

CYBER ABUSE AND COLLEGE STUDENTS: NEW RISK FACTORS
IN INTIMATE PARTNER VIOLENCE

by

S. ELIZABETH WICK

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Abstract

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S. Elizabeth Wick, MS

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Supervising Professor: Peter Lehmann

Intimate partner violence has far-ranging consequences that affect every aspect of society. While much research has been done to examine the risk factors and demographics for physical violence, realization is growing that psychological and emotional violence may also cause significant harm to its victims. New technologies such as cell phones and computers have enabled perpetrators to intimidate, isolate, and stalk their victims in new and damaging ways. Certain populations such as college students are thought to be at particular risk for the effects of this type of intimate partner violence for several reasons, including their high risk for physical violence and their frequent use of cyber technology.

The purpose of this study was to examine the risk factors among college students for both cyber victimization and cyber perpetration of abuse in an intimate relationship. The Routine Activities Theory was used to test this research question, using the known correlation between risk taking behaviors and intimate partner violence to define the independent variable and the dependent variable. Three mediating factors of online exposure, disclosure, and perceived risk of engaging in abusive activity were examined in an expectation of correlation between these factors and the dependent variables of cyber victimization and perpetration.

This study used an online survey instrument to perform a quantitative study to explore the routine cyber habits of college students as possible risk factors for cyber abuse. The findings supported the model tested, although sample size limited the significance of the mediating factors. The implications of these findings on the study of and prevention of intimate partner violence in college students were discussed.

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Chapter 1

Introduction

This thesis examines the effects of online behaviors as risk factors for cyber abuse and cyber victimization as a relevant issue in understanding intimate partner violence (IPV). Intimate partner violence is an increasing problem in the modern world. While growing awareness and reporting may account for some of the rise in figures and percentages of domestic abuse in the population, other factors must be considered. Popular speculation focuses on the cultural influence of movies and video gaming as one explanation of the increase in violence in both dating and non-intimate partner violence. Demographics have also been explored as causal factors: age, race, and socioeconomic status have been studied for relation to IPV. However, recent research has identified changes in modern society: specifically, in the way we communicate and share information, as well as the way we develop and maintain relationships. The rapid advancement of technology forces us to examine whether this technology has altered the shape of society and made the world a more dangerous place for victims of intimate partner violence. This chapter briefly identifies the definitions that will be used for this thesis and describes the potential hazards of online activity as well as its consequences. The theory to be tested in this thesis will also be introduced. Finally, the research question for this thesis will be articulated.

Many studies have examined face to face violence, which for the purposes of this study will be based on the definition formulated by the Center of Disease Control. The CDC stipulates that physical domestic violence is “the intentional use of physical force with the potential for causing death, disability, injury, or harm” (Centers for Disease Control and Prevention, 2014, p. 1). Threats, harassment, and stalking are defined as a separate type of intimate partner violence

and “use words, gestures, or weapons to communicate the intent to cause death, disability, injury, or physical harm” (Centers for Disease Control and Prevention, 2014, p. 1). However, only a few studies have examined in depth victimization in the cyber world of information technology. In the front lines of the police departments and domestic violence shelters in the U.S., awareness is growing that cyber abuse is extending the vulnerability of victims beyond the physical arena into the far reaches of the Internet and the fabric of their daily lives.

Study Objectives

This study proposes to study college students and their usage of internet and communications technology to investigate a link between their behaviors and the occurrence of perpetration and victimization in the cyber world. The issue of definition with regard to this phenomenon is one of the more challenging aspects of this field. Therefore, the definition of cyberharassment that will be used for this study describes a range of behaviors that include mediated contact using electronic or Internet capable devices to pursue, threaten, or harass an individual in such a way as to cause fear or distress (Melander, 2010, Reynolds, Henson & Fisher, 2011). ‘Cyberharassment’, ‘cybervictimization’ and ‘cyber abuse’ will be used interchangeably in reference to these behaviors or patterns. The terms ‘offending’ and ‘perpetration’ will be used interchangeably to describe the commission of cyberharassment, as will the terms ‘victimizer’, ‘perpetrator’ and ‘offender’.

Facets of Cyber Abuse

Cyber victimization can take many forms. One of the most common involves threats, mediated stalking, and harassment through communication technology, particularly cell phones. This can include excessive or abusive texting, or the use of a GPS device within the phone to determine a victim’s location. Victimizers can also control a victim’s phone in a manner that

isolates the victim from their support network, reveals with whom the victim has been in contact, or in many cases prevents the victim from calling for help (Southworth, Finn, Fraser, & Tucker, 2007).

On-line victimization can extend even further. While again the most common form of on-line harassment is through excessive or unwanted email, a victimizer can use a victim's social networking sites to track, locate, embarrass or humiliate them (Southworth et al., 2007, Welsh & Lavoie, 2012). Browser histories and email logs can keep an abuser up to date on a victim's quest for information or future plans. Software and programs available for free on the Internet can even allow remote access to a victim's phone or computer, negating the need for physical intrusions. Victimizer have been known to impersonate a victim, using credit cards or personal information to purchase goods or sign up for services (Southworth et al., 2007). Legal trouble can often follow this type of harassment. In a small number of alarming cases, messages purporting to be from a victim have invited participation in a rape fantasy scenario, resulting in sexual assault by a stranger (Correll, 2010).

Cyber harassment can be devastating in terms of psychological or real world damage. Fear for one's safety and psychological distress are some of the possible results of this type of abuse. A victim's offline life can also be vulnerable: consequences of cyber harassment may include poor credit scores, trouble with employers, or custody issues. Communication technology can also be physically or virtually controlled to the point where the victim is isolated from his or her support network.

Legal resources for cyberstalking victims are thin on the ground. Cyberstalking laws differ by state and locality, and may be difficult to enforce. In this situation the burden of proof falls largely on the victim, and indeed awareness of legal resources available to victims can be

low. Equally troubling is that fact that popular perceptions of cyberstalking can be dismissive of the harm inflicted on its victims.

These are only a few of the reasons that make it imperative to study this kind of abuse. The omnipresence of cyber space in social communication makes it a considerable risk factor when its utilization poses a risk to its users. Furthermore, while the mental, legal, and financial aspects are damaging enough, this cyber abuse can also be a gateway to physical abuse. Without studying cyber victimization and its effects, it may be impossible to get an accurate picture of intimate partner violence in this country.

An Introduction to the Routine Activities Theory

This study seeks to understand risk factors for cyberstalking in college students. To do so, the Routine Activities Theory will be used as a framework to develop an understanding of correlates of cyberharassment such as risky behaviors and attitudes about online behaviors among this population.

The Routine Activities Theory was developed in 1979 by Cohen and Felson to provide a relationship between daily activities and occurrence of direct contact crime. It argues that crime occurs at the intersection of a motivated offender, an attractive and accessible target, and the absence of some authority figure that could prevent the crime from happening. The terms that this theory uses to describe these conditions are proximity, exposure, and lack of guardianship (Cohen & Felson, 1979). The original theory presumed that this intersection would be temporal and physical, with victim and offender meeting in the same place at the same time. However, this study will test the theory's applicability to cyberspace, particularly with regard to cyber abuse by an intimate or former partner, which may occur over an indefinite period of time at a virtual location. The fact that "technology is regularly and pervasively used in stalking" of intimate partners underscores the need

for more research into this problem (Southworth et al., 2007, p. 844).

Research Question

In sum, this thesis explores the relationships between online habits and cyber abuse in order to illuminate one aspect of the growing social crisis of intimate partner violence. Current research argues that the consequences of psychological abuse can be equally as devastating as physical abuse. Equally concerning is that this form of abuse may open the doorway to physical or sexual abuse. Research is necessary to identify the potential risk factors for this social problem and develop preventive strategies.

Chapter 2

Literature Review

The purpose of this study is to examine the effects of online behaviors as risk factors for cyber abuse and cyber victimization. To provide background for this study's relevance, several issues will be discussed: the incidence and impact of face to face IPV in college students, its modern evolution in a communication based culture, and the usage of technology among this population. The correlation of risky off-line behaviors to perpetration and victimization in intimate relationships will also be examined, and the suitability of this population for study of the phenomenon of cyber harassment and abuse will be addressed.

IPV among University Students

Intimate partner violence has long been recognized as a serious social problem, with consequences that range from physical to mental to financial and affect every part of our society. IPV and its demographics have been widely studied in the general population around the world, and many associated factors have been identified in various groups of people. Recent research has narrowed in on a population that seems to be particularly at risk in the United States: college and university students.

The Prevalence of IPV among College Students

In 2011, the College Dating Violence and Abuse Poll found that 43% of college women polled reported being in a relationship characterized by some form of abuse: physical, psychological, sexual, or controlling behaviors. The National Coalition Against Domestic Violence in 2007 found that 21% of college students (of unspecified gender) report having experienced dating violence by a current partner, and 32% reported violence by a previous partner. Nearly one third of college students reported having physically assaulted a dating

partner in the previous year (National Coalition against Domestic Violence, 2007). This statistic also did not specify gender for the perpetrator or victim.

Commonly Researched Risk Factors

The study of intimate partner violence in students has identified a number of risk factors. Gender has been a key issue, based on the common acceptance that IPV is primarily perpetrated by men against women in an attempt to control or dominate one's partner (Mustaine & Tewksbury, 1999). Early studies have borne this out, finding higher rates of victimization among women and perpetration among men and until recently, most of the available statistics supported this view (Kaukinen, 2014). Low socioeconomic status and substance use have also been associated with the occurrence of IPV (Tilyer & Wright, 2014). IPV has been negatively related to age: females age 20-24 have been found to be at highest risk for non-fatal intimate partner violence, leading Tilyer & Wright in their 2014 article to propose that young couples lacking in relationship skills and experience may turn to violence as a way to settle disagreements or resolve conflict. Race plays a definitive role, with African Americans, American Indians, and Alaskan natives suffering disproportionate rates of IPV as compared to the rest of the population (Melander, 2010). Other factors studied include neighborhood, destructive communication skills, and anger and emotionality (Kaukinen 2014, Tilyer & Wright 2014). One of the biggest predictors for the occurrence of violence within a relationship has been witnessing or experiencing abuse in childhood or adolescence (Kaukinen, 2014). While these risk factors have all been found to significantly affect IPV, the increasing influence of modern communication technology on peoples' lives demands that we investigate its role in the growing problem of domestic violence.

The Impact of IPV on College Students

The adverse effects of IPV are many and well documented. They comprise physical injury, obesity, substance abuse, depression, low self-esteem, and anxiety disorders among others (Kaukinen, Gover, & Hartman, 2012). New research is exploring associations between IPV and academic achievement: high academic achievement may serve as a protective factor, while low academic achievement can be a consequence of IPV (Cercone et al., 2005;Kaukinen 2014; Kaukinen et al., 2012). These studies highlight the increasing urgency of developing a response to the phenomenon of dating violence as its documented incidence on college campuses rises. Some 10-50% of college students report experiencing violence or abuse in some form (Kaukinen et al., 2012). This age group may be particularly vulnerable for several reasons: students are differentiating from their parents and other adults in their lives, they may be escaping parental scrutiny for the first time, or they may be experimenting with one of their first intensely romantic relationships (Kaukinen 2014). Depending on the definition used and the type of violence being investigated, as many as 1 in 3 couples in college report some form of dating violence (Kaukinen et al., 2012, College Dating Violence and Abuse Poll, 2011).

Because of the elusive and complicated nature of the task of identifying intimate partner violence, developing a clear picture of the extent of this problem is difficult. Adding to this difficulty is the fact that while risk factors have been extensively studied, clarifying the temporal relationship of these factors to the actual experience of abuse or violence requires further research. A longitudinal study that follows students throughout their college career, noting which factors (such as substance abuse) show causality and which may be consequences of experiencing IPV would add to body of knowledge in this field immeasurably.

Bi-directional IPV in College Students

Not only is the reported occurrence of dating violence among college students increasing, new studies have noted a marked change in the way it is being documented. Current research examines both victimization and perpetration, with some unexpected results. Past studies based on the feminist perspective of IPV, which argues that men use violence to dominate women, have clearly found that women were more often victimized than men (Kaukinen et al., 2012). However, more recent studies are finding that rates of perpetration by men and women are similar than previously thought. In fact, dating violence among college students has been found to occur most frequently in the context of a mutually violent relationship, with both parties enacting the role of perpetrator and victim (Cercone, Beach, & Arias 2005; Kaukinen et al., 2012). In the 2005 study by Cercone et al., researchers found that males and females were equally likely to report perpetration and victimization in terms of psychological aggression and minor assault, as well as being victims of severe physical assault. However, females admitted to committing severe physical assault on their partners in a significantly higher percentage than men: 15% of women as compared to 7% of men (Cercone et al., 2005, p. 209). A later study by Kaukinen et al. (2012) found that when the violence was one way, perpetration by women was greater than by men, and that men were being victimized more frequently than women. This study asked about experiences that included pushing and slapping and more severe forms of violence that ranged from sexual assault to choking, with the finding that women were more likely to push or slap their partners than to be victims of this behavior (Kaukinen et al., 2012). However, Cercone et al.'s study found that female victims of IPV were still at greater risk than males for physical and psychological injury (2005). A study on the use of technology to control an intimate partner's behavior in college students found that women reported engaging in

controlling and monitoring behaviors significantly more than males (Burke, Wallen, Vail-Smith, & Knox, 2011). While these results offer interesting new perspectives on the incidence of intimate partner violence in college students, several caveats must be considered: these studies depend on accurate self-reporting, and past studies have found that men may underreport committing abuse against their partners, perhaps due to awareness of societal condemnation of IPV (Cercone et al., 2005). Likewise, the chronological relationship is unclear when exploring violence committed by women: research is needed to determine if they are primary aggressors or if they are responding in self-defense (Cercone et al., 2005, Kaukinen et al., 2012). In any case, these findings confirm the determination by Tilyer and Wright (2014) that a binary, exclusive, and gender-based distinction between victims and perpetrators ignores a vast area of study in the field of IPV, limiting the development of possible prevention and intervention with both male and female students.

Gender considerations. While the gender stereotypes involved with IPV are changing, gender must still be considered when exploring dating violence in college students. Although most conflict occurs in mutually violent relationships, if the violence is not bi-directional, women are more likely to be perpetrators than victims (Kaukinen et al., 2012). It should be noted that these findings include different types of abuse, including psychological and emotional abuse as well as physical, and do not specify who initiated the violence. Women are more likely to suffer sexual assault and are more likely to be seriously injured by their partners, while men are more likely to be the victims of psychological abuse (Kaukinen, 2014).

Similarities in victims and perpetrators of IPV. One explanation of the trend towards bi-directional violence was put forward by Mustaine and Tewksbury in their 1999 article. They described the principle of homogamy, based on the "...principle that persons who have

characteristics that are similar to offenders are more likely to be around offenders and consequently victimized more often” (p. 48). Another study proposed that similar traits and routine activities among victims and offenders opened up the possibility for belonging to both groups (Tilyer & Wright, 2014). An expansion of this proposal explored the possibility that common underlying traits such as impulsivity or risk taking could account for this overlap in perpetrators and victims. Cercone et al. (2005) found important evidence that both men and women engaged in “equal numbers of discrete acts of nonsexual violence” against their partners (p. 208). In this study, males and females reported equally to experiencing severe physical assault by a partner. As stated earlier in this paper and in contrast to popular belief, however, females were significantly more likely than males to report perpetrating a severe physical assault, although this difference could be accounted for by under-reporting by men (Cercone et al., 2005). While there remains a difference in types of violent acts committed by men and women, obviously there can no longer be a strictly dichotomous definition of either victim or victimizer, especially one based on gender.

Tilyer and Wright pursued this area of research with college students and found an overlap in perpetration and victimization for both genders (2014). 1 out of 3 participants in their study identified as both perpetrator and victim. They theorize that the relationship between victimization and offending is due to common risk factors shared between these two groups. The concept of this overlap will be discussed in more detail in terms of offending and victimization later in this paper.

Cyber Abuse among College Students

While the above studies are primarily concerned with the physical aspects of IPV, psychological abuse can be equally debilitating and its effects much harder to quantify. The

Center for Disease Control defines psychological/emotional violence as involving trauma to the victim caused by acts, threats of acts, or coercive tactics and can include "...humiliating the victim, controlling what the victim can and cannot do, withholding information from the victim, and isolating the victim from friends and family" (2014, p. 1). Hall, Walters and Basile break it down further into two subtypes: emotional/verbal and dominance/isolation, both of which can be perpetrated utilizing or controlling the victim's cyber technology (2012). College students make an ideal population for the study of cyberharassment and its effects for several reasons: they have high rates of technology use, they engage in risky behaviors on and offline and they are at high risk for face to face IPV. An investigation into their decisions and online behaviors may clarify the increasing risk of being stalked or harassed through technology.

The impact of cyberharassment. The effects of cyberharassment easily fall under the umbrella of psychological violence, manifesting as fear, anxiety, or low self-esteem. Cyber harassment could also lead to more visibly identifiable consequences such as substance abuse, depression, or legal trouble (Kaukinen et al. 2012, Kaukinen 2014). While cyber abuse can be damaging by itself, there is also the possibility that it will serve as the predecessor to physical stalking or abuse. This research suggests that cyberharassment should indeed be studied as increasing the risk of IPV and its effects in college students.

Risky offline behaviors. College students are well known for indulging in behaviors associated with IPV. A clear correlation has been found between drug and alcohol use and intimate partner violence in students (Kaukinen 2014). However, a temporal relationship for this correlation has not been established, and some conjecture exists as to whether some substance abuse may actually function as a coping method for dealing with victimization. Sexual risk taking also co-occurs with IPV and the number of sexual partners has been found to positively

associate with the risk of intimate partner victimization (Kaukinen, 2014). While Kaukinen in her 2014 study found that more extreme violence occurred in exclusive dating relationships, she noted that non-monogamous relationships may create feelings of jealousy or possessiveness which can exacerbate the potential for dating violence. Although the scope of this study does not extend to LGBT relationships, it is worthwhile to note that she found that these students are many times more likely to be the victims of violence of any type. The relevance of risky offline behaviors is the expectation that students who engage in them are also more likely to engage in risky online behaviors.

Statistics on technology use. 97% of college students in the U. S. use the Internet, and 73% use social networking sites (Pew Internet Statistics, 2014). 98% of the population aged 18-29 has a cell phone of which 83% are smart phones. 81% use their phones to text and more than half use their phones to access the Internet and email (Pew Internet Statistics, 2014). While this study is concerned with technology usage by college students, it is worthwhile to note that cell phone ownership in the general population of the U.S has increased from 34 million to 203 million in the last 10 years (Gibson, 2014) and that 84% of American adults are online (Pew Internet Statistics, 2014). The Pew Research Center's 2015 exploration found that 93% of American adults feel that controlling who has access to information about them is important, and only 9% feel like they have a lot of control over their personal information (Madden & Rainie, 2015).

Risky online behaviors. College students have developed habits in their technology usage that may increase their risk of victimization. Increased levels of exposure and proximity to offenders add to their attractiveness as a target (Welsh & Lavoie, 2012). The level of disclosure with which many technology users have become comfortable not only include personal

information but also physical location, with many cell phones including GPS locators and websites encouraging “check ins” in specific places, thus allowing potential offenders to monitor, track or stalk victims. Melander in her 2010 dissertation also points out that “...those who use technological forms of communication tend to be less inhibited in their online interactions and may type or text things that they would not customarily say in real life” (p. 18). This may refer to the disclosure of information or aggressive or inappropriate responses to communications.

Increased Risk of Cyber Abuse

The rise in technology use clearly allows for a rise in the opportunity for cyber abuse in relationships. As previously noted, past studies show a distinct gender-based difference in perpetration or victimization in IPV, while the latest research notes an increased proportion of students of both genders who are concurrently or alternately perpetrator and victim (Kaukinen et al., 2012, Kaukinen, 2014, Tilyer & Wright, 2014). The changing social norms of modern communication technology may be a significant contributing factor to this phenomenon.

The Use of Technology in Cyber Abuse

College students are using technology in record numbers, rendering them more susceptible to manipulation and intrusion in their daily routines. The most prevalent form of cyber abuse is through texting, either in a threatening and harassing manner or through repetitive and relentless contact (Burke et al., 2011). Checking a partner’s online history, email, or texts, monitoring social networking sites, using GPS to locate a partner, and demanding passwords to a partner’s accounts have been identified as just some of the ways in which technology is frequently abused. Less frequently, a GPS tracker may be attached to a car or a victim’s belongings to allow a victim’s movements to be followed. In the study by Burke et al., females

reported engaging in controlling and monitoring behavior more than males; however, in Welsh and Lavoie's study, females were much more likely to report unwanted contact than males (Burke et al., 2011; Welsh & Lavoie, 2012). This study expects to find that not only is the incidence of cyber abuse increasing, but that the line between offender and victim is blurring or even disappearing in a world in which advancing technology allows cyber abuse in intimate relationships to occur with frequency and impunity.

The Importance of Studying Cyber Abuse

In concluding, the question that will be explored in this study is whether college students engage in online behaviors that make them vulnerable to cyber abuse or harassment by their intimate partners. This form of abuse has damaging consequences that can affect students' mental and physical health, self-esteem, academic achievement, and legal standing. Furthermore, cyber abuse may exacerbate the potential for physical violence in intimate relationships.

Chapter 3

The Routine Activities Theory

Theories of IPV

Many theories attempt to grapple with the social problem of intimate partner violence, with three of the most popular including feminist, social learning, and social exchange theory. Early work on this subject focused largely on the feminist theory of domestic violence, in which a patriarchal society enables men to control women through coercive behaviors and violence, and that men may acceptably use violence to maintain this control (Anderson, 1997; Jasinski, 2001). Social learning theory addresses the proven statistic that witnessing or experiencing abuse as a child is a substantial risk factor for abusing or being abused as an adult (Jasinski, 2001). Social exchange theory explains violence as occurring when the rewards for engaging in violence exceed the costs (Jasinski, 2001). However, while each of these theories make a valuable contribution towards understanding the phenomenon of IPV, no one theory can predict or explain every incidence of domestic violence. Recent research examined earlier in this paper suggests that these largely gender based theories cannot account for the fact that in many cases women may no longer be the sole victim or the primary victim, particularly in the case of psychological or cyber abuse, and that these limitations must be addressed.

The nature of this new information regarding abusive relationships in college students as viewed through the lens of cyber abuse calls for exploration of a different theory of IPV. The Routine Activities Theory suited the nature of this study in that it allows for the shift in emphasis on victimization as occurring to men as well as women and examines risk factors that result from the changing patterns of life experienced through new technology.

The Routine Activities Theory

The Routine Activities Theory (RAT) was developed in 1979 by Cohen and Felson to relate daily routine activities with the occurrence of direct contact crime. In this section this paper will describe the theory and demonstrate the applicability of this theory to cyber harassment among college students.

The development of the theory. Cohen and Felson in 1979 developed this theory to account for physical crime such as robbery or assault. They proposed that these crimes occurred at the intersection of three factors or conditions: an accessible and attractive target, the presence of a motivated offender, and the lack of a capable guardian to prevent this crime from taking place (Cohen and Felson, 1979). Routine activities can become risk factors for victims, increasing their exposure and proximity to possible offenders. Since this theory was presented many studies have been carried out that affirm its significance to the field of criminal justice in addressing face to face crime. However, a debate has formed over whether the theory can be applied to the world of encounters that take place in cyberspace. Some researchers maintain that the RAT needs revision to apply in cyberspace because there is no intersection of time and place in which the offender and victim meet and a physical crime occurs (Yar 2005, Tilyer & Eck, 2009). Others say that the RAT adapts quite well to cyber harassment (Welsh & Lavoie, 2012; Melander, 2010; Reyns, Henson & Fisher, 2011). While the original theory assumed that the convergence of offender and victim would be temporal and physical, the institution of the ubiquitous and ever-present Internet was not a reality in 1979. Cohen and Felson themselves in 1979 noted that "...technological advances may enable offenders to carry out their work more effectively" (p. 591). While their statement referred to advances such as telephones and

automobiles, the next logical step is to examine its relevance to modern communication technology.

Concepts of the Routine Activities Theory. Recent examinations of this theory have described its components in terms of exposure, proximity, and guardianship. Exposure measures the accessibility of the target or victim to victimization. Proximity refers to offender's apparent ease with which a target may be victimized. Guardianship refers to the presence of an authority figure or institution that can prevent crime from occurring (Reyns et al., 2011). The lack of guardianship is a significant component of the RAT, and very applicable to modern communication technologies.

The effect of the Internet environment. A number of recent studies proposed that the online environment rather than removing the possible interaction of victim and offender actually extends it. The Internet technology negates the requirement that offenders and victims occupy the same physical location: its accessibility and constant presence provide access to a vast number of people and an almost limitless supply of information at any time (Reyns et al. 2011, Welsh & Lavoie 2012). The time factor expands as well. Encounters between offenders and their victims may overlap or occur over a period of time (Reyns et al., 2011). And finally, guardianship in communication while nominally present in organizations such as Facebook and other virtual institutions is for all practical purposes non-existent. Some law enforcement agencies purport to deal with psychological or cyber harassment, but the reality is that this type of victimization is extremely difficult to determine, document, and enforce consequences.

Components of RAT applied to modern technology. The theoretical perspective of the RAT suggests that frequent users of cybertechnology may be increasing their risk of victimization (Welsh & Lavoie, 2012). An examination of the concepts of exposure and

proximity through the lens of cyber activity reveal a trend towards an increasing amount of risky behaviors in the world of modern technology.

Exposure . According to the Pew Research Center the sheer amount of time spent online and on cellphones is increasing exponentially across all ages and all income brackets in the United States. 97% of adults aged 18-29 used the Internet in 2014 (Pew Internet Statistics, 2014). By 2012, 67% were using their phones to access social networking sites (Pew Internet Statistics, 2014). In some respects this is positive: research indicates that users of social networking sites are much less likely to be socially isolated and receive more social support than the average American (Pew Research Center 2010). However, these sites encourage the creation of profiles that may include such personal information such as gender, birthdate, hometown, academic information, relationship status, the name of the user's partner, and sometimes even the home address or the class schedule of the user (Welsh & Lavoie, 2012). Utilizing this information, an offender can victimize a user repeatedly over an extended period of time (Reyns et al., 2011).

The disclosure of personal information can increase the risk of many kinds of online victimization: from stalking and harassment to identity theft, from strangers or intimate partners. However, users often seem unaware of these risks, and the disclosure of this type of information is perceived as normal in online interactions (Welsh & Lavoie, 2012). Users perceive little threat to their privacy or safety from sharing this type of information.

Proximity. The constant accessibility of users of modern technology such as smart phones and computers opens vast new worlds of virtual encounters. Victims can be contacted at almost any time, which may lead to feelings of increased vulnerability (Melander, 2010). Online

offenders have the potential to be creative in terms of harassment, utilizing technology to threaten, stalk, isolate, control, or cause legal trouble for their victims.

Guardianship. As stated previously, the lack of guardianship over the use of communication and cyber technology presents ample opportunity for a motivated offender to harass or abuse an intimate partner. While this absence of authority is a significant aspect of the problem of cyber harassment which needs to be explored, this study will concentrate on the first two concepts of the RAT, exposure and proximity, as influenced by the on-line behaviors of college students.

In conclusion, the Routine Activities Theory will be used to test the research question “Are the online behaviors of college students increasing their risk for cyber harassment”? The amount of online exposure and proximity of these students to motivated offenders is expected to have a positive correlation to the experience of cyber victimization. This study will also investigate whether online exposure and proximity relate to cyber harassment in terms of perpetration.

Chapter 4

Methodology

This study administered multiple scales to 300 undergraduate psychology students at a large southwestern state university. Participants were recruited to explore the online and offline activities of college students and their experiences of cyber perpetration and cyber victimization. They learned about the study through the university psychology department's website and received course credit for completing the questionnaire. The final sample size was 298 undergraduate students. The sample comprised 68.8% female, 30.5% male and .3% other. Participants identified as 93% straight, 1.7% gay or lesbian, 4% bisexual, and 1% other. The race/ethnicity of the sample included equal numbers of Caucasian/White students and Hispanic/Latino students at 27.5% each. Asian/Pacific Islanders constituted 21.1% and African American /Black students made up 16.1% of the sample. Native American students accounted for 1% and 5% identified as other. The mean age of the sample was 20.8 years with a standard deviation of 4.5.

The demographics section of this study also asked students about their current relationship status. The majority defined themselves as not currently dating, at 44.6%. Steady or exclusive daters made up 34.4% of the sample, with 11.6% occasionally dating. Engaged students were 3.1% of the participants and 4.4% were married. 1.0% chose 'other' to describe their relationship status.

Research Question

The purpose of this study is to investigate whether the incidence of cyber harassment is related to the routine activities of college students.

Routine Activities Theory

This study sought to test whether the Routine Activities Theory can be applied to the experience of cyber abuse among college students. The increase in activity involving communications technology among this population leads to concerns that cyber harassment and other abusive behaviors will also increase, with damaging physical, mental, and social consequences.

Independent Variable

Since established research has positively correlated risk-taking behaviors with the occurrence of dating violence, the independent variable was represented by the propensity for risky offline behaviors of a large sample of college students (Kaukinen, 2014). The DOSPERT Risk-Taking Scale was selected to measure this variable. Both victims and victimizers were expected to score similarly on this scale in line with the hypothesis that they have common experiences and behaviors that affect their potential to be involved in cyber abuse.

Mediating Factors

The routine online behaviors of these students were explored in the expectation that these factors affect the dependent variable of either perpetration or victimization. The habits measured were the amount and type of online disclosure, the degree of online exposure, and the perceived risk of getting caught engaging in various harassing online activities. As argued by the theory that will be used to test this research question, online exposure to motivated offenders increases the likelihood of victimization. The range of online activities engaged in by students serves as a measure of proximity to motivated offenders, while the information that they commonly share online suggests the degree of disclosure with which they are comfortable. The Perceived Risk Scale examines the potential influence of this perception of legal consequences on the actions of perpetrators.

Dependent Variables

The dependent variables identified whether the participants experienced online victimization or committed online perpetration of victimizing cyber-behaviors. Online disclosure and exposure were expected to mediate the relationship between risk taking propensity and cyber victimization, while online disclosure, online exposure, and the perceived risk of getting caught were expected to mediate the relationship between risk taking propensity and online victimizing behavior.

Similarities between victims and perpetrators . A review of available literature suggests that this research will find that participants who have experienced victimization and those who have perpetrated cyber abuse will have similar scores on the independent and mediating variables. Although this study is not able to determine the chronological or sequential occurrence of victimization and perpetration, it is expected to find that a significant percentage of participants will report both.

Measures Used

The questionnaire used for this study comprised various scales and demographic questions. The demographic questions included gender, sexual orientation, age, race/ethnicity, citizenship, and levels of education for the participant and his/her parents. This section also asked for information on the participant's income, religious practices, relationship status, and GPA.

The DOSPERT Scale. The DOSPERT (or Domain-Specific Risk-Taking Adult) scale was developed and modified to evaluate the respondents' assessment of the likelihood of engaging in various risky behaviors (Blais & Weber, 2006). Questions included such items as the likelihood of the participant driving a car without a seatbelt, having unprotected sex, or not

returning a found wallet that contained \$200.00. Responses were on a 7-point Likert scale ranging from 1 = “Extremely unlikely” to 7 = “Extremely likely,” with higher scores suggesting tendencies towards greater risk. While the DOSPERT has separate subscales for different domains of risk (ethical, financial, health-safety, recreational, social), for the present analyses, the scores (means) across all 30 items were used as a measure of risk propensity (Cronbach’s alpha for the present sample = .85).

Measure of Online Exposure. This measure was developed by Welsh and Lavoie (2012) to measure the type and frequency of online behaviors engaged in by participants in an average week. The 17 items questioned participants’ usage of the Internet for activities such as shopping, banking, dating or social networking. It used a 5-point response scale, with answers ranging from 1 (‘always’) to 5 (‘never’) (Cronbach’s alpha for the present sample = .78). Scores are the mean across the 17 items.

Measure of Online Disclosure. This measure assessed how likely a participant would be to share various types of personal information online, e.g., his or her email address, sexual orientation, pictures of the participant engaging in risky behavior such as drinking or using drugs, or suggestive photos (Welsh & Lavoie, 2012). This measure had 24 items and used a 5-point Likert scale with answers ranging from 1 (‘very likely’) to 5 (‘very unlikely’) (Cronbach’s alpha for the present sample = .89). Scores are the mean across the 24 items.

The Perceived Risk Scale. This measure was adapted from the Cyber Psychological Abuse scale developed and validated by Leisring and Guimatti (2014). Participants answered 12 questions exploring how likely they thought that they would be to get in legal trouble for engaging in various online abusive or harassing activities. Answers ranged from 1 (‘never’) to 7 (‘definitely’). Items included potential risk in activities such as “insulting someone in an email,

text, or social networking site,” “using someone’s phone or social networking site to locate or follow them,” and “using technology to assume someone’s identity to commit theft or ruin their credit rating” (Cronbach’s alpha for the present sample = .96). Scores are the mean across the 12 items. Cyber victimization. This measure of the first dependent variable, whether or not the participant had been abused or harassed in the cyber world, used the Cyber Obsessional Pursuit Scale formulated for a study on obsessive relational intrusion and cyber stalking by Spitzberg and Cupach (1999). The first 24 questions asked how many times the participant had been undesirably pursued or victimized by cyber means with a scale ranging from 1 (“never”) to 6 (“over 5 times”). Example items included “sending excessively needy or disclosive messages,” “sending threatening messages,” and “meeting first online and then following or stalking you.” This was followed by 9 questions that assessed the participant’s dependence on cyber means to pursue friendships and relationships, e.g., “how many good friends do you keep up with primarily via computer” and “how many romantic relationships have you initiated or maintained via computer?” For the present analyses, victimization scores are the mean across the first 24 items (Cronbach’s alpha for the present sample = .93).

Cyber perpetration. The dependent variable of perpetration was measured by a modified version of the Cyber Psychological Abuse Scale (Leisring & Giumatti, 2014). The 12 questions used a Likert scale from 1 (“never”) to 6 (“more than 10 times”) to determine how many times the participant had committed acts of harassment or abuse by cyber means against an intimate partner. These acts ranged from insulting the participant’s partner in an email or a text, posting inappropriate or embarrassing information or pictures of them online, keeping tabs on their partner using cyber means, or threatening to harm their partner or their families online or by

text. Perpetration scores are the mean across the 12 items (Cronbach's alpha for the present sample = .79).

Analyses

Independent samples t-tests were conducted to test for sex differences in risk propensity, online exposure, online disclosure, perceived risk of getting legal trouble for cyber-harassment, cyber-victimization, and cyber-victimizing. Correlations among these variables were conducted separately by sex.

To test for the mediating effects of online exposure, online disclosure, and perceived risk on the relationships between risk propensity and cyber-victimization and between risk propensity and cyber-victimizing, path analyses with bootstrapped tests of mediation were conducted.

These path analyses also tested for differences in the paths for men vs. women.

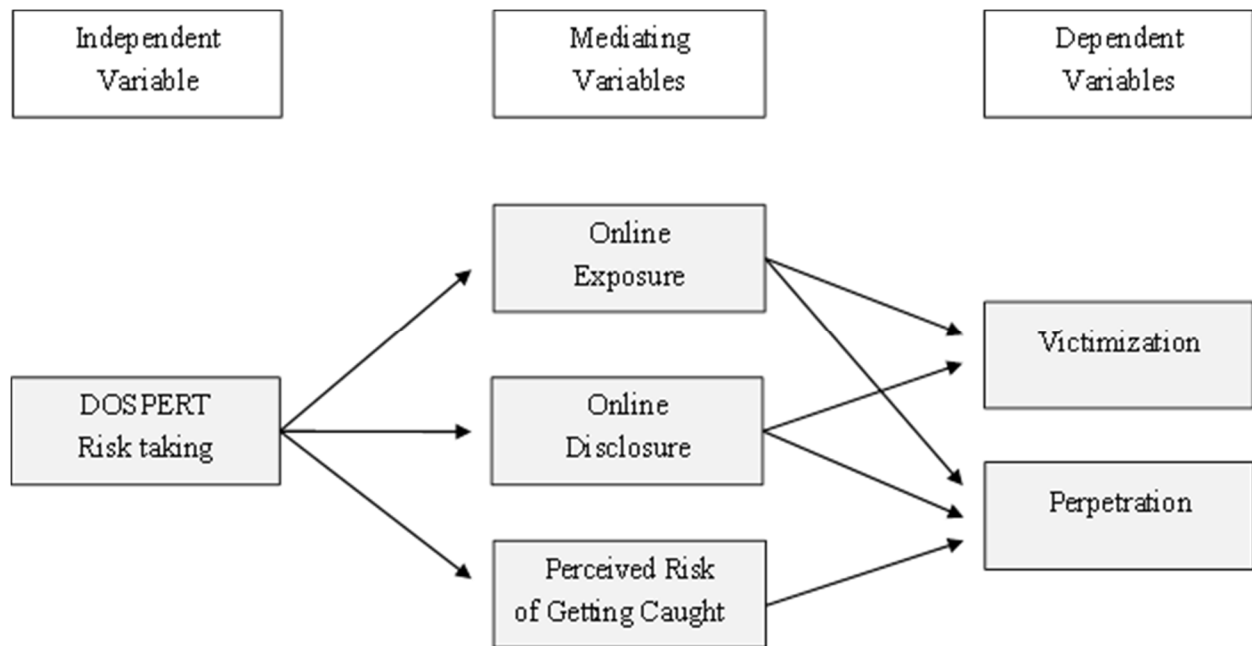


Figure 4.1. Model

Chapter 5

Results

Table 5-1 presents the means and standard deviations for cyber-victimization, cyber-victimizing, risk propensity, online exposure, online disclosure, and perceived risk of getting in legal trouble for cyber-harassment, separately by sex. Surprisingly, given that men typically score higher than women on measures of antisocial behaviors, while women typically score higher than men on being victimized, the only significant sex difference was that men scored higher than women on DOSPERT risk propensity.

Table 5.1 *Means and standard deviations*

| | <i>Female Mean</i> | <i>Female S. D.</i> | <i>Male Mean</i> | <i>Male S. D.</i> | <i>t</i> |
|---------------------------|------------------------|-------------------------|----------------------|-----------------------|---------------|
| Cyber Obsessional Pursuit | 1.4407 | .53274 | 1.3469 | .49497 | 1.389 |
| Cyber Psychological Abuse | 1.5918 | .55463 | 1.4922 | .59266 | 1.359 |
| DOSPERT Total Risk | 3.0326 | .68684 | 3.4806 | .84438 | - 4.393*** |
| Online Exposure | 2.5458 | .47484 | 2.6711 | .53364 | -1.850 |
| Online Disclosure | 2.5040 | .55647 | 2.4426 | .66408 | 0.792 |
| CPA Perceived Risk | 2.7534 | 1.77479 | 2.9157 | 1.72958 | -0.720 |

*p < .05 **p<.01 ***p<.001

Table 5-2 presents the correlations among cyber-victimization, cyber-victimizing, risk propensity, online exposure, online disclosure, and perceived risk of getting in legal trouble for cyber-harassment, separately by sex. As expected, degree of being cyber-victimized was significantly positively correlated with degree of engaging in cyber-victimizing, but it is notable that this correlation was particularly high for men. Consistent with Routine Activities Theory, for women, being cyber-victimized was significantly positively correlated with risk propensity,

online exposure, and online disclosure. For men, being cyber-victimized was significantly positively correlated with risk propensity but not online exposure nor online disclosure.

Consistent with Routine Activities Theory, for women and men, engaging in cyber-victimization was significantly positively correlated with risk propensity and online disclosure. It was expected that level of perpetration of cyber-victimization would be significantly correlated with perceived risk of getting in legal trouble, but for the present sample these correlations are surprisingly positive, i.e., those expecting to get into legal trouble are more likely to report engaging in cyber-victimization.

To test for the mediating effects of online exposure, online disclosure, and perceived risk on the relationships between risk propensity and cyber-victimization and between risk propensity and cyber-victimizing, path analyses were conducted that modeled risk propensity as an exogenous variable predicting online exposure, online disclosure, and perceived risk of getting in legal trouble for cyber-harassment (modeled as correlated variables) that, in turn, were tested as predictors of being cyber-victimized and perpetrating cyber-harassment. Combined and separate analyses were also run for sex, with a difference chi-square calculated for the combined analyses to test for the equivalence of the estimated paths for the male versus female matrices. Mediation effects were tested using the bias corrected bootstrapping of confidence intervals option in Mplus version 5.21 (Muthén & Muthén, 1998-2007) with maximum likelihood estimation using the covariance matrix. Missing data were handled using full information maximum likelihood.

Table 5.2 *Correlations among variables*

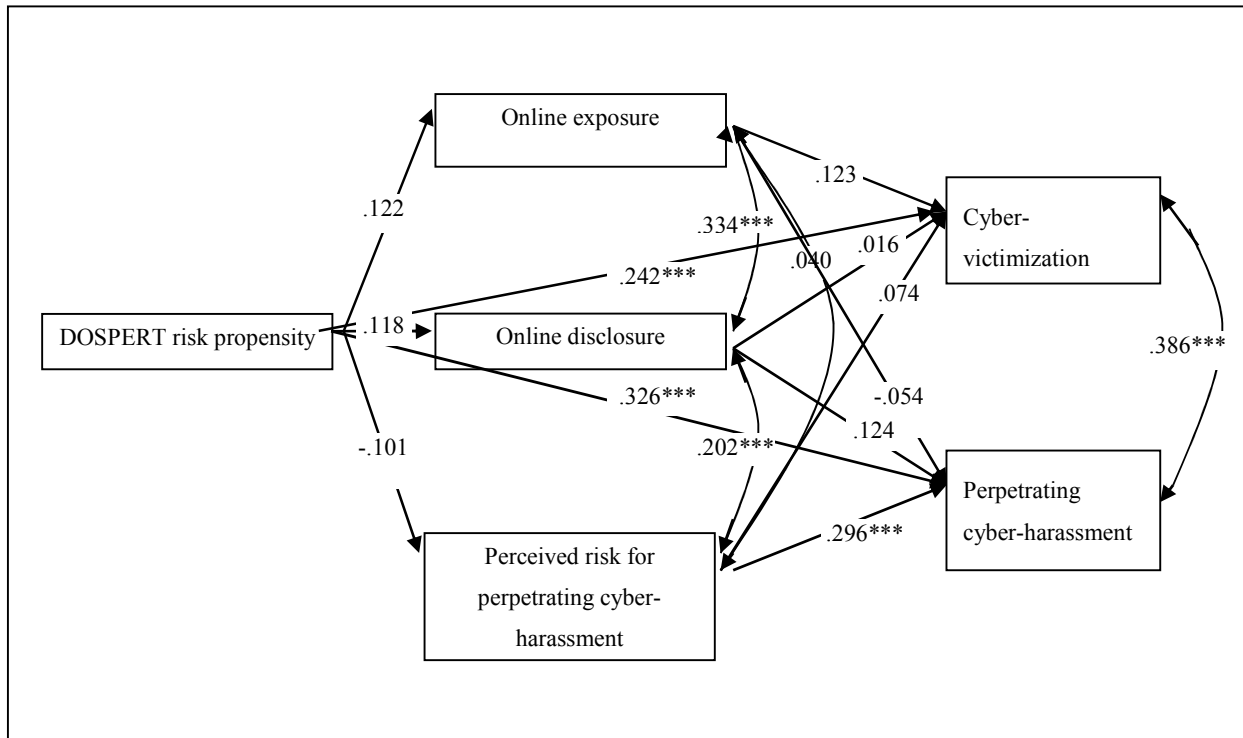
| | <i>Cyber Obsessional Pursuit</i> | <i>Cyber Psychological Abuse</i> | <i>DOSPERT Total Risk</i> | <i>Online Exposure</i> | <i>Online Disclosure</i> | <i>CPA Perceived Risk</i> |
|---------------------------------|--|--|-------------------------------|----------------------------|------------------------------|-----------------------------------|
| Cyber Obsessional Pursuit | | .375*** | .234** | .192* | .165* | .037 |
| Cyber Psychological Abuse | .627*** | | .246*** | .045 | .211** | .281*** |
| DOSPERT Total Risk | .418*** | .488*** | | .076 | .045 | -.132 |
| Online Exposure | .154 | .010 | .228 | | .365*** | .045 |
| Online Disclosure | .027 | .225* | .256* | .239* | | .203** |
| CPA Perceived Risk | -.025 | .197 | -.065 | -.062 | .134 | |

Women above diagonal; men below diagonal.

* $p < .05$ ** $p < .01$ *** $p < .001$

Results of the path analyses are presented (Figure 1) for the model constraining the male and female estimates to be equal, as the difference chi-square for this model was not significant ($\chi^2 = 10.57, 13 \text{ df}, p = .65$). Controlling for risk propensity, none of the mediating factors were significant predictors of being cyber-victimized, but risk perception was significantly predictive of perpetrating cyber-harassment. The direct paths from risk propensity to being cyber-victimized and from risk propensity to perpetrating cyber-harassment were highly significant. Bootstrapped mediation analyses indicated that the relationship between risk propensity and being cyber-victimized was not significantly mediated by online disclosure (95% confidence interval: $-.011, .023$), but there were trends toward significance for online exposure (95% CI: $-.002, .043$) and risk perception (95% CI: $-.026, .002$). Similarly, bootstrapped mediation

analyses indicated that the relationship between risk propensity and perpetrating cyber-harassment was not significantly mediated by online exposure (95% confidence interval: -.035, .005), but there were trends toward significance for online disclosure (95% CI: -.001, .050) and risk perception (95% CI: -.061, .000).



* $p < .05$ ** $p < .01$ *** $P < .001$

Figure 5.1. Path diagram showing standardized estimates for the model testing direct and indirect pathways between risk propensity and cyber-harassment.

Chapter 6

Discussion and Conclusion

Findings

In keeping with the traditional model of IPV in which men use abuse to control their female partners, each of these correlations were tested for sex differences. For women, the findings revealed a significant positive association for risky behaviors, online exposure, disclosure, and being victimized. For men, the positive correlation was between risk propensity and being victimized, with little association from the mediating variables. Men scored higher in general on the DOSPERT scale for risk propensity. Another significant positive correlation was found between the dependent variables of victimization and perpetration for both sexes, as was hypothesized by researchers who argued that offenders and victims share traits that cause them to engage in similar activities, with the result that they belong in both groups (Tilyer & Wright, 2014).

This study does offer some support for the Routine Activities Theory in that personality risk factors as measured by the DOSPERT scale, as well as situational factors of online exposure and disclosure, were all predictive of being cyber- victimized, at least for women. The mediation analyses, however, suggested that these personality and situational risk factors acted independently to increase the risk for being cyber-victimized and to be more likely to perpetrate cyber-victimization. As predicted, perceived risk of legal consequences for perpetrating cyber-harassment was not correlated with being cyber-victimized but was correlated, significantly so for women, with the likelihood of perpetrating cyber-harassment. What was unexpected was that this correlation between perceived risk of legal consequences for perpetrating cyber abuse and actual perpetration of cyber abuse was positive, whereas Routine Activities Theory would argue

that this correlation should be negative. The path model, however, in which this correlation did become negative, suggests that suppressor effects may have occurred due to intercorrelations among the predictors.

Theoretical Implications

While not entirely statistically conclusive, this study does support the applicability of the Routine Activities Theory for studying the risk factors of cyber abuse. While the propensity for engaging in risky behaviors had the most significance for predicting victimization and perpetration, for women, routine habits of exposure and disclosure were associated for victimization. Additionally, the positive correlation between victimization and perpetration suggests that studies identifying similar behaviors and habits in offenders and victims are correct in arguing that these similarities result in participants' belonging to both groups. The degree of association with regard to the mediating factors suggests that further research using the Routine Activities Theory for studying cyber abuse may be able to produce more conclusive results. Another way of testing the Routine Activities Theory would be to look at the combined interactive effects of the personality vs. situational risk variables, i.e. does the combination of a risky personality in combination with exposure to risky situations increase the risk of being cyber victimized over and above the additive effects of personality and situational risk factors by themselves.

Practice Implications

This study also has implications applicable to the field of social work intervention and prevention. Adolescents on the verge of developing into adulthood should be targeted for education with regard to personal privacy and safe usage of communication technology. In particular, young people should be educated about the permanence of cyber communication and its ubiquity, where posts and communications can become viral and constantly accessible. Crisis

counselors and others who deal with victims of IPV can also learn from the results of this study. Risk assessments of victims should include questions that reflect the experience of cyber harassment or abuse as a risk factor. Equally importantly, safety planning with victims should extend to teaching victims how their online habits and behaviors may be leaving them vulnerable to further abuse or victimization.

Limitations

The size of the sample and its composition may have influenced the results of this study. A larger sample size may have produced more statistical power in analyzing the mediating factors. Also, the survey was only administered to undergraduate psychology students, limiting its generalizability to the general population. In addition, the amount of education achieved by each participant may have had an effect on the results as compared to the general age group.

The survey itself depended on self-report, which may have created a social desirability bias. Societal norms stigmatizing IPV may have affected the report of certain behaviors or experiences. And finally, since the study was unable to determine the chronology of events, some data regarding the perpetration of abuse against a partner may be flawed, e.g., a victim who admits perpetration of abuse may be responding in self-defense.

Future Research

The dearth of research about this aspect of IPV demands further investigation on a large scale. The consequences of cyber abuse are often overshadowed by the dramatic and visible harm of physical abuse, even though recent research confirms that psychological abuse can have powerful and long-lasting effects on the victim. Increased study of cyber abuse is necessary to develop intervention and preventive strategies to engage this growing social problem. It is also imperative to study the changing face of IPV, especially among the young: while women are still

more likely to be victims of severe physical abuse, young men and women are becoming equally likely to victimize each other, as evidenced by the finding that mutual violence has become the most frequent example of a violent relationship in this demographic. We must develop an understanding of why this is occurring to assess our current knowledge in this field and how to combat it.

Conclusion

This study sought to add to the field of knowledge regarding intimate partner violence. Improved definition and awareness of abusive behaviors has extended beyond the sphere of physical and sexual violence to psychological and emotional abuse. Authorities in every state are responding to increasing reports of this type of abuse by passing laws criminalizing stalking, cyberstalking, and posting threats and harassment through social media and cell phones. Victims are reporting these experiences in greater numbers than ever before, and as the usage of communication technologies increases, the expectation is that cyber abuse will also increase.

Because this phenomenon is a new area of investigation, there is relatively little research and information on the subject. However, newly available information suggests that traditional models and theories of IPV may need to be reconsidered for this population, including evidence that men are also victims of IPV and that young adults in relationships are victimizing each other.

The findings from this study provide some illumination in the challenge of fighting intimate partner violence in college students. Working from the correlation between the propensity for risky behavior in college students to the experience of cyber victimization and perpetration, associations between the usage of communication technology and the incidence of cyber abuse provided insight into the risks facing college students as they navigate their intimate

relationships. The promotion of healthy behaviors with communication technology may benefit this population, helping them to identify risky situations and decrease behaviors that may lead to IPV.

Appendix 1

Measures

Domain-Specific Risk-Taking (Adult) Scale – Risk Taking

For each of the following statements, please indicate the **likelihood** that you would engage in the described activity or behavior if you were to find yourself in that situation.

Provide a rating from *Extremely Unlikely* to *Extremely Likely*, using the following scale:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------------------|---------------------|-----------------|----------|-----------------|-------------------|------------------|
| Extremely Unlikely | Moderately Unlikely | Somewhat Likely | Not Sure | Somewhat Likely | Moderately Likely | Extremely Likely |

1. Admitting that your tastes are different from those of a friend. (S)
2. Going camping in the wilderness. (R)
3. Betting a day's income at the horse races. (F/G)
4. Investing 10% of your annual income in a moderate growth diversified fund. (F/I)
5. Drinking heavily at a social function. (H/S)
6. Taking some questionable deductions on your income tax return. (E)
7. Disagreeing with an authority figure on a major issue. (S)
8. Betting a day's income at a high-stake poker game. (F/G)
9. Having an affair with a married man/woman. (E)
10. Passing off somebody else's work as your own. (E)
11. Going down a ski run that is beyond your ability. (R)
12. Investing 5% of your annual income in a very speculative stock. (F/I)
13. Going whitewater rafting at high water in the spring. (R)
14. Betting a day's income on the outcome of a sporting event (F/G)
15. Engaging in unprotected sex. (H/S)
16. Revealing a friend's secret to someone else. (E)

17. Driving a car without wearing a seat belt. (H/S)
18. Investing 10% of your annual income in a new business venture. (F/I)
19. Taking a skydiving class. (R)
20. Riding a motorcycle without a helmet. (H/S)
21. Choosing a career that you truly enjoy over a more secure one. (S)
22. Speaking your mind about an unpopular issue in a meeting at work. (S)
23. Sunbathing without sunscreen. (H/S)
24. Bungee jumping off a tall bridge. (R)
25. Piloting a small plane. (R)
26. Walking home alone at night in an unsafe area of town. (H/S)
27. Moving to a city far away from your extended family. (S)
28. Starting a new career in your mid-thirties. (S)
29. Leaving your young children alone at home while running an errand. (E)
30. Not returning a wallet you found that contains \$200. (E)

Note. E = Ethical, F = Financial, H/S = Health/Safety, R = Recreational, and S = Social.

Measure of Online Exposure

In the average week, how often do you use the Internet for the following? Provide a rating from “*Always*” to “*Never*” using the following scale:

| | 1 | 2 | 3 | 4 | 5 |
|----|---|-------------------|------------------|---------------|--------------|
| | <i>Always/</i> | <i>Very Often</i> | <i>Sometimes</i> | <i>Rarely</i> | <i>Never</i> |
| a. | E-mail | | | | _____ |
| b. | Downloading music, movies or TV episodes | | | | _____ |
| c. | Multi-User Dimensions (MUDs) | | | | _____ |
| d. | Message Boards | | | | _____ |
| e. | Banking | | | | _____ |
| f. | Shopping (e.g., eBay) | | | | _____ |
| g. | Gambling (e.g., online poker) | | | | _____ |
| h. | Playing computer-based fantasy games | | | | _____ |
| i. | Chat rooms | | | | _____ |
| j. | Instant messaging | | | | _____ |
| k. | Browsing sports sites | | | | _____ |
| l. | Online dating sites | | | | _____ |
| m. | Browsing entertainment or gossip sites | | | | _____ |
| n. | Doing school or course work | | | | _____ |
| o. | Social networking (e.g., Facebook, Myspace) | | | | _____ |
| p. | Listserves/Newsgroups | | | | _____ |
| q. | Blogs | | | | _____ |

Willingness to Share Information Online- Online Disclosure

Please indicate how likely you would be to share or post the following information on your online social networking account (e.g., Facebook, MySpace). Provide a rating from “*Very Likely*” to “*Very Unlikely*” using the following scale:

| | 1 | 2 | 3 | 4 | 5 |
|----|---|---------------|---------------------------------------|-----------------|----------------------|
| | <i>Very Likely</i> | <i>Likely</i> | <i>Neither Unlikely or Likely</i> | <i>Unlikely</i> | <i>Very Unlikely</i> |
| a. | E-mail address | | | | _____ |
| b. | Phone or mobile number | | | | _____ |
| c. | Current relationship status | | | | _____ |
| d. | Current local address | | | | _____ |
| e. | Images of yourself drinking alcohol | | | | _____ |
| f. | Political views | | | | _____ |
| g. | Gossip or rumours about friends or peers | | | | _____ |
| h. | Instant messenger screen name | | | | _____ |
| i. | Images of yourself using illicit drugs | | | | _____ |
| j. | Religious views | | | | _____ |
| k. | Current area or program of study | | | | _____ |
| l. | Negative references to university administration or staff | | | | _____ |
| m. | Image of yourself in a central photograph (i.e., profile photo) | | | | _____ |
| n. | Course schedule | | | | _____ |
| o. | Sexual orientation | | | | _____ |
| p. | News feeds, mini-feeds, or personal updates | | | | _____ |
| q. | Negative references to your school or professors | | | | _____ |

- r. Activities or personal hobbies _____
- s. Comments or notes on your wall _____
- t. Images of yourself in inappropriate or suggestive poses _____
- u. Plans for weekend _____
- v. Favourite books, movies, or TV shows _____
- w. Dating interests or preferences _____
- x. List of friends _____

Perceived Risk Scale

The following questions are intended to measure how likely you think you are to get in legal trouble for engaging in the following activities. Please rate each item according to the following scale:

0. Never
1. Almost never
2. A slight possibility
3. Possibly
4. Somewhat likely
5. Very likely
6. Definitely

___ 1. “Shouting” at someone by using capital letters in an email, text message, or on a social networking site.

___ 2. Insulting someone in an email, text, or social networking site.

___ 3. Posting inappropriate pictures or embarrassing information online to humiliate someone.

___ 4. Threatening to harm someone in an email, text, or on a social networking site.

___ 5. Swearing at someone or calling them names in an email, text, or social networking site.

___ 6. Keeping tabs on someone by checking their emails, text messages, or inbox on a social networking site.

___ 7. Emailing or texting others to embarrass or hurt someone.

___ 8. Using someone’s phone or social networking site in order to locate or follow them.

___ 9. Excessively texting or emailing someone to harass or threaten them.

___ 10. Threatening to harm someone’s family or friends in an email, text, or on a social networking site.

___ 11. Emailing or texting someone's boss or place of employment to embarrass or humiliate them.

___ 12. Using technology to assume someone's identity to commit theft or ruin their credit rating.

In your lifetime, how often, if at all, has anyone ever obsessively pursued you through electronic means (computer, e-mail, chat room, etc.) over a period of time for the purpose of establishing an intimate relationship that you did NOT want? That is, . . .

Circle the best answer

NEVER ONLY 2 TO 3 4 TO 5 OVER 5
ONCE TIMES TIMES TIMES

Has anyone ever undesirably & obsessively communicated with or pursued you through computer or other electronic means, by...

| | | | | | |
|--|---|---|---|---|---|
| 1. SENDING TOKENS OF AFFECTION (e.g., poetry, songs, electronic greeting cards, praise, etc.) | 0 | 1 | 2 | 3 | 4 |
|--|---|---|---|---|---|

Has anyone ever undesirably & obsessively communicated with or pursued you through computer or other electronic means, by...

| | | | | | |
|---|---|---|---|---|---|
| 2. SENDING EXAGGERATED MESSAGES OF AFFECTION (e.g., expressions of affections implying a more intimate relationship than you actually have, etc.) | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

3. SENDING EXCESSIVELY 0 1 2 3 4

DISCLOSIVE MESSAGES

(e.g., inappropriately giving private
information about his/her life, body,
family, hobbies, sexual experiences,
etc.)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

4. SENDING EXCESSIVELY “NEEDY” 0 1 2 3 4

OR DEMANDING MESSAGES

(e.g., pressuring to see you, assertively
requesting you go out on date, arguing with
you to give him/her “another chance”, etc.)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

- | | | | | | |
|--|---|---|---|---|---|
| 5. SENDING PORNOGRAPHIC/ OBSCENE IMAGES OR MESSAGES (e.g., photographs or cartoons of nude people, or people or animals engaging in sexual acts, etc.) | 0 | 1 | 2 | 3 | 4 |
|--|---|---|---|---|---|

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

- | | | | | | |
|---|---|---|---|---|---|
| 6. SENDING THREATENING WRITTEN MESSAGES (e.g., suggesting harming you, your property, family, friends, etc.) | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

7. SENDING SEXUALLY HARASSING 0 1 2 3 4
MESSAGES

(e.g., describing hypothetical sexual acts
between you, making sexually demeaning
remarks, etc.)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

8. SENDING THREATENING PICTURES 0 1 2 3 4
OR IMAGES

(e.g., images of actual or implied
mutilation, blood, dismemberment,
property destruction, weapons, etc.)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

9. EXPOSING PRIVATE INFORMATION 0 1 2 3 4

ABOUT YOU TO OTHERS

(e.g., sending mail out to others regarding
your secrets, embarrassing information,
unlisted numbers, etc.)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

10. PRETENDING TO BE SOMEONE SHE 0 1 2 3 4

OR HE WASN'T

(e.g., falsely representing him- or herself
as a different person or gender, claiming a
false identity, status or position,
pretending to be you, etc.)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

11. SABOTAGING' YOUR PRIVATE 0 1 2 3 4

REPUTATION

(e.g., spreading rumors about you, your
relationships or activities to friends,
family, partner, etc.)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

12. SABOTAGING' YOUR 0 1 2 3 4

WORK/SCHOOL REPUTATION

(e.g., spreading rumors about you, your
relationships or activities in organizational
networks, electronic bulletin boards, etc.)

Has anyone ever undesirably & obsessively communicated with or pursued you through computer or other electronic means, by...

13. ATTEMPTING TO DISABLE YOUR COMPUTER 0 1 2 3 4

(e.g., downloading a virus, sending too many messages for your system to handle, etc.)

Has anyone ever undesirably & obsessively communicated with or pursued you through computer or other electronic means, by...

14. OBTAINING PRIVATE INFORMATION WITHOUT PERMISSION 0 1 2 3 4

(e.g., covertly entering your computer files, voicemail, or the files of co-worker, friend or family member, etc.)

Has anyone ever undesirably & obsessively communicated with or pursued you through computer or other electronic means, by...

15. USING YOUR COMPUTER TO GET INFORMATION ON OTHERS 0 1 2 3 4

(e.g., stealing information about your friends, family, co-workers, etc.)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

16. BUGGING' YOUR CAR, HOME, OR 0 1 2 3 4

OFFICE

(e.g., planting a hidden listening or
recording device, etc.)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

17. ALTERING YOUR ELECTRONIC 0 1 2 3 4

IDENTITY OR PERSONA

(e.g., breaking into your system and
changing your signature, personal
information, or how you portray yourself
electronically, etc.)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

18. TAKING OVER YOUR ELECTRONIC 0 1 2 3 4

IDENTITY OR PERSONA

(e.g., representing him or herself to others
as you in chatrooms, bulletin boards,
pornography or singles sites, etc.)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

19. DIRECTING OTHERS TO YOU IN 0 1 2 3 4

THREATENING WAYS

(e.g., pretending to be you on chat lines
and requesting risky sex acts, kidnapping
fantasies, etc.)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

20. MEETING FIRST ON-LINE AND THEN 0 1 2 3 4

FOLLOWING YOU

(e.g., following you in while driving,
around campus or work, to or from the
gym or social activities, etc.)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

21. MEETING FIRST ON-LINE AND THEN 0 1 2 3 4

INTRUDING IN YOUR LIFE

(e.g., showing up unexpectedly at work,
front door, in parking lot, intruding in your
conversations,)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

22. MEETING FIRST ON-LINE AND THEN 0 1 2 3 4

THREATENING YOU

(e.g., threatening to engage in sexual
coercion, rape, physical restraint, or to
harm him or herself, your possessions,
pets, family, or friends)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

23. MEETING FIRST ON-LINE AND THEN 0 1 2 3 4

HARMING YOU

(e.g., corresponding with you through an
on-line dating service and then following,
harassing, or otherwise stalking you)

*Has anyone ever undesirably & obsessively
communicated with or pursued you through
computer or other electronic means, by...*

24. FIRST MEETING YOU ON-LINE AND 0 1 2 3 4

THEN STALKING YOU

(e.g., corresponding through an on-line
dating service or as acquaintances and
then following, harassing, or otherwise
stalking you)

Online Perpetration

The following questions are intended to measure if you have **EVER ENGAGED** in the following activities. Please rate each item according to the following scale:

| 0 | 1 | 2 | 3 | 4 | 5 |
|-------|------|-----------|-----------|------------|-----------------------|
| Never | Once | 2-3 Times | 4-6 Times | 7-10 Times | More Than 10 Times |

1. “Shouting” at someone by using capital letters in an email, text message, or on a social networking site.
2. Insulting someone in an email, text, or social networking site.
3. Posting inappropriate pictures or embarrassing information online to humiliate someone.
4. Threatening to harm someone in an email, text, or on a social networking site.
5. Swearing at someone or calling them names in an email, text, or social networking site.
6. Keeping tabs on someone by checking their emails, text messages, or inbox on a social networking site.
7. Emailing or texting others to embarrass or hurt someone.
8. Using someone’s phone or social networking site in order to locate or follow them.
9. Excessively texting or emailing someone to harass or threaten them.
10. Threatening to harm someone’s family or friends in an email, text, or on a social networking site.
11. Emailing or texting someone’s boss or place of employment to embarrass or humiliate them.
12. Using technology to assume someone’s identity to commit theft or ruin their credit rating.

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Biographical Information

Elizabeth Wick became interested in the field of intimate partner violence through her internship at the Arlington Police station doing outreach with Victim Services. She has a Master's Degree in Social Work and a Master's Degree in the Science of Horticulture. Her future plans include earning a Licensed Clinical Social Worker certification.