-incident behaviors appeared to significantly correspond with physical violence.

In addition to reviewing the prevalence and assault correspondence of preincident behaviors, the current dissertation examined suggested alterations to the threat assessment model from experts concerned with the prevalence and predictiveness of pathway behavior. For instance, in some targeted violence models, psychotic illness has been considered a "first order factor" (James et al., 2009, p.21) "of central importance" (James et al., 2010, p.521) with other pre-incident concerns deemed less essential. In the current dissertation, only 13% of participants observing concerns and 12% of participants witnessing assault noted perpetrator mental health difficulties. Thus, unlike recommendations based on public figure protection samples (e.g., James et al., 2010), for campus threat assessment teams, mental health concerns may represent a less frequent issue, and several additional pre-incident behaviors may also need to be considered. In some targeted violence models, "the availability of guns" has been noted as "the only one of the causes...necessary" for attacks (Muschert, 2007, p.68) with other pre-incident behaviors considered unrelated to risk. In the current dissertation, only 3% of participants viewing concerns and 4% of participants witnessing assault indicated perpetrator acquisition or interest in weapons. Several pre-incident behaviors unrelated to weapon use corresponded with assaultive outcome (e.g., threatening gestures, threatening statements, physical following) and could be overlooked with exclusive focus on firearm use. Some targeted violence models have described consumption of violent media as a consistent predecessor of attack (Kiilakoski & Oksanen, 2011) without discussing other pathway behaviors. Although not specifically listed in the questions of the current dissertation, participants observing violent media consumption from the perpetrator would likely classify the concern as acquisition / interest in weapons or other, and these two pre-incident behaviors were infrequently observed (i.e., acquisition / interest in weapons noted by 3% and other noted by 5% of participants observing concern). Participants witnessing assault infrequently observed both of these types of behavior, and assessing and managing additional pre-incident behaviors would appear necessary. Thus, with a general collegiate student sample, alterations to the threat assessment model were not supported.

#### Campus Threat Assessment and General Violence Prevention

The methodology of the current dissertation allowed for exploration of broadening the campus threat assessment approach. Pre-incident behaviors and assaultive outcomes were examined generally without distinguishing between nontargeted and targeted campus safety concerns. Despite this overlap, pre-incident behaviors corresponded with physical assault, which suggests pre-incident behaviors could relate to violence risk. In criminological reviews, threatening and harassing behaviors have been associated with subsequent violence, especially if directed toward a consistent target (Kropp et al., 1995; Monahan et al., 2001). Moreover, the empirical fields of bullying, intimate partner, stalking, and workplace violence have examined situations with multiple alarming actions, repetitive offending, and persistent focus on targeted individuals (Fagan & Mazerolle, 2011; Jenkins, 2009; Polanin et al., 2012; Romano et al., 2011; Weller et al., 2013; Yamawaki et al., 2012) and have generally found escalating misconduct from perpetrators prior to assault. Thus, with findings from criminological and crime prevention fields and the current dissertation, threat assessment may be applicable across several types of safety concerns and could broadly prevent violence.

#### Campus Threat Assessment Reporting Improvement Efforts

Additionally, the current dissertation supported enhancing campus threat assessment through reporting improvement efforts. Despite initially being asked a yesor-no question about witnessing campus safety concerns (i.e., Question 1 in Appendix B), about half (49%) of participants that noted observing concerns did not do so until being provided another question with a list of problematic behaviors (i.e., Question 2 in

Appendix B). Across contexts (i.e., 18% of observers of intimate concerns and 16% of observers of non-intimate concerns reported), observers of non-assaultive (14%) and assaultive (20%) campus safety issues rarely reported to authorities, and 39% of observers of problematic behavior performed no protective action upon exposure to campus safety concerns, often indicating doubt of the likelihood of danger (43% of nonresponders), immediacy of danger (37%), and the importance of personal intervention (37% indicated not wanting to get involved and 29% noted the perpetrator produced no harm). About half of observers (44%) engaged in informal protective actions that did not involve contacting authorities. These informal responders generally viewed the perpetrator as dangerous (i.e., 35% indicated danger being likely and 34% indicated having a gut feeling regarding danger), but described the problematic situation as a private matter (i.e., 36% indicated the situation was a personal matter) that they did not want to make worse (i.e., 30% indicated not wanting to make the situation worse). Overall, 16% of participants observing concerns informed authorities, and these reporters typically had personal interpretations (i.e., 34% noted having a gut feeling regarding danger) of immediate (i.e., 37% noted danger was immediate) and likely (i.e., 37% noted danger was likely) danger. Thus, with pre-incident reporting rates lower than vignette threat assessment analyses (Hollister et al., 2012; Hollister et al., 2014b; Sulkowski, 2011) and potentially changeable attitudes regarding danger and need for police assistance impacting reporting decisions, the current dissertation suggests campus threat assessment teams could benefit from efforts aimed at enhancing pre-incident reporting in the general collegiate population.

Using several standardized measures, the current dissertation clarified potential targets for reporting improvement efforts. The amount of observed perpetrator misconduct corresponded with increased reporting, and, within reporting improvement efforts, the diffuse nature of pre-incident behavior and the need for centralized assessment (i.e., by police) of perpetrator escalation could be highlighted (Bartling et al., 2010; Hollister et al., 2014b). Throughout analyses, high campus connectedness and low self-reported delinquency related to heightened reporting, and pre-reporting could be enhanced through administrators ensuring connected and collaborative learning environments with frequent positive student-authority interactions (Sulkowski, 2011; Sulkowski & Lazarus, 2011). Freshmen and males were less likely to report, and information regarding pre-incident behaviors and the "path to intended violence" (Calhoun & Weston, 2003, p.58) could be incorporated into existing freshmen orientation presentations (Hollister et al., 2014b; Sulkowski, 2011) and peer-led small group interventions for male students (i.e., typically for sexual assault prevention; Brecklin & Forde, 2001; Breitenbecher, 2000; Foubert, 2000; Foubert & Perry, 2007; Paul & Gray, 2011). Students with positive contact with campus police and an ability to recall community-oriented policing slogans were more likely to report, and effective campaigns increasing non-emergency officer contact (e.g., foot patrol, service-learning opportunities) and student awareness of community-oriented policing (e.g., Internet postings or campus posters) could correspond with heightened reporting (Bain, Robinson, & Conser, 2014; Griffith, Hueston, Wilson, Moyers, & Hart, 2004; Levitt, 1998). Throughout, contextual variables (i.e., intimate versus non-intimate context), victimbystander relationships, and bystander-offender relationships did not significantly impact

participant reporting. Distinctive attitudinal influences addressed in disparate collegiate reporting improvement efforts, such as increasing trust in police (Tyler, 2005), decreasing rape myth adherence (Payne et al., 1999), and reducing beliefs in the just world hypothesis (Weller, Hope, & Sheridan, 2013; Yamawaki, Ochoa-Shipp, Pulsipher, Harlos, & Swindler, 2012), were not significantly related to reporting, after controlling for other factors (e.g., campus connectedness, self-reported delinquency). Broad campus reporting improvement efforts, aimed at enhancing prosocial campus connections and decreasing support for antisocial actions, could be explored. Thus, with review of actual reporting decisions upon exposure to campus safety concerns, the current dissertation displayed reporting influences that can guide the development of campus threat assessment reporting improvement efforts.

#### Limitations

Based on advanced understanding of the prevalence, assault correspondence, and reporting of pre-incident behaviors, campus threat assessment implications can be formed from the current dissertation. However, prior to exploring these possibilities, limitations should be considered. Specifically, although the sample was fairly representative of the general undergraduate population, participant observations of one perpetrator (i.e., the most recent) were reviewed, which may not fully capture campus pre-incident behaviors. For instance, 4% of participants indicated observing multiple perpetrators, and the current dissertation did not request further information about additional perpetrators.

Additionally, 19% indicated their concerning observations included other witnesses, and multiple surveyed participants could have described the same incident. Approximately one-tenth of participants (11%) noted observing two or more pre-incident behaviors from

a perpetrator, and these participants could have selected several categories of concerning behavior based on one perpetration incident. Additionally, focusing on participants' selfreported observations and responses could have impacted reporting analyses. Of participants exposed to campus safety concerns, 10% expressed not reporting due to other factors, which could have included additional witnesses extending the incident to police. Even though these participants may have been willing to report and did not to avoid redundant police contact, they were incorporated into non-reporting groups. Thus, in the current dissertation, limitations in analyses of the prevalence, assault correspondence, and reporting of pre-incident behaviors corresponded with self-reported, observational measurement of pre-incident behavior, assault, and responses to concerning behavior.

Moreover, the measurement of reporting influences included weaknesses. Some measures (e.g., MisbehaviorSN, PositiveCPSN, ReportSN) incorporated questions generated specifically for this dissertation and may not have included appropriate validity or reliability. Other measures (i.e., DS, ITPS, MBTPS) involved alterations to relate the scale to campus police and reporting, and these adjustments could have reduced the quality of the instruments. In some reporting analyses, campus reporting encouragement variables were used; however, these variables did not distinguish whether students were provided the intervention before, during, or after responding to concerning behavior. In general, reporting measurements included mostly close-ended, multiple-choice questions that may not have captured additional unmeasured reporting factors.

The sample of the current dissertation included limited diversity. Participants were from the same large Midwestern university and tended to be white (i.e., 83% of participants) females (i.e., 72% of participants). The findings of the current dissertation

should be explored in additional, diverse collegiate samples to review the applicability of results and suggestions across various campus settings.

#### Practical Implications

Despite these limitations, the current dissertation possesses practical implications. With the approach being deemed "an emerging standard of care" (Deisinger et al., 2014, p.107; Randazzo & Cameron, 2012, p.285) and supportive findings throughout the current dissertation, campus threat assessment would represent a necessary piece of collegiate safety programming. In comparison to alternative safety procedures (Pollard et al., 2012; Randazzo & Cameron, 2012; Sulkowski & Lazarus, 2011), campus threat assessment would appear to more effectively prevent targeted violence with enhanced centralized awareness of pre-incident behaviors, thorough assessment of campus safety concerns, and coordinated multidisciplinary threat management plans (Deisinger et al., 2008; Deisinger et al., 2014).

Although campus threat assessment has generally been presented as an approach for preventing large-scale shootings (Deisinger et al., 2008; Deisinger et al., 2014; Pollard et al., 2012; Randazzo & Cameron, 2012; Scalora et al., 2010), broad application of this approach could improve violence prevention throughout general campus safety concerns. Specifically, in the current dissertation, pre-incident behaviors from the perpetrator were observed in the majority of physical and sexual assaults, and preincident behaviors significantly corresponded with physical violence. These findings and general criminological and crime prevention analyses regarding increased perpetrator risk following pre-incident behaviors (Fagan & Mazerolle, 2011; Hare, 2003; Jenkins, 2009; Kropp et al., 1995; Monahan et al., 2001; Polanin et al., 2012; Weller et al., 2013; Yamawaki et al., 2012; Yang et al., 2010) support extension and reframing of the campus threat assessment approach.

This approach could be incorporated into general campus policing models. With several campuses utilizing community-oriented policing, which emphasizes proactive crime reduction and campus stakeholder collaboration (Bartling et al., 2010; Griffith et al., 2004; Peak, Barthe, & Garcia, 2008; Scalora et al., 2010), the preemptive noticing, assessing, and managing of safety concerns within the campus threat assessment model would appear to fit within existing policing approaches. With multidisciplinary consultation, this positioning would further enhance professional awareness, evaluation, and mitigation of pre-incident concerns. Thus, incorporating the campus threat assessment model effectiveness of general violence prevention.

Moreover, with approximately 20% of United States collegiate campuses failing to incorporate campus threat processes (Bolante, 2014; Randazzo & Cameron, 2012) and continued complaints about a broad approach to inhibiting infrequent mass shootings (Frey, 2007; Gisburne, 2003; Goodwin, 2014), the reconceptualization of campus threat assessment as a policing model for general violence prevention could correspond with less resistance and greater utilization by campus administrators. Rather than relying on case examples of large-scale attacks (Deisinger et al., 2008; Deisinger et al., 2014; Pollard et al., 2012; Randazzo & Cameron, 2012; Scalora et al., 2010), the effectiveness of campus threat assessment could be displayed through discussion of relevant policing procedures and general violent crime reduction.

Additionally, with broad violence prevention possibilities and only 16% of students observing concerning behavior informing authorities, the current dissertation suggested campus threat assessment procedures could be enhanced with reporting improvement efforts. These pre-incident reporting enhancement strategies could be incorporated into existing campus policing and general violence prevention efforts. For instance, community-oriented policing often involves non-emergency officer contact (e.g., community meetings, foot patrol, service-learning opportunities) and displays (e.g., Internet postings, posters) emphasizing community-wide collaboration to ensure safety (Bain et al., 2014; Bartling et al., 2010; Deisinger et al., 2014; Griffith et al., 2004; Peak et al., 2008; Sulkowski, 2011). As campus connectedness and lack of delinquency related to greater authority notification in the current dissertation, these communityoriented policing efforts would likely improve pre-incident reporting. In fact, students with prior contact with campus police and an ability to recall community policing advertisements reported significantly more often than other observers of concerns in the current dissertation. Therefore, within community-oriented policing efforts, further contact with the campus community could enhance the effectiveness of campus threat assessment.

In the current dissertation, males and freshmen were less likely to report than other observers, and information regarding the "path to intended violence" (Calhoun & Weston, p.58) could be incorporated into existing campus activities for these students. For example, at freshmen orientations, campus police often provide a brief presentation about offered services (Griffith et al., 2004; Sulkowski, 2011). At this event, succinctly mentioning that harassing and threatening behaviors precede violence and can be reported could assist campus threat assessment teams. For campus sexual assault prevention, peer-led small-group interventions for males are frequently employed to reduce rape-related attitudes and increase willingness to assist rape victims (Brecklin & Forde, 2001; Breitenbecher, 2000; Foubert, 2000; Foubert & Perry, 2007; Paul & Gray, 2011). Within these efforts, a review of appropriate responses to observed sexual victimization generally occurs and mentioning the importance of reporting behavior on the "path to intended violence" (Calhoun & Weston, 2003, p.58) could easily be included. Thus, feasible and potentially effective campus threat assessment reporting enhancement efforts appear available. As directly victimized students were more likely to report than bystanders in the current dissertation, generating personalized understanding of campus safety improvements that can follow pre-incident reporting, in campus policing and other violence prevention efforts, could have widespread benefits. *Implications for Future Research* 

The current dissertation promotes utilizing a broader violence prevention framework in further empirical analyses of campus threat assessment. Similar to hypothesizing in the current dissertation, further general population review could clarify the applicability of the threat assessment model across violence prevention efforts. As the current dissertation limited contextual considerations to non-intimate and intimate categories, several additional situational factors could be considered.

Program evaluations of the threat assessment approach could be performed with rates of general violence utilized as an outcome variable. Specifically, for campus threat assessment review, collegiate settings could be randomized to campus threat assessment or non-threat assessment campus safety procedures with equivalent survey and policing record-keeping regarding violence allowing causal comparisons.

Campus pre-incident reporting improvement efforts could also be examined. The impact of community-policing techniques and sexual assault prevention efforts on collegiate student reporting of pre-incident behavior could be reviewed, and the utility of incorporating brief mentioning of "the path of intended violence" (Calhoun & Weston, 2003, p.58) into these processes could be explored.

#### Conclusion

Overall, empirical diversification can strengthen threat assessment (Meloy et al., 2014; Muschert, 2007). Nearly all threat assessment examinations have included police and media record reviews of targeted attackers and threateners, which has related to long-standing concerns regarding the prevalence, assault correspondence, and reporting of preincident behaviors (Frey, 2007; Gisburne, 2003; Goodwin, 2013; Meloy et al., 2014). With a general collegiate student survey about exposure to concerning behaviors and reporting responses, the current dissertation examined these concerns. Throughout analyses, the campus threat assessment approach was supported, as pre-incident behaviors appeared uncommon and predictive of physical violence. With review of responses to concerning behaviors, pre-incident reporting improvement efforts were also clarified. Thus, the current dissertation enhanced understanding of campus targeted violence prevention, and threat assessment could further advance through unique explorations, informed by general criminological and crime prevention methodology, with general population samples.

#### References

- Asmussen, K. J., & Creswell, J. W. (1995). Campus response to a student gunman. *The Journal of Higher Education*, 66(5), 575-591.
- Association of Threat Assessment Professionals [ATAP], 2006. *Risk assessment* guideline elements for violence: Considerations for assessing the risk of future violent behavior. Retrieved from:

http://atapworldwide.org/associations/8976/files/documents/RAGE-V.pdf

- Bain, A., Robinson, B. K., & Conser, J. (2014). Perceptions of policing: Improving communication in local communities. *International Journal of Police Science & Management*, 16(4), 267-276.
- Bartling, K., Yardley, O., & Evans, C. (2010). UNL Threat Assessment Partnership: Communications campaign. Paper presented at the Great Plains Association of Threat Assessment Professionals Meeting, Lincoln, Nebraska.
- Baumeister, R. F., Vohs, K. D., & Funder, D. C. (2007). Psychology as the science of self-reports and finger movements. *Perspectives on Psychological Science*, 2(4), 396-403.
- Bolante, R. (2014). *Threat assessment in community colleges*. Unpublished doctoral dissertation, Oregon State University.
- Bosick, S. J., Rennison, C. M., Gover, A. R., & Dodge, M. (2012). Reporting violence to the police: Predictors through the life course. *Journal of Criminal Justice*, 40, 441-451.

- 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.
- Brecklin, L. R., & Forde, D. R. (2001). A meta-analysis of rape education programs. *Violence and Victims, 16*(3), 303-321.
- Breitenbecher, K. H. (2000). Sexual assault on college campuses: Is an ounce of prevention enough?. *Applied & Preventive Psychology*, *9*, 23-52.
- 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(4), 419-425.
- Calhoun, F. S. (2001). Violence toward judicial officials. *The Annals of the American* Academy of Political and Social Science, 576, 54-68.
- Calhoun, F.S. & Weston, S.W. (2003). Contemporary threat management: A guide for identifying, assessing, and managing individuals of violent intent. San Diego,
  CA: Specialized Training Services.
- Calhoun, F. S., & Weston, S. W. (2008). On public figure howlers. In Meloy J.R., Sheridan L, Hoffmann J. (Eds). *Stalking, threats, and attacks against public figures*. New York: Oxford University Press.
- Calhoun, F. S., & Weston, S. W. (2009). *Threat assessment and management strategies: Identifying the howlers and hunters*. Boca Raton, FL: CRC Press.
- Calhoun, F. S., & Weston, S. W. (2012). Concepts and case studies in threat management. Boca Raton, FL: CRC Press.

- Cameron, C. D., & Payne, B. K. (2011). Escaping affect: How motivated emotion regulation creates insensitivity to mass suffering. *Attitudes and Social Cognition*, 100(1), 1-15.
- Catalano, S. (2012). Stalking victims in the United States Revised. *Bureau of Justice Statistics Bulletin*. Washington, DC: Bureau of Justice Statistics.
- Center for Disease Control. (2012). *Suicide: Facts at a glance*. Retrieved from: http://www.cdc.gov/violenceprevention/pdf/suicide-datasheet-a.PDF
- Cornell, D. G., Allen, K., & Fan, X. (2012). A randomized controlled study of the
   Viginia Student Threat Assessment Guidelines in kindergarten through grade 12.
   School Psychology Review, 41(1), 100-115.
- Cornell, D., Sheras, P., Gregory, A., & Fan, X. T. (2009). A retrospective study of school safety conditions in high schools using the Virginia Threat Assessment Guidelines versus alternative approaches. *School Psychology Quarterly*, 24, 119-129.
- Cornell, D. G., Sheras, P. L., Kaplan, S., McConville, D., Douglass, J., Elkon, A., et al.
   (2004). Guidelines for student threat assessment: Field-test findings. *School Psychology Review*, *33*, 527-546.
- Daniels, J. A., Buck, I., Croxall, S., Gruber, J., Kime, P., & Govert, H. (2007). A content analysis of new reports of averted school rampages. *Journal of School Violence*, 6(1), 83-99.
- de Becker, G. (1998). The gift of fear: Survival signals that protect us from violence. New York: Little Brown.

- Deisinger,G., Randazzo, M., O'Neill, D., & Savage, J. (2008). The handbook for campus threat assessment and management teams. Massachusetts: Applied Risk Management.
- Deitz, P., Matthews, D., Martell, D., Stewart, T., Hrouda, D., & Warren, J. (1991a).
  Threatening and otherwise inappropriate letters to members of the United States
  Congress. *Journal of Forensic Sciences*, *36*. 1445-1468.
- Dietz, P., Matthews, D., Van Duyne, C., Martell, D., Parry, C., Stewart, T.,...Crowder, J.D. (1991). Threatening and otherwise inappropriate letters to Hollywood celebrities. *Journal of Forensic Sciences*, *36*, 185-209.
- Drysdale, D. A., Modzeleski, W., & Simons, A. B. (2010). *Campus Attacks: Targeted Violence Affecting 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., 2010.
- Duhart, D. T. (2001). Violence in the workplace, 1993-99. *Bureau of Justice Statistics Bulletin*. Washington, DC. Bureau of Justice Statistics.
- Ericson, K. (2014, October 29). UNL's most, least popular majors for Fall 2014. *Daily Nebraskan*. Obtained from: http://www.dailynebraskan.com/news/unl-s-most-least-popular-majors-for-fall/article\_16af053c-5f13-11e4-91c1-001a4bcf6878.html
- Fabiano, P. M., Perkins, H. W., Berkowitz, A., Linkenbach, J., & Stark, C. (2003).
  Engaging men as social justice allies in ending violence against women: Evidence for a social norms approach. *Journal of American College Health*, *52*(3), 105-112.

- Fagan, A. A., & Mazerolle, P. (2011). Repeat offending and repeat victimization: Assessing similarities and differences in psychosocial risk factors. *Crime & Delinquency*, 57(5), 732-755.
- Fein, R. A., & Vossekuil, B. (1999). Assassinations in the United States: An operational study of recent assassins, attackers, and near-lethal approachers. *Journal of Forensic Sciences*, 50, 221-233.
- Fein, R. A., Vossekuil, B., & Holden, G. (1995). Threat assessment: An approach to prevent targeted violence. *Research in Action*. U.S. Department of Justice, Office of Justice Programs, National Institute of Justice: Washington, D.C.
- Fein, R. A., & Vossekuil, B. (1998). Threat assessment investigations: A guide for state and local law enforcement officials. *Research Report*. U.S. Department of Justice, Office of Justice Programs, National Institute of Justice: Washington, D.C.
- Fischer, P., Krueger, J. I., Greitemeyer, T., Vogrincic, C., Kastenmuller, A., Frey,
  D.,...Kainbacher, M. (2011). The bystander effect: A meta-analytic review of bystander intervention in dangerous and non-dangerous emergencies. *Psychological Bulletin*, 137(4), 517-537.
- Federal Bureau of Investigation. (2011). *Crime in the United States*. Retrieved from: http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2011/crime-in-the-u.s.-2011/about-cius
- Foubert, J. D. (2000). The longitudinal effects of a rape-prevention program on fraternity men's attitudes, behavioral intent, and behavior. *Journal of American College Health*, 48, 158-163.

- Foubert, J. D., & Perry, B. C. (2007). Creating lasting attitude and behavior change in fraternity members and male student athletes: The qualitative impact of an empathy-based rape prevention program. *Violence Against Women, 13*(1), 70-86.
- Flynn, C., & Heitzmann, D. (2008). Tragedy at Virginia Tech: Trauma and its aftermath. *The Counseling Psychologist*, 36, 479-489.
- Frey, B. S. (2007). *Overprotected politicians*. Zurich, Switzerland: CESifo Working Paper No.2019
- Frey, K. S., Hirschstein, M. K., Edstrom, L. V., & Snell, J. L. (2009). Observed reductions in school bullying, nonbullying aggression, and destructive bystander behavior: A longitudinal evaluation. *Journal of Educational Psychology*, 101, 466–481.
- Gisburne, J. P. (2003). *The applicability of the Miso-model to youth violence and the interpretations of dangerousness*. Unpublished doctoral dissertation, University of Nebraska-Lincoln.
- Goodwin, A. (2014). Threat assessment: Are we using the wrong nets?. *Journal of College Student Psychotherapy*, 28(4), 252-256.
- Goudriaan, H., Wittebrood, K. & Nieuwbeerta, P. (2004). Neighbourhood characteristics and reporting crime: Effects of social cohesion, confidence in police effectiveness, and socio-economic disadvantage. 46, 719-742.
- Greene, E., & Heilbrun, K. (2011). Wrightsman's psychology and the legal system (7th ed.). Belmont ,CA: Wadsworth Cengage Learning.
- Griffith, J. D., Hueston, H., Wilson, E., Moyers, C., & Hart, C. L. (2004). Satisfaction with campus police services. *College Student Journal*, *38*(1), 150-156.

- Hare, R. D. (2003). *Manual for the Revised Psychopathy Checklist, 2nd ed.* Toronto, ON:Multi Health Systems.
- Hodges, H. J., Low, E. C., Hollister, B. A., Viñas-Racionero, M. R., & Scalora, M. J.
  (2015). *Examining the reasons and responses to threatening behaviors on a college campus*. Manuscript submitted for publication.
- Hollister, B. A., Bockoven, J. N., & Scalora, M. J. (2012, March). An examination of reporting tendencies for campus threat assessment. Poster presented at the American Psychology-Law Society Conference, San Juan, PR.
- Hollister, B. A., Hoff, S. M., Hodges, H. J., Scalora, M. J., & Marquez, A. (2015a). *Student reporting to hypothetical and actual campus safety concerns*. Manuscript in preparation.
- Hollister, B. A., & Scalora, M. J. (in press). Broadening campus threat assessment beyond mass shootings. *Aggression and Violent Behavior*.
- Hollister, B. A., Scalora, M. J., Bockoven, J., & Hoff, S. M. (2015b). Campus stakeholder reporting of pre-incident behaviors. Manuscript submitted for publication.
- Hollister, B.A., Scalora, M.J., & Hoff, S.M. (2014a, November). Observing pre-incident actions prior to assaultive behavior. In M. J. Scalora (Chair), *Campus threat assessment: Empirical analysis of problem behavior, reporting patterns, and implications for community policing*. Symposium conducted at the American Society of Criminology Annual Meeting, San Francisco, CA.

- Hollister, B., Scalora, M., Hoff, S., & Marquez, A. (2014b). Exposure to preincident behavior and reporting in college students. *Journal of Threat Assessment and Management*, 1(2), 129-143.
- James, D. V., (2010). Protecting the prominent? A research journey with Paul Mullen. *Criminal Behavior and Mental Health, 20*, 242-250.
- James, D. V., Farnham, F. R., & Wilson, S. P. (2014). The Fixated Threat Assessment Centre: Implementing a joint policing and psychiatric approach to risk assessment and management in public figure threat cases. In Meloy, J. R., & Hoffman, J. *International handbook of threat assessment*. New York: Oxford University Press.
- James, D. V., McEwan, T. E., MacKenzie, R. D., Meloy, J. R., Mullen, P. E., Pathe, M. T.,...Darnley, B. J. (2009). Persistence in stalking: A comparison of associations in general forensic and public figure samples. *The Journal of Forensic Psychiatry & Psychology*, 1-23.
- James, D. V., Mullen, P. E., Meloy, J. R., Pathe, M. T., Preston, L., Darnley, B...Scalora, M. J. (2010). Stalkers and harassers of British Royalty: An exploration of proxy behaviours for violence. *Behavioral Sciences and the Law*, 1-17.
- Jenkins, D. M. (2009). When should threats be seen as indicative of future violence?
  Threats, intended violence, and the intimacy effect. In Calhoun, F. S., & Weston,
  S. W. *Threat assessment and management strategies: Identifying the hunters and howlers*. Boca Raton, FL: CRC Press.
- Kiilakoski, T., & Oksanen, A. (2011). Soundtrack of the school shootings: Cultural script, music, and male rage. *Young*, *19*(3), 247-269.

- Kuijpers, K. F., van der Knaap, L. M., & Winkel, F. W. (2012). Risk of revictimization on intimate partner violence: The role of attachment, anger, and violent behavior of the victim. *Journal of Family Violence*, 27, 33-44.
- Lauritsen, J. L., Owens, J. G., Planty, M., Rand, M. R., & Truman, J. L. (2012). Methods of counting high-frequency repeat victimizations in the National Crime Victimization Survey. *Bureau of Justice Statistics Bulletin*. Washington, DC. Bureau of Justice Statistics.
- Lee, R. M., & Robbins, S. B. (1995). Measuring belongingness: The social connectedness and the social assurance scales. *Journal of Counseling Psychology*, *42*, 232–241.
- Levitt, S. D. (1998). The relationship between crime reporting and police: Implications for the use of Uniform Crime Reports. *Journal of Quantitative Criminology*, 14(1), 61-81.
- Marquez, A., & Scalora, M. J. (2011). Problematic approach of legislators:
  Differentiating stalking from isolated incidents. *Criminal Justice and Behavior*, 38(11), 1115-1126.
- 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*(1), 3-18.
- McMahon, S., Postmus, J. L., & Koenick, R. A. (2011). Conceptualizing the engaging bystander approach to sexual violence prevention on college campuses. *Journal* of College Student Development, 52(1), 115-130.

- Meloy, J. R. (2001). Violence risk and threat assessment: A practical guide for mental health and criminal justice professionals. San Diego, CA: Specialized Training Services.
- 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. (2014). *International handbook of threat assessment*. New York: Oxford University Press.
- Meloy, J. R., Hoffmann, J., Guldimann, 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., Hoffmann, J., Roshdi, K., Glaz-Ocik, J., & Guldimann, A. (2014). Warning behaviors and their configurations across various domains of targeted violence.
  In Meloy, J. R., & Hoffman, J. *International handbook of threat assessment*. New York: Oxford University Press.
- 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., Sheridan, L., Hoffmann, J. (2008). *Stalking, threats, and attacks against public figures*. New York: Oxford Univ. Press.

- Miller, M., Hemenway, D., & Wechsler, H. (2002). Guns and gun threats at college. Journal of American College Health, 51(2), 57-65.
- 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(1), 60-80.
- Neighbors, C., Walker, D. D., Mbilinyi, L. F., O'Rourke, A., Edleson, J. L., Zegree, J., & Roffman, R. (2010). Normative misperceptions of abuse among perpetrators of intimate partner violence. *Violence Against Women*, 16(4), 370–386.
- Nekvasil, E. K., & Cornell, D. G. (2012). Student reports of peer threats of violence: Prevalence and outcomes. *Journal of School Violence*, *11*(4), 357-375.
- Nolan, J. M., Ford, S. J., 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.
- Oliver, W. M. (2000). The third generation of community policing moving through innovation, diffusion, and institutionalization. *Police Quarterly*, *3*, 365-388.
- Paluck, E. L., & Shepherd, H. (2012). The salience of social referents: A field experiment on collective norms and harassment behavior in a school social network. *Journal of Personality and Social Psychology*, *103*(6), 899-915. doi: 10.1037/a0030015

- Paul, L. A., & Gray, M. J. (2011). Sexual assault programming on college campuses: Using social psychological belief and behavior change principles to improve outcomes. *Trauma Violence Abuse 12*(2), 99-109.
- Paull, M., Omari, M., & Standen, P. (2012). When is a bystander not a bystander? A typology of the roles of bystanders in workplace bullying. *Asia Pacific Journal of Human Resources*, 50, 351-366.
- Payne, D. L., Lonsway, K. A., & Fitzgerald, L. F. (1999). Rape myth acceptance:
  Exploration of its structure and measurement using the Illinois Rape Myth
  Acceptance Scale. *Journal of Research in Personality*, *33*, 27-68.
- Peak, K. J., Barthe, E. P., & Garcia, A. (2008). Campus policing in America: A twentyyear perspective. *Police Quarterly*, 11(2), 239-260.
- Perkins, H.W., Craig, D.W., & Perkins, J.M. (2011). Using social norms to reduce bullying: A research intervention among adolescents in five middle schools. *Group Processes Intergroup Relations*, 14(5), 703-722.
- Pershing, J. L. (2003). To snitch or not to snitch? Applying the concept of neutralization techniques to the enforcement of occupational misconduct. *Sociological Perspectives*, 46(2), 149-178.
- Piquero, A. R., MacIntosh, R., & Hickman, M. (2002). The validity of a self-reported delinquency scale: Comparisons across gender, age, race, and place of residence. *Sociological Methods & Research*, 30(4), 492-529.
- Polanin, J. R., Espelage, D. L., Pigott, T. D. (2012). A meta-analysis of school-based bullying prevention programs' effects on bystander intervention behavior. *School Psychology Review*, 41(1), 47-65.

- Pollack, W. S., Modzeleski, W., & Rooney, G. (2008). Prior knowledge of potential school-based violence: Information students learn may prevent a targeted attack.
  Washington, DC: U.S. Secret Service & U.S. Department of Education.
- Pollard, J. W., Nolan, J. J., & Deisinger, E. R. (2012). The practice of campus-based threat assessment: An overview. *Journal of College Student Psychotherapy*, 26(4), 263-276.
- Potter, S. J., Moynihan, M. M., Stapleton, J. G., & Banyard, V. L. (2009). Empowering bystanders to prevent campus violence against women: A preliminary evaluation of a poster campaign. *Violence Against Women*, 15(1), 106-121.
- Pynchon, M. R., & Borum, R. (1999). Assessing threats of targeted group violence: Contributions from social psychology. *Behavioral Sciences and the Law*, 17, 339-355.
- Rand, M. R., & Robinson, J. E. (2011). Criminal victimization in the United States,
  2008. Retrieved from: http://www.bjs.gov/index.cfm?ty=pbdetail&iid=2218
- Randazzo, M. R., & Cameron, J. K. (2012). From Presidential protection to campus security: A brief history of threat assessment in North American schools and colleges. *Journal of College Student Psychotherapy*, 26(4), 277-290.
- Rath, G. D., Jarratt, L. G., Leonardson, G. (1989). Rates of domestic violence against adult women by men partners. *Journal of American Board Family Practice*, 2(4), 227–233.
- 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, 157-172.

Reiman, J. (2007). *The rich get richer and the poor go to prison: Ideology, class, and criminal justice* (7<sup>th</sup> ed.). Boston, MA: Allyn and Bacon.

Romano, S. J., Levi-Minzi, M. E., Rugala, E. A., & Van Hasselt, V. B. (2011).

Workplace violence prevention. FBI Law Enforcement Bulletin, 80(1), 1-10.

Samaha, J. (2006). Criminal Justice (7th ed.). Belmont, CA: Wadsworth.

- 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 Science and the Law*, 2, 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., Simons, A., & VanSlyke, S. (2010). Campus safety: Assessing and managing threats. FBI Law Enforcement Bulletin, 79(2), 1-10.
- 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. J., Zimmerman, W., & Wells, D. G., (2008). Use of threat assessment for the protection of Congress. In Meloy J.R., Sheridan L, Hoffmann J. (Eds). *Stalking, threats, and attacks against public figures*. New York: Oxford University Press.

- Schnebly, S. M. (2008). The influence of community-oriented policing on crimereporting behavior. *Justice Quarterly*, 25(2), 223-251
- Selwyn, N. (2008). 'High-jinks' and 'minor mischief': A study of undergraduate students as perpetrators of crime. *Studies in Higher Education*, *33*(1), 1-16.
- Shaffer, H. J., Peller, A. J., Laplante, D. A., Nelson, S. E., & Labrie, R. A. (2010).
  Toward a paradigm shift in Internet gambling research: From opinion and self-report to actual behavior. *Addiction Research and Theory*, 18(3), 270-283.
- Strong, K. & Cornell, D. (2008). Student threat assessment in Memphis City Schools: A descriptive report. *Behavioral Disorders*, 34(1), 42-54.
- Sulkowski, M. L. (2011). An investigation of student's willingness to report threats of violence in campus communities. *Psychology of Violence*, *1*(1), 53-65.
- Sulkowski, M. L., & Lazarus, P. J. (2011). Contemporary response to violent attacks on college campuses. *Journal of School Violence*, 10(4), 338-354.
- Summers, J. J., Beretvas, S. N., Svinicki, M. D., & Gorin, J. S. (2005). Evaluating collaborative learning and community. *The Journal of Experimental Education*, 73(3), 165-188.
- Tarling, R. & Morris, K. (2010). Reporting crime to the police. British Journal of Criminology, 50, 474-490.
- Thompson, M., Sitterle, D., Clay, G., & Kingree, J. (2007). Reasons for not reporting victimizations to the police: Do they vary for the physical and sexual incidents?. *Journal of American College Health*, 55(5), 227-282.
- Truman, J. L., & Planty, M. (2012). Criminal Victimization, 2011. Bureau of Justice Statistics Bulletin. Washington, DC. Bureau of Justice Statistics.

- Tyler, T. R. (2005). Policing in Black and White: Ethnic group differences in trust and confidence in police. *Police Quarterly*, *8*(3), 322-342.
- University of Nebraska. (2014). *Factbook*. Obtained from: http://nebraska.edu/factbook.html
- Van Der Meer, B. B., & Diekhuis. M. L. (2014). Collecting and assessing information for threat assessment. Meloy, J. R., & Hoffman, J. *International handbook of threat assessment*. New York: Oxford University Press.
- Vossekuil, B., Fein, R. A., Reddy, M., Borum, R., & Modzeleski, W. (2002). The final report and findings of the safe school initiative: Implications for the prevention of school attacks in the United States. Washington, DC: U.S. Secret Service & U.S. Department of Education.
- 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(2), 320-339.
- White, S. G., & Meloy, J. R. (2007). *The Workplace Assessment of Violent Risk (WAVR-21)*. San Diego, CA: Specialized Training Services.

- 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*(16), 3195-3212.
- Ybarra, L. M., & Lohr, S. L. (2002). Estimates of repeat victimization using the National Crime Victimization Survey. *Journal of Quantitative Criminology*, 18(1), 1-21.
- Zavala, E. (2010). Deviant lifestyles and the reporting of physical victimization to police. *The Journal of Family Violence*, 25(1), 23-31.
- Yang, M., Wong, S. C., & Coid, J. (2010). The efficacy of violence prediction: A metaanalytic comparison of nine risk assessment tools. *Psychological Bulletin*, 136(5), 740-767.
- Zavala, E. (2010). Deviant lifestyles and the reporting of physical victimization to police. *The Journal of Family Violence*, 25(1), 23-31.

#### Appendix A

## **INFORMED CONSENT FORM**

IRB# 14542

Title: Factors Impacting Safety on Campus

Purpose: This research project aims to gain information about the safety-related behaviors of college students. You are invited to participate in this study because you are a college student. You must be 19 years-of-age or older to participate.

Procedures: You will be asked to complete an online survey. The procedures will last for approximately 30 minutes, and will be conducted through the Internet. Some issues in this survey that will be addressed include victimization or other concerning experiences while on campus. In most cases, the amount of distress this creates is limited.

Benefits: The completion of this study can assist college campuses in efforts to increase student safety.

Risks and/or Discomforts: This survey will ask you to recall potentially distressing circumstances, which could create anxiety for some participants. If by participating in this experiment, you experienced anything that you would like to further discuss with a psychological counselor please contact the University of Nebraska-Lincoln Counseling and Psychological Services at 402-472-7450 to make an appointment. Counseling sessions one, two, and three are of no charge to University of Nebraska-Lincoln students.

Confidentiality: No names, contact information, or other identifiers will be included on the survey. The data will be stored in a password-protected account and will only be seen by the investigator during the study and for 5 years after the study is complete. Results will be prepared for data analysis on a computer in a secure lab setting. The information obtained in this study may be published in scientific journals or presented at scientific meetings, but the data will be reported as aggregate data.

Compensation: You will receive one research credit for participating in this project. Participants will not receive any other compensation.

Opportunity to Ask Questions: You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. Or you may contact the investigators at the phone numbers below. Please contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965 to voice concerns about the research or if you have any questions about your rights as a research participant.

Freedom to Withdraw: Participation in this study is voluntary. You can refuse to participate or withdraw at any time without harming your relationship with the

researchers or the University of Nebraska-Lincoln, or in any other way receive a penalty or loss of benefits to which you are otherwise entitled.

Consent, Right to Receive a Copy: You are voluntarily making a decision whether or not to participate in this research study. Your selection of "I agree to participate in this study" certifies that you have decided to participate having read and understood the information presented. You may print a copy of the consent document.

Name and Phone number of investigator(s): Brandon Hollister, M.A., Principal Investigator Email: bhollister12@gmail.com Office: (402) 460-7282 Mario Scalora, Ph.D., Secondary Investigator Email: mscalora1@unl.edu Office (402) 472-3126 I agree to participate in this study. (1) I do not agree to participate in this study. (2)

## **QUESTIONS REGARDING PRE-INCIDENT BEHAVIOR ON CAMPUS**

 Have you ever become aware of an individual who made somebody intimidated or fearful for his or her safety while on campus?
 Yes (1) No (2)

2. What were the behaviors of the potentially dangerous individual? Please select all that apply.

```
Repeated unwanted verbal contacts through email or phone (1)
Repeated unwanted face-to-face contact (2)
Physical following (3)
Vandalism or property theft (4)
Surveillance or monitoring (5)
A threatening gesture (6)
A threatening statement (7)
Acquisition or interest in weapons (8)
Physical assault (9)
Sexual assault or touching (10)
Suicidal statements or attempts (11)
Other (12)
```

3. Please skip this question if you observed only one incident of concerning behavior from the individual. If you observed more than one incident, please list the concerning behavior(s) noticed in each incident. Order them chronologically with the earliest first. For example, "Instance Once – threatening statements, physical following; Instance Two – surveillance and monitoring, threatening statements; Instance Three – acquisition or interest in weapons".

4. How many other people were aware of concerning behavior from the individual? If unknown, please estimate.

5. What was your relationship with this potentially dangerous individual?

```
Previous or current romantic partner (1)
A friend's previous or current romantic partner (2)
A friend (3)
An acquaintance (4)
Stranger (5)
University faculty, administration, or staff (6)
Other (7)
```

6. What was your relationship to the victim or victims? Please select all that apply.

7. What was the context of these behaviors? Please select all that apply.

```
An individual romantically/sexually obsessed with someone (1)
Related to an intimate relationship (2)
Concerns about grades (3)
A suspension or expulsion (4)
Workplace dismissal (5)
Draw attention to self or issue (6)
Mental health issues (7)
Revenge for perceived wronging (8)
Motivated by bias (such as racism, sexism, homophobia, etc.) (9)
Other (10)
```

8. What action if any did you take in response to observing the behavior? Please select all that apply.

None (1) Changed the victim's personal security (such as changing locks or changing phone numbers (2) Talked with the potentially dangerous individual (3) Had a third party, beside university administration, faculty, or police, talk to the individual (4) Talked with a friend of the potentially dangerous individual (5) Notified the university administration or a university faculty member (6) Notified police (7) Collected or saved evidence (8) Consulted a trusted individual (9) Other (10) 9. What was the outcome of the situation? Please select all that apply.

The potentially dangerous individual received assistance from campus / other resources (1)

The potentially dangerous individual was expelled or suspended from campus (2) The potentially dangerous individual was arrested (3) The potentially dangerous individual reduced or stopped their behavior (4) The potentially dangerous individual's threatening behavior became more severe (5) The potentially dangerous individual attempted violence toward someone (6) The potentially dangerous individual damaged property (7) Authorities were notified (8) Not sure (9) Other (10)

10. Have you observed other individuals, besides the previously described individual, who made somebody intimidated or fearful while on campus?

Yes (1) No (2)

## Appendix C

# QUESTIONS REGARDING REASONS FOR RESPONSES UPON EXPOSURE TO CONCERNING BEHAVIOR

1. What circumstances were important in deciding your actions? Please select all that apply.

A dangerous situation appeared immediate (1) A dangerous situation appeared likely (2) Behavior or personality changes in the potentially dangerous individual (3) The potentially dangerous individual's behavior was harming myself or someone else (4) My relationship with the potentially dangerous individual (5) I had a "gut feeling" that an individual was going to be dangerous (6) The potentially dangerous individual had made serious and / or specific threats (7) My awareness of available campus resources (8) Other (9)

2. Why did you choose not to inform the police about the potentially dangerous individual? Please select all that apply.

A dangerous situation did not appear immediate (1) A dangerous situation did not appear likely (2) The individual typically acts threatening without committing violence (such as venting) (3) No one was being harmed by the potentially dangerous individual (4) My relationship with the potentially dangerous individual (5) I did not have a "gut feeling" that the individual was going to be dangerous (6) The individual had made no threats of violence (7) I was not aware of available campus resources (8) It seemed like a personal matter, not a police matter (9) I did not believe the police could do anything (10) I did not believe the police would do anything (11) I thought it might make the situation worse (12) I did not want to get involved (13) I did not want to put myself in danger (14) Other (15)

# Appendix D

# **DEMOGRAPHIC QUESTIONS**

1. Age in years 2. Year as student 1st (1) 2nd (2) 3rd (3) 4th (4) Other (5) \_\_\_\_\_ 3. Major 4. Gender Male (1) Female (2) 5. Race/Ethnicity White (1) Black/Non-Hispanic (2) Asian/Pacific Islander (3) Hispanic (4) American/Alaskan Native (5) Other (6) \_\_\_\_\_

6. Grade Point Average (GPA)

## Appendix E

## SELF-REPORT DELINQUENCY SCALE

 How many times in the past year have you used illicit drugs? Never (1)
 Once or twice (2)
 Once every 2-3 months (3)
 Once a month (4)
 Once every 2-3 weeks (5)
 Once a week (6)
 2-3 times a week (7)
 Once a day (8)
 2-3 times a day (9)

2. How many times in the past year have you stole more than \$5? Never (1)
Once or twice (2)
Once every 2-3 months (3)
Once a month (4)
Once every 2-3 weeks (5)
Once a week (6)
2-3 times a week (7)
Once a day (8)
2-3 times a day (9)

3. How many times in the past year have you used physical aggression to get money or things?
Never (1)
Once or twice (2)
Once every 2-3 months (3)
Once a month (4)
Once every 2-3 weeks (5)
Once a week (6)
2-3 times a week (7)
Once a day (8)
2-3 times a day (9)

4. How many times in the past year have you hit or threatened somebody? Never (1)
Once or twice (2)
Once every 2-3 months (3)
Once a month (4)
Once every 2-3 weeks (5)
Once a week (6)
2-3 times a week (7)
Once a day (8)
2-3 times a day (9)

## Appendix F

## CAMPUS CONNECTEDNESS SCALE

 I feel disconnected from campus Strongly disagree (1)
 Moderately disagree (2)
 Slightly disagree (3)
 Slightly agree (4)
 Moderately agree (5)
 Strongly agree (6)

2. There are people on campus with whom I feel a close bond Strongly disagree (1)
Moderately disagree (2)
Slightly disagree (3)
Slightly agree (4)
Moderately agree (5)
Strongly agree (6)

3. I don't feel that I really belong around the people that I know.
Strongly disagree (1)
Moderately disagree (2)
Slightly disagree (3)
Slightly agree (4)
Moderately agree (5)
Strongly agree (6)

4. I feel connected to people in my classes. Strongly disagree (1)
Moderately disagree (2)
Slightly disagree (3)
Slightly agree (4)
Moderately agree (5)
Strongly agree (6) 5. I feel that I can share personal concerns with other students. Strongly disagree (1)
Moderately disagree (2)
Slightly disagree (3)
Slightly agree (4)
Moderately agree (5)
Strongly agree (6)

6. I've made friends in my classes.
Strongly disagree (1)
Moderately disagree (2)
Slightly disagree (3)
Slightly agree (4)
Moderately agree (5)
Strongly agree (6)

7. I feel so distant from the other students.
Strongly disagree (1)
Moderately disagree (2)
Slightly disagree (3)
Slightly agree (4)
Moderately agree (5)
Strongly agree (6)

8. I have no sense of togetherness with my peers.
Strongly disagree (1)
Moderately disagree (2)
Slightly disagree (3)
Slightly agree (4)
Moderately agree (5)
Strongly agree (6)

9. I catch myself losing all sense of connectedness with college life.
Strongly disagree (1)
Moderately disagree (2)
Slightly disagree (3)
Slightly agree (4)
Moderately agree (5)
Strongly agree (6)

10. I feel that I fit right in on campus.
Strongly disagree (1)
Moderately disagree (2)
Slightly disagree (3)
Slightly agree (4)
Moderately agree (5)
Strongly agree (6)

 There is no sense of brotherhood/sisterhood with my college friends. Strongly disagree (1)
 Moderately disagree (2)
 Slightly disagree (3)
 Slightly agree (4)
 Moderately agree (5)
 Strongly agree (6)

12. I feel I fit into my classes.Strongly disagree (1)Moderately disagree (2)Slightly disagree (3)Slightly agree (4)Moderately agree (5)Strongly agree (6)

13. I don't feel related to anyone on campus.Strongly disagree (1)Moderately disagree (2)Slightly disagree (3)Slightly agree (4)Moderately agree (5)Strongly agree (6)

14. Other students make me feel at home on campus.Strongly disagree (1)Moderately disagree (2)Slightly disagree (3)Slightly agree (4)Moderately agree (5)Strongly agree (6)

15. I don't feel I participate with anyone or any group.Strongly disagree (1)Moderately disagree (2)Slightly disagree (3)Slightly agree (4)Moderately agree (5)Strongly agree (6)

16. I know other people well in my classes.Strongly disagree (1)Moderately disagree (2)Slightly disagree (3)Slightly agree (4)Moderately agree (5)Strongly agree (6)

# Appendix G

# DIFFUSION SCALE

1. How much do you feel it is your moral responsibility to help the police? Not at all (1)

(2)
(3)
(4)
(5)

(6)

Extremely (7)

2. How much do you feel that others are responsible for helping the police? Not at all (1)

(2)
(3)
(4)
(5)
(6)
Extremely (7)

### Appendix H

## **INSTITUTIONAL TRUST OF POLICE SCALE**

 I have confidence that the University of Nebraska-Lincoln Police Department can do its job well
 Strongly Disagree (1)
 Disagree (2)
 Agree (3)
 Strongly Agree (4)

2. I trust the leaders of the University of Nebraska-Lincoln Police Department to make decisions that are good for everyone on campus Strongly Disagree (1)
Disagree (2)
Agree (3)
Strongly Agree (4)

3. Overall, the University of Nebraska-Lincoln Police Department is legitimate and people should obey the decisions that University of Nebraska-Lincoln Police Department officers make
Strongly Disagree (1)
Disagree (2)
Agree (3)
Strongly Agree (4)

4. There are many things about the University of Nebraska-Lincoln Police Department and its policies that need to be changed
Strongly Disagree (1)
Disagree (2)
Agree (3)
Strongly Agree (4)

5. People's basic rights are well protected by the University of Nebraska-Lincoln Police Department
Strongly Disagree (1)
Disagree (2)
Agree (3)
Strongly Agree (4)

6. The University of Nebraska-Lincoln Police Department officers care about the well-being of everyone they deal with
Strongly Disagree (1)
Disagree (2)
Agree (3)
Strongly Agree (4)

7. The University of Nebraska-Lincoln Police Department officers are often dishonest Strongly Disagree (1)
Disagree (2)
Agree (3)
Strongly Agree (4)

8. Some of the things the University of Nebraska-Lincoln Police Department does embarrasses the campusStrongly Disagree (1)Disagree (2)Agree (3)Strongly Agree (4)

#### Appendix I

## MOTIVE BASED TRUST OF POLICE SCALE

 The University of Nebraska-Lincoln Police Department considers the views of the people involved when deciding what to do Strongly Disagree (1)
 Disagree (2)
 Agree (3)
 Strongly Agree (4)

2. The University of Nebraska-Lincoln Police Department takes account of the needs and concerns of the people they deal with Strongly Disagree (1)
Disagree (2)
Agree (3)
Strongly Agree (4)

3. The University of Nebraska-Lincoln Police Department gives honest explanations for their actions to the people they deal with Strongly Disagree (1)
Disagree (2)
Agree (3)
Strongly Agree (4)

#### Appendix J

#### JUST WORLD SCALE

 Generally speaking, I would say that most people can be trusted. Not at all true (1)
 A little true (2)
 Moderately true (3)
 Very true (4)
 Completely true (5)

2. I believe that people are basically moral. Not at all true (1)A little true (2)Moderately true (3)Very true (4)Completely true (5)

3. I believe in human goodness. Not at all true (1)A little true (2)Moderately true (3)Very true (4)Completely true (5)

4. I believe most people try to be fair. Not at all true (1)A little true (2)Moderately true (3)Very true (4)Completely true (5)

5. I trust others.Not at all true (1)A little true (2)Moderately true (3)Very true (4)Completely true (5)

6. I would say that most of the time people try to be helpful. Not at all true (1)A little true (2)Moderately true (3)Very true (4)Completely true (5)

7. I believe that others have good intentions. Not at all true (1)A little true (2)Moderately true (3)Very true (4)Completely true (5)

8. I trust what people say.Not at all true (1)A little true (2)Moderately true (3)Very true (4)Completely true (5)

### Appendix K

#### ILLINOIS RAPE MYTH ACCEPTANCE SCALE SHORT FORM

 Generally speaking, I would say that most people can be trusted. Not at all true (1)
 A little true (2)
 Moderately true (3)
 Very true (4)
 Completely true (5)

2. I believe that people are basically moral. Not at all true (1)A little true (2)Moderately true (3)Very true (4)Completely true (5)

3. I believe in human goodness. Not at all true (1)A little true (2)Moderately true (3)Very true (4)Completely true (5)

4. I believe most people try to be fair. Not at all true (1)A little true (2)Moderately true (3)Very true (4)Completely true (5)

5. I trust others.Not at all true (1)A little true (2)Moderately true (3)Very true (4)Completely true (5)

6. I would say that most of the time people try to be helpful. Not at all true (1)A little true (2)Moderately true (3)Very true (4)Completely true (5)

7. I believe that others have good intentions. Not at all true (1)A little true (2)Moderately true (3)Very true (4)Completely true (5)

8. I trust what people say.Not at all true (1)A little true (2)Moderately true (3)Very true (4)Completely true (5)

### Appendix L

#### SOCIAL NORMS QUESTIONS

Reminder: The concerning behaviors listed on the prior question were:

-repeated unwanted verbal contacts through email or phone

-repeated unwanted 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 touching

-suicidal statements or attempts

1. What percent of University of Nebraska-Lincoln students do you think have engaged in any of the concerning behaviors listed?

0 - 10% (1)

10 - 20% (2)

- 20 30% (3)
- 30 40% (4)
- 40 50% (5)
- 50 60% (6)
- 60 70% (7)
- 70 80% (8)
- 80 90% (9)
- 90 100% (10)

2. What percent of students view the University of Nebraska-Lincoln Police Department positively?
0-10% (1)
10-20% (2)
20-30% (3)
30-40% (4)
40-50% (5)
50-60% (6)
60-70% (7)
70-80% (8)
80-90% (9)

90-100% (10)

3. What percent of students that see concerning behavior on campus report their observations to university administration, faculty, or police?
0-10% (1)
10-20% (2)
20-30% (3)
30-40% (4)
40-50% (5)
50-60% (6)
60-70% (7)
70-80% (8)
80-90% (9)
90-100% (10)

## Appendix M

# **REPORTING ENCOUARGEMENT QUESTIONS**

1. During your time as a student, have you had contact with the campus police in any form?

Yes (1)

No (2)

2. How would you describe your contact with campus police? Very negative (1)Negative (2)Neither positive nor negative (3)Positive (4)Very positive (5)

3. How many campus police advertisements have you seen? None (1)Few (2)Some (3)Many (4)

4. Briefly describe what the advertisement(s) said

5. Besides 911, what phone number can be used to report concerning activity to campus police?

#### Appendix N

### **DEBRIEFING STATEMENT**

Thank you for your participation in the study, Enhancing Campus Threat Assessment through Pre-Incident Reporting, conducted by Brandon Hollister in the Clinical Psychology Training Program at the University of Nebraska-Lincoln.

This study analyzed factors impacting the exposure and reporting of behavior preceding assaults (i.e., pre-incident behavior). This understanding is highly important to campus safety efforts aimed at noticing pre-incident behavior and preventing subsequent violence. Delinquency, campus connectedness, attitudes toward police, and perceptions of campus crime were considered in the current study.

Many actions in the survey are considered pre-incident behavior, and the University of Nebraska-Lincoln campus police could be notified at (402) 472-2222, if these or other concerning actions are viewed. Indications of the following have been seen prior to perpetration of past campus attacks (Calhoun & Weston, 2003):

Grievance — displayed by expressions of loss, injustice, mission, revenge Violent Ideation — displayed by threats, fascination with violence or assassins, expressions of lack of alternatives

Research and Planning — displayed by target research, gathering information about weapons or locations

Preparation — displayed by acquiring weapons, reckless behaviors demonstrating expected death, security breech

If you have any questions or concerns about this study, please contact the researcher, Brandon Hollister, bhollister12@gmail.com, (402)460-7282, or the research advisor, Dr. Mario Scalora, mscalora1@unl.edu, (402) 472-3126.

If by participating in this experiment, you experienced anything that you would like to further discuss with a psychological counselor please contact the University of Nebraska-Lincoln Counseling and Psychological Services at 402-472-7450 to make an appointment. Counseling sessions one, two, and three are of no charge to University of Nebraska-Lincoln students.