FORMS OF TECHNOLOGY-FACILITATED SEXUAL VIOLENCE AND UNIVERSITY WOMEN’S PSYCHOLOGICAL FUNCTIONING

by

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Abstract

Technology-facilitated sexual violence (TFSV) is an emerging social and public health issue that can significantly impact those who experience it, yet our knowledge and understanding of this issue is limited. Despite the abundance of research addressing offline sexual violence, comparatively little attention has been paid to online sexual violence. With a growing emphasis on the use of technology on campuses and university women being both avid users of technology and overrepresented as victims of sexual violence (Stermac, Del Bove, Brazeau, & Bainbridge, 2006), university women are at an increased risk of experiencing TFSV. Using an online self-guided study, this research investigated the forms and characteristics of TFSV being experienced by university women and their association with women’s wellbeing. Results indicate that technologies are being used to victimize women in a variety of ways and these experiences are associated with feelings of depression, anxiety, stress and symptoms of post-traumatic stress disorder.
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Chapter One: Introduction and Literature Review

Introduction

The presence of new technologies including social networking sites, personal blogs, video-sharing websites, and smart phones is a growing feature in contemporary society and thus in the lives of today’s young adults. These new technologies carry with them several benefits such as the increased ability to communicate and share information, the facilitation of the development and representation of young people’s identities (including their sexual identities) (Cooper, McLoughlin, & Campbell, 2000; Oksman & Turtiainen, 2004) and the potential for a ‘cyberfeminism’, (van Zoonen, 2001) given technologies allowance for women to communicate and assemble on local and global scales (Powell, 2010). Despite these benefits afforded to people with the advancement of technology, there is also a dark side to the advancement of technology. Specifically, new technologies are being used to facilitate and perpetrate sexual violence against women (Henry & Powell, 2015a). The term being used to describe the range of harmful sexually aggressive behaviours committed against women with the assistance or use of new technologies is technology-facilitated sexual violence and harassment (TSFV) (Henry & Powell, 2015b). TFSV is an emerging social and public health issue that can significantly impact those who experience it, yet our knowledge and understanding of this issue is limited. This research expands on the little that is already known about TFSV by investigating the characteristics of the TFSV behaviours that are occurring among female university students and their association with the psychological functioning of these students, who are both avid users of new technologies and overrepresented as victims of sexual violence.
Overview

Technology-facilitated sexual violence and harassment poses a unique challenge for researchers. Although TFSV bears similarities to the related fields of offline sexual victimization and cyber-victimization (CV), it presents some unique characteristics and challenges that distinguish it from these related fields. Thus, although this research defines TFSV as a unique concern, it also discusses briefly how it relates to nonsexual CV through the lens of a society that frequently and disproportionately victimizes young women. This research begins by discussing the range of crimes occurring online, in particular occurrences of cyber-bullying among university students. The research then defines TFSV as a multifaceted concept. This is followed by a statement of the problem of TFSV with reports of prevalence and case examples, and then a description of the harms associated with being victimized by TFSV. This is followed by a discussion of the wide range of sexual victimization experience occurring among university women, including prevalence, impacts, and a theoretical explanation. This concludes with a description of the literature on reporting and disclosure as well as victim-perpetrator relationships.

Cyber-Victimization

Cyber-victimization (CV), which refers to victimization resulting from cyber-criminal behaviour is a serious problem for young women. In particular, young adults aged 18 to 24 years old are three times more likely than individuals aged 25 and older to report experiences of CV (Statistics Canada, 2011). This is not surprising given that young adults 14 to 34 years old represent the greatest proportion of consumers of new technologies such as mobile phones, social networking websites such as Facebook and
Twitter, personal blogs, and video posting websites such as YouTube (Australian Communications and Media Authority, 2011; Yardi & Bruckman, 2011). In areas such as university campuses technology can be a remarkable tool for learning and socialization. However, the use of new technologies on university campuses also creates an environment where harassment can take place with increased ease and anonymity.

One form of CV, cyber-bullying (CB) is an aggressive and intentional action that is carried out by a group or an individual through electronic forms of communication, repeatedly and over time, against a victim who cannot easily defend themselves (Hinduja & Patchin, 2009). These aggressive, nonsexual acts can be either direct (e.g., name-calling, threats, and insults) or indirect (e.g., exclusion from online social networks, identity theft, and impersonation) (Riebel, Jager, & Fischer, 2009). This is in contrast to TFSV, which involves aggressive acts of a sexual nature committed with the use of technology.

The majority of research on CB has been conducted on high school aged students and younger. This may be based on the assumption that incidents of CB decrease during the transition from high school to university. However, when we consider that university students use social networking sites (Lenhart, Purcell, Smith, & Zickuhr, 2010) and text messaging (Smith, 2011) at high rates and engage in these forms of communication in the absence of parental control, the occurrence of CB victimization among university-age women begins demanding research attention. In fact, recent evidence from the National Annenberg Survey of Youth (2010) has indicated that approximately 5, 8, and 16% of university students are involved in CB as victims, perpetrators, or victim-perpetrators respectively, compared to 5, 7, and 12% of high school students. Furthermore, in a study
of students at a university in Istanbul it was found that 17% of university students utilized the internet every day and the majority of those with experiences of CB accessed the internet every day with 80% of them staying connected for more than an hour at a time (Turan, 2011). This is not surprising given evidence suggesting a positive relationship between the frequency of internet use and exposure to CB (Rosen, Cheever, Carrier, 2008; Smith et al., 2008). In a recent study involving over 200 undergraduate students at universities in the United States, researchers found that 51% of students reported being victims of CB (BeeBe, 2010). Although research on the prevalence of CB among university students is limited estimates generally range from 9 to 43% of university-age young adults (Finn, 2004; Kraft & Wang, 2010; Lindsay & Krysik, 2012; Reyns, Henson, & Fisher, 2012) with estimates varying depending on the sample, time frame, and measure used. It is worth noting that some researchers argue that CB may be even more prevalent than offline forms of bullying due to the fact that it is possible to engage in CB at any time of day with the use of mobile devices (Slonje & Smith, 2008).

Current evidence suggests that men and women are equally likely to experience CB (Statistics Canada, 2011). However, men may be more likely to experience CB at the hands of a stranger, whereas women may be more likely to be victimized by a classmate or co-worker (Statistics Canada, 2011). This indicates that when women are victimized through technology, the attack may be personal in nature, which could lead to a more severe impact than that experienced by men, who may suffer less personal attacks.

There is some dispute over the impact CV has on victims, with some suggesting that the social and intrapsychical harms incurred by victims are not embodied and tangible and therefore are not real. However, empirical evidence suggests that the harms
associated with CV are in fact real and significant (Henry & Powell, 2015b). One study even found that CV causes more negative impacts on victims compared to offline victimization (Smith et al., 2008). Individuals who are victimized by CB in particular can experience severe and long-term consequences as a result, often feeling anxious, insecure, unhappy, and experiencing low self-esteem (Olweus, 1993). Victims may also be sensitive, withdrawn, depressed, and engage in suicidal ideation (Olweus, 1993). It is also not uncommon for those victimized by CB to experience more embarrassment, self-blame, anger (Beran, Rinaldi, Bickham, & Rich, 2012), anxiety, and interpersonal sensitivity (Kokkinos, Antoniadou, & Markos, 2014) compared to their non-victimized counterparts. A study conducted among university students in Istanbul found that experiences of cyberbullying were linked to feeling angry, scared, excited, embarrassed, hurt, and self-blaming (Turan, 2011). Among young adults CB has also been linked to avoiding classes or going to work (Klomek, Sourander, & Gould, 2010). This is not surprising given that victims of CB are known to experience concern over how the experience would reflect upon them with potential employers (Rivituso, 2014). Distrust of technology and mistrust of people are also not uncommon for victims of CB (Rivituso, 2014). Experiences of CB may also impact students’ psychosocial functioning and interpersonal relationships (Kokkinos, Antoniadou, & Markos, 2014). Additionally, CB experiences have also been linked to increases in risky activities including time spent on the internet, sharing of personal information online with strangers, sending pictures to and meeting face-to-face with strangers who were originally met online (Berson & Berson, 2005), which may lead to further victimization experiences.
Based on this evidence it is apparent that CB is a widespread issue for university students in Canada and the United States with severe consequences, which can affect all aspects of the victim’s life. Additionally, female victims of CB may experience more severe consequences as a result of suffering more personal attacks. While there is already research conducted regarding the severity and prevalence of CB among university students, it is apparent that further research is needed to investigate the full range and type of cyber offenses that are occurring among university students, which includes cyber-sexual offenses such as TFSV. In other words, although there has been substantial research conducted that investigates CB experiencing among university students, this research has focused almost exclusively on non-sexual CB.

**Technology-facilitated Sexual Violence**

Despite the vast research attention that has been paid to CB experiences among university students in North American, there has been comparatively less attention directed towards investigating TFSV occurring among university women living in Canada and the United States. Furthermore, although there is a well-established link between the expansion of new technologies such as the internet and mobile phones and access to pornographic and amateur sexual material (see Barron & Kimmel, 2000) comparatively little work has been conducted regarding the association between new technologies and sexual violence. However, some researchers have noted an increase in the number of violent and non-consensual sex acts depicted in online pornography (Barron & Kimmel, 2000), which Powell (2010) suggests may be an indication of the relationship between technology and increases in violence against women. Furthermore, as the duration of internet access increases so does the frequency of exposure to violence
and pornography (Alexy, Burgess, Baker, 2005; Rosen et al., 2008; Smith et al., 2008). Additionally, preliminary estimates have indicated that approximately 1 in 5 American college males have perpetrated at least one form of online sexually coercive behaviour (Thompson & Morrison, 2013). Furthermore, available information to date suggests that young women across the globe are overwhelmingly the targets of these types of behaviours (Halder & Jaishankar, 2009). Thus, TFSV may be a more widespread problem on university campuses across North America than the amount of available literature would suggest.

**Defining technology-facilitated sexual violence.** Although the term TFSV has been used to collectively describe the range of harmful sexually aggressive behaviours perpetrated against women with the assistance or use of new technologies (Henry & Powell, 2015b), according to some researchers TFSV may be a multifaceted concept that consists of six distinct but related categories (Henry & Powell, 2014). The first of these categories is non-consensual pornography or revenge porn, which is the unauthorized creation and/or distribution of sexually explicit images of the victim. With the advancement of technology this form of sexual aggression has increased in ease, with websites specifically designed for the purpose of posting nude images of individuals (usually ex-partners) along with identifying information such as links to social media profiles, full or partial names, and locations (Stroud, 2014). Many of these sites are also equipped with message boards where site users comment on the victims’ appearances and moral character (Stroud, 2014). The second category of TFSV is the actual or threatened creation and/or distribution of sexual assault images, while the third form of TFSV comprises the use of a carriage service to procure a sexual assault. This involves posting
an advertisement online persuading an individual or individuals to sexually assault a person, usually a former romantic partner. The fourth form of TFSV includes both online sexual harassment and cyber-stalking. Online sexual harassment involves asking someone intimate questions or sending them unwanted pornographic material via the internet. This category includes active forms of harassment such as sexual statements, humiliating comments on online forums and chatrooms, as well as intentionally emailing or posting sexually explicit images or videos. This category also includes passive forms of harassment such as the use of sexually suggestive nicknames, and pornographic avatars (i.e., digital representations of people) (Barak, 2005). Finn and Banach (2000) also include ‘page-jacking’ in the category of online sexual harassment, which is when an internet user hi-jacks a webpage and redirects site visitors to a website containing pornographic or other offensive material. In contrast, cyber-stalking involves the repetitive pursuit of an individual through electronic or Internet-enabled devices (Reyns et al., 2012). These repetitive pursuits are any unwanted electronic communications that may be threatening, intimidating, or coercive in nature (Hazelwood & Koon-Magnin, 2013). The fifth form of TFSV is gender-based hate speech, which involves offensive and degrading comments directed at a person or a group of people based on their gender, mostly commonly women. The last form of TFSV is virtual rape, which is when a person’s avatar is subjected to simulated sexual violence by other avatars (Boyd, 2009; Dibbell, 1998). Other non-consensual online behaviours discussed in the literature include refusing to delete a sexually explicit image of an individual when asked to do so, making threats to ‘do something’ with the image (such as sending it on to others and/or posting it to a particular website etc.), and using the image to degrade or harass the
individual (VPLRC, 2013). Currently, no research has been published that attempts to address all six forms of TFSV, choosing instead to focus on a single category of TFSV. Given that researchers tend to make distinctions between the different forms of TFSV, research is needed that addresses each of the previously mentioned six types of TFSV separately.

The prevalence of technology-facilitated sexual violence. It has only been within the last few years that empirical articles have emerged discussing the prevalence of TFSV against young adult women. This is surprising considering the large number of cases involving TFSV that have been reaching the media for several years (e.g., Kingkade, 2014). Much of the work that has been conducted has focused on the areas of non-consensual pornography (Citron & Franks, 2014; Henry & Powell, 2014b; Humbach, 2010; Parker, 2009), online sexual harassment (Barak, 2005; Citron, 2009; Finn & Banach, 2000; Morahan-Martin, 2000; Ybarra & Mitchell, 2008), gender-based hate speech (Citron, 2010; Guichard, 2009; Lee & Leets, 2002; Nussbaum, 2010), and virtual rape (Boyd, 2009; Dibbell, 1998), with the most research attention being dedicated to non-consensual pornography among non-university women.

In terms of non-consensual pornography, the Cybercrime Working group reported that they have received anecdotal reports that Canadian law enforcements regularly receives complaints about non-consensual pornography but do not follow-up on these unless they meet certain legal requirements (CCSO Cybercrime Working Group, 2013). Thus, there is no current method of determining the exact number of incidents of non-consensual pornography that are being reported to Canadian law enforcement. However, the Department of Justice Canada (2002) noted that women and children tend to be the
most frequent targets of non-consensual images. Furthermore, reports from countries that have criminalized non-consensual pornography indicate that this behaviour is common. For instance, after recently criminalizing non-consensual pornography UK police forces had a shocking 175 reported cases in a six month period (Halliday, 2015). Given that only an estimated 8% of individuals who are sexually victimized report it to the police (Statistics Canada, 2006), this crime is thought to be significantly underreported.

Furthermore, the Cyber Civil Rights Initiative (2013) surveyed women online and found that 1 in 10 ex-partners have threatened to expose their partner’s sexually explicit images online after the breakup and 60% of those eventually followed through on their threat. The same study also found that 90% of non-consensual pornography victims were female. In addition to being disproportionately represented as victims of non-consensual pornography, young women are also more likely than young men to send sexually explicit images of themselves, often as a response to pressure from their male partners or peers (Ringrose et al., 2012). In fact, a survey conducted on young women in the United States by the National Campaign To Prevent Teen and Unplanned Pregnancy (2008) found that 56% of young women have sent or posted a sexually suggestive message, while 37% have had sexually suggestive messages shared with them that were originally meant for someone else. Interestingly, both men and women who do not engage in sexting (i.e., the sending or receiving of sexually explicit text messages, photos, or videos through electronic devices) scored lower on measures of hostility towards women (Perkins, Becker, Tehee, & Mackelprang, 2014). Additionally, reports of non-consensual pornography have also reached media attention with reports of a Canadian man posting sexually explicit images of his ex-girlfriend on the internet after making threats to do so
when the relationship ended (CBCNews, 2014). By extrapolating this preliminary evidence it appears that the problem of non-consensual pornography is both frequent and largely directed towards women.

Unfortunately, non-consensual pornography is not the end of the sexually victimizing behaviours that women must contend with while utilizing technology. Cases where the sexually explicit material being distributed depicts a sexual assault have been researched with less rigor despite the fact that these cases have been attracting media attention for several years. For instance, a case made headlines in 2014 when a Canadian high school student committed suicide after images of her sexual assault were distributed among the perpetrators’ friends (McCormack, 2014) and a similar case garnered media attention in 2012 when an American teenager also committed suicide after images depicting her sexual assault by three male classmates were circulated among her peers (Warren, 2013). Countless other cases have also reached media attention, proving that the filming and later distribution of sexual assaults is a growing phenomenon made possible by the expansion of new technologies. Although there are a few media reports of men being victimized by this form of TFSV, the overwhelming majority of incidents reported by the media feature female victims. Based on this preliminary evidence it appears that the distribution of sexual assault material has become more apparent and possibly increased in recent years, with the majority of cases involving female victims.

Similarly, cases where a carriage service is used to arrange a sexual assault have not yet been as thoroughly documented and studied by researchers. However, the media has reported on several recent incidents, providing a glimpse at this form of TFSV. For instance, a 2010 case made headlines when an American man used the carriage website,
Craigslist to arrange the rape of his former girlfriend (Correll, 2010), an act that would have been impossible only a few decades ago before the development of new technologies. Additionally, although similar reports have been highlighted by the media, no reports have been found where men have been victimized by this form of TFSV. Overall, media evidence such as the above example indicate that the use of carriage services to arrange sexual assaults is a recent phenomenon with very real consequences for the women who are victimized.

Sexual harassment and stalking have also taken renewed forms with the development of technology. These technology-facilitated sexually violent and harassing behaviours have gained slightly more attention from researchers in recent years compared to other forms of TFSV. Available research to date suggests that online sexual harassment and cyber-stalking tend to be strongly directed towards young women across the globe (Barak, 2005; Biber et al., 2002; Finn & Banach, 2000; Morahan-Martin, 2000). Specifically, Griffiths (2000) found that 41% of women in the United Kingdom who regularly use the internet have been sent unsolicited pornographic materials or been harassed or stalked on the Internet. Additionally, while engaging the same online activities women experience more sexual harassment compared to men (Edward & Choi, 2016). In a recent media example following the non-guilty verdict in an online harassment case against two Canadian female activists, women who commented online on the verdict were subject to online sexual harassment, including being the recipients of unwanted sexual images (Daro, 2016). Similarly, Reyns and colleagues (2012) found that 40% of American college student have been the victim of cyber-stalking at some point in their lives, with 60% of cyber-stalking victims typically being women (U.S. National
Violence Against Women Survey, 2000). These early investigations suggest that incidents of online sexual harassment and cyber-stalking are frighteningly common among young women.

The most widespread form of sexual violence and harassment facing women in the technological age, despite minimal amount of empirical research relating to prevalence, may be the use of gender-based hate speech on the internet. The social networking site Facebook recently made headlines in 2013 when speech and images encouraging and making light of violence against women were posted on the website (Carletti, 2013). Facebook groups that rate how “rape-able” female students are continue to surface, while threats of sexual violence (including publicly posting the names and addresses of women who “deserve to be raped”) are a continuing reality in the lives of women on the internet, in particular post-secondary students (Henry & Powell, 2015b). Additionally, the General Social Survey on Victimization reported that 16% of respondents have witnessed hatred or promotion of violence against an identifiable group while on the internet (Statistics Canada, 2011), with 16% of these incidents being directed towards women. Furthermore, individuals posting online under female names received 25 times more sexually threatening and hateful comments than individuals writing under male names (Meyer & Cukier, 2006). Dr. Martin from the University of Sydney made an interesting point in a press release when she reflected on how online message boards treat women stating,

It appears our experience of online conversations is reflecting our gendered experiences of the world at large. Just like in face-to-face public conversations, like meetings or forums, women are being put off by male voices being
adversarial, dismissive and sometimes abusive (as cited in Osborne-Crowley, 2015, para. 8)

Based on this evidence, the extent of the problem may make it almost impossible for women to access the internet without encountering some form of gender-based hate speech.

The last and perhaps most sparsely researched form of TFSV is virtual rape. The simulated sexual assault of a person’s digital representation of themselves is something that has only been made possible recently with the development of virtual reality games. In fact, the earliest report of virtual rape only occurred in 1993 when the New York based newspaper, The Village Voice reported on a virtual rape that took place in the simulated world of LambdaMOO (Dibbell, 1998). Since this incident, reports of virtual rape continue to capture media attention, occurring in the image-based virtual worlds of Second Life, World of Warcraft, Grand Theft Auto V, DayZ, and many more (e.g., Boyd, 2009; Grandoni, 2014). This is not surprising given the popularity of interactive virtual worlds. With over 11 million World of Warcraft members and 14 million Second Life users (Warren & Palmer, 2010), reports of virtual rape are becoming more and more frequent, proving that even in a virtual world, women are not free from sexual violence and harassment.

**The impact of technology-facilitated sexual violence.** Similar to the impact that nonsexual CB is thought to have on victims, the impact that TFSV has on victims tends to be overlooked or underestimated, with policy makers and helping professionals undervaluing the link between social and intrapsychical harms, and embodied harms (Henry & Powell, 2015b). In other words, TFSV is presumed to have a diminished
impact on victims due to the fact that it takes place in the virtual world and is therefore not ‘real’. Contrary to this belief, individuals who experience harms in the virtual world are often met with real effects. In fact, TFSV presents unique concerns for victims that may actually result in a greater potential for harm than sexual violence perpetrated in the ‘real’ world.

Before the proliferation of technology, sexual violence was limited to instances of direct perpetrator-victim contact but in this technological age victims are more accessible than ever and sometimes all that is needed to sexually victimize a woman is the click of a button. Thus, in our modern age women are more at risk for sexual violence than ever before. In line with this, Yar (2005) noted several unique factors of technology that give it greater potential to harm victims than crimes committed in the offline world. Firstly, the multiple connectivity permitted by the cyber environment allows a single perpetrator to connect with numerous other offenders. Secondly, the breakdown of spatial temporal barriers allows perpetrators to target victims with ease and speed across a vast geographical and transnational landscape. Additionally, the anonymity and malleability of online identities makes deceptions in the online world easier and the identification and regulation of perpetrators more difficult. The anonymity of the internet also makes it difficult if not possible for victims to take countermeasures against threats made online (David-Ferdon & Feldman Hertz, 2007), while also disinhibiting perpetrators and dehumanizing victims. Additionally, the anonymity of the online world has been found to increase incivility and immoral behaviour (Singer & Ashman, 2009). It is these factors that allow sexual violence and harassment committed in the cyber environment to have an impact on victims above that of traditional forms of sexual violence and harassment.
Despite the abundance of research addressing the impact that nonsexual CB has on victims, only a small number of empirical studies have been conducted addressing the impact the TFSV has on victims, particularly university women. The little research that has been conducted on how TFSV impacts victims has focused on non-consensual pornography, online sexual harassment, and cyber stalking. The early investigative research indicates that TFSV can have both significant and long-lasting consequences for victims. For instance, Powell (2010) argues that the distribution of an intimate image even when the original image was taken with consent is a violation of an individual’s sexual autonomy which results in humiliation, intimidation, and harassment. In line with this assessment, the Cyber Civil Rights Initiative (2013) reported that over 93% of non-consensual pornography victims experience severe emotional distress and anxiety and 47% of victims contemplated suicide after their sexually explicit images were distributed without their consent. It is also not uncommon for victims to experience high levels of shame whenever they view the image or imagine others viewing the image (Citron & Franks, 2014). Furthermore, when an Ontario man distributed sexually explicit images of his ex-girlfriend on the internet it was reported that she was “so traumatized…that she had to be taken to a crisis centre for help. She had trouble eating and sleeping for days on end and feared her reputation had been irreparably damaged” (McQuigge, 2016). Along with suffering psychological damage, victims of non-consensual pornography also report damages that affect their personal and professional lives. For instance, schools have been known to terminate teachers whose sexually explicit images appeared on the internet, regardless of whether the image was posted with their consent. Furthermore, many victims of non-consensual pornography fear engaging in everyday activities out of
concerns for safety and feelings of embarrassment (Millner, 2013). Similar effects have also been documented for individuals whose sexual assault images have been distributed. For instance, Powell (2010) emphasizes the continued assault on a victim when the original physical assault is captured and later distributed. As an example, when images of a young women’s sexual assault were distributed among peers at her school she endured over a year of bullying before eventually committing suicide (McCormach, 2014).

When TFSV occurs in the form of online sexual harassment or cyber stalking, the cost to victims is just as great if not more so than when these behaviours occur offline. Online sexual harassment and coercion have been associated with higher levels of anger, alcohol and other drug use, as well as a poor relationship with parents (Ybarra et al., 2007). It is also not uncommon for victims to experience anorexia nervosa and depression (Newsweek, 2008), as well as anxiety, difficulty thinking positive thoughts, and an inability to focus on tasks (Nobles, Reyns, Fox, & Fisher, 2014). With specific reference to cyber stalking, victims are known to experience a sense of fear and intimidation as well as stress and anxiety (Hazelwood & Koon-Magnin, 2013).

Although gender-based hate speech on the internet does not necessarily involve a direct threat to the victim, threats to a group can also significantly impact those who are members of that group. For instance, the 2014 West Coast LEAF report on cyber-misogyny noted that although gender-based speech is often dismissed as “harmless locker room-talk” with perpetrators who are simply “juvenile pranksters” and victims who are “overly sensitive complainers,” the underlying message that women receive from gender-based hate speech is that they must either tolerate the malice or withdrawal from the internet all together. Through Crisis Reaction theory and Harmful Speech theory Leets
(2002) presented empirical evidence that hate speech is harmful, produces trauma, and gives similar reactions to other broadly recognized crimes, including those taking place in the offline world. It is also possible for victims of hate speech to experience self-blame, fear, intimidation, and internalize the negative evaluations present in hateful content (Boeckmann & Turpin-Petrosino, 2002).

Although virtual rape does not directly involve a physical assault the impact the experience has on victims can be both physical and emotional (Strikwerda, 2014). During the attack, an individual whose avatar is being assaulted can experience shock, distrust and a lack of confidence in using related technologies (MacKinnon 1997). One victim reported experiencing “posttraumatic tears” following the virtual rape (Dibbell, 1998), indicating both a severe and potentially long-term consequence.

The available evidence regarding the impact TFSV has on victims indicates that TFSV may result in comparable harms to nonsexual CB as well as experiences of violence occurring in the offline world. Specifically, victims of TFSV appear to experience symptoms of post-traumatic stress, depression, fear and anxiety, shame and self-blame, interpersonal and career development problems, internalized negative beliefs, and a distrust of technology. Although this evidence provides a starting point for empirical investigation, more evidence is needed to determine the exact forms of TFSV that are occurring and their differential impact on victims, particularly university women.

Factors related to the impact of technology facilitated sexual violence.

Perpetrator-victim relationship. A variable widely believed to affect the health outcome following a victimizing experience is the victim’s relationship to the perpetrator. The research on this issue however remains considerably divided. Although there is the
belief among some researchers and clinicians that those who are victimized by someone they know are at an increased risk for mental health concerns, the empirical evidence to support this notion is lacking. With regards to sexual victimization, some researchers have found that victims who know their perpetrator experience less trauma than do victims who do not know their perpetrator (Bownes, O’Gorman, & Sayers, 1991; Ellis, Atkeson, & Calhoun, 1981). However, others have found the opposite patterns of results (Culbertson & Dehle, 2001; DeMaris & Kaukinen, 2005; Temple, Weston, Rodriguez, & Marshall, 2007) and others report no relationship between trauma symptoms and the victim-perpetrator relationship (Koss, Dinero, Sibel, & Cox, 1988). With regards to CB victimization, the literature is equally divided as the literature on sexual victimization. Specifically, some researchers have reported that individuals who experience CB from someone they do not know report considerably more fear than individuals who know their perpetrator (Lindsay & Krysik, 2012), while others hold to the theoretical notion that CB from a known perpetrator results in more fear due to the increased likelihood that the victimization could transfer into the offline world.

With regards to prevalence, research on sexual victimization occurring offline strongly indicates that women are more likely to be victimized by someone they know compared to a stranger. For instance, the US Bureau of Justice (2003) stated that nearly 75% of rapes reported to law enforcement in the United States were committed by someone the victim knew. The prevalence of different victim-perpetrator relationships in CB experiences appears to be slightly more convoluted in the literature. The confusion is a result of the fact that approximately 21% of undergraduate students who experience CB report that there was more than one type of perpetrator involved in the incident (Lindsay
& Krysik, 2012). However, in a sample of 342 undergraduate students at universities in the United States, 32% of individuals who reported experiencing CB indicated that the perpetrator was someone they knew, 20% indicated that the perpetrator was their significant other, and 16% indicated that the perpetrator was someone they did not know (Lindsay & Krysik, 2012).

**Disclosing and reporting.** Another factor that is viewed as a critical and valuable step in recovery is disclosure of unwanted experiences. Whereas an absence or even delay in disclosure is thought to negatively impact the recovery process (Ullman, Foynes, & Tang, 2010). The rationale behind this is that disclosing negative experiences will allow individuals to unburden their minds of negative thoughts, permit them to make sense of negative events, allow them to better regulate their emotions, and strengthen their connection to the social world, all of which can result in better health and psychological functioning. These views have been validated in the literature. Specifically, disclosure has been associated with lower levels of depression (BromanFulks et al., 2007), social anxiety (Brown & Heimberg, 2001), negative mood, psychological distress, and traumatic stress (Kearns, Edwards, Calhoun, Gidycz, 2010) as well as increased grade point average (Pennebaker & Francis, 1996), improvements in immune functioning (Pennebaker, Kiecolt, & Glaser, 1988), and decreases in absenteeism rates from work (Fancis & Pennebaker, 1992). However, disclosure does not always result in positive outcomes, in fact, negative disclosure reactions can have noticeable negative impacts on victims. For instance, negative reactions to the disclosure of sexual assault (i.e., being blamed for the assault, being stigmatized, controlling or distracting reactions, and neglecting the victim’s needs and being overly upset by the disclosure) (Ullman, 2000).
have been linked to greater PTSD symptomology, self-blame, and maladaptive coping strategies (Littleton & Radecki Breikopf, 2006; Ullman & Filipas, 2001b; Ullman, Townsend, Filipas, & Starzynski, 2007).

Investigations into the reporting and disclosing practices of sexual assault survivors indicate that these behaviours are consistently low (Bachman, 1998; Koss, Gidycz, & Wisnieski, 1987). In fact, only one-half to two-thirds of sexual assault victims eventually tell someone about their experience and according to the 1999 National Crime Victimization Survey fewer than 28% of sexual assaults are reported to police. However, reporting and disclosing of sexual assault experiences is not always clear-cut. In fact, there are several factors that have been found in impact the likelihood and helpfulness of disclosure. With regard to the likelihood of disclosure, stereotypical assaults (e.g., unknown perpetrators, use of physical force, victim injury and victim resistance) are associated with more disclosure to social support services (Ullman & Filipas, 2001a). Furthermore, women who experience multiple traumas are less likely to disclosure their experiences (Hlavka, Kruttschnitt, & Carbone-López, 2007). Additionally, women with more severe psychological symptoms tend to receive more negative reactions form social support services (Ullman & Filipas, 2010b). In terms of the helpfulness of disclosure, increased age, length of time since sexual victimization, perceived control over recovery, and high social/emotional support are all positively related to the helpfulness of disclosure experience for women who disclosure to mental health professionals. While, perpetrator anonymity, high injury and resistance during assault, PTSD symptoms, and negative disclosure reactions (e.g., being treated differently and being controlled or
blamed) are all negatively related to the helpfulness of disclosure (Starzynski & Ullman, 2014).

Similarly, relatively few victims of CB report these incidents to the police. In Statistics Canada’s *Self-reported Internet Victimization in Canada 2009* report, only 7% of adults and 14% of children indicated that they reported their CB experience to the police.

Thus, despite the mounting empirical evidence indicating the benefits of disclosing and reporting negative experiences, victims of both sexual victimization and nonsexual CB victimization have relatively low levels of reporting and disclosing.

**Theoretical Understanding of Violence Against Women.**

It was not until the late 1960s and early 1970s that violence against women began being viewed as a serious social problem in need of theoretical explanations (Renzetti, Edlseon, Bergen, 2001). In particular, this social problem disproportionately affects women aged 15 to 24 (Carter-Snell, 2007; Fisher, Cullen, & Turner, 2000; Stermac, Del Bove, Brazeau, & Bainbridge, 2006). In settings such as university campuses where there are high proportions of young women, sexual victimization has been occurring at alarming rates (see Schwartz & DeKeseredy, 1997; Tremblay et al., 2008). Well-cited surveys of female university students in Canada and the United States indicate that 3 to 45% of women experienced some form of sexual victimization while they were students (Fisher & Sloan, 2007; Ontario Women’s Directorate, 2013). In a study involving 293 female undergraduate students on Canadian university campuses, researchers found that over 32% of women reported experiencing sexual victimization (DeKeseredy & Schwartz, 1998). Additionally, the most serious negative experiences reported by over
10% of Canadian university students involved incidents of a sexual nature (Tremblay et al., 2008). Not only is the problem of sexual victimization shockingly prevalent in the lives of female university students but the effects of these behaviours can be both long-lasting and severe. Although the effects of sexual victimization are serious for all women, the experiences are particularly harmful for young women (Petrak, 2002). Individuals who have been sexually victimized often experience posttraumatic stress disorder, depression, acute fear and anxiety, as well as generalized anxiety (Campbell, Dworkin, & Cabral, 2009; Jordan, Campbell, & Follingstad, 2010). Suicide attempts are also not uncommon for victims of sexual violence (Foa & Rothbaum, 1998). Victims are also known to suffer from low self-esteem and social adjustment difficulties (Resick, 1993). For some individuals these psychological symptoms can persist for months or even years following the sexually victimizing experience (Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992).

One theoretical explanation in the literature that attempts to explain this phenomenon is feminist theory. This theory focuses on the concept of male-dominated or patriarchal culture and the societal structures and organizations that help to preserve it (Dobash & Dobash, 1979; Renzetti, Edlseon, Bergen, 2001). Here patriarchy is defined as “a sexual system of power in which the male possesses superior power and economic privilege” (Eisenstein, 1980, p. 16). Feminist explanations of violence against women hold that the main contributions to violence against women are our historically male-dominated social structure and socialization that teaches men and women to follow gender-specific roles (Pagelow, 1984; Yllö, 1984). For instance, men are socialized to be active and dominant whereas women are socialized to be passive and submissive.
(Shannon, 2004). As a result of this socialization men learn to devalue women and their subordinate position in the social structure. In order to uphold this patriarchal societal structure, violence is used to establish and maintain power over women (Renzetti, Edliseon, & Bergen, 2001). The view of violence as a means of control over women has been supported in cross-cultural studies, which have reported less violence in egalitarian societies (Levinson, 1989). As a result of feminist theory’s explanation of violence against women, this theory holds that sexual violence against women is not committed in an attempt to satisfy sexual urges but is committed in an attempt to exercise control and dominance over the victim (Ellis, 1989). In our current technological age, information and communication technologies are simply another tool of the patriarchal society being used to sexualize, exploit, and victimize women in order to retain control over them.

Thus, TFSV cannot be attributed to the development of new technologies themselves, rather the development of TFSV is the product of producing technologies in a society with gender inequality and attitudes that permit the systematic abuse of women.

**The Present Study**

Current literature has defined TFSV in a variety of ways, indicating that this form of sexual aggression can take many forms, from online sexual harassment to the non-consensual distribution of another person’s intimate images. Furthermore, although empirical information on the prevalence of TFSV is limited, evidence suggests that TFSV is a reality in the lives of women, particularly university-aged women who are spending increasing amounts of time online (Ybarra, Espelage, & Mitchell, 2007). Additionally, TFSV experiences have been linked to serious consequences for those who are victimized, including suicide and suicidal ideation, anxiety, depression, fear, as well as
changes in career trajectory. Although research has begun investigating TFSV experiences among women in general, less is known about these experiences among university women despite the vast research attention that has been given to nonsexual cyber-bullying among university populations. Furthermore, no research has been conducted investigated the full range of TFSV experiences consecutively, choosing instead to focus on specific forms of TFSV.

**Purpose.** The purpose of this research is to expand on what is already known about TFSV with a focus on university populations by investigating characteristics of the TFSV behaviours that are occurring and their differential association with the psychological functioning of university women. In particular, university campuses can be environments where young women are targeted for victimization. The growing emphasis on the use of technology for learning makes TFSV behaviours occurring against university women a focus of research on violence against women. Empirical research is necessary in order to develop policies and legislative initiatives surrounding this emerging public health concern.

In light of the expanding nature of technology and society’s continued allowance of the victimization of women, this research investigated four separate research questions. First, how frequently do different forms of TFSV occur among university women? Second, do experiences of TFSV predict negative symptomology? Third, do different victim-perpetrator relationships result in different levels of negative symptomology? Lastly, what is the nature of the relationship between TFSV experiences, negative symptomology, and disclosure practices? In order to answer these questions a
survey of university women was conducted to determine the frequency, nature and outcome of TFSV experienced by undergraduate students.
Chapter Two: Method

Participants

Participants were 103 women, age 18-35 years old ($M= 21.00, SD= 2.70$) who were currently or previously enrolled in an undergraduate degree program (See Table 1). Due to attrition (i.e., participants’ not completing the survey in its entirety) the final sample consisted of 80 women. The majority of participants identified themselves as White/Caucasian ($N= 44; 43\%$), followed by South Asian/Chinese ($N= 26; 25\%$), East Asian/Middle Eastern ($N= 17; 16\%$), Other ($N=10; 10\%$), and Hispanic/Latino ($N=5; 5\%$). Furthermore, $40\%$ ($N= 41$) of participants identified themselves as visible or racialized minorities, $1\%$ ($N= 1$) identified themselves as an aboriginal person, and $9\%$ ($N= 9$) identified themselves as having a disability. The majority of participants identified themselves as heterosexual ($N= 80; 78\%$), followed by bisexual ($N= 11; 11\%$), homosexual ($N= 5; 5\%$), asexual ($N=3; 3\%$), pansexual ($N= 2; 2\%$), and other ($N=1; 1\%$).

In terms of relationship status, the majority of participants identified themselves as being single ($N= 46; 45\%$), followed by in a relationship or relationships ($N=35; 34\%$), dating ($N=17; 16\%$), and married or common law ($N=4; 4\%$). With regard to living situation, the majority of participants reported that they lived off-campus with a roommate or roommates ($N= 46; 45\%$) followed by off-campus with one or more parents ($N= 43; 42\%$), off-campus alone ($N= 8; 8\%$), and university residence ($N= 4; 4\%$). Participants were enrolled in the programs/faculties of enrollment included arts and science, life sciences, social sciences, humanities, engineering, and others, with $95\%$ of participants being enrolled in full-time studies.
Materials

Demographic characteristics. Participants answered questions regarding their age, relationship status, sexual orientation, ethno-cultural background, disability status, living situation, and educational background (See Appendix A).

Technology-facilitated sexual violence experiences. In order to determine the types of TFSV that are being experienced by university women, participants answered questions designed by the researcher and based on Henry and Powell’s (2014) categories of TFSV, bolstered by the categories of non-consensual behaviours outlined by the inquiry into sexting (See Appendix B). Informed by these categories, participants were asked about the frequency with which they have experienced each form of TFSV (e.g., in the last year, how often has someone refused to delete a sexual explicit image of you when asked to do so?) Similar to previous research conducted by Thompson & Morrison (2013), responses are based on a 6-point Likert scale (0 = never and 5 = every day or almost every day). Data based on these responses was then treated as interval data, which allowed for the summing of responses and the formation of an overall TFSV experience score. In focusing on individual categories of TFSV this research gained a range of information while allowing for comparisons across different forms of TFSV. Furthermore, this also allowed for the determination of whether certain forms of TFSV are more prevalent than others and whether certain forms of TFSV result in greater and/or different patterns of psychological impact.

Technology-facilitated sexual violence experience severity rating. In order to gain data on the self-reported impact of TFSV, participants were also asked to rank the severity of each of their TFSV experiences (i.e., how severe was this experience for
you?) (See Appendix B). This ranking was based on a 5-point Likert scale (1 = not at all severe and 5 = extremely severe). This allowed for comparisons of severity across different forms of TFSV as well as comparisons of self-reported severity and the severity indicated by valid and reliable distress scales.

**Victim-perpetrator relationship.** In order to compare to current research indicating that one-half of victims do not know their perpetrator (Kowalski & Limber, 2007; Ybarra, Mitchell, Wolak, & Finkelhor, 2006), data was collected on whether or not the victim was familiar with the perpetrator(s) (See Appendix B). This item (i.e., with regard to your most severe experience of TFSV, did you know the identity of your perpetrator(s)?) utilized a dichotomous response format where participants selected either ‘yes’ or ‘no’. Participants who endorsed the item were asked a follow-up question (i.e., please indicate your relationship to the perpetrator). Here the response format was multiple choice, with responses based on previous studies with insight on the perpetrator-victim relationship (e.g., Stermac et al., 2015). These items provided information on the characteristics of the victim-perpetrator relationship and allowed for the determination of whether the victim-perpetrator relationship is related to the psychological impact that TFSV has on victims.

**Disclosure and reporting.** Participants were also asked questions regarding their disclosure and reporting behaviour following the most severe incident of TFSV (e.g., with regard to your most severe experience of TFSV, did you disclose the incident to anyone?) (See Appendix B). A multiple choice response format was used where participants were asked to check all that apply. Response options were informed by previous research with insights into who female university students are likely to
disclosure their unwanted sexual experiences to (e.g., Stermac, et al., 2015). Participants who endorse this item were then be asked a follow-up question (i.e., how helpful was this disclosure to you?). Here the response format was a 5-point Likert scale (1 = not at all useful and 5 = very useful). These items provided information regarding the disclosing and reporting behaviours of victims of TFSV and also allowed for the determination of whether disclosing and reporting are related to the psychological impact that TFSV has on victims.

**Negative symptomology associated with technology-facilitated sexual violence.** In order to assess distress reactions, participants completed the Depression, Anxiety and Stress Scale (DASS 21; Henry & Crawford, 2005) based on how they felt in the month following their TFSV experience (See Appendix C). Participants ranked their endorsement of items based on a 4-point Likert scale (0 = did not apply to me at all and 3 = applied to me very much or most of the time). In order to assess participants’ symptoms of posttraumatic stress, participants completed the PTSD Check List (PCL; Weather, Litz, Herman, Huska, & Keane, 1993) based on how they felt in the year following their TFSV experience (See Appendix D). The PCL is a 17-item scale where participants are instructed to rank their endorsement of posttraumatic symptoms based on a 5-point Likert scale (1 = not at all and 5 = extremely). These scales allowed for valid and reliable measures of participants psychological functioning.

**Engagement with technology.** In order to assess participant’s changes in attitude and engagement with technology following their most severe TFSV experience, they were also asked a number of questions on the subject (e.g., I experience discomfort or anxiety while using technology) (See Appendix E). Items were based on previous
literature on CB (See Olweus, 1993) and campus sexual victimization (See Stermac et al., 2015). Here the response format was a 4-point Likert scale (1 = strongly disagree and 4 = strongly agree).

**Procedure**

**Study design.** In order to investigate the characteristics and impact of TFSV on female university students, a cross-sectional research design was employed in which volunteer participants completed an online survey. The survey was comprised of a battery of self-report measures (See Appendix A) created using Survey Wizard, which is a secure web-based application designed for constructing and managing Internet surveys. Survey Wizard ensures that data is secure and encrypted and allows easy exporting for statistical analysis. By utilizing a web-based design for data collection the study had the unique opportunity to reach a large number of potential participants while also maintaining participant anonymity as they respond to sensitive questions.

When participants followed an advertised link to the survey, the initial page consisted of the necessary information for informed consent. By clicking the “please continue” button at the bottom of the webpage, participate acknowledged their consent to participate in the study and that all of their questions regarding the study had been answered to their satisfaction. This method of providing informed consent is a standard practice for online studies. Once participants had provided their informed consent they entered the questionnaire webpage, which consisted of a variety of questions and surveys designed to assess the characteristics TFSV experiences as well as participant’s psychological functioning. At the culmination of the survey, participants were thanked for their participation and directed to a resource list. This resource information contained
a list of local, national, and international support resources for any individual experiencing distress.

**Participant recruitment.** Data collection began following approval from the Social Sciences, Humanities and Education Research Ethics Board at the University of Toronto. Participant recruitment was carried out through permitted institutional electronic and non-electronic postings. These strategies have been successfully used in similar studies in Canadian universities. Advertisements for the study included a link to the survey, which was held on a secure University of Toronto server. Electronic advertisements were placed on social networking sites (e.g., Facebook, Craigslist, Kijiji), in addition to University of Toronto news and events posting websites (e.g., www.my.utoronto.ca, www.psa.psych.utoronto.ca, www.life.utoronto.ca). Non-electronic advertisements were also distributed to various public bulletin boards in areas within and surrounding the university, including libraries and community centres. In addition to the description of the study and the study link, the electronic and non-electronic advertisements also included the principal investigator’s contact information, where participants were able to ask questions regarding the study prior to their decision to participate.

**Data analysis.** Prior to investigating the study’s research questions, overall TFSV scores were computed for each participant, which was accomplished by summing each participants scores for items measuring non-consensual pornography, sexual assault image distribution, the use of a carriage service to arrange a sexual assault, online sexual harassment, online stalking, online gender-based hate speech, and virtual rape. Following this, depression scores were computed for each participant, which was accomplished by
summed all depression related items on the *DASS-21* and multiplying this score by two. The same process was then completed for the anxiety and stress related items on the scale. Lastly, PTSD symptom scores were computed for each participant, which was accomplished by summing all item scores on the *PCL*. Cross-sectional data were then analyzed in a variety of ways, utilizing the Statistical Package for the Social Sciences (SPSS).

First, in order to investigate how frequently different forms of TFSV occur among university women univariate descriptive statistics were computed alongside other variables of interest. Second, in order to investigate whether experiences of TFSV predict negative symptomology, regression analyses were performed between the predictor variable of overall TFSV experience score and the criterion variables of *DASS-21* depression, anxiety, and stress scores and *PCL* scores. Furthermore, in order to also investigate the differential impact of certain forms of TFSV (e.g., non-consensual pornography) on university women’s psychological functioning a multiple regression analysis was also performed for each separate psychological symptomology measure. The regression coefficients for each analysis were then compared against each other to determine which form of TFSV best predicts each measure of psychological symptomology. Third, in order to determine if different victim-perpetrator relationships result in different levels of negative symptomology univariate analyses of variance were performed. Specifically, the analyses examined which type of victim-perpetrator relationship (known perpetrator vs. unknown perpetrator) was related to greater psychological impact as defined by *DASS* and *PCL* scores. Fourth, in order to investigate the nature of the relationship between TFSV experiences, negative symptomology, and
disclosure practices two separate analyses were performed. Specifically, a hierarchical multiple regression analysis as well as a path analysis were conducted. To start, the hierarchical multiple regression tested for a moderation between the variables where negative disclosure experience were thought to moderate the relationship between TFSV and negative symptomology (i.e., depression, anxiety, stress, and posttraumatic symptoms). Then, the path analysis tested for a mediation analysis between the variables where TFSV experiences would lead to increases in negative symptomology (i.e., depression, anxiety, stress, and posttraumatic symptoms) through unhelpful disclosure experiences.
Chapter Three: Results

Results

Univariate descriptive statistics. Univariate descriptive statistics were computed for variables of interest. The means and standard deviations for each form of TFSV are separated in Table 2, with means computed based on a 6-point Likert scale (0 = *never* and 5 = *every day or almost every day*). With regards to the first research question the top three most common TFSV experience reported by this sample of university women were online gender-based hate speech with 58% (N = 46) of the sample reporting experiencing this at least once in the last year, followed by online sexual harassment (N = 42; 53%), and online stalking (N = 41; 52%). Some participants also reported experiences including and non-consensual pornography (N = 16; 20%), sexual assault image distribution (N = 8; 10%), the use of a carriage service to arrange or attempt to arrange their sexual assault (N = 6; 8%), and lastly virtual rape (N = 6; 7%). In terms of other non-consensual behaviours, 26% (N = 21) of participants noted that someone refused to delete a sexually explicit image of them when asked to do so, 21% (N = 17) of participants noted that someone had used a sexually explicit image of them for a purpose other than that consented by them, 17% (N = 14) of participants reported that someone used a sexual explicit image of them to degrade or harass them, and 13% (N = 10) of participants noted that someone threatened to ‘do something’ with a sexually explicit image of them such as post it to a particular website.

Self-report severity of TFSV experiences (i.e., 1 = *not at all severe* and 5 = *extremely severe*) indicated that virtual rape was rated the most severe (N = 8, M = 2.00, SD = 1.29), followed by sexual assault image distribution (N = 12, M = 1.70, SD = 1.16),
non-consensual pornography ($N=23$, $M=1.55$, $SD=1.00$), online stalking ($N=50$, $M=1.20$, $SD=1.02$), online gender-based hate speech ($N=55$, $M=1.19$, $SD=0.83$), online sexual harassment ($N=53$, $M=1.16$, $SD=.95$), and the use of a carriage service to arrange sexual assault ($N=10$, $M=1.00$, $SD=1.07$).

With regards to psychological impacts the average DASS depression score for participants ($M=10.93$, $SD=12.80$) was in the mild range, the average DASS anxiety score ($M=9.48$, $SD=12.12$) was in the mild range, the average DASS stress score ($M=12.28$, $SD=12.53$) was in the normal range. The average PCL score ($M=36.67$, $SD=20.87$) was above the suggested cut-off for clinical relevance among general population samples and in civilian primary care settings.

Participants’ attitudes towards technology following their TFSV experience were as follows: Fifty percent ($N=40$) of participants agreed or strongly agreed with the following statement “I experienced discomfort or anxiety while using technology”. Thirty-six percent ($N=29$) of participants agreed or strongly agreed with the following statement “my attitude towards the use of technology in school became more negative”. Thirty-three percent ($N=26$) of participants agreed or strongly agreed with the following statement “I felt less safe or comfortable using technology on campus or in class”. Finally, twenty-four percent ($N=19$) of participants agreed or strongly agreed with the following statement “my overall use of technology decreased”.

Perpetrator characteristics (See Table 3) were also variable. Fifty-nine percent ($N=53$) of participants reported that they did not know the identity of their perpetrator. Additionally, 27% ($N=24$) of participants indicated that there were multiple perpetrators involved in their most severe TFSV experience, 48% ($N=43$) indicated that there was a
single perpetrator involved, and 25% ($N = 23$) did not know. Furthermore, among the participants who knew their perpetrator all reported that the perpetrator(s) were male, aside from one incident were a participant reported both a male and female perpetrator. Lastly, of those who knew the identity of their perpetrator 14 participants indicated that it was an acquaintance, 9 participants indicated that it was a romantic partner, 9 indicated that the perpetrator was a friend, 6 reported that the perpetrator was a school-mate, 2 stated that the perpetrator was a co-worker, and 8 stated that they had another relationship to the perpetrator.

With regards to disclosure and reporting (See Table 4), the majority of the sample (57%; $N = 51$) reported that they did not disclose their most severe TFSV experience to anyone. Among those that did disclose their experience, 3% ($N = 3$) stated that it was “Not at all helpful”, 26% ($N = 23$) stated that it was “Slightly helpful”, 20% ($N = 18$) stated that it was “Somewhat help”, 26% ($N = 23$) stated that it was “Moderately helpful”, and 26% ($N = 23$) stated that it was “Very helpful”. With regards to who was disclosed to, 32 participants reported that they disclosed the TFSV experience to a friend, 14 participants reported that they disclosed the incident to a roommate, 12 participants reported that they disclosed the incident to a romantic partner, 8 participants reported that they disclosed to a parent/guardian, 3 participants reported that they disclosed to a counsellor/therapist, 2 disclosed to a non-parental family member, 1 participant reported the incident to local police, and 1 participant told their resident advisor/don.

**Regression analyses.** The extent to which overall TFSV experiences (score created from summing participants’ individual TFSV experience scores) contributed to the prediction of DASS depression, anxiety, and stress scores as well as PCL scores was
examined. To begin, an examination of correlations among study variables revealed that as the number of TFSV victimization experiences increases there is an increase in negative symptomologies (See Table 5). Furthermore, TFSV experiences predicted 26% of the variance in depression ratings ($M= 10.93, SD= 12.80$), $R^2 = .26$, $F(1,78) = 26.83$, $p<.001$, 33% of the variance in anxiety ratings ($M= 9.48, SD= 12.12$), $R^2 = .33$, $F(1,78) = 38.22$, $p<.001$, 30% of the variance in stress ratings ($M= 12.85, SD= 12.53$), $R^2 = .30$, $F(1,78) = 33.20$, $p<.001$, and 33% of the variance in PTSD symptom ratings ($M= 36.67$, $SD= 20.87$), $R^2 = .33$, $F(1,76) = 37.94$, $p<.001$. Thus, in terms of the second research question, TFSV experiences do predict negative symptomology.

In order to further investigate the first research question, the extent to which individual forms of TFSV contributed to the prediction of DASS depression, anxiety, and stress scores as well as PCL scores was also examined.

Together TFSV experiences predicted 35% of the variance in depression ratings ($M= 10.93, SD= 12.80$), $R^2 = .35$, $F(7,72) = 5.61$, $p<.001$. Approximately 12% of the variance in depression scores is uniquely accounted for by experiences of online stalking $sr^2 = .12$, $t(72)= 3.60$, $p=.001$. Whereas, experiences of non-consensual pornography $sr^2 = .01$, $t(72)=1.00$, $ns$, sexual assault image distributed $sr^2 = .01$, $t(72)=1.14$, $ns$, the use of a carriage service used to arrange or attempt to arrange your sexual assault $sr^2 = .01$, $t(72)= -.97$, $ns$, online sexual harassment $sr^2 = .00$, $t(72)= .23$, $ns$, online gender-based hate speech $sr^2 = .00$, $t(72)= .42$, $ns$, and virtual rape $sr^2 = .00$, $t(72)= -.74$, $ns$ did not significantly independently predict any variance in depression rating. Thus, online stalking was the only independently significant predictor of depressive symptoms,
suggesting that experiences of online stalking are better predictive of depression symptomology compared to other forms of TFSV.

TFSV experiences predicted 37% of the variance in anxiety ratings ($M= 9.48, SD= 12.12$), $R^2 = .37$, $F(7,72)= 6.06$, $p<.001$. Approximately 5% of the variance in anxiety scores is uniquely accounted for by experiences of online stalking $sr^2 = .05$, $t(72)= 2.28$, $p<.05$. Whereas, non-consensual pornography $sr^2 = .01$, $t(72)=1.19$, $ns$, sexual assault image distributed $sr^2 = .00$, $t(72)=.38$, $ns$, the use of a carriage service used to arrange or attempt to arrange your sexual assault $sr^2 = .01$, $t(72)= -.97$, $ns$, online sexual harassment $sr^2 = .01$, $t(72)= 1.02$, $ns$, online gender-based hate speech $sr^2 = .00$, $t(72)= .45$, $ns$, virtual rape $sr^2 = .00$, $t(72)= .55$, $ns$ did not independently significantly predict variance in anxiety ratings. Thus, online stalking was the only independently significant predictor of anxiety symptoms, suggesting that experiences of online stalking are better predictive of anxiety difficulties compared to other forms of TFSV.

TFSV experiences predicted 34% of the variance in stress ratings ($M= 12.85, SD= 12.53$), $R^2 = .34$, $F(7,72)= 5.29$, $p<.001$. Approximately 4% of the variance in stress scores is uniquely accounted for by experiences of online stalking $sr^2 = .04$, $t(72)= 2.18$, $p<.05$. Whereas, non-consensual pornography $sr^2 = .01$, $t(72)=.81$, $ns$, sexual assault image distributed $sr^2 = .00$, $t(72)=.72$, $ns$, the use of a carriage service used to arrange or attempt to arrange your sexual assault $sr^2 = .00$, $t(72)= -.54$, $ns$, online sexual harassment $sr^2 = .01$, $t(72)= .78$, $ns$, online gender-based hate speech $sr^2 = .02$, $t(72)= 1.50$, $ns$, and virtual rape $sr^2 = .00$, $t(72)= -.45$, $ns$ did not significantly uniquely account for variance in stress ratings. Thus, online stalking was the only independently significant predictor of
stress symptoms, suggesting that experiences of online stalking better predict stress symptomology compared to other forms of TFSV.

TFSV experiences predicted 42% of the variance in PTSD ratings ($M=36.67$, $SD=20.87$), $R^2=.42$, $F(7,70)=7.08$, $p<.001$. Approximately 7% of the variance in PTSD scores is uniquely accounted for by experiences of online stalking $sr^2=.07$, $t(70)=2.80$, $p<.05$, while non-consensual pornography uniquely accounted for 4% of the variance in PTSD scores $sr^2=.04$, $t(70)=2.07$, $p<.05$. In contrast, sexual assault image distributed $sr^2=.00$, $t(70)=-.32$, $ns$, the use of a carriage service used to arrange or attempt to arrange your sexual assault $sr^2=.01$, $t(70)=-1.23$, $ns$, online sexual harassment $sr^2=.01$, $t(70)=.96$, $ns$, online gender-based hate speech $sr^2=.00$, $t(70)=.55$, $ns$, and virtual rape $sr^2=.00$, $t(70)=.38$, $ns$ did not significantly uniquely predict variance in posttraumatic stress ratings. Thus, online stalking and non-consensual pornography were the only independently significant predictors of PTSD symptoms, suggesting that experiences of online stalking and non-consensual pornography better predict posttraumatic stress symptomology compared to other forms of TFSV.

Overall, the lack of independently significantly predictors of psychological functioning compared to their significant combined predictive power would suggest that it is the combined effect of multiple victimizations that predicts negative symptomology. However, it should be noted that while online stalking was the best independent predictor of all negative symptomology ratings, it also had one of the largest sample sizes. Thus, the lack of other significantly independent predictors may be the result of a lack of power and not their true relationship to victim’s functioning.
Independent-groups t-test. In order to investigate the characteristics of the victim-perpetrator relationship univariate analyses of variance were performed (See Figure 1). Specifically, the analyses examined victim-perpetrator relationship (known perpetrator vs. unknown perpetrator) and psychological impact as defined by DASS and PCL scores.

The extent to which perpetrator type (known, unknown) influenced ratings of DASS-depression was examined using a two-tailed independent-groups t-test. The homogeneity of variance assumption was not violated, Levene’s $F(1,62) = 1.45$, $ns$, therefore, the t-test formula based on pooled variance estimates was used. Participants who knew their perpetrator ($N = 24, M = 12.50, SD = 14.37$) did not experience significantly different rates of depression $t(62) = .43$, $ns$, compared to participants who did not know their perpetrator ($N = 40, M = 11.05, SD = 12.10$). Thus, participants who knew their perpetrator did not differ in the level of depression they experienced following their experience of TFSV compared to participants who did not know their perpetrator.

The extent to which perpetrator type (known, unknown) influenced ratings of DASS-anxiety was examined using a two-tailed independent-groups t-test. The homogeneity of variance assumption was not violated, Levene’s $F(1,62) = .17$, $ns$, therefore, the t-test formula based on pooled variance estimates was used. Participants who knew their perpetrator ($N = 24, M = 9.92, SD = 13.27$) did not experience significantly different rates of anxiety $t(62) = .18$, $ns$, compared to participants who did not know their perpetrator ($N = 40, M = 9.35, SD = 11.29$). Thus, participants who knew their perpetrator did not differ in the level of anxiety they experienced following their experience of TFSV compared to participants who did not know their perpetrator.
The extent to which perpetrator type (known, unknown) influenced ratings of DASS-stress was examined using a two-tailed independent-groups t-test. The homogeneity of variance assumption was not violated, Levene’s $F(1,62) = 1.67$, $ns$, therefore, the t-test formula based on pooled variance estimates was used. Participants who knew their perpetrator ($N = 24, M = 14.25, SD = 14.26$) did not experience significantly different rates of stress $t(62) = .53$, $ns$, compared to participants who did not know their perpetrator ($N = 40, M = 12.50, SD = 11.89$). Thus, participants who knew their perpetrator did not differ in the level of stress they experienced following their experience of TFSV compared to participants who did not know their perpetrator.

The extent to which perpetrator type (known, unknown) influenced PCL scores was examined using a two-tailed independent-groups t-test. The homogeneity of variance assumption was not violated, Levene’s $F(1,62) = .14$, $ns$, therefore, the t-test formula based on pooled variance estimates was used. Participants who knew their perpetrator ($N = 24, M = 37.25, SD = 22.40$) did not experience significantly different rates of PTSD symptoms $t(60) = .03$, $ns$, compared to participants who did not know their perpetrator ($N = 38, M = 37.39, SD = 20.92$). Thus, participants who knew their perpetrator did not differ in the level of PTSD symptoms they experienced following their experience of TFSV compared to participants who did not know their perpetrator.

Thus, in terms of the third research question, the results of these analyses suggest that participants experiencing TFSV who know their perpetrator(s) do not differ in the negative symptomology they experience compared to victims who do not know their perpetrator.
**Hierarchical multiple regression.** In order to investigate possible interactions among study variables, a hierarchical multiple regression analysis was conducted. To avoid potentially problematic high multicollinearity with the interaction term, the variables were centered and an interaction term between TFSV experience and disclosure helpfulness was created (Aiken & West, 1991). The proposed interaction investigated whether negative symptomology is a function of negative experiences, specifically this investigation looked at whether negative disclosure experience moderated the relationship between TFSV and negative symptomology (i.e., depression, anxiety, stress, and posttraumatic symptoms).

To begin, two variables were included overall TFSV experience score (created by summing each participants scores for items measuring non-consensual pornography, sexual assault image distribution, the use of a carriage service to arrange a sexual assault, online sexual harassment, online stalking, online gender-based hate speech, and virtual rape) and disclosure helpfulness ratings (i.e., 1 = *not at all useful* and 5 = *very useful*). These variables accounted for a nonsignificant amount of variance in depression ratings, $R^2 = .22$, $F(2, 22) = 3.06$, *ns*. Next, the interaction term between TFSV experience and disclosure helpfulness was added to the regression model, which accounted for a nonsignificant proportion of the variance in depression ratings, $R^2 = .25$, $F(3, 21) = 2.35$, *ns*. Furthermore, the second model with the interaction between TFSV experience scores and disclosure helpfulness scores did not account for significantly more variance than just TFSV and disclosure helpfulness alone, $R^2_{change} = .03$, *ns*, indicating that a significant moderation between TFSV and disclosure helpfulness on depression ratings was not detected.
TFSV experience score and disclosure helpfulness ratings accounted for a significant amount of variance in anxiety ratings, $R^2 = .31$, $F(2, 22) = 5.01$, $p < .05$. Next, the interaction term between TFSV experience and disclosure helpfulness was added to the regression model, which accounted for a significant proportion of the variance in anxiety ratings, $R^2 = .32$, $F(3, 21) = 3.28$, $p < .05$. However, the second model with the interaction between TFSV experience scores and disclosure helpfulness scores did not account for significantly more variance than just TFSV and disclosure helpfulness alone, $R^2_{\text{change}} = .01$, ns, indicating that a significant moderation between TFSV and disclosure helpfulness on anxiety ratings was not detected.

TFSV experience score and disclosure helpfulness ratings accounted for a significant amount of variance in stress ratings, $R^2 = .25$, $F(2, 22) = 3.57$, $p < .05$. Next, the interaction term between TFSV experience and disclosure helpfulness was added to the regression model, which accounted for a nonsignificant proportion of the variance in stress ratings, $R^2 = .26$, $F(3, 21) = 2.41$, ns. Furthermore, the second model with the interaction between TFSV experience scores and disclosure helpfulness scores did not account for significantly more variance than just TFSV and disclosure helpfulness alone, $R^2_{\text{change}} = .01$, ns, indicating that a significant moderation between TFSV and disclosure helpfulness on stress ratings was not detected.

TFSV experience score and disclosure helpfulness ratings accounted for a nonsignificant amount of variance in posttraumatic symptomology ratings, $R^2 = .19$, $F(2, 21) = 2.53$, ns. Next, the interaction term between TFSV experience and disclosure helpfulness was added to the regression model, which also accounted for a nonsignificant proportion of the variance in posttraumatic symptomology ratings, $R^2 = .25$, $F(3, 20) =$. 
2.23, *ns*. Furthermore, the second model with the interaction between TFSV experience scores and disclosure helpfulness scores did not account for significantly more variance than just TFSV and disclosure helpfulness alone, $R^2_{\text{change}} = .06$, *ns*, indicating that a significant moderation between TFSV and disclosure helpfulness on posttraumatic symptomology ratings was not detected.

Overall, the results of the hierarchical multiple regression analysis indicate that negative disclosure experiences do not moderate the relationship between TFSV and negative symptomology (i.e., depression, anxiety, stress, and posttraumatic symptoms).

**Path analysis.** In order to investigate the proposed mediation model, a path analysis was also conducted. The proposed model explored whether TFSV experiences led to increases in negative symptomology (i.e., depression, anxiety, stress, and posttraumatic symptoms) through unhelpful disclosure experiences.

Firstly, the regression of TFSV experiences on depression symptomology, ignoring the disclosure helpfulness, was significant, $\beta = .83$, $T(23) = 2.53$, *p* < .05. However, the regression of TFSV on disclosure helpfulness was nonsignificant, $\beta = -0.02$, $T(23) = .76$, *ns*. Therefore, disclosure does not mediate this relationship and further analyses are not reported here but the performed model can be viewed in Figure 2. Overall, not only do disclosure experiences not significantly mediate the relationship between TFSV experiences and depression symptomology, disclosure experiences are also not significantly independently predictive of depression symptomology.

Secondly, the regression of TFSV experiences on anxiety symptomology, ignoring the disclosure helpfulness, was significant, $\beta = .99$, $T(23) = 3.24$, *p* < .01. However, the regression of TFSV on disclosure helpfulness was nonsignificant, $\beta = -0.02$,
Therefore, disclosure does not mediate this relationship and further analyses are not reported here but the performed model can be viewed in Figure 2. Overall, not only do disclosure experiences not significantly mediate the relationship between TFSV experiences and anxiety symptomology, disclosure experiences are also not significantly independently predictive of anxiety symptomology.

Thirdly, the regression of TFSV experiences on stress symptomology, ignoring the disclosure helpfulness, was significant, $\beta = .79$, $T(23) = 2.72$, $p < .05$. However, the regression of TFSV on disclosure helpfulness was nonsignificant, $\beta = -.02$, $T(23) = -.76$, $ns$. Therefore, disclosure does not mediate this relationship and further analyses are not reported here but the performed model can be viewed in Figure 2. Overall, not only do disclosure experiences not significantly mediate the relationship between TFSV experiences and stress symptomology, disclosure experiences are also not significantly independently predictive of stress symptomology.

Lastly, with regards to posttraumatic stress, the regression of TFSV experiences on posttraumatic symptomology, ignoring the disclosure helpfulness, was significant, $\beta = 1.36$, $T(22) = 2.30$, $p < .05$. However, the regression of TFSV on disclosure helpfulness was nonsignificant, $\beta = -.02$, $T(22) = -.77$, $ns$. Therefore, disclosure does not mediate this relationship and further analyses are not reported here but the performed model can be viewed in Figure 2. Overall, not only do disclosure experiences not significantly mediate the relationship between TFSV experiences and posttraumatic stress symptomology, disclosure experiences are also not significantly independently predictive of posttraumatic stress symptomology.
Thus, the results of the path analysis indicate that experiences of TFSV directly account for negative symptomology, while disclosure experiences neither directly nor indirectly account for negative symptomology.

In terms of the fourth and final research question the results of the hierarchical multiple regression analysis and path analysis reveal that there is a direct relationship between TFSV experiences and negative symptomology but neither are related to disclosure practices.

**Summary of results.** Collectively the results of the above analyses indicate that experiences of TFSV are occurring among university women. In particular, the most commonly reported experiences of TFSV among this sample of university women were online gender-based hate speech, followed by online sexual harassment, and online stalking. Furthermore, these experiences were associated with symptoms of depression, anxiety, stress, and PTSD. However, no difference in psychological symptoms was detected between women who knew their perpetrator and those who did not. Lastly, disclosure experiences were not found to be related to negative symptomology through either moderation or mediation of negative symptomology’s relationship with TFSV experiences.
Chapter Four: Discussion

The results of this study indicate that experiences of TFSV are occurring among university women, with certain forms of TFSV being experienced more frequently. Moreover, the results of this study show that these experiences are associated with women’s psychological functioning despite the fact that they take place in a virtual world.

Several important findings emerged from this study with regards to experiences of TFSV. Firstly, university women reported experiencing a variety of forms of TFSV, with online gender-based hate speech being the most common, followed by online sexual harassment and online stalking, and the use of a carriage service to arrange their sexual assault being the least commonly reported. This is similar to the pattern of victimization frequency seen with offline forms of sexual victimization (See Statistics Canada, 2006), where typically less severe forms of victimization such as sexual harassment are more common than more severe forms such as rape.

The results of this study also demonstrate not only the frequency of occurrence of TFSV among university women but its association with their wellbeing. Experiences of TFSV were associated with symptoms of depression, anxiety, stress, and PTSD, as well as discomfort and negative attitudes towards technology. It is worth noting that although experiences of TFSV together accounted for a fair portion of the variance in DASS and PCL scores, individual experiences of certain forms of TFSV accounted for little of the variance, and were at times non-significant. This could be an indication that the relationship between TFSV and negative symptomology is attributed to the impact of multiple forms of victimization. Furthermore, the greatest percentage of variance
accounted for by TFSV experiences was seen for PTSD symptoms. Therefore, it may be particularly important for service providers working with this population of women to pay close attention to symptoms of posttraumatic stress. However, it is important to note that in addition to PTSD symptoms being on average above the cut-off for clinical relevance, depression and anxiety scores were also above the normal range for this sample of women.

The perpetrators were, without exception, male, most commonly an acquaintance, romantic partner, or friend. This is in line with what we would expect to see based on feminist theory, which states that unwanted sexual experiences such as TFSV are the product of a society that disproportionally victimizes women due to their subordinate role to the men in society, who maintain power and control through the victimization of women. Furthermore, these results are also similar to the pattern of perpetrator characteristics seen in offline sexual victimization experiences. The majority of perpetrators of offline sexual violence against women are males (Canadian Panel on Violence Against Women, 1993), who are typically known to the victims (Canadian Panel on Violence Against Women, 1993; Stermac, Du Mont, & Kalemba, 1995).

Although the majority of reported perpetrators in this study were unknown to the victim, over half of participants indicated that their perpetrator was anonymous, therefore, we cannot determine whether they are actually known to the victim. This is in stark contrast to offline experiences of sexual violence where the woman typically comes face-to-face with her perpetrator, making anonymity virtually impossible. Additionally, in this sample over a quarter of women reported that their TFSV experience involved multiple perpetrators, which differs greatly from offline experiences, which rarely involve
multiple perpetrators working together (Kelly, Lovett, & Regan, 2005). With regards to the impact that relationship to the perpetrator had on wellbeing, no difference in psychological symptoms were detected between women who knew their perpetrator and those who did not. This finding fits in with the literature on offline sexual victimization, which is currently divided on the impact of perpetrator relationship, with some researchers reporting that it has no effect (Koss, Dinero, Sibel, & Cox, 1988).

With regards to disclosure and reporting practices, over half of women did not disclose their TFSV experience. This is similar to findings from offline sexual violence studies, where disclosure is limited (Bachman, 1998; Koss, Gidycz, & Wisnieski, 1987). Furthermore, similar to offline sexual violence experience among university women (Fisher, Daigle, Cullen, Turner, 2003; Orchowski & Gidycz, 2012), among those women in this sample who did disclose their experience, the most common person disclosed to was a friend followed by a roommate (possibly also a friend), then a romantic partner. Furthermore, only one participant in this sample reported their experience to local police and no one reported the experience to campus police. Although the low level of formal reporting is similar to offline sexual victimization experiences, it is also not surprising in light of the fact that our current Canadian legislation does not recognise many online victimizations as crimes (see West Coast LEAF, 2014).

Disclosure experiences were not found to be related to negative symptomology through either moderation or mediation of negative symptomology’s relationship with TFSV experiences. This is in contrast to some research that has been conducted in the literature that finds that negative reactions following sexual assault are associated with negative psychological consequences such as depression, anxiety, posttraumatic stress.
symptoms, substance abuse (Borja et al., 2006; Campbell et al., 2001; Davis et al., 1991; Ullman, 1996a, 1996b, 1996c; Ullman & Filipas, 2001; Ullman, Filipas, Townsend, & Starzynski, 2007; Ullman, Starzynski, Long, Mason, & Long, 2008), hostility and fear (Orchowski & Gidycz, 2015), as well as hurt, shame, and rejection (Campbell et al., 2001; Campbell & Raja, 1999). It should be noted that although this study found no impact of negative disclosure experiences on negative symptomology, less than half of the sample disclosed their experience, therefore these null analyses were based on a small sample size, indicating that there may not have been sufficient power to detect an effect.

**Strengths and Weaknesses of the Current Research**

There are a number of strengths associated with the current research that should be noted. Firstly, the cross-sectional research design allowed for the simultaneous analysis of multiple outcome and exposure variables, which is ideal given the range of TFSV experiences reported by university women and the multiple negative symptoms associated with these experiences. Secondly, unlike other studies that have investigated TFSV, this research simultaneously examined all forms of TFSV that have been discussed in the literature. Lastly, given the novel nature of research investigating TFSV this research explored all possible outcomes.

In addition to the strengths of this research there are also a number of limitations to this study. Firstly, the cross-sectional nature of this research did not allow for the examination of causality, only the investigation of associations between variables. For instance, this research leaves open the possibility that an unknown third variable could account for the relationship between TFSV and negative symptomology. In particular, the current landscape of the university environment indicates that mental health problems are
common among university students in North America (American College Health Association, 2015), which may be a function of other stressors associated with university life such as academic difficulties. Secondly, despite the efforts of the researcher, the sample of women who participated in the study was fairly homogenous, with nearly half the women identifying as white or Caucasian and none of the sample identifying as Black/African Canadian or Aboriginal. This is particularly troubling given the high rates of sexual victimization within the black and aboriginal communities (See Bryant-Davis, Chung, Tillman, 2009; Pearce et al., 2015). Thirdly, this research is also subject to the short-coming associated with using self-report data. Specifically, the results of this study may be influenced by social desirability, despite the researcher’s attempts to mitigate this through anonymous responding. Lastly, this study did not collect information regarding the technologies used by participants (e.g., social networking sites, virtual reality games, cellphones, etc.) and how often participants accessed these technologies and communication mediums. Therefore we cannot make inferences regarding the likelihood of TFSV victimization or risk factors associated with it.

**Future Directions**

Based on the evidence gained from this study on the association between TFSV and depression, anxiety, stress, and PTSD, it will be important for future research to investigate other areas of association, particularly those related to offline sexual victimization such as problem drinking. As this study only investigated participants’ psychological functioning one year after the TFSV experience, future research should also investigate the potential long-term consequences TFSV has on victims. For instance, are there changes in career trajectory for those whose sexually explicit images appear
online without their consent? Additionally, it might also be relevant for research to investigate risk factors for experiencing TFSV. For instance, anecdotal evidence suggests that women who use dating applications such as Tinder or OkCupid might be at an increased risk of experiencing TFSV. Overall, little research has been conducted on characteristics among those who perpetrate TFSV (for an exception see Thompson & Morrison, 2013) and risk factors for experiencing TFSV such as accessing certain websites or engaging in certain online activities. Lastly, research is also needed addressing potential relationships between online and offline experiences of sexual victimization. Mitchell and colleagues (2011) found a strong correlation between online victimization and offline sexual victimization but the precise nature of this relationship is still unknown.

**Clinical and Policy Implications**

Overall, TFSV is a developing area of research, and thus more research is needed in order to inform both clinical and legislative interventions. The discrepancy between occurrences of TFSV and changes in legal and clinical practices is particularly concerning in light of the current research that suggests that experiences of TFSV are not only occurring among young women but are associated with negative psychological functioning. As a starting point, due to the ability of TFSV to place women’s experiences of victimization in an arena where they can be viewed by the world, there are certain implications for bystander intervention. For instance, Powell (2010) suggested that sexually explicit images would not be distributed without permission unless there is a willing consumer audience. Thus, by intervening and encouraging young adults to think
about the ethicality of the images they are consuming we may be able to curb the unauthorized distribution of women’s private images.

**Conclusions**

This study has provided evidence supporting the notion that victimization taking place online may have real and profound implications for women’s offline experiences. Specifically, experiences of sexual victimization appear to be associated with impact on female victims, regardless of whether they take place in a real or virtual world. Furthermore, women who attend universities are surrounded by and must interact with technology almost on a daily basis and are therefore at particular risk of experiencing sexual victimization through the very technologies that should be facilitating their learning.

This research is an important step in unravelling the nature of TFSV and its impact on young women’s lives. Similar to many modern advancements new technologies are not inherently dangerous but can be harnessed by those who perpetrate crimes against women. Cooper (2001) noted that the internet is a medium of communication and information that is inherently neither good nor bad but may become so in our current patriarchal society. Despite its malevolent potential, new technologies are a crucial part of our modern culture and in the lives of young women attending post-secondary schools, and this is unlikely to change. As a result, it is crucial that service providers and legislative initiative begin to adapt to the changing technological nature of crimes against women.
References


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Table 1

*Participant demographics*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>46 (45)</td>
</tr>
<tr>
<td>In relationship(s)</td>
<td>35 (34)</td>
</tr>
<tr>
<td>Dating</td>
<td>17 (16)</td>
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<tr>
<td>Married or common-law</td>
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<td><strong>Ethno-cultural background</strong></td>
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<tr>
<td>White or Caucasian</td>
<td>44 (43)</td>
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<tr>
<td>South Asian or Chinese</td>
<td>26 (25)</td>
</tr>
<tr>
<td>East Asian or Middle Eastern</td>
<td>17 (16)</td>
</tr>
<tr>
<td>Other</td>
<td>10 (10)</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>5 (5)</td>
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<tr>
<td><strong>Sexual orientation</strong></td>
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<tr>
<td>Heterosexual</td>
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<tr>
<td>Bisexual</td>
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</tr>
<tr>
<td>Homosexual</td>
<td>5 (5)</td>
</tr>
<tr>
<td>Asexual</td>
<td>3 (3)</td>
</tr>
<tr>
<td>Pansexual</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Other (don’t know)</td>
<td>1 (1)</td>
</tr>
<tr>
<td><strong>Living situation</strong></td>
<td></td>
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<tr>
<td>With roommate(s)</td>
<td>46 (45)</td>
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</table>

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<table>
<thead>
<tr>
<th></th>
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<tr>
<td>With parent(s)</td>
<td>43 (42)</td>
</tr>
<tr>
<td>Alone</td>
<td>8 (8)</td>
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<tr>
<td>University residence</td>
<td>4 (4)</td>
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*Note: N = 103*
Table 2

*Mean frequency of forms of TFSV*

<table>
<thead>
<tr>
<th></th>
<th>( M )</th>
<th>( SD )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Gender-based Hate Speech</td>
<td>1.40</td>
<td>1.52</td>
</tr>
<tr>
<td>Online Sexual Harassment</td>
<td>1.28</td>
<td>1.41</td>
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<tr>
<td>Online Stalking</td>
<td>1.05</td>
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<tr>
<td>Non-consensual Pornography</td>
<td>.41</td>
<td>.98</td>
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<tr>
<td>Sexual Assault Image Distribution</td>
<td>.29</td>
<td>.90</td>
</tr>
<tr>
<td>Virtual Rape</td>
<td>.25</td>
<td>.88</td>
</tr>
<tr>
<td>Use of Carriage service to Arrange Sexual Assault</td>
<td>.21</td>
<td>.72</td>
</tr>
</tbody>
</table>

*Note:* 0 = never and 5 = every day or almost every day

\( N = 80 \)
### Table 3

_TFSV perpetrator characteristics_

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perpetrator Type</strong></td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>53 (59)</td>
</tr>
<tr>
<td>Known</td>
<td>37 (41)</td>
</tr>
<tr>
<td><strong>Number of perpetrators</strong></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>43 (48)</td>
</tr>
<tr>
<td>Multiple</td>
<td>24 (27)</td>
</tr>
<tr>
<td>Unknown</td>
<td>23 (25)</td>
</tr>
<tr>
<td><strong>Relationship to perpetrator(s)</strong></td>
<td></td>
</tr>
<tr>
<td>Acquaintance</td>
<td>14 (16)</td>
</tr>
<tr>
<td>Romantic partner</td>
<td>9 (10)</td>
</tr>
<tr>
<td>Friend</td>
<td>9 (10)</td>
</tr>
<tr>
<td>Other</td>
<td>8 (9)</td>
</tr>
<tr>
<td>School-mate</td>
<td>6 (7)</td>
</tr>
<tr>
<td>Co-worker</td>
<td>2 (2)</td>
</tr>
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</table>

*Note: N = 90*
Table 4

*TFSV disclosure and reporting characteristics*

<table>
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<tr>
<th>Characteristic</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disclosure of experience</strong></td>
<td></td>
</tr>
<tr>
<td>Not Disclosed</td>
<td>51 (57)</td>
</tr>
<tr>
<td>Disclosed</td>
<td>39 (43)</td>
</tr>
<tr>
<td><strong>Helpfulness of disclosure</strong></td>
<td></td>
</tr>
<tr>
<td>Not at all helpful</td>
<td>3 (3)</td>
</tr>
<tr>
<td>Slightly helpful</td>
<td>23 (26)</td>
</tr>
<tr>
<td>Somewhat helpful</td>
<td>18 (20)</td>
</tr>
<tr>
<td>Moderately helpful</td>
<td>23 (26)</td>
</tr>
<tr>
<td>Very helpful</td>
<td>23 (26)</td>
</tr>
<tr>
<td><strong>Relationship to disclosed person(s)</strong></td>
<td></td>
</tr>
<tr>
<td>Friend</td>
<td>32 (36)</td>
</tr>
<tr>
<td>Roommate</td>
<td>14 (16)</td>
</tr>
<tr>
<td>Romantic partner</td>
<td>12 (13)</td>
</tr>
<tr>
<td>Parent/guardian</td>
<td>8 (9)</td>
</tr>
<tr>
<td>Counsellor/therapist</td>
<td>3 (3)</td>
</tr>
<tr>
<td>Other family member</td>
<td>2 (2)</td>
</tr>
<tr>
<td>Local police</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Resident advisor/don</td>
<td>1 (1)</td>
</tr>
</tbody>
</table>

*Note: N = 90*
Table 5

*Descriptive statistics and correlations among study variables*

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overall TFSV Experience Score</td>
<td>4.45</td>
<td>5.51</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. DASS Depression Score</td>
<td>10.93</td>
<td>12.80</td>
<td>.51**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. DASS Anxiety Score</td>
<td>9.48</td>
<td>12.12</td>
<td>.57**</td>
<td>.91**</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. DASS Stress Score</td>
<td>12.85</td>
<td>12.53</td>
<td>.55**</td>
<td>.89**</td>
<td>.90**</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>5. PCL Score</td>
<td>36.67</td>
<td>20.87</td>
<td>.58**</td>
<td>.91**</td>
<td>.89**</td>
<td>.89**</td>
<td></td>
</tr>
<tr>
<td>6. Disclosure Helpfulness</td>
<td>2.46</td>
<td>1.22</td>
<td>-.02</td>
<td>-.10</td>
<td>-.90</td>
<td>-.11</td>
<td>-.05</td>
</tr>
</tbody>
</table>

Notes * indicates $p<.05$
  ** indicates $p<.01$
Effects of perpetrator type on depression, anxiety, stress, and posttraumatic symptoms

Figure 1

Effects of perpetrator type on negative symptomology
Figure 2

Path model depicting the effect of TFSV experiences on increases in depressive, anxiety, and stress symptoms and post-traumatic symptoms through decreases in helpfulness of disclosure.

Note. Standardized path coefficients are noted. Path representing the performed mediation component of the model are emphasized in bold.

* indicates $p<.05$

** indicates $p<.01$
Appendix A: Background/Demographic Questionnaire

Please let us know the following about you:
1) Your age
_____________________________________________________________________
_____________________________________________________________________

2) Your current relationship status:
   a. In relationship(s)
   b. Dating
   c. Single
   d. Married or common-law

3) How would you describe your sexual orientation?
_____________________________________________________________________
_____________________________________________________________________

4) Where were you born?
_____________________________________________________________________
_____________________________________________________________________
   If you were born outside of Canada, how many years have you been in Canada?
_____________________________________________________________________
_____________________________________________________________________

5) How would you describe your ethно-cultural background?
_____________________________________________________________________
_____________________________________________________________________

6) Do you consider yourself to be a visible or racialized minority? Yes □ No □
_____________________________________________________________________
_____________________________________________________________________

7) Do you consider yourself to be an Aboriginal person? Yes □ No □
_____________________________________________________________________
_____________________________________________________________________

8) Are you as person with a disability? Yes □ No □
9) What is your current living situation (e.g. with parents, roommates, university residence)


10) Are you currently enrolled in an undergraduate program at the University of Toronto? Yes □ No □


12) Current program and semester/year (e.g., biology, second year)


13) Are you a full time student? Yes □ No □
Appendix B: Technology-facilitated Sexual Violence Questionnaire

I am interested in learning more about your experiences with technology-facilitated sexual violence (TFSV). Read each statement carefully. If you do not know your exact response, just give your best guess.

1) In the last year, how often has someone created and/or distributed a sexually explicit image of you without your permission (i.e., non-consensual pornography or revenge porn)?
   a. Never
   b. Less than a few times a year
   c. A few times a year
   d. One or more times a month
   e. One or more times a week
   f. Every day or almost every day

   1a) How severe was this experience for you? [Display for individuals who endorse the above item]
      a. Not at all severe
      b. Slightly severe
      c. Moderately severe
      d. Extremely severe

2) In the last year, how often has someone used a sexually explicit image of you for a purpose other than that consented to by you?

3) In the last year, how often has someone refused to delete a sexual explicit image of you when asked to do so?

4) In the last year, how often has someone threatened to ‘do something’ with a sexually explicit image of you (e.g., threatened to send it to others or post it on a particular website)?

5) In the last year, how often has someone used a sexually explicit image of you to degrade or harass you?

6) In the last year, how often has someone threatened to or actually created and/or distributed a sexual assault image of you?

7) In the last year, how often has someone posted an advertisement on a carriage service (e.g., Craig’s List) to arrange or attempt to arrange your sexual assault?

8) In the last year, how often has someone sexually harassed you online?

9) In the last year, how often has someone stalked you online (i.e., repetitively pursued you through electronic or Internet-enabled devices)?
10) In the last year, how often have you personally received gender-based hate speech (i.e., offensive and degrading comments directed towards you because of your gender) while on the Internet?

11) In the last year, how often have you been virtually raped (i.e., having your avatar or digital representation of yourself subjected to sexual violence by other avatars)?

12) Please select the TFSV experience that you feel most severely impacted you [Only display for participants you endorsed any of the above items].
   a. Non-consensual pornography or revenge porn
   b. The use of a carriage service to arrange your sexual assault
   c. Online sexual harassment
   d. Cyber-stalking
   e. Gender-based hate speech
   f. Virtual rape

13) With regard to your most severe experience of TFSV, was there more than one perpetrator involved? Yes □ No □ Unknown □

14) With regard to your most severe experience of TFSV, did you know the identity of your perpetrator(s)? Yes □ No □

   If yes, please indicate your relationship to the perpetrator. If there were multiple perpetrators, check all that apply.
   a. Romantic partner
   b. Friend
   c. Acquaintance
   d. Family member
   e. School mate
   f. Dorm mate
   g. University staff or faculty member
   h. Non-university employer
   i. Co-worker
   j. Other Please describe:

   Please indicate the gender of the perpetrator. If there were multiple perpetrators, check all that apply.
   a. Male
   b. Female
   c. Unknown
   d. Other Please describe:

15) With regard to the TFSV experience you rated most severe, did you disclose the incident to anyone?
   Yes □ No □
16) With regard to the TFSV experience you rated most severe, who did you disclose the incident to? (Check all that apply)
   a. Roommate
   b. Friend
   c. Counsellor/Therapist
   d. Romantic partner
   e. University health services
   f. Doctor/nurse
   g. Parent or guardian
   h. Other family member
   i. Campus police
   j. Local police
   k. Office of Student conduct
   l. Religious leader
   m. Resident advisor or don
   n. Off-campus rape crisis center staff
   o. University faculty or staff

17) How helpful was this disclosure to you?
   a. Not at all useful
   b. Slightly useful
   c. Somewhat useful
   d. Moderately useful
   e. Very useful
Appendix C: Depression Anxiety and Stress Scale (Henry & Crawford, 2005)

Please read each statement and select a number 0, 1, 2 or 3 that indicates how much the statement applied to you over the month following the TFSV experience you rated the most severe. There are no right or wrong answers. Do not spend too much time on any statement.

0 = Did not apply to me at all; 1 = Applied to me to some degree, or some of the time; 2 = Applied to me to a considerable degree, or a good part of the time; 3 = Applied to me very much, or most of the time

1) I found it hard to wind down 0 1 2 3
2) I was aware of dryness of my mouth 0 1 2 3
3) I couldn't seem to experience any positive feeling at all 0 1 2 3
4) I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion) 0 1 2 3
5) I found it difficult to work up the initiative to do things 0 1 2 3
6) I tended to over-react to situations 0 1 2 3
7) I experienced trembling (e.g., in the hands) 0 1 2 3
8) I felt that I was using a lot of nervous energy 0 1 2 3
9) I was worried about situations in which I might panic and make a fool of myself 0 1 2 3
10) I felt that I had nothing to look forward to 0 1 2 3
11) I found myself getting agitated 0 1 2 3
12) I found it difficult to relax 0 1 2 3
13) I felt down-hearted and blue 0 1 2 3
14) I was intolerant of anything that kept me from getting on with what I was doing 0 1 2 3
15) I felt I was close to panic 0 1 2 3
16) I was unable to become enthusiastic about anything 0 1 2 3
17) I felt I wasn’t worth much as a person

18) I felt that I was rather touchy

19) I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat)

20) I felt scared without any good reason

21) I felt that life was meaningless
Appendix D: Posttraumatic Stress Checklist (Weather, Litz, Herman, Huska, & Keane, 1993)

Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, then select one of the numbers to the right to indicate how much you have been bothered by the problem in the year following your most severe TFSV experience.

1 = Not at all; 2 = A Little Bit; 3 = Moderately; 4 = Quite a bit; 5 = Extremely

1) Repeated disturbing memories, thoughts, or images of the stressful experience? 1 2 3 4 5

2) Repeated, disturbing dreams of the stressful experience? 1 2 3 4 5

3) Suddenly acting or feeling as if the stressful experience were happening again (as if you were reliving it)? 1 2 3 4 5

4) Feeling very upset when something reminded you of the stressful experience? 1 2 3 4 5

5) Having physical reactions (e.g., heart pounding, trouble breathing, or sweating) when something reminded you of the stressful experience? 1 2 3 4 5

6) Avoiding thinking about or talking about the stressful experience or avoiding having feelings related to it? 1 2 3 4 5

7) Avoiding activities or situations because they remind you of the stressful experience? 1 2 3 4 5

8) Trouble remembering important parts of the stressful experience? 1 2 3 4 5

9) Loss of interest in activities that you used to enjoy? 1 2 3 4 5

10) Feeling distant or cut off from other people? 1 2 3 4 5

11) Feeling emotionally numb or being unable to have loving feelings for those close to you? 1 2 3 4 5

12) Feeling as if your future will somehow be cut short? 1 2 3 4 5

13) Trouble falling or staying asleep? 1 2 3 4 5

14) Feeling irritable or having angry outbursts? 1 2 3 4 5
15) Having difficulty concentrating? 1 2 3 4 5
16) Being “super alert” or watchful or on guard? 1 2 3 4 5
17) Feeling jumpy or easily startled? 1 2 3 4 5
Appendix E: Engagement with Technology Questionnaire

In the year following the TFSV experience you rated as most severe, how much did you agree with the following statements?

1 = Strongly Disagree (SD); 2 = Disagree (D); 3 = Agree (A); 4 = Strongly Agree (SA)

<table>
<thead>
<tr>
<th>Statement</th>
<th>SD</th>
<th>D</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) I experienced discomfort or anxiety while using technology.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2) My overall use of technology decreased.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3) I felt less safe or comfortable using technology on campus or in class.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4) My attitude towards the use of technology in school became more negative.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Appendix F: Consent and Information Sheet for Participants

Counselling and Clinical Psychology

Program

ONTARIO INSTITUTE OF STUDIES IN EDUCATION OF THE UNIVERSITY OF TORONTO
252 Bloor Street West, Toronto, Ontario, Canada M5S 1V6

CONSENT INFORMATION

My name is Jenna Cripps. I am a researcher in the Counselling and Clinical Psychology program at the University of Toronto (Ontario Institute for Studies in Education) under the supervision of Dr. Lana Stermac. I am carrying out a study on the effects of unwanted sexual experiences occurring through technology (i.e., technology-facilitated sexual violence) on the female undergraduate students attending the University of Toronto.

Purpose of the Research:
The purpose of this research study is to learn about the effect that technology-facilitated sexual violence may have on the wellbeing of female university students. I am interested in speaking with female undergraduate students with experiences of technology-facilitated sexual violence. This research will help us understand the experiences of female undergraduate students, in particular the impact technology-facilitated sexual violence has on women’s wellbeing.

Participants in this Study:
As a University of Toronto student you are invited to participate in an online self-guided survey. You will be asked about your background, experiences of technology-facilitated sexual violence, as well as some questions about your psychological wellbeing. Questions about psychological wellbeing will include asking about your mental health (e.g., depression, stress, and anxiety). It is expected that the study will be completed in approximately 20 minutes.

What Happens to the Information You Provide?
All of the information you provide, including your survey responses and any correspondence with the research team is confidential, meaning that no one other than the members of our research team will have access to your information. No identifying information will be collected during the survey and all data will be coded. All electronic data will be encrypted, consistent with the University of Toronto standards described at: http://www.utoronto.ca/security/UTORprotect/encryption_guidelines.htm.

All collected information will be kept in a locked and secure location in our research office at the University of Toronto for five years, after which time they will be destroyed. Data security measures will be consistent with the University of Toronto’s Data Security Standards for Personally Identifiable and Other Confidential Data in Research. Any
publications or presentations made on the basis of the information provided in this study will not identify you in any way.

**Possible Risks of Participation:**
Some of the information that you will be asked about may be upsetting or stressful. Every effort will be made by our research team to make sure that you feel safe and comfortable throughout your participation in the study. Your participation in this study is completely voluntary. You are free to refuse to answer any question(s), and you may end your participation at any time without any negative consequences. You may withdraw from the study by exiting your browser at any time. If you are concerned about your confidentiality, you may wish to go into your browser’s privacy settings to delete your browser history. Once you have submitted your responses however, it will not be possible to withdraw from the study. We also provide you with a list of resources for information, support and counselling services.

**Possible Benefits of Participation:**
There are no personal benefits to you for participating in this study, however, your participation will help us gain a better understanding of how experiences of technology-facilitated sexual violence effect the psychological wellbeing of women in university. This may lead to the development and provision of greater awareness and prevention measures and new support services for students. For your participation you will have the opportunity to enter a draw to win a $50 gift card.

Your involvement in this research is appreciated. If you agree to participate, please continue with the consent instructions below. Should you have any questions, please feel free to contact me, Jenna Cripps at jenna.cripps@mail.utoronto.ca. If you have any further questions pertaining to your rights as a research participant, you can contact the Ethics Review Office at (416) 946-3273 or at ethics.review@utoronto.ca.

**CONSENT**
By clicking the “continue” button below, I am indicating that I have read and understood the conditions under which I agree to participate in this study voluntarily. My continuation does not constitute a waiver of any legal rights. I am free to discontinue participation in the study at any time by exiting my web browser. I may decline to answer any questions to which I do not wish to respond. I have also had the opportunity to ask questions of research team members.

Please print this screen if you would like a copy of this page for your own records.

Thank you for your participation,

Jenna Cripps, B.Sc.
Graduate Student, Counselling and Clinical Psychology Program
Ontario Institute for Studies in Education, University of Toronto
Lana Stermac, Ph.D.
Professor, Counselling and Clinical Psychology Program
Ontario Institute for Studies in Education, University of Toronto

Request to Receive Results of Study
If you would like a general summary of the results of this study, please contact me at jenna.cripps@mail.utoronto.ca and I will forward the information to you. Your name and email will remain confidential and will not be associated with the answers you have provided.
Appendix G: Advertisement for Participants Recruitment

We are conducting a study on University of Toronto women’s experiences of technology-facilitated sexual violence

A chance to win a $50 Amazon.ca gift card will be provided for your time

If you are currently a female undergraduate student, you may be eligible to participate in an online survey

To learn more about this study, please go to:
survey.s.oise.utoronto.ca/
surveyviewer2/index.php?surveyID=FLSIP

If you have questions, please contact researchers at jenna.cripps@mail.utoronto.ca
Appendix H: Resource List for Participants

Counselling and Clinical Psychology Program

ONTARIO INSTITUTE OF STUDIES IN EDUCATION OF THE UNIVERSITY OF TORONTO
252 Bloor Street West, Toronto, Ontario, Canada M5S 1V6

INFORMATION AND RESOURCES INFORMATION
The following is a list of resources that you may find helpful if you would like to receive further information or counselling and support services. *The resources listed for the University of Toronto are available to students currently attending the University of Toronto.

UNIVERSITY OF TORONTO BASED RESOURCES*

- **Assault Counsellor/Educator**
  Provides confidential psychotherapy in Counselling and Psychological Services for students who have experienced recent or current sexual assault, partner violence or sexual harassment.
  
  Tel: **416-978-0174**

- **Health & Wellness Centre – St. George Campus**
  Provides counselling, psychotherapy and support services.

  14 College Street, 2nd Floor
  Koffler Student Services Centre
  University of Toronto
  Toronto, ON M5T 2Z9
  Phone: 416-978-8030
  Fax: 416-978-7341

- **Sexual Harassment Office**
  The Sexual Harassment Office handles complaints of harassment based on sex, sexual orientation, gender identity and gender expression at the University of Toronto.

  Tel: 416.978.3908
  416.971.2289 (fax)
  [www.sho.utoronto.ca](http://www.sho.utoronto.ca)
  215 Huron Street, 6th Floor, Suite 603
• **Health and Counselling Centre UTM**

Room 1123A, Davis Building  
3359 Mississauga Rd. N.  
Mississauga, ON  
L5L 1C6  
Phone: 905-828-5255  
Fax: 905-828-3852  
Email: health.utm@utoronto.ca

• **Counselling & Psychiatric Offices UTM**

A psychiatrist and two counsellors are available and located outside of the main Centre.

Tel: 905-828-5255  
Fax: 905-828-3852

• **Health and Wellness Centre UTSC**

University of Toronto Scarborough  
Student Centre, SL-270  
1265 Military Trail  
Scarborough, Ontario, M1C 1A4

Phone: 416-287-7065  
Fax: 416-287-7069  
Email: health-services@utsc.utoronto.ca

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**TORONTO AREA BASED RESOURCES**

• **Barbra Schlifer Commemorative Clinic**

This specialized clinic provides professional individual and group counselling services, information, referrals, legal services, advocacy and interpretation in over 80 languages to women who have experienced violence.

Address: Suite 503, 489 College Street Toronto, ON M6G 1A5  
Tel: 416-323-9149  
Fax: 416-323-9107  
Website: www.schliferclinic.com

• **Brief Psychotherapy Centre for Women**

Address: 2 Carlton Street Suite 1806 Toronto, ON M5B 1J3  
Tel: 416-591-2000  
Website: http://www.womenscollegehospital.ca/programs-and-services/bpcw/
• **Gerstein Centre (Toronto, ON Canada)**
  The Gerstein Centre provides crisis intervention to adults, living in the City of Toronto, who experience mental health problems. The service has three aspects: telephone support, community visits and a ten-bed, short-stay residence. All three aspects of the service are accessed through the crisis line.

  Tel: 416-929-0149  
  Crisis Line: 416-929-5200  
  Website: [www.gersteincentre.org](http://www.gersteincentre.org)

• **Women’s Counselling, Referral and Education Centre**
  A community-based mental health agency serving the GTA and surrounding areas.

  Address: 489 College Street, Suite 303B Toronto, Ontario M6G 1A5  
  Tel: 426-534-7501  
  Website: [http://www.plosomalife.com/WCRECsite/contact/contact.html](http://www.plosomalife.com/WCRECsite/contact/contact.html)

• **519 Church Street Community Centre**
  The 519 Church Street Community Centre provides counseling for LGBT persons in distress, as well as legal assistance.

  Tel: (416)-392-6874

• **Family Services**
  Family Services offers a range of programs and services, including individual and family counselling, group therapy and workshops, with expertise in abuse and trauma-related issues. Services are provided in a number of languages and fees are on a sliding scale based on income. They have a number of locations in downtown Toronto, Scarborough, York Region, South Etobicoke, and Rexdale.

  Tel: 416-595-9618 (Family Services Toronto); 1-888-820-9986 (Family Services York Region – Richmond Hill location); 1-888-223-3999 (Family Services York Region – Newmarket location); 905-415-9719 (Family Services York Region – Markham location)  
  Website: [www.familyservicetoronto.org](http://www.familyservicetoronto.org) (Family Services Toronto); [www.fsyr.ca](http://www.fsyr.ca) (Family Services York Region)
• **Sexual Assault Care Centre**  
The Sexual Assault Care Centre is operated out of the Scarborough Hospital and provides emergency medical treatment, information and emotional support to those who have experiences sexual assault.

Tel: (416) 495-2555  
Website: [http://www.sacc.to](http://www.sacc.to)

• **Telehealth Ontario**  
Provides free, confidential medical advice and information. A registered nurse will take your call 24 hours a day, seven days a week.

Tel: 1-(877) 234-4343  
Crisis Line: 1-(866)-797-0000

**ONTARIO AND CANADIAN RESOURCES**

• **Canadian Mental Health Association (CMHA)**  
This site provides information about Post Traumatic Stress Disorder (PTSD).

Website: [http://www.cmha.ca/bins/content_page.asp?cid=3-94-97](http://www.cmha.ca/bins/content_page.asp?cid=3-94-97)

• **Distress Centres of Toronto**  
Distress Centres of Toronto offers a 24-hour telephone crisis line which provides emotional support, crisis intervention and suicide prevention to callers in need. Interpreter services are provided in 151 languages.

24-hour Crisis Line: 416-408-HELP (4357)  
Website: [www.torontodistresscentre.com](http://www.torontodistresscentre.com)

• **Canadian Association of Sexual Assault Centres (CASAC)**  
The CASAC is a Canadian group of sexual assault centres who have come together to implement the legal, social and attitudinal changes necessary to prevent, and ultimately eradicate, rape and sexual assault. This website provides information about sexual assault and contact information for anti-violence and sexual assault centres across Canada.

Website: [www.casac.ca/node/61](http://www.casac.ca/node/61)

• **Ontario Psychological Association**  
Referral Service: 416-961-0069 or toll-free 1-800-268-0069

• **Women’s Support Network of York Region**  
Crisis Line: 1-800-263-6734
Website: [http://www.womenssupportnetwork.ca/pgs/home.htm](http://www.womenssupportnetwork.ca/pgs/home.htm)

- **Assaulted Women’s Helpline**
  The Assaulted Women’s Helpline provides a 24-hour telephone crisis line offering emotional support, crisis counselling, safety planning and referrals for women who have experienced violence.

  Crisis Line: 416-863-0511 (within GTA); 1-866-863-0511 (toll-free)
  Website: [www.awhl.org](http://www.awhl.org)

- **Rape, Abuse, and Incest National Network (RAINN)**
  The RAINN is an American organization that aims to prevent sexual assault and offers support to survivors. This website provides information about sexual violence and related issues, as well as contact information for sexual assault centres across the United States and a national sexual assault hotline.

  Website: [http://www.rainn.org/](http://www.rainn.org/)

- **Women’s Support Network**
  The Women’s Support Network (WSN) is a rape crisis centre dedicated to providing free, confidential services for women who have experienced sexual violence.

  Crisis Line: (905) 895-7313
  Website: [http://www.womenssupportnetwork.ca](http://www.womenssupportnetwork.ca)

- **Central Intake**
  Central Intake refers assaulted women to shelters in and out of their communities.

  Tel: (416) 397-5637

- **Elle Ecoute**
  Elle Ecoute provides confidential support and crisis intervention for French-speaking women aged 16 years and older.

  Crisis Line: (416) 657-2229
  Tel: 1-(877)-679-2229

- **Advent Family Services**
  Advent Family Services provides individual, family, and group therapy with an emphasis on cross cultural services.

  Tel: (416)-633-3190