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IMAGE-BASED SEXUAL VIOLENCE:  
VICTIM EXPERIENCES AND BYSTANDER RESPONSES

by

Michelle A. Krieger

A Dissertation  
Submitted to the Faculty of Graduate Studies  
through the Department of Psychology  
in Partial Fulfillment of the Requirements for  
the Degree of Doctor of Philosophy  
at the University of Windsor

Windsor, Ontario, Canada

2020

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IMAGE-BASED SEXUAL VIOLENCE:  
VICTIM EXPERIENCES AND BYSTANDER RESPONSES

by

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## ABSTRACT

Advances in internet-enabled and social networking technologies have permeated modern life, changing the nature of social interactions, including how sexual violence is committed and experienced. A novel form of technology-facilitated sexual violence is the use of technology to take, share, or otherwise use sexual images of another person without their consent, termed image-based sexual violence (IBSV). This is not widely thought of as a form of sexual violence and the impact on women and girls is often minimized despite emerging evidence that these experiences are both common and distressing. This form of violence has only begun to be studied, but the accounts that exist suggest that these acts may be similar to traditional (offline) sexual violence in some ways and differ significantly in others. The internet and networked technologies allow sexual images to be spread quickly and indefinitely to vast audiences, which may result in negative social and psychological outcomes for victims beyond, or that differ from, those that exist for other forms of sexual violence. Technology also introduces a social element to these acts, as non-consensual use of sexual images is often social (e.g., an image is sent to or viewed by others) which has implications both for victims' experiences and prevention. Individuals who receive or view the images are considered bystanders and represent an important population to study as they are uniquely positioned to either intervene in prosocial ways (e.g., by preventing future misuse of the image) or to transition into perpetration (e.g., by forwarding an image). The current project contributes to the nascent literature on IBSV through a series of three online studies that investigated victims and bystanders. Study 1 explored key psychological symptoms and social changes in adult women victims of IBSV. A minority of women had symptoms of depression, trauma, and anxiety within clinical levels and about 60% had changes to some of their relationships. Study 2 contextualizes the quantitative findings of Study 1,

deepening our understanding of women's experiences. Using a qualitative method, Study 2 examined how women conceptualized and labeled their experiences of IBSV. Women's experiences were similar to victims of offline sexual violence, and were fell into two broad categories – themes describing emotional reactions, which were more common when the incident occurred, and themes that involved processing or meaning-making, which reflected women's current thoughts and feelings about the incident. None of the labels which women used to describe these acts (e.g., betrayal) alluded to their gendered nature. Study 3 explored the impact of group size, gender, peer norms, and attributions of victim blame and responsibility on bystanders' self-reported likelihood of helping in a hypothetical scenario in which they receive a sexual image forwarded without consent. Group size was experimentally varied. Only victim blame, gender, and peer norms around image sharing predicted intent to help. Taken together, Studies 1 and 2 enhance our understanding of the impact of IBSV for victims so that this form of violence can be established as worthy of serious consideration, future study, and intervention. Study 3 illuminates several factors that may impact bystander responses to inform intervention and educational efforts. A secondary aim of the project was to explore ways in which IBSV is similar to, and different from, traditional sexual violence. The current studies identified similarities in women's accounts and outcomes between offline and IBSV, as well as identified variables that influence bystander behaviour offline as well as when responding to image-. These findings suggest that existing interventions to prevent sexual violence (in the case of bystanders) and support victims may be adapted for IBSV. Most importantly, when synthesizing across the three studies, the findings suggest that the larger social and cultural context that supports violence against women offline also supports such violence in online spaces, underscoring the need for systemic change.

## DEDICATION

Many years ago, you wrote “*May your quest for a Ph.D be fruitful and rewarding. I cannot share your burden, but I will try my best to aid you.*” You have done that and so much more. So much has changed in the years since, but your support and love has never been one of them. This work is dedicated to you, Cat, as a wholly inadequate symbol of my gratitude and love. This work would not have been possible without you.

## ACKNOWLEDGEMENTS

I would like to start by expressing my deepest gratitude to my supervisor, Dr. Charlene Senn. You have shaped my entire graduate school experience. You broadened my horizons and taught me how to think critically and in new ways. Truly, it would not have been an education without you. Thank you for lending your expertise and guidance.

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## **CHAPTER I – Image-based sexual violence: Victim experiences and bystander responses**

Violence against women has been broadly defined by the United Nations (UN) as “any act of gender-based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life” (UN, 1993). Sexual violence encompasses a wide variety of behaviours, from sexual jokes in a workplace to intimate partner violence or rape, and though the specific acts are varied, the objective of the violence – social control of women - remains the same, giving these acts a common character (Kelly, 1996, 2012). The World Health Organization (2013) states that globally, “35 percent of women ... have experienced physical and/or sexual violence from an intimate partner or sexual violence from a non-partner,” the majority of which is perpetrated by men (p. 2). This statistic does not reflect the many indirect harms of sexual violence, such as to individuals who experience disruptions to interpersonal relationships, economic costs to society, and the psychological cost of living with violence and the fear of violence for nonvictims.

Sexual violence is disproportionately experienced by women and girls globally and in Canada (Rosenberg & Duffy, 2010; Sinha, 2013). One area where this is particularly true is with the incorporation of technology into, and use of technology to facilitate, sexual violence. Like traditional sexual violence, technology-facilitated sexual violence (TFSV) includes a wide variety of acts, some more readily recognized as violence than others. The study of technology in relation to sexual violence is relatively new and much remains unknown, particularly with regard to the range and impact of these experiences for victims, and the conditions that facilitate perpetration and bystander behaviours.

The current project focused on an understudied form of TFSV, the non-consensual manufacture and use of sexual images, and employed multiple small-scale studies to explore victims' psychological symptoms and relationship changes, how victims understand their experiences, and factors that may contribute to, or hinder, sharing of images without consent by those who receive them. The broader aims of the current project were to contribute to the small body of literature on TFSV, make preliminary descriptions of victims' experiences in order to establish these acts as a form of sexual violence worthy of further study and prevention efforts, as well as make connections to the established body of work on traditional sexual violence.

### **Background**

Technological advances have drastically changed the way people live their lives and relate to one another. Many have speculated on and studied how these technologies impact social interaction, but much remains unknown as the technological landscape continues to change and evolve. What is clear, however, is that the internet, and the online spaces that it enables, is now a key social context in which adults are living their lives and children are being socialized into.

Recent figures from the Canadian Internet Use Survey indicate that over 90 percent of Canadians over 15 years old use the internet and 67 percent of people who use the internet are on social networking websites such as Facebook or Twitter, increasingly via mobile devices (Statistics Canada, 2013; 2019). Globally, that translates to over 2.26 billion Facebook users, just one of many social media platforms (Ortiz-Ospina, 2019). A national survey of students under 16 years old revealed that in addition to internet access at school, 99 percent accessed the internet outside of school and often on personal mobile devices (Steeves, 2014). In the United States (US), 84 percent of adults use the internet, and usage increases to 96 percent for adults 18 to 29 years old (Perrin et al., 2014; Perrin & Duggan, 2015). Young adults also report the highest rates

of using social networking websites at approximately 90 percent (Perrin, 2015) and have the highest rates of smartphone ownership at approximately 86 percent in the US (Anderson, 2015). Globally it is estimated that over three and a half billion people access the internet and there are over five billion mobile phone subscriptions (Ortiz-Ospina, 2019; International Telecommunication Union, 2019). Among industrialized nations, it is consistently reported that youth (25 years old and younger) adopt emerging technologies and practices, such as smartphones and texting, at the highest rates (Cotton, Shank, & Anderson, 2014; Ling, Bertel, & Sundsøy, 2011; Statistics Canada, 2019; Walsh, White, & Young, 2008).

Internet-connected mobile devices, such as cell phones and tablets, have changed the nature of social interaction by providing platforms for geographically distant people to connect from almost anywhere at any time. Online and face-to-face interactions do not represent different relationships, as many “offline” relationships involve online communication, sometimes even when the other person is physically present (Goodings, Locke, & Brown, 2007; Pettegrew & Day, 2015). Social media, or technologies that serve as platforms for social engagement and connection, can be viewed both as part, and as extensions of, the offline world (boyd, 2014), providing a new space for many social phenomena, both positive and negative, to occur. For example, bullying and social exclusion can now occur online or via mobile devices (Smith & Williams, 2004), as can positive interactions like making and maintaining friendships or receiving social support (Kim & Lee, 2011; Morahan-Martin & Schumacher, 2000; Whitty, 2008). As more interactions move online, online spaces increasingly represent not only an important social context, but an avenue for personal development.

In online spaces, young people not only interact with others, but actively construct their online and offline identities - an important developmental task during adolescence and young

adulthood (Reid & Boyer, 2013). A key component of identity formation is developing a sense of consistency and “inner continuity” through exposure to and interaction with others (Erikson, 1968, p. 50), which now often takes place in online (in addition to offline) spaces. Many youth report that mobile connectivity is crucial to how they socialize and report using their mobile devices to facilitate connection and a sense of belonging (Walsh et al., 2008; Walsh, White, & Young, 2009). Those who have friends who use mobile devices and believe that those people think being online is important, are more likely to identify with their mobile devices (Walsh, White, Cox, & Young, 2011). These young people express themselves through their phones, online personas, and view their mobile devices as part of their identity (Srivastava, 2005; Walsh et al., 2008). Online personas are often used to maintain or support an individual’s offline identity (Steinfeld, Ellison, & Lampe, 2008). Youth report feeling pressured to stay connected or risk being excluded from their peer groups or facing censure for being unavailable (Green & Singleton, 2007; Pempek et al., 2009). For many people, but for those who have grown up with the internet in particular, mobile phones are no longer seen as a mere tool, but as a “social object” central to identity and daily life (Igarashi, Motoyoshi, Takai, & Yoshida, 2008; Srivastava, 2005; Walsh et al., 2009).

Research has also shown that individuals engage in different types of activities, act out different roles, and present themselves differently depending on whether or not the online environment is anonymous (Turkle, 1995; Zhao, Grasmuck, & Martin, 2008). This suggests that people curate or actively construct their online identities according to how they want to portray themselves and are acutely aware of doing so with an ever-present digital audience of their peers. Youth in particular use social networks to observe their peers, explore and test out different identities, and adapt these in response to peer feedback and personal development (Pempek,

Yermolayeva, & Calvert, 2009; Zhao et al., 2008). For example, Dhir and Torsheim (2016) found that adolescents (those aged 12 to 16 years) tagged more photos on Facebook, seeking status and approval from their peers, than young adults did. This supports the idea that youth are using social networks to enhance and develop their identities, and this interaction can help youth clarify their sense of self (Davis, 2013).

Research on gender and technology suggests that there not only differences in how men and women use the internet and mobile devices, but also in the way that online spaces are experienced. Past studies have found that women report feeling less confident (Durnell & Haag, 2002; Jackson et al., 2001; Tsai, Lin, & Tsai, 2001) and more anxious using computers and going online (Chou, 2003; Chua, Chen, & Wong, 1999; Whitley, 1997; Zhang, 2005), though there is conflicting evidence (e.g., Pope-Davis & Twing, 1991) as well as evidence that this is changing (Cotton et al., 2014; Shaw & Gant, 2002; Todman & Day, 2006). More recent studies have suggested that, for computer use in general, differences in psychological states like anxiety are no longer present; however, they seem to persist for more technical skills and aspects of computing (Scherer & Siddiq, 2015). Interestingly, one study reported that in childhood boys were slightly more anxious than girls, but this effect was reversed in high school (King, Bond, & Blandford, 2002). This finding is similar to other behaviours, like fear of math, that reflect the internalization of gendered stereotypes (e.g., girls are not good at math) and responses to social conditioning. Scholars posit that these findings arise from differences in how girls and boys are taught to think about and interact with computers and technology (e.g., Jackson et al., 2001). The finding that individuals who endorse more stereotypically masculine beliefs about themselves were more confident using technology lends support for this conclusion (Huffman, Whetten, & Huffman, 2013). Overall, it appears that for many, technology is still viewed as inherently



masculine and online spaces as belonging to men. This can be seen in the backlash against women in highly technical careers, such as computer science, as well as in response to women taking up space online (Kennedy, 2000; Sherman et al., 2000).

Harassment such as this often makes online spaces unsafe for women and serves to exclude women from the potential benefits of online participation (Megarry, 2014). This may be particularly harmful for girls and young women for whom digital spaces are crucial for socialization and identity formation. The role of fear in restricting women's presence in online spaces can be seen as a virtual extension of what Valentine (1989) outlined in relation to offline spaces, in that fear of male violence acts as a form of social control, restricting women's free movement and use of space.

Scholars have suggested that some features of online environments, such as the potential to be anonymous, facilitate online harassment, and this harassment is disproportionately aimed at women and girls and perpetrated by boys and men (Barak, 2005; Joinson, 2007; Suler, 2004). A few studies have found that men and women are targeted online in equal proportions but the types of harassment are different, with women and girls typically reporting more sexual harassment, requests for sexual encounters, unwanted sexually explicit images, online stalking, and higher rates of distress as a result of any form of online harassment (Biber, Doverspike, Baznik, Cober, & Ritter, 2002; Bossler, Holt, & May, 2012; Fenaughty & Harré, 2013; Goodson, McCormick, & Evans, 2001; Henry & Powell, 2016; Livingstone & Görzig, 2014; Staude-Müller, Hansen, & Voss, 2012). Research on harassment via mobile technologies has found that girls and women are targeted more often (Fenaughty & Harré, 2013). This is concerning as young people report that mobile phone harassment is more distressing due to the centrality of mobile phones in their lives and the fact that the harassment can occur at any time or place

(Fenaughty, 2010). Henry and Powell (2016) suggest that the anonymous nature of online harassment and threats - instead of creating psychological distance due to the slim chance that someone will act on an online threat – can create a generalized fear of the unknown that may increase psychological distress. In light of this, findings that women hold less positive attitudes towards computers and the internet than men are unsurprising (Brosnan & Lee, 1998; Jackson et al., 2001; Durndell & Haag, 2002; Liaw, 2002; Whitley, 1996).

The research on gender and technology suggests that although the internet and mobile devices have the potential to act as equalizing media, many (if not all) of the social inequalities and processes that occur offline are perpetuated in online spaces. Chief among these is the use of technology to support and commit sexual violence.

### **Technology and Violence Against Women**

The Association for Progressive Communications found that the use of technology to commit sexual violence is a global phenomenon and takes varied forms (Athar & Women's Legal and Human Rights Bureau, 2013; Nyst, 2014). Early theorization differentiated between the use of technology to bring existing forms of gender-based violence (e.g., harassment) online, which was termed *technology-assisted* sexual violence, and the use of technology to perpetrate new forms of violence, which was termed *technology-facilitated* sexual violence (TFSV; Henry & Powell, 2015b). However, as technology has become more present in our daily lives, the boundaries between online and offline spaces have been eroded and technology-facilitated sexual violence appears to have become the preferred umbrella term.

Henry and Powell (2014) originally outlined six forms or categories of TFSV<sup>1</sup> which have been refined and redefined as five dimensions as more is learned about the forms and nature of TFSV. The five dimensions of TFSV as outlined Henry and Powell (2018) are:

(a) online sexual harassment; (b) gender- and sexuality-based harassment; (c) cyberstalking; (d) image-based sexual abuse, and; (e) the use of a carriage service to perpetrate a sexual assault or coerce an unwanted sexual experience (p. 196).

Online sexual harassment refers to unwanted sexual attention online and includes behaviours such as receiving unsolicited messages asking for sex or having graphic sexual images posted on a social media profile. This is distinguished from gender- and sexuality-based harassment, which also describes unwanted online attention, but refers to harassment that insults people because of their gender, sexuality, or sexual orientation and the use of online spaces and communities to promote gender-based discrimination and violence. Examples of this include, “gender and sexuality-based hate speech, rape threats, reputation harming lies, impersonation, false accusations of sexual violence, and virtual rape” (Henry & Powell, 2018, pp.199-200). Though there are definitional similarities to their offline correlates, online sexual, gender- and sexuality-based harassment differ from traditional violence in that technology allows for sustained campaigns of harassment to be perpetrated against a single person by many different individuals, making it hard to establish a pattern of harassment or legal culpability of a single perpetrator. The third form of TFSV is cyberstalking, defined as “online obsessive relational pursuit” which in addition to online acts includes the use of technology as an extension of offline stalking behaviours (Henry & Powell, 2018, p. 201). An example of this is the use of GPS-enabled

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<sup>1</sup> (1) the unauthorized creation and distribution (actual or threatened) of sexual images; (2) the creation and distribution (actual or threatened) of sexual assault images; (3) using a carriage service to procure a sexual assault; (4) online sexual harassment and cyberstalking; (5) gender-based hate speech; and (6) virtual rape (Henry & Powell, 2014, p.85).

devices or applications to track someone's movement or location. New technological developments have made it possible to monitor someone's online and offline behaviours using a variety of means that can be operated across great geographic distances and often anonymously. The fourth dimension of TFSV is image-based sexual abuse. Image-based sexual abuse includes two categories of behaviour, sexting coercion, which is pressuring someone to engage in "unwanted sexual behavior via sexually explicit text, pictures, or video," and the nonconsensual creation, use, distribution, or threat of distribution of sexually explicit images (Henry & Powell, 2018, p. 201). The second form of image-based sexual abuse refers to both pictures and videos, and encompasses any use of images without consent, regardless of whether they were initially created or sent willingly. This could include showing someone else a sexted image (sexting is defined herein as the sending and receiving of self-produced sexual material via technology), forwarding images to others, posting images online (commonly termed revenge pornography), using images for any purpose that was not previously agreed to, refusing to delete images, or threatening to distribute the images (Henry & Powell, 2015a; VPLRC, 2013). The fifth and final form of TFSV is the use of a carriage service to perpetrate a sexual assault or coerce an unwanted sexual experience. This refers to the use of novel technologies such as dating applications to facilitate sexual assault. There is little known about this topic but anecdotal reports from crisis centres suggest that technology is impacting the ways in which sexual assault is perpetrated (Henry & Powell, 2014).

The current project focused on a subset of behaviours in Henry and Powell's (2018) image-based sexual abuse category (hereafter referred to as image-based sexual violence). Image-based sexual violence is used in this work to refer to taking and/or using sexual images (photos and videos) without consent. It excludes sexting coercion, threats to commit image-based sexual

violence, and images taken of children and used/distributed by adults for the purposes of child pornography (i.e., where age is the motivating factor in perpetration/use of images).

There are few estimates of the lifetime prevalence of TFSV, but one recent study of Australian adults reported that 62.3 percent of a large community sample had experienced at least one incident of TFSV (Powell & Henry, 2016). Little is currently known about how common it is to have had a sexual image distributed without one's consent. For adolescents and young adults, estimates have ranged from approximately 12 percent in a US convenience sample (Dir & Cyders, 2015), and between 8 and 32 percent of randomly sampled adolescents in five European countries (Wood, Barter, Stanley, Aghtaie & Larkins, 2015). It is relevant to note that when the European data was broken down by gender, this number increased to 42 percent amongst female adolescents. Among a random sample of US adults and students from 15 German universities, the prevalence of non-consensual image use was approximately two percent in both studies, with half of those in the US study perpetrated by a current or former romantic partner (Dekker & Koops, 2017; Ybarra et al., 2017). These percentages may underestimate how often images are forwarded or viewed without consent as many of these incidents may be unknown to the individuals featured in the images.

There are currently few studies of perpetration, which includes taking, sharing, and posting or uploading sexual images without consent. At this time, there are no systematic estimates of filming behaviours in the literature though individual examples are described (e.g., Henry & Powell, 2014) and one study that asked about taking suggestive *and* embarrassing images (emphasis added) of a romantic partner reported about one percent of their sample had done so (Reed, Tolman, & Ward, 2016). An exploratory study conducted by the author on a mid-size Canadian campus found that 1.5% ( $n = 4$ ) of a mixed-gender convenience sample reported

taking images of others (pictures and video) without consent, which translated to 2.5% of the men, as no women reported this behaviour (Krieger & Senn, 2015). Research on pornography and other image-sharing websites has also found that non-consensual images, primarily of women, is a growing niche and there are multiple online communities devoted exclusively to uploading and sharing such images. These appear to be mostly (if not exclusively) populated by men (Henry & Flynn, 2019), which suggests that perpetration may be more common among men than the current prevalence estimates suggest. Anecdotal reports by police officers working in sex crime units suggest that these acts are perpetrated frequently, as complaints of non-consensual image sharing are extremely common (so common in fact that police often do not address the complaints because it would be impossible to keep up; Dodge & Spencer, 2018).

Sharing images without consent includes both electronic sharing (forwarding) as well as physically showing images to other people. In youth samples, studies have reported that between 3 and 25 percent had forwarded or physically shown sexted images to others, and boys were almost three times more likely to forward an image than girls (Madigan, Ly, Rash, Van Ouytsel, & Temple, 2018; Johnson, Mishna, Okumu, & Daciuk, 2018; Mitchell et al., 2012; Strassberg et al., 2013; Strassberg, Rullo & Mackaronis, 2014). Boys were also significantly more likely to share sexual photos that they themselves had taken of other people (Strassberg et al., 2014). Studies with adults are fewer and the estimates vary widely between studies. For example, Hudson, Fetro, and Ogletree (2014) reported that 45% of their sample of college students had shared or forwarded a sexual image, whereas Thompson and Morrison (2013) found that only 16.3% of their sample of college men had forwarded or shared an image. Falling between these two estimates, a recent US study of adults reported that approximately 23% of people who had received a sext went on to share the image and did so with an average of three other people

(Garcia et al., 2016). Research that employs random sampling of diverse populations is still needed to establish reliable estimates of perpetration behaviours and related variables.

Other research suggests that the relationship between individuals who receive an image and the other parties (sender, victim) influences decisions around sharing or forwarding images. For example, among adolescents, Strohmaier and colleagues (2014) found that only three percent would send an image to an acquaintance, but this increased to 26 percent for sending images to a good friend. Lim et al. (2016) reported a similar proportion in that almost one third of a sample of young adults was willing to show sexted images to their friends without permission. However, this decreased to 14 percent when the image was from a partner rather than an acquaintance. In both cases the differences suggest that youth recognize that using a sext without permission represents a significant violation of trust and are sensitive to the social contexts in which they share (or do not share) images. It is concerning that a significant proportion of young adults in both studies would be willing to share the image, perhaps suggesting that this is not seen as harmful or an act of sexual violence. Additionally, the fact that a larger proportion of youth were willing to share the image when it was not of an intimate partner may indicate that technology affords psychological distance between the sharer and the subject of the image, allowing the person sharing the image to downplay the harms involved and their own role in perpetuating victimization. Research has long established a relationship between being anonymous and antisocial behaviour (Zimbardo, 2004).

Across all forms of TFSV, Powell and Henry (2016) found that for both men and women who had been victims, the perpetrator was most often a man. They also found that men were more likely to be perpetrators overall and women were more likely to be targeted by male perpetrators. The majority of studies that discuss non-consensual distribution of sexts suggest

that it is most common that images of women and girls are distributed by men and boys (Citron & Franks, 2014; Mitchell et al., 2012; Rollins, 2015; Wood et al., 2015), although a recent study did find similar rates of non-consensual distribution for images of men and women (Ybarra et al., 2017) and one study with Australian adults found a higher prevalence for men (having an image shared), though this had a small effect size (Powell & Henry, 2016). Analyses of revenge pornography websites report that the vast majority (i.e., over 90%) of the posted images are of women (Henry & Flynn, 2019; Langelois & Slane, 2017; Uhl, Rhyner, Terrance, & Lugo, 2018). For another subtype of image-based sexual violence, online blackmailing for the purpose of obtaining sexual photographs, researchers have consistently reported that girls are targeted more often than boys (Kopecký, 2017).

Despite conflicting results regarding prevalence, the social and psychological outcomes following non-consensual distribution of images appear to be more negative and harmful for women, and all forms of TFSV experienced as more distressing (Henry & Powell, 2015a; Powell & Henry, 2016). For example, when images of girls or women are released, it can cause embarrassment, distress, damage to reputation and relationships, and be used by others to harass the subject (Burkett, 2015; Lippman & Campbell, 2014). Images of boys and men are rarely reported to cause negative reactions or fallout given that images of male bodies are not sexualized to the same extent as female bodies, and the ability to access male bodies (e.g., through sexual activity or by obtaining sexual images) does not increase social status among groups of boys and men in the same way that access to female bodies does (Salter, 2016). This dynamic is widely recognized amongst youth themselves, though it does not appear to be questioned or challenged, but instead regarded as an expected part of sexual relations (Ringrose et al., 2012; Ringrose et al., 2013; Wei & Lo, 2013).



## **Differentiating Sexting from Non-consensual Use of Sexual Images**

Although the incorporation of technology into sexual practices is not new (e.g., use of Polaroid cameras to take sexual images was discussed by Edgley and Kister in 1982), the ability to instantly transmit images or information worldwide and with relative ease was previously unknown. Sexting, or the sending and receiving of self-produced sexual material via technology, has quickly become a staple of modern courtship, and even friendships.

Analyses of the sexting literature have reported an estimated prevalence of approximately 53 to 57 percent for adults and between .9 and 60 percent for those younger than 18, though reported rates varied widely (Barrense-Dias, Berchtold, Surís, & Akre, 2017; Klettke, Hallford, & Mellor, 2014). This variance has been attributed to differences in the definition of sexting used and the population(s) sampled (Agustina & Gómez-Durán, 2012; Walker & Sleath, 2017), although changes in the prevalence of sexting over time are also suggested in the literature. Indeed, an examination of the impact of definitions on prevalence estimates concluded that estimates were lower for studies whose definitions specified images in addition to, or instead of text, and also definitions that asked about receiving rather than sending, resulting in vast differences (Barrense-Dias et al., 2017). Many studies have used a single question to assess sexting prevalence (e.g., Livingstone & Görzig, 2014) which does not allow for different behaviours to be teased out. Another definitional issue is the use of different time periods. For example, a broad definition with a longer time frame, such as Baumgartner et al.'s (2014), "In the past 12 months, have you sent or posted a sexual message (words, pictures, or videos) of any kind on the internet?" would be expected to produce a much higher estimate than a conservative definition with a smaller time frame (e.g., "In the last month, have you sent a sexually suggestive picture (naked or half naked) of yourself using the Internet or a mobile phone?" used by Van

Ouytsel et al., 2014). The differences in definitions and methods go beyond these few examples, but highlight the difficulties in making comparisons and drawing conclusions from this literature.

Historically, sexting was more common in those under the age of 18, with those who were closer to the age of 18 sexting at higher rates and the prevalence decreasing with age into adulthood (Baumgartner, Sumter, Peter, Valkenburg, & Livingstone, 2014; Campbell & Park, 2014; Dake, Price, Maziarz, & Ward, 2012; Wysocki & Childers, 2011). However, a recent study by the Pew Research Center (Lenhart & Duggan, 2014) suggests that several shifts have occurred, with sexting becoming more common overall across all the age groups surveyed, and with those between the ages of 18 and 24 years now sexting at the highest rates. This may reflect differences in methodology, increased access to smartphones and the internet, or a cohort effect as the so-called “digital natives” age into adulthood.

The literature on sexting is still in its infancy. Early investigations revealed several correlates of sexting that appear to have moderate support. In the area of individual differences, the literature suggests that people who are higher in sensation-seeking and risk-taking tendencies (Baumgartner et al., 2014; Dir & Cyders, 2015; Livingstone & Görzig, 2014), who experience high levels of attachment anxiety (Drouin & Landgraff, 2012; Weisskirch & Delevi, 2011), who hold more favourable attitudes towards sexting (Dir, Coskunipinar, Steiner, & Cyders, 2013; Hudson & Fetro, 2015; Strassberg, McKinnon, Sustaía, & Rullo, 2013; Weisskirch & Delevi, 2011) and believe their peers do as well (Van Ouytsel, Ponnet, Walrave, & d’Haenens, 2017) are more likely to sext. Interestingly the relationship with sensation-seeking, which has the most support within the literature, may only hold true for youth who sext, suggesting that youth and adult sexting may have different correlates and much remains unknown at this stage (Delevi & Weisskirch, 2013; Van Ouytsel, Van Gool, Ponnet, & Walrave, 2014).

Despite much of the discussion around sexting framing it as a psychologically unhealthy behaviour, research into the relationship between sexting participation and psychological factors such as depression (Temple et al., 2014; Van Ouytsel et al., 2014), anxiety (Temple et al., 2014), coping skills (Sevcikova, 2016), and perceived same-sex popularity (Abeeel, Campbell, Eggermont & Roe, 2014), have produced conflicting results and weak support. This may be due to differences in the definitions of sexting that were used, differences in the sample characteristics, use of cross-sectional designs that fail to illuminate causal processes, or actual changes over time in who sexts and how it is perceived within these populations.

Several external factors also appear to be related to sexting. For example, people who are in romantic relationships (Burkett, 2015; Colley, Todd, White & Turner-Moore, 2010; Drouin & Landgraff, 2012), people who use the internet more often and text more frequently (Dake et al., 2012; Livingstone & Görzig, 2014; West et al., 2014), and among youth, those who pay their own phone bill (Lenhart, 2009) are more likely to sext. However, as youth spend more time cultivating relationships online and engaging in sexting, these relationships may weaken or change. For example, if the average amount of texting increases among young adults to the point in which everyone is texting a similar amount (ceiling effect for technology use), the relationship between texting frequency and sexting may dissolve.

In the psychological literature, sexting is usually constructed as a risky behaviour because it is often associated with being sexually active (Ferguson, 2011; Gordon-Messer, Bauermeister, Grodzinski, & Zimmerman, 2013), higher rates of sexual activity (AP-MTV, 2009; Dake et al., 2012; Dir, Cyders & Coskunpinar, 2013; Temple et al., 2012), risky sexual behaviours like having unprotected sex (Benotsch et al., 2013; Ferguson, 2011), non-sexual risk behaviours like drug use (Benotsch et al., 2013; Dake et al., 2012), and as occurring primarily between underage

children, putting them at risk both for legal charges for producing child pornography and of becoming victims of child pornographers if their images are leaked (Rollins, 2015). In addition, sexting itself is often defined as a risky sexual behaviour, despite research that demonstrates that victimization mediates the relationship between sexting/online sexual expression and lower life satisfaction and worse mental health outcomes, as compared to youth who do not sext (Festl et al., 2019).

Some of these behaviours, such as being sexually active, are not necessarily risky but are treated that way given that much of the focus within the sexting discourse is focused on young people and on girls in particular. Reflecting the value placed on chastity for girls and women, girls' sexual expression is often discussed as inherently negative and dangerous, resulting in sexting behaviours being acquainted with sexual risk (Karaian, 2014).

However, there is also evidence that suggests that the relationship between sexting and risk behaviours is uncertain. Several studies have failed to find any relationship between sexting and sexual risk behaviours (Curran, Hubach, & Hammer, 2016; Ferguson, 2011; Gordon-Messer et al., 2013; Temple & Choi, 2014), and Ferguson (2011) also reported that sexting was more common for young women who found sex to be pleasurable. This suggests that sexting may be part of a healthy sexual repertoire for some women. In other studies, youth report that sexting is a way to explore their sexuality in a safe way, without the pressure of another person present or risk of unwanted sexual activity, pregnancy, or sexually transmitted infections (Benotsch et al., 2013). In this regard, consensual sexting may be an avenue for healthy sexual expression for some individuals. Hasinoff (2012) argues that if the discourse shifts to view consensual sexting as a normal part of sexual expression, non-consensual behaviours will be better recognized as a different phenomenon.

The belief that sexting is a risky behaviour is not only prevalent in the literature and popular press, but also amongst young people. Several studies have found that people, including those who sext, perceive sexting to be risky for a number of reasons (Kopecký, 2012; Lippman & Campbell, 2012; Weisskirch & Delevi, 2012). Aside from legal and educational repercussions (for minors), the reasons that sexting was perceived to be risky were all consequences of the non-consensual distribution of images, such as embarrassment or harassment from peers. These consequences are perceived to be more likely to happen to girls and women and more harmful when they do, so it is not surprising that youth report that sexting is more of a risk for young women than for men and more women are wary of sexting (Dir, Cyders et al., 2013; Henderson, 2011; Lim, Vella, Horyniak, & Hellard, 2016).

The literature is unclear on the nature of gender differences for some sexting practices, and many of the findings are conflicting. One key area where the findings remain unclear is the proportion of men versus women who send and receive sexts. Some studies have suggested that girls and women are more likely to sext than boys (Englander, 2012; Lippman & Campbell, 2012; Mitchell, Finkelhor, Jones, & Wolak, 2012; Wysocki & Childers, 2011) and send more sexts that include images (AP-MTV, 2009; Ogletree, Fancher, & Gill, 2014; Strohmaier, Murphy, & DeMatteo, 2014). Other studies have reported that boys and men sext more often overall and receive more sexts than girls and women (Dir et al., 2013; Fetro & Ogletree, 2014; Gordon-Messer et al., 2013; Hudson, 2011; Livingstone & Görzig, 2014; Strassberg et al., 2013). Temple et al. (2012) found that boys were more likely to request sexts from girls, which may explain why it has been reported that girls send more images and boys receive them at higher rates. Two studies did report that boys and men sent more images than girls and women (e.g., Kerstens & Stol, 2014; Marcum, Higgins, & Ricketts, 2014), in contrast to most others that

suggest the opposite. It is possible that these results do not reflect the same phenomenon (i.e., consensual sexting), as the measure of sexting used in the Marcum et al. (2014) study was the sending of nude images to others when they were unwanted. Notably, many studies have failed to find any gender differences (Abeelee, Campbell, Eggermont, & Roe, 2014; Benotsch et al., 2013; Dake et al., 2012; Henderson, 2011; Drouin & Landgraf, 2012; Lenhart, 2009; Rice et al., 2012; Ybarra et al., 2017) or report similar rates for sexts that do not contain images (Strohmaier et al., 2014).

It is difficult to interpret these findings as the definitions and populations differed between studies. For example, it is expected that studies that define sexting as including both text and images would report much higher rates of sexting than studies that only count sexual images, and these (definitional) differences could also mask gender differences in sexting practices. It is also likely that the relationship between sexting and gender is complex and depends on many contextual factors. There is some evidence to support this. In a multi-country investigation of sexting, Baumgartner et al. (2014) found that in countries that were more sexually restrictive (endorsed traditional gender roles) boys reported sexting at higher rates, and in countries that were more egalitarian the rates were more similar. Other research suggests that ethnicity interacts with gender to impact the likelihood of sexting within country borders as well (e.g., Dake et al., 2012; Fleschler Peskin et al., 2013; Rice et al., 2012).

Despite a number of studies reporting no gender differences for prevalence of sexting, other research suggests that the experience of sexting is gendered, which is not unexpected as other sexual practices and the use of technology are as well. Sevcikova (2016) examined several psychological correlates for girls and boys who sexted across different age groups and found that gender differences did not emerge until older adolescence. In combination with Ogletree,

Fancher, and Gill's (2014) finding that some of the variation in sexting rates can be attributed to the extent to which individuals endorse traditional ideals of masculinity and femininity (at least within a North American context), this suggests that offline socialization processes are a key explanatory factor.

A feminist critique of cybersex (online sexual encounters) that is applicable to sexting is that these exchanges tend to replicate heterosexist norms and gendered patterns of behaviour that occur in the offline world (Döring, 2000). The literature on sexting provides support for this in two ways. First, patterns of coercive behaviour in which young women are pressured into sexting by young men are often reported in the sexting literature (e.g., Klettke et al., 2014; Lenhart, 2009; Lippman & Campbell, 2012; Ringrose, Gill, Livingstone & Harvey, 2012), with girls reporting pressure to sext as their primary motivation for sexting at much higher rates than boys (NCPTUP, 2008), and boys soliciting sexts more frequently than girls (Temple et al., 2012). In fact, one of the most common reasons youth say they sext is in response to requests from romantic partners (Drouin, Vogel, Surbey, & Stills, 2013) or to gain approval from peers (Van Ouytsel, Ponnet, Walrave, & d'Haenens, 2017). Being asked to send a sext and the experience of receiving unwanted sexts is reported to be more upsetting to girls and women than to boys and men, and girls/women also report that these acts can be perceived as threatening - a perception not reported in the literature for boys or men (Burkett, 2015; Livingstone & Görzig, 2014; Temple et al., 2012). Sexting also mirrors offline sexual activity in that many women participate in unwanted but consensual sexting, in which they agree to sext despite not wanting to, for a variety of reasons such as pleasing their partner or a belief that it will foster intimacy (Drouin & Tobin, 2014). Sexting in the absence of this intrinsic motivation is related to having negative experiences with sexting (Kerstens & Stol, 2014). In these cases, it may be difficult to isolate and

study truly consensual sexting exchanges, which complicates the distinction between consensual and non-consensual acts.

A few studies have explicitly discussed sexting as a gendered phenomenon, most notably with regards to how the sexual double standard is applied to sexting behaviours. The sexual double standard refers to ways in which men and women are held to different behavioural standards, treated, or perceived differently for the same sexual behaviours. This takes many forms, but it is usually the case that behaviours that are permissible or praised for men are unacceptable for women (Bordini & Sperb, 2013). In the case of sexting, the sexual double standard can be seen in the different ways that nude images are treated when they are of men/boys versus women/girls. For example, when images of girls or women are distributed, it may be seen as damaging to their reputation and used by others to harass and isolate them, whereas images of male bodies are not seen as shameful or indicative of poor character (Salter, 2016). Research on social media suggests that when users encounter content that they deem inappropriate (e.g., sexual content) on other people's social media profiles, this can result in real-world consequences, such as negative evaluations of the person or efforts to distance themselves online (Muscanell, Ewell, & Wingate, 2016). It is likely that the sexual double standard shapes users' perceptions of appropriate online behaviours, meaning that women would be disproportionately impacted. In fact, the potential for sexual images to damage girls' reputations is so powerful that rumors of an image alone can be fuel for harassment, and boys threaten to spread such rumors in order to blackmail girls into sending images (Sales, 2016). As a result of these factors, the consequences for women and girls tend to be more negative and harmful than for boys and men when these images are distributed (Draper, 2012; Ringrose, Harvey, Gill & Livingstone, 2013). Whereas young women are expected to set boundaries on sexual activities



and abstain from sexting, young men are challenged to prove their sexual prowess by collecting and sharing sexted images (Ringrose et al., 2013; Walker et al., 2013). This creates a no-win situation for many young women in which they are pressured to sext and judged to be “prudes” if they do not agree, yet are also vilified as “sluts” or as attention-seeking if they do (Lippman & Campbell, 2014). The sexual double standard also positions men as active sexual pursuers, compared to women’s passive and receptive role, and this is used to normalize coercion and pressure by boys/men on girls/women to sext and justify the collection and sharing of images among male peers to gain social status (Ringrose et al., 2013).

Accordingly, education about sexting and prevention programs have been disproportionately focused on girls and young women, despite the fact that they may not be more likely to sext (Lippman & Campbell, 2014). The focus has been on managing the risks that social media pose to girls and women and promoting abstinence from these activities (for an example, see McEachern, McEachern-Ciattoni, & Martin, 2012), especially in the legal and educational realms (Krieger, 2017). Attempts to prevent sexting that place responsibility on girls have been critiqued as reinforcing existing systems of inequality through the implicit value placed on protecting White, heterosexual, middle class girls (Karaian, 2014). Importantly, this framework also prevents any in-depth dialogue about sexting as a healthy sexual practice, particularly in relation to girls. In the risk management and sexual double standard narratives, if girls are responsible for managing the sexual behaviours and desires of others, including the use of their images without consent, then this does not leave much room for unconstrained sexual exploration. A few studies have suggested that girls do negotiate with partners around sexting, are interested in sexting, and derive pleasure from sexting, even as they simultaneously make decisions about potential risks and consequences (Burkett, 2015; Lee & Crofts, 2015).

The responsabilisation of women for male sexuality and to manage any risks related to sexual activity seems to have been internalized by young people with regard to sexting. In a focus group study, Salter (2016) reports that many of the participants engaged in victim blaming when a sexual image was used without consent – stating that it was the fault of the women or girls because they chose to sext in the first place. Burkett (2015) found that girls also endorsed this viewpoint, stating that they had to be careful who they sent images to in case they were later distributed by that individual.

Girls and women who violate traditional gender roles by wanting and choosing to sext are assumed to have accepted these risks. At the same time that women are made responsible, male perpetration is often ignored entirely or normalized as part of typical masculine sexuality. For example, young women reported that they often received unwanted pictures of male genitals and perceived these to be unpleasant, but failed to assign any responsibility to the male senders, instead viewing it as part of normal male sexual behaviour (Salter, 2016). Qualitative research with young people consistently finds that young men are encouraged by peers to collect and share images of young women with their male friends as a source of amusement and bonding (Albury & Crawford, 2012; Ringrose et al., 2013). Previous studies have also noted that young men who indicate that they are not interested in sexting or who decline to view images are often excluded, teased, and shamed by their male peers for violating masculine gender norms (Walker et al., 2013). This reinforces heteronormative sexist behaviours in which males are viewed as the sexual aggressors and gain status by establishing dominance over females (i.e., by showing sexted images to peers). Optimistically, young men in a recent study by Burkett (2015) reported that although they knew of people sharing sexted images and might mention receiving images to

peers, distributing sexted images without consent was not viewed as acceptable, normal, or positive within their peer group.

Taking and sharing sexual images without consent is often considered part of sexting not only by youth who engage in the practice, but in the literature as well. In Wolak and Finkelhor's (2011) typology of sexting, the taking and sharing of images without consent, along with images that are illegal for other reasons, are deemed "aggravated" sexting. In the legal literature, the distribution of images without consent is often termed "secondary" sexting, meaning any spread of images beyond the initial "primary" transfer, or called "mass sexting: (e.g., Barnes, 2012; Mujahid, 2011). Cases where images of adults are uploaded to websites, usually accompanied by personal details about the subject, are termed revenge pornography or non-consensual pornography, and generally treated as a separate phenomenon given that the sexting discourse has historically been concerned with underage individuals. Though the platform and intention behind the act may differ - for example, pictures forwarded to gain status versus uploaded with intent to harm, revenge pornography can be considered a variant of non-consensual image distribution. The conflation of these concepts is illustrated in the language that is used. For example, non-consensual and consensual sexting are both considered to be under the larger umbrella of "sexting," just as revenge pornography is considered a type of pornography.

These terms and conceptualizations are problematic because they fail to differentiate consensual and non-consensual behaviours, which both normalizes acts of violence and contributes to a view of sexting (and sexual) behaviours as inherently risky, especially for girls and women. Ultimately, it prevents the labeling of non-consensual acts as sexual violence. In addition, much of the discourse reduces these acts to "paradigmatic conceptualization[s]" that divorce them from a wider context of societal violence and prevent a deeper examination of the

phenomena (Henry & Powell, 2016, p. 398). For example, the typical revenge pornography paradigm is one in which a male partner distributes or uploads sexual photos of a female ex-partner as revenge for the dissolution of the relationship. However, this discounts other scenarios and motivations for perpetration, such as the use of images to control or coerce women or to gain favour with peers (Henry & Powell, 2016). It also erases the broader social context in which female bodies continue to be seen as shameful and female sexual expression stigmatized, allowing men to use these images as a way to exert power and control over women and girls.

One impact of this can be seen in the legal realm, where images of women taken without consent and then shared have been treated as more serious than images initially taken by the women themselves (Citron, 2009; Salter & Crofts, 2015). Generally, legal sanctions for the non-consensual distribution of sexual images for adults have been slow to emerge, though several countries and U.S. states have attempted to prosecute revenge pornography or the use of sexual images without consent (Henry & Powell, 2016). However, most of these offences have been charged under existing laws, such as copyright law, and some of the newly-enacted- legislation evidences victim-blaming attitudes. For example, the revenge pornography legislation in California only provides recourse for people whose images were initially taken without their knowledge or consent (Levendowski, 2014). In other words, the women deemed to be “real victims.” In 2015, Canada amended the criminal code to prohibit any non-consensual manufacture or use of intimate images, regardless of their origin. However, research with law enforcement shows that victim blame, failure to differentiate consensual from non-consensual acts, and minimization of the seriousness of these acts led to many cases being dealt with through inappropriate and potentially harmful remedies, such as deferring to untrained individuals like school principals to talk to youth – a solution that could result in inadvertently

reinforcing messages that blame the victim, excuse the perpetrator, and fail to address issues of consent (Dodge & Spencer, 2018). There is a need for criminal laws and law enforcement practices that frame these acts as sexual violence and acknowledge the potential for serious harms, no matter how the original images were created or obtained (Henry & Powell, 2016).

The legal system, and the broader society that shapes it, will not be able to truly provide justice until the seriousness of non-consensual manufacture and use of sexual images is recognized as a form of sexual violence. The impact that recognizing these behaviours as acts of violence with serious harms can be seen in the difference between legal outcomes for perpetrators made by judges that frame these behaviours as harmful versus those that do not, and those that engage in victim-blaming. In an example of the former from Australia, Deputy-Chief Magistrate Jane Mottley sentenced a man to six months in jail for posting nude pictures of his ex-girlfriend on Facebook, and stated that the harms were “not difficult to contemplate: embarrassment, humiliation and anxiety at not only the viewing of the images by persons who are known to her but also the prospect of viewing by those who are not. It can only be a matter for speculation as to who else may have seen the images, and whether those images ... will again be available for viewing, circulation or distribution” (Unreported case, as cited in Langos, 2015). In an analysis of Canadian legal cases involving the distribution of sexual images, judges who believed that technology would exacerbate the harms caused gave harsher sentences for cases where technology was used as compared to cases where images were distributed in other ways (Dodge, 2019). This is contrasted with the comments of judges that frame these acts as less harmful than other crimes, and who blame the victim for taking the image in the first place. Legal scholarship in the US reflects this view; for example, one article stating that “compared to sexual offenses involving physical harm, such as molestation or rape, sexting is much less

severe, especially since most sexting materials are self-produced” (Barry, 2010, p. 143).

Interviews with Canadian police officers reveal that the perception that these acts are both commonplace and not as serious as other types of sexual offenses impacts how they choose to respond to these incidents and make use of police resources (Dodge & Spencer, 2018). Research is needed to investigate the outcomes of these acts for women to ensure that judicial processes reflect the reality of women’s experiences – both offline and online.

Finally, these conceptualizations are also problematic from a knowledge production and prevention standpoint, as muddy theoretical constructs make it harder to research and discuss these issues accurately. When non-consensual and consensual acts are studied together, it contributes to the mixed findings regarding outcomes and correlates of sexting within the literature. For example, in one study that evaluated outcomes separately for adolescent girls that had been coerced into sexting and those who had sent a sext willingly, the girls who were coerced were more likely to experience anxiety (Englander, 2012). A more accurate conceptualization would be to view and name these behaviours as part of a continuum of TFSV. This critique has been made by many scholars studying TFSV and a call has been made for more research in this area, to label these acts as TFSV, and to begin addressing perpetration in prevention efforts (e.g., Albury & Crawford, 2012; Henry & Powell, 2015b; Karaian, 2013; Krieger, 2017; Powell, 2010; Salter, 2016). A first step in this process is to develop a body of research on the nature and impact of different forms of TFSV and make connections to the existent literature on sexual violence.

### **Relationship between TFSV and Offline Sexual Violence**

**Victims.** Early evidence suggests that those between the ages of 18 and 24 years old experience the highest rates of TFSV (Henry & Powell, 2016). This is similar to the rape

literature, which suggests that younger people are at higher risk for victimization, with women between the ages of 18 and 24 years at particularly increased risk (Black et al., 2011). Currently there is little research on the outcomes for victims after their images have been shared, but the few accounts that exist suggest that the outcomes may be similar to those for offline sexual violence. Bates (2015) interviewed victims of revenge pornography, women who had had their intimate images uploaded online with identifying information by romantic ex-partners, and found many of the same symptoms that are reported in the traditional sexual violence literature. Participants described a range of negative psychological effects, such as depression, anxiety, PTSD, and issues with trust, confidence and self-esteem. These mirror common outcomes reported by victims of offline sexual violence. Similar outcomes (depression and anxiety) have been reported amongst adolescents whose images had been distributed without consent (Englander, 2016; Festl, Reer, & Quandt, 2019), as well as for people who had been coerced to send sexual images (Drouin, Ross, & Tobin, 2015). In a study of TFSV more generally (i.e., multiple forms of TFSV), Cripps (2016) found similar results, with women reporting anxiety, stress, depression, and symptoms of trauma. Some literature on cyberbullying suggests that online and offline acts result in different patterns of psychological outcomes for victims (Bonanno & Hymel, 2013; Wang, Nansel, & Iannotti, 2011), and cyberbullying victims report more social disruption, anxiety, and depressive symptoms than victims of offline bullying (Campbell, Spears, Slee, Butler, & Kift, 2012). Several studies on the effects of cyberbullying have included the non-consensual distribution of private material, including sexual images, and found that adolescents and young adults often report this type of victimization as being the most harmful or serious for victims (Menesini, Nocentini & Calusii, 2011; Slonje & Smith, 2008;

Smith et al., 2008), often because of the public nature of the act (Nocentini et al., 2010). This suggests that the public nature of non-consensual image sharing could present additional harms.

In addition to the psychological outcomes resulting from the incident itself, the importance of online reputation and the central role of online networks in young people's lives suggest that the involvement of the internet could introduce unique or additional harms. In person negative reactions from others, such as victim blaming, have been linked to poorer psychological outcomes for victims of sexual assault (Ullman & Peter-Hagene, 2016). Drawing from the literature on traditional sexual violence, as well as the discourse within sexting, it is probable that these negative reactions will be disproportionately experienced by girls and women. For some people the inability to "escape" negative reactions from others, due to the prevalence of internet-enabled technologies (e.g., at home and at school), may exacerbate these outcomes. In addition to reactions from others, adolescents have identified that the "fear of not knowing who had seen the picture/clip" as a primary reason for rating this type of online victimization as amongst the most harmful, along with the potential for a large audience (Slonje & Smith, 2008, p. 153). Online victimization may not only result in negative psychological outcomes, but also social isolation from online spaces – an important developmental sphere.

In addition to the direct effects of image-based sexual violence, online sexual violence also contributes indirectly to educational, social, and economic disadvantages for women. For example, in a study of Latino adolescents, Espinoza (2015) found that girls reported significantly more distress and anger as a result of cybervictimization (including the distribution of "private pictures" without consent), and that this distress predicted attendance problems (e.g., skipping classes following online victimization).



**Perpetrators.** As outlined above, TFSV encompasses a wide range of perpetration behaviours that vary in intensity and motivation. There is debate whether technology simply provides an additional tool for individuals who already commit gender-based violence, or if it creates opportunities for individuals who would not otherwise participate in such acts to do so. There is some evidence to support each side of the debate, suggesting that technology may be adopted by existing perpetrators (e.g., Dempsey, Sulkowski, Dempsey & Storch, 2011) and in other cases, decrease the barriers to offending for people who would not otherwise do so (Duerksen & Woodin 2019). This is hypothesized to be due to features of online environments, such as the lack of eye contact with victims and potential to be (or feel) anonymous, that lead to disinhibition in online spaces, decreasing barriers to perpetration similar to offline environments (Barak, 2005; Duerksen & Woodin, 2019; Joinson, 2007; Lapidot-Lefler & Barak, 2012).

A small body of literature is developing, but much remains unknown about perpetrators of TFSV and how it relates to offline sexual violence. Researchers have noted that many forms of offline violence are increasingly being perpetrated using technology and in online spaces (Patton et al., 2014). This trend extends to gender-based violence, and indeed, research on intimate partner violence suggests that online violence and offline violence often co-occur, suggesting that technology may be viewed as an additional tool for some abusers (Korchmaros, Ybarra, Langhinrichsen-Rohling, boyd & Lenhart, 2013). A recent review of technology's role in adolescent dating violence found evidence to support this perspective (Stonard, Bowen, Lawrence & Price, 2014). Studies with young people who had been victims of sexual cyber dating abuse reveal that this group is significantly more likely to be female than male and were also more likely to have experienced offline sexual coercion and dating aggression, suggesting that perpetrators may be using both on- and offline tactics concurrently (Borrajo, Gámez-Guadix

& Calvete, 2015; Hinduja & Patchin, 2011; Zweig et al., 2013). These findings are echoed by Drouin, Ross and Tobin (2015) who found that being coerced to send sexual images via technology (sext) was related to both intimate partner violence and being coerced to have physical sex. Additionally, some predictors of men's sexually coercive and aggressive behaviours, such as rape supportive beliefs and having peers that approve of sexual violence (Schwartz & DeKeseredy, 1997; Schwartz, DeKeseredy, Tait, & Alvi, 2001), also predict sexually coercive behaviours using technology (Thompson & Morrison, 2013). Other researchers have reported similar findings for other types of gender-based violence, such as stalking, wherein perpetrators use technology as an additional avenue to monitor, harass or threaten (Buhi, Clayton & Surrency, 2009). The literature on perpetration is sparse, but fits with the studies of victims that suggest technology is often adopted as an additional tool to perpetrate. For example, Ybarra, Espelage and Mitchell (2007) found that individuals who perpetrated online sexual harassment were also more likely to sexually harass people offline.

Though online perpetration appears to be an extension of offline perpetration for some individuals, some research suggests that for others, online interactions and features of the online environment may decrease barriers to offending. For example, individuals who are not otherwise involved with acts such as bullying do target people online (Kerstens & Veenstra, 2015; Kubiszewski, Fontaine, Huré, & Rusch, 2013). Alarming, one study found that participation in sexist acts online, such as posting sexist statements, increases hostile sexism in offline situations afterward (Fox, Cruz & Lee, 2015). This effect appears to be increased when users post under anonymous conditions, lending weight to the theory, long supported in social psychology, that the perception of anonymity can induce individuals to act differently.

In the case of non-consensual image use, bystanders, for example someone who receives an image from a friend, can easily transition into perpetration by forwarding or showing the image to someone else. New technologies allow for images to be created and shared easily and instantaneously, which may decrease opportunities for online bystanders to reflect prior to acting. Technology also means that these bystanders may not know the victim, do not have to interact with them, and may feel anonymous – all of which might decrease the barriers to perpetration. However, these differences have yet to be investigated in the literature.

**Bystanders.** In the literature on traditional sexual violence, aspects of the environment have been investigated for the way they impact bystander behaviours. In the online realm, individuals who witness online acts of violence have been termed cyberbystanders (e.g., Palasinki, 2012). It is important to investigate cyberbystanders and other bystanders to TFSV as they represent a key target in the prevention of sexual violence. If connections to the existent research on bystander behaviour can be made, this would greatly assist with the development of theory and intervention.

The basic premise behind the bystander effect, first postulated by Darley and Latané in 1968, is that there are barriers that impede bystander action, the most well known being that the more people that are present, the less likely any one individual is to act (Darley & Latané, 1968; Latané & Darley, 1968). In an emergency situation, if a bystander thinks that multiple others are present, diffusion of responsibility, or a feeling of lessened responsibility for taking action personally because the onus is shared with others, may occur. In Darley and Latané's classic studies, when bystanders overheard someone having a seizure and believed there to be other witnesses, they were less likely to take action and slower to act if they did, than bystanders who thought they were alone (Darley & Latané, 1968). If other people are present for the bystander to

interact with, Latané and Darley (1968) posited that other environmental and social factors, in addition to diffusion of responsibility, become relevant in determining if a bystander takes action. For example, the presence of passive bystanders in an ambiguous situation decreases the likelihood of intervention because the situation may not be interpreted as an emergency (social influence) or an individual may be fearful of social reprisal (audience inhibition) from others (Latané & Nida, 1981). Decades of research has shown this to be true (see Latané & Nida, 1981, and Fischer et al., 2011, for reviews). In Latané and Darley's (1970) bystander model:

The overall decision of whether to intervene or not depends on [a bystander's decisions at five steps] – that is, whether he (sic) notices an event or not, perceives it as an emergency or not, feels personal responsibility or not, is able to think of the kinds of intervention necessary or not, and has sufficient skill to intervene or not (p. 36).

There is no body of literature on the behaviour of cyberbystanders in response to the non-consensual taking or sharing of sexual images as of this writing. However, there is evidence that bystanders act in similar ways across on- and offline contexts (Macháčková & Pfetsch, 2016), suggesting that some of the factors that are important in the traditional literature may also be relevant in online situations. Drawing from the literature on offline bystander behaviour and the nascent literature on cyberbystanders in other contexts, several factors seem particularly relevant to online environments.

The most basic factor impacting behaviour in the bystander effect is the number of other people present - the more people who witness an event, the less likely any one of them is to take action (Latané & Nida, 1981). Online, the actual number of bystanders is often impossible to know, but can be presumed to be large in many situations. It should be noted that other variables can interact with group size to reduce or reverse the bystander effect, such as if the bystanders

know each other, when a situation is judged to be a dangerous emergency, or if the perpetrator is present (Fischer et al., 2011). Multiple factors also interact with group size to encourage or inhibit bystander action depending on the context. For example, Levine and Crowther (2008) found that in a sexual harassment scenario, when more women were present as bystanders they were more likely to come to the aid of a female victim than when women bystanders were alone with, or outnumbered by, male bystanders. A similar study found that for female bystanders witnessing a potential rape at a party, as the group size increased, so did intent to intervene (Katz, Colbert, & Colangelo, 2015). These studies suggest that individual factors may interact with specific contextual variables to produce exceptions to the bystander effect, such as women responding to potential sexual assaults.

The number of bystanders has also been demonstrated to decrease intervention among cyberbystanders in several contexts. Markey (2000) reported that in a non-emergency situation where someone requested help in a chat room, people were slower to respond as more people were present. In a series of studies with male bystanders to an online sex offense against minors, intervention decreased (and time taken to intervene increased) when the men thought that the online space was being strictly monitored (either by people or electronically) and when the number of other unknown bystanders was increased (Palasinki, 2012). In studies of online bullying, as the number of cyberbystanders increased, the likelihood of intervention decreased (Obermaier, Fawzi & Koch, 2016). In this same study, the bystander effect was lessened when the bullying was severe (non-ambiguous emergency situation) and when individuals felt personally responsible to act, both of which are consistent with the traditional bystander literature. Some researchers have suggested that in online spaces in particular, it is often impossible to know how many other people have witnessed an event or have viewed a webpage

for example, which may result in an overestimation of the number of other witnesses resulting in diffusion of responsibility, and decreased likelihood of intervention (Macháčková, Dedkova, Sevcikova, & Cerna, 2013).

In the traditional bystander effect literature, one of the key factors that can inhibit or encourage bystander intervention is fear of judgment from others, or audience inhibition. For example, if an individual sees a dog inside a parked car on a warm day and believes that the group norm would be to say nothing, and thinks that their friends would think intervention is silly or unnecessary, they might be less likely to go into the store and tell someone. Rutkowski, Gruder and Romer (1983) found that when the social responsibility norm (i.e., people should help others) was salient, it predicted greater bystander intervention. A number of studies on bystanders to sexual violence have supported this idea, and found that when people, male bystanders in particular, think their peers support intervention they themselves are more willing to take action, and conversely, when bystanders believe their peers are more tolerant of sexual aggression, they are less willing to intervene (Banyard & Moynihan, 2011; Brown & Messman-Moore, 2010; Fabiano, Perkins, Berkowitz, Linkenbach & Stark, 2003; Orchowski, Berkowitz, Boggis & Oesterle, 2016; Stein, 2007). In a study of college students that assessed actual bystander behaviours, Brown, Banyard and Moynihan (2014) found that when men believed that their peers would support bystander intervention in sexual assault situations, they were more likely to have intervened in the past.

In cases of unauthorized distribution of sexual images, peer norms are likely to be very influential as the nature of the act is inherently social. This is due to the shared nature of the experience and interpersonal motivations of those involved. Accordingly, many people will have the opportunity to view the images and potentially intervene, for example by alerting the victim

or telling a peer that they do not approve of forwarding the image. It is possible that a similar effect exists for unauthorized image use, where individuals who believe that their peers approve of sharing such images will be less likely to perceive the situation as worthy of intervention.

Related to norms, beliefs about sexual assault and the endorsement of rape myths, or false beliefs about rape (Burt, 1980) that “serve to deny, [minimize], and justify male sexual aggression against women” (Lonsway & Fitzgerald, 1994, p. 134) can impact a bystander’s willingness to intervene when faced with sexual violence. For example, if an individual believes that women say no to sex when they really mean yes, they might be less likely to perceive a situation in which a man was continuing sexual activity despite a woman saying no as an emergency and as requiring intervention. Rape myths are used as a basis for victim blaming attitudes, in which a victim is perceived as responsible for the act of violence and therefore less “worthy” of intervention and empathy than other victims are. Previous research has shown that people who endorse rape myths report less willingness to intervene in situations involving sexual assault and vice versa (Burn, 2009; McMahon, 2010; Stein, 2007).

In the online realm, Macháčková and Pfetsch (2016) investigated the role that normative beliefs about aggression (online and in-person) had on adolescents’ bystander behaviour in response to cyberbullying. They found that individuals who believed that aggression was an acceptable behaviour were less likely to intervene in cases of cyberbullying. Similarly, Freis and Gurung (2013) reported that cyberbystanders who had negative attitudes about people who are gay were less likely to intervene in an online bullying scenario where the victim was gay than were people who did not hold such attitudes. Although sexism and victim blame have not been studied experimentally in relation to unauthorized image use, qualitative analyses of the discourse and media coverage of sexual assaults that were filmed and the images later distributed

reveal that victim blame is pervasive. Pennington and Birthisel (2016) examined media coverage of a sexual assault case in Steubenville, Ohio using framing theory, which states that how the media understands a particular story both shapes and reflects the larger social context in which it occurs. They stated “that the partygoers’ social media posts about the Steubenville rape ... [which evidenced victim blaming attitudes, could be considered] the very first ‘reporting’ on the assault” (Pennington & Birthisel, 2016, p. 2457). Common to this analysis and Dodge’s (2016) examination of three other similar cases, was the conclusion that the act of filming and distributing images of sexual assault reflects an underlying culture that supports sexual assault and victim blame, as these acts were treated as “legitimate forms of humiliation committed against deserving girls (Dodge, 2016, p. 72).

Several other factors, such as a bystander’s relationship with the victim and to the other bystanders may also play an important role in the decision whether to intervene (e.g., Katz, Pazienza, Olin, & Rich, 2015). In many cases when a sexual image is forwarded or put online, it is first circulated amongst people known to the victim and/or perpetrator. Bystanders’ relationships to the victim, and to each other, have been researched extensively in the traditional bystander literature.

For bystanders, when groups are cohesive or are acquainted with each other, helping behaviours generally increase (Palasinki, 2012). However, this appears to be moderated by the perceived norms within the group, relationship to the perpetrator and/or victim, and perceived blameworthiness of the victim (Rutkowski, Gruder, & Romer, 1983). Cyberbystanders who have a strong relationship with the perpetrator are less likely to intervene in cases of cyberbullying (Macháčková, Dedkova, Sevcikova, & Cerna, 2013), as are men (but not women) who know the perpetrator in sexual assault situations (Bennett, Banyard, & Edwards, 2017). This may extend to



cases where cyberbystanders are friends with the individual who is distributing an image. A recent meta-analysis found that a bystander's relationship to the victim (stranger v. known) had no effect on their willingness to intervene (Fischer et al., 2011). Contrary to this, a recent study of cyberbystanders found that having a relationship with a cyberbullying victim increased intervention (Macháčková et al., 2013). It is possible that bystander behaviour differs when the victim is a friend versus merely an acquaintance, as the meta-analysis did not assess for this distinction. In the same meta-analysis, Fischer and colleagues (2011) noted a non-significant trend that physical proximity to the victim induced people to take action. If true, the distance provided by mobile technologies and computers may increase the bystander effect in instances of unauthorized sexual image use. However, research on cyberbullying provides mixed results. Some scholars have suggested that the inability to see the impact on the victim may decrease empathy, and therefore decrease motivation to intervene (Macháčková et al., 2013), but another study found that witnesses were more likely to act in prosocial ways online than they were in traditional bullying contexts (e.g., people who actively participated in person were more likely to defend the victim or remain inactive online; Quirk & Campbell, 2015). This may be related to features such as increased distance, perceived anonymity, and the potential for decreased audience inhibition, that exist in online spaces, all of which could lessen barriers to prosocial action. Bystanders' relationship to the victim, as well as the potential moderating effect of different media (e.g., physically showing the image versus receiving it as a text or viewing it on a website), on intervention behaviour should be investigated in future studies.

### **Summary and Problem Statement**

Social networking and online spaces have an unprecedented importance in the lives of children and young adults. Technology plays a central role in the development of friendships and

romantic relationships, as well as in the development of sense of self or identity. The research suggests that offline inequalities related to gender impact the way men and women think about and interact with technology and in online spaces. Given the increasingly important role of online spaces for adolescents and young adults, the exclusion of girls and women from these spaces can have negative social, developmental, economic, and psychological consequences. Girls and women are excluded from online spaces both by the use of technology-facilitated sexual violence (TFSV) which can render online spaces as unsafe, as well as well-intentioned prevention efforts that encourage girls and women to prevent and respond to TFSV by disengaging from internet-enabled technologies (e.g., delete their social media account or turn off their phone). Moreover, it is not realistic or desirable for girls and women to avoid networked technologies because of the important role they play in all aspects of modern life (e.g., use of the internet to access a class webpage or the need for an e-mail address to register for services or receive information).

Related, but distinct from the common practice of sexting, is the non-consensual creation and distribution of sexual images via technology - the form of TFSV that is the focus of the current project. Much is still unknown about TFSV and image-based sexual violence, including accurate estimates of prevalence, though the nascent literature and anecdotal reports from the media, police, and organizations that provide services to victims indicate these experiences are common (Dodge & Spencer, 2018). Qualitative accounts suggest that the impact of taking and distributing sexual images without consent disproportionately impacts and has negative consequences for girls and women, and is primarily perpetrated by boys and men.

The current project begins to address the paucity of research on TFSV and develop the literature on the non-consensual manufacture and distribution of sexual images (image-based

sexual violence). The majority of studies that have investigated image-based sexual violence have done so with adolescent populations, so more research is needed to establish what this looks like for adults (Powell & Henry, 2016). Accordingly, the experiences of adult women who had been victimized and adult bystanders were explored in the current project.

As the aim of this work is to contribute to an initial understanding of the phenomenon, multiple studies were conducted instead of a single, more focused study in order to present a broader picture. Three studies were conducted to address distinct but related aspects of image-based sexual abuse. Studies 1 and 2 focused on adult women victims of image-based sexual violence and Study 3 focused on cyberbystanders or the recipients of images shared without consent. Future studies will expand this line of research to the study of perpetrators.

The first area where much remains unknown is about how TFSV is related to non-TFSV sexual violence. There is debate over the impact that the production and use of sexual images without consent has on victims. Within the literature, as well as the public, legal, and educational spheres, harms stemming from the non-consensual distribution of sexual images tend to be minimized and taken less seriously than other forms of sexual violence (Citron, 2009). This stems from the view that acts of violence conducted in online spaces do not result in the same types of harms as physical acts of violence, and therefore should not be taken as seriously (Henry & Powell, 2015b). The belief that girls and women who engage in sexting are responsible for any subsequent use of their pictures and are therefore are not “real” victims also contributes to a lack of interest in addressing these incidents as sexual violence (e.g., DeMitchell & Parker-Magagna, 2011). Several scholars have argued that TFSV has psychological and physical consequences for women, and represents a related but distinct form of violence that remains inadequately studied (Henry & Powell, 2015b). An important step in combating attitudes that minimize this form of

TFSV is to produce a body of literature that investigates the impacts for women and girls, which can then inform future discussions in this area. This was addressed with Study 1, which investigated the prevalence of psychological symptoms and relationship change among women who had sexual images taken or shared without consent (victims).

Investigation into victims' experiences would be incomplete with only a symptom-based description of the harms. It is also important to study how the women themselves conceptualize these incidents and understand them in the context of their daily lives. Study 2 qualitatively investigated how women who have their sexual images used without consent conceptualized these experiences using a thematic analysis and explored how these experiences were shaped by diverse social and cultural factors. A secondary goal was to make preliminary comparisons to the literature on outcomes of offline forms of sexual violence.

To date, bystanders have not been studied in relation to the unauthorized distribution of sexual images and factors influencing the behaviour of image recipients are largely unknown. Bystanders have been identified as a key resource in the prevention of sexual violence, and many prevention programs focus on ways to empower people to act in proactive ways in response to (potential or occurring) sexual assaults (e.g., Banyard, Moynihan, & Plante, 2007). The factors that encourage or act as barriers to pro-social action may be different for cyberbystanders than for traditional bystanders, though preliminary research on cyberbullying suggests that many of the same processes may be operating. The very nature of unauthorized image use is that the images are sent to or viewed by others, meaning that there will always be cyberbystanders present who have the potential to minimize the harm (e.g., by notifying someone) or to stop the spread altogether (e.g., if they are the only person to receive the image and refuse to pass it on). For this reason, it is of particular importance to study cyberbystanders.

Drawing parallels from the traditional bystander literature and the limited research on cyberbystanders, Study 3 investigated the effect of group size, peer norms, and victim blame on willingness to intervene. The outcome variable was the likelihood that an image recipient (or bystander) would be willing to engage in helpful behaviours, such as alerting the victim that her image is being shared or texting their disapproval to the sender..

These studies examined multiple facets of image-based sexual violence, specifically non-consensual image creation and distribution, in order to contribute broadly to an emerging area of knowledge on a novel form of technology-facilitated sexual violence. Before larger projects can be undertaken, exploratory and descriptive studies such as these must first be conducted to lay the groundwork for future scholarship. Connections to the literature on offline sexual violence will help researchers and professionals working in the area of violence against women develop theory, future directions for research, clinical interventions, and prevention programs.

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## **CHAPTER II - Image-based sexual violence: Relationship changes and psychological symptoms among victims**

Concern about the use of technology to commit violence against women is not new but the issue is one of increasing importance as networked technologies become ubiquitous. The use of technology to aid or commit sexual violence has been termed technology-facilitated sexual violence (TFSV) and encompasses a range of acts including the unauthorized creation, use, and distribution of sexual images (Henry & Powell, 2014, 2018). The current study investigated psychological and social outcomes for women following the creation and/or use of their sexual images without consent (a form of “image-based sexual violence”). In the literature this has also been referred to as non-consensual sexting or revenge pornography. This terminology is not used here as revenge pornography has been conceptualized by some researchers as specifically requiring that the act be motivated by revenge (e.g., Walker & Sleath, 2017) and may exclude instances where images were taken but not shared online or distributed.

TFSV as a whole appears to be a relatively common experience among adults (~ 60 percent) and may be most frequent for young adults (Powell & Henry, 2016; Ybarra, Price-Feeny, Lenhart, & Zickuhr, 2017). A recent study of people 15 years and older in the US suggested that 2 percent have had their intimate images shared without consent, often by romantic partners or former partners (Ybarra et al., 2017). A recent Australian study with adults puts this at around 10 percent for being filmed without consent and 9 percent for having had images posted online or sent to other people (Powell & Henry, 2016).

With the emergence of TFSV as a significant social concern, many researchers have noted parallels between these acts and gender-based violence that is perpetrated offline. There is mounting evidence that TFSV is related to offline forms of violence against women in the way that women and girls are targeted online, the adoption of technology to perform traditional acts

of violence such as sexual harassment or monitoring of an intimate partner, and the co-occurrence of physical and technologically-mediated acts of violence (Barak, 2005; Department of Justice Canada, 2002; Stoleru & Costescu, 2014; Yahner, Dank, Zweig & Lachman, 2015).

An important similarity that has been noted between TFSV and traditional forms of sexual violence is its gendered nature. Though online victimization is not limited to girls and women, some studies suggest that girls and women are disproportionately the targets of sexual harassment online and via mobile phones (Fenaughty & Harré, 2013; Mitchell, Ybarra & Korchmaros, 2014; Powell & Henry, 2016), sexual coercion via technology (Salter, 2016; Zweig, Dank, Yahner & Lachman, 2013), online blackmail for the purposes of obtaining sexual images (Kopecký, 2017), and cyber dating abuse (Zweig et al., 2013). A recent analysis of revenge pornography websites also revealed that the vast majority of the images were of women (Uhl, Rhyner, Terrance, & Lugo, 2018). For other forms of TFSV, such as receiving unwanted sexual images, several studies have found no gender differences (e.g., Finn, 2004; Ybarra et al., 2017), though others have reported higher rates of victimization of women (Henry & Powell, 2016). For unauthorized use of sexual images in particular, many studies have suggested that the most common type of incident is one in which images of women and girls are distributed by boys and men (Citron & Franks, 2014; Rollins, 2015; Mitchell et al., 2012; Wood et al., 2015). However, these findings are not universal as Ybarra et al. (2017) failed to find gender differences and a recent large-scale study of adolescents in Australia reported higher rates of non-consensual image circulation for men than for women (though the authors of this study did note a small effect size; Powell & Henry, 2016). It is worth noting that despite mixed findings regarding gender of the targets, the literature consistently reports that perpetrators of TFSV tend to be boys

and men (Barak, 2005; Patrick, Heywood, Pitts, & Mitchell, 2015; Strassberg, Rullo, & Mackaronis, 2014; Ybarra et al., 2017).

The distribution of sexual images in particular appears to have different consequences for girls and women than for boys and men. For example, when images of girls or women are circulated, it may be seen as damaging to their reputation and used by others to harass and isolate the individual in the image (Burkett, 2015; Lippman & Campbell, 2014). As a result of this, the consequences tend to be more negative and harmful when these images are made public (Ringrose et al., 2013). Conversely, images of male bodies are not seen as shameful or indicative of poor character, so images of men/boys generally do not have the same stigmatizing quality, and collecting and/or distributing images of women without consent may enhance social standing among male peer groups on and offline (Henry & Flynn, 2019; Ringrose, Harvey, Gill, & Livingstone, 2013; Salter, 2016). The double standard is echoed in media coverage of (consensual and non-consensual) sexting, where the consequences are viewed as different and more harmful for young women than young men (Draper, 2012). In fact, the potential for sexual images to damage girls' reputations is so powerful that rumors of an image alone can be fuel for harassment, and boys threaten to spread such rumors in order to blackmail girls into sending images (Sales, 2016). A number of studies have found that women and girls experience online harassment in general as more harmful and distressing than boys and men (e.g., Biber, Doverspike, Baznik, Cober & Ritter, 2002; Fenaughty & Harré, 2013; Livingstone & Görzig, 2014; Henry & Powell, 2016; Khoo & Senn, 2004; Mitchell et al., 2014; Powell & Henry, 2016; Staude-Müller, Hansen & Voss, 2012). Accordingly, the non-consensual use of sexual images can be conceptualized as a form of violence against women both because of the gendered dynamics and the disproportionate impact on girls and women.

There is considerable debate around the nature of online sexual victimization, the resultant harms, and how (or if) outcomes relate to those of traditional forms of sexual violence. Though there is an extensive literature that documents the psychological, physical, and social outcomes of offline sexual violence for women, a similar body of work does not yet exist for TFSV, including for image-based sexual violence.

When a sexual assault is filmed and later distributed or used to threaten the victim, the use of technology is easily argued as both continuing the assault and creating additional harm due to the “unbounded nature of potential and perpetual public shame and humiliation” (Henry & Powell, 2015, p. 767). Yar (2005) highlights technology’s ability to magnify the harms of traditional crime when it is recorded and distributed online. Other scholars have similarly argued that online victimization in particular may exacerbate harms for victims (e.g., Campbell, Spears, Slee, Butler, & Kift, 2012; Wang, Nansel, & Iannotti, 2011). The fact that victimization is no longer contained to a small audience or distinct place and time may lead to increased feelings of embarrassment or vulnerability (Slonje & Smith, 2008), especially in cases where the online material is sexual or acts as an indefinite extension of an offline sexual assault, such as when an assault is filmed (Henry & Powell, 2015). Dooley, Pyzalski, and Cross (2009) suggest that victims’ lack of control over the online material, including the ability to delete the content, to know who has seen it and/or where it is posted, may add to or worsen feelings of powerlessness which often occur after a sexual assault.

The few studies that have investigated psychological outcomes of image-based sexual violence suggest that victims may experience some of the same psychological symptoms as victims of offline sexual violence. For example, Bates (2015) interviewed victims of revenge pornography and found that their experiences were similar with regards to experiences of trauma,

depression, anxiety and fear, decreased confidence and self-esteem, disruptions to relationships, and loss of trust (Atkeson, Calhoun, Resick & Ellis, 1982; Calhoun, Atkeson & Resick, 1982; Chan, Lam, Chow & Cheung, 2008; Collibee & Furman, 2014; Ullman & Brecklin, 2003; Ullman & Peter-Hagene, 2016). Similar findings have been reported for adolescents whose images had been distributed without consent (Englander, 2016) and women who had been coerced into sexting (Drouin, Ross, & Tobin, 2015). In fact, the women who were coerced into taking sexual images reported more symptoms of trauma associated with being coerced to send a sext than being coerced into physical sex, both at the time of the incident and in retrospect (Drouin, et al., 2015). This could be due to concerns about how the image was later used or fear that anyone they encounter could have viewed the images.

Anecdotally, much of the harms that occur when sexual images are used without consent stems from the (online and offline) harassment that may follow, which is magnified by the importance of online spaces for adolescents (Sales, 2016; Underwood & Ehrenreich, 2017). Several features of online harassment, such as the fact that harassment via mobile platforms can “follow” victims into their personal spaces, as well as the inability to respond to anonymous harassment, may cause additional distress and represent a key distinction between online and offline violence (Fenaughty, 2010; Smith, 2012; Vandebosch & Van Cleemput, 2008). There is some evidence that victims of online sexual harassment judge it to be more offensive than offline harassment, and have reported more negative outcomes (e.g., depression) than those targeted offline (Biber et al., 2002; Wang et al., 2011). However, other studies suggest that victims of online harassment report fewer negative consequences, and state that the severity of harms may depend on how the violence was perpetrated, for example, via cell phone versus on social networking websites (Ortega et al., 2009; Smith et al., 2008). Compared to other forms of

electronic (and offline) harassment, the distribution of sexual images without consent is perceived by youth to be one of the most distressing types of online harassment (Slonje & Smith, 2008; Smith et al., 2008); however, studies of victims' experiences are lacking.

Sexual violations that occur "publicly" in online spaces may prove especially disruptive due to their impact on social networks and support. Negative reactions from others following the disclosure of a sexual assault can result in worse psychological outcomes for victims (Davis, Brickman & Baker, 1991; Ullman, 2000). Based on a qualitative study with victims of revenge pornography, Bates (2015) suggested that supportive reactions may provide psychological, emotional, and physical safety and assistance, all of which may relate to increased ability to cope after sexual images have been shared without consent.

Beyond these few studies, not much is known about the impact of having one's sexual images taken and/or shared without consent. Though some research exists, image-based sexual violence is rarely the sole focus and is commonly studied alongside other outcomes or as part of a larger survey studying online violence more generally. Consequently, much is unknown about the nature of image-based sexual violence and victims' experiences of these acts which the current study aims to address.

Documenting outcomes of image-based sexual violence will help researchers make connections to existing literature and to develop theory, which researchers have argued is needed for the field to progress (Henry & Powell, 2015). Other researchers have also highlighted the need for research on psychological outcomes in particular (e.g., Cooper, Quayle, Jonsson, & Svedin, 2016; Klettke et al., 2014). This information will be helpful in developing education, intervention, and treatment. Lastly, documenting the implications of these acts for victims may



help legitimize this as a serious form of violence against women in the eyes of the legal system, and as an issue deserving of attention, advocacy, and resources.

The current study investigated the prevalence of psychological symptoms among victims of image-based sexual violence in a sample of community and university women. As these images are often distributed amongst peers and in online social networks, the impact of changes or disruption in various social relationships on psychological symptoms was also examined. Data was also collected on the importance of digital technologies (i.e., social networking sites, mobile phones) and the relationship between these ratings of importance and psychological symptomology was evaluated (e.g., having images shared on a social networking profile may be more distressing to those who rate these technologies as more important to them).

It was hypothesized that women who had sexual images taken and/or shared without consent would experience symptoms of depression, anxiety, and trauma similar to the psychological symptoms experienced by survivors of offline sexual violence (Resick, 1993). In the non-TFSV literature, victims typically experience a period of acute distress and the proportion of women who continue to experience high levels of symptoms decreases after this time (Resick, 1993; Resick, Calhoun, Atkeson, & Ellis, 1981; Rothbaum, Foa, Murdock, Riggs, & Walsh, 1992). One study on sexting and intimate partner violence assessed whether this holds true for TFSV; the researchers found that young women who were coerced into sexting reported that their symptoms were more severe at the time of the study than at the time of the initial incident, which may reflect different trajectories in how symptoms are experienced over time for that type of TFSV (Drouin et al., 2015). The current study was cross-sectional but included time since the incident in the analyses without directional hypotheses given that so little literature exists around symptom development and maintenance for victims of image-based sexual

violence. The study also explored positive outcomes that women may have experienced in order to provide a richer description of women's experiences, instead of one focused solely on deficits. The study provides a description of this emerging phenomenon to inform future research and practice.

## Method

**Participants.** A total of 152 adult women (16 years and older) who had had a sexual image of themselves taken or used without consent participated in the study. Almost half of the women, 48.3% ( $n = 73$ ), were recruited through the participant pool and the remaining 53.1% ( $n = 78$ ) were recruited from the community. The women ranged in age from 16 to 57 years old, with an average age of 25.45 years ( $SD = 9.09$ ). The community women were significantly older than women recruited from the university, with mean ages of 30.15 years ( $SD = 10.55$ ) and 20.42 years old ( $SD = 1.82$ ) respectively;  $t(149) = -7.77, p < .001$ . The sample was relatively diverse with only 65.1% identifying as White ( $n = 99$ ). Demographic characteristics of the sample are listed in Table 1. For the analyses, women recruited from the university and from the community were combined as the goal was to include a diverse sample of women, and a significant proportion (~40%) of the community women reported they were also students, indicating overlap between these populations.

Table 1

*Demographic Characteristics of Sample (N = 152)*

	%	<i>M</i>	<i>SD</i>	Min.	Max.
Age (years)		25.45	9.09	16	57
Ethnicity					
Arab/West Asian	7.2%				
Black	7.2%				
East Asian	5.9%				
Indigenous	0.7%				
Latin American	4.6%				
South Asian	7.9%				
South East Asian	1.3%				
White	65.1%				

**Procedure.** Participants were recruited from the community using online advertisements posted on social media and from a mid-sized Canadian university through the psychology department's participant pool, which is open to students from all faculties who are enrolled in select psychology and business courses. The advertisements used a behavioural description of the experiences of interest (i.e., "women who have had a sexual image taken and/or used without consent") and did not use terms such as online sexual violence that women might not identify with or find ambiguous. Women from the community were compensated with a five dollar electronic gift card and women from the university were compensated with course credit. After viewing the study description and eligibility criteria, and consenting to participate, all measures were completed online. The participants first provided non-identifying demographic information, briefly described the event where their sexual image was taken or shared without consent, and indicated how long it had been since the incident occurred (or the time when they first became aware of the incident). Participants then completed the measures assessing symptoms of depression, anxiety, trauma, and changes to relationship quality. Finally, the women were asked

about any positive changes they had experienced after the incident. The study was approved by the university's research ethics board.

**Measures. *Technology use and perceived importance of online social networks.***

Participants were first asked if they owned a mobile phone, if it was a smartphone (i.e., phones that have many of the same capabilities as computers, such as the ability to access the internet), and if they used social networking websites. The importance of online social networks or peer groups was measured by asking women how frequently they used their cell phone and social networking websites/applications and how important these were to them on a 5-point Likert-type scale, from 1 (*not at all important*) to 5 (*extremely important*).

***Incident characteristics.*** Participants were asked to think about an incident where their sexual images were taken or used without consent, or in the case of multiple incidents, the most significant one. They provided a brief description of the incident and indicated how many months had passed since it first occurred and/or since they first learned that their image was used. Participants could also indicate that the incident was still occurring, as this could be the case with images that are circulated online.

***Changes in relationship quality.*** Participants were asked if relationships with their peers, family, and romantic partners (if applicable) had changed since the incident first occurred on a Likert-type scale ranging from 1 (*not at all*) to 4 (*completely*). Participants who reported that their relationships had changed (women who responded in the 2 to 4 range) were then asked to report whether the changes for each type of relationship were positive or negative by rating their agreement with two statements (e.g., "Overall, relationships with my peers have changed for the better/worse since the incident") on a 5-point Likert-type scale. Participants were able to report both positive and negative changes for each group and indicated what proportion of their

relationships had changed in each direction on a Likert-type scale ranging from 1 (*none of my relationships*) to 5 (*all my relationships*), with the midpoint labeled (*half of my relationships*).

***Beck Depression Inventory – Second Edition (BDI-II)***. The BDI-II is 21-item self-report measure in which scores are summed to indicate the presence of depression and severity of symptoms over the past two weeks (Beck, Steer & Brown, 1996). One item that asked about suicidal ideation was deleted from the measure to be consistent with departmental practice where the study was conducted. The BDI-II has demonstrated high internal consistency,  $\alpha = .91$  to  $.93$ , with both student and adult populations, and performs equally well for men and women (Beck et al., 1996; Dozois et al., 1998; Whisman, Perez & Ramel, 2000). The BDI-II is an updated form of the Beck Depression Inventory (BDI), which has been used previously in research with sexual assault victims (e.g., Gidycz et al., 1993).

***Beck Anxiety Inventory (BAI)***. The BAI is a 21-item self-report measure of anxiety symptoms (Beck, Epstein, Brown & Steer, 1988). Scores on a likert-type scale, from 0 (*not at all*) to 3 (*severely – it bothered me a lot*), are summed to indicate the presence of anxiety and symptom severity. The BAI has demonstrated high internal consistency ( $\alpha = .94$ ) and acceptable test-retest validity,  $r = .67$  to  $.75$ , in various samples (Beck et al., 1988; Fydrich et al., 1992). The BAI has been used previously in research on psychological outcomes of sexual assault in adult women (e.g., Gidycz et al., 1993).

***Posttraumatic Diagnostic Scale for DSM-5 (PDS-5)***. The Posttraumatic Stress Diagnostic Scale (PDS-5) is a 24-item self-report scale where scores are summed to assess the presence and severity of post-traumatic stress disorder symptoms (PTSD), from 0 (*not at all*) to 3 (*almost always*), in the last month (Foa et al., 2016). The PDS-5 is derived from the Postraumatic Diagnostic Scale (PDS) and was developed to assess PTSD according to the diagnostic criteria

outlined in the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5*; American Psychiatric Association, 2013). The PDS-5 has demonstrated high internal consistency ( $\alpha = .95$ ) and test-retest reliability ( $r = .90$ ) in a variety of populations and good diagnostic agreement with the *DSM-5* (Foa et al., 2016). The PDS-5 has good convergent validity with other measures of PTSD symptoms and discriminant validity from measures of depression and anxiety. The PDS, the precursor to the PDS-5, has been validated for use with sexual assault victims (Foa, Cashman, Jaycox & Perry, 1997; McCarthy, 2008).

***Positive outcomes.*** Participants were also asked, “Have there been any positive changes in your life as a result of the incident?” in an open-ended question.

## Results

***Perceived importance of online social networks.*** All but one woman owned a cell phone (99.3%,  $n = 151$ ) and the majority of these (84.2%,  $n = 128$ ) were Smartphones. On average, women reported that their phones were moderately to very important to them ( $M = 3.6$ ,  $SD = .83$ ), with 14.6% ( $n = 22$ ) reporting they were extremely important and no one reporting that their phone was not important at all. Most of the women, 90.8% ( $n = 138$ ), reported using social networking applications (apps) or websites (e.g., Facebook or Snapchat). On average, women who used social networking websites/apps reported these were moderately important to them ( $M = 3.27$ ,  $SD = 1.025$ ), with 13.2% ( $n = 20$ ) reporting they were extremely important and only 2.6% ( $n = 4$ ) reporting that they were not important at all. There was a statistically significantly negative relationship between age and the importance of social networking websites/apps and cell phones, with younger women reporting both social networking websites/apps ( $r = -.30$ ,  $p < .001$ ) and their cell phones ( $r = -.33$ ,  $p < .001$ ) as being more important than older women.

***Incident characteristics.*** The ways in which the women's images were used fell into several distinct types of incidents. The most common type of incident was having a sexual image (picture or video) taken without consent, which accounted for 33.6% ( $n = 51$ ) of the experiences. Having a sexual image shared without consent and posted online both accounted for about a quarter of the incidents (25.0%,  $n = 38$  and 25.7%,  $n = 39$  respectively). Unsurprisingly, 13.8% ( $n = 21$ ) of the women reported experiencing more than one of the above events (e.g., an image was shared with others and put online) and a small number of women (2.0%,  $n = 3$ ) reported experiences that did not fit into these categories, such as having an image of their face edited onto a nude picture and subsequently distributed.

Women took the image (of themselves) that was later used non-consensually less than half of the time (41.4%,  $n = 63$ ). A majority of the women, 86.8% ( $n = 125$ ), who provided information about the perpetrator knew the person who took or used their image without consent. Most commonly the image was taken/used by a current romantic partner (36.3%,  $n = 41$ ) or former partner (24.8%,  $n = 28$ ). Images were also taken/used by friends (20.4%,  $n = 23$ ) and acquaintances/non-friend peers (18.6%,  $n = 21$ ). In most cases, women indicated that they currently did not have a relationship with the person who used their image (e.g., that person is no longer a friend), though some women indicated they were still in a romantic relationship (7%,  $n = 6$ ) or were still friends (5.8%,  $n = 5$ ) with the person. This means that 14.6% of the women victimized by a romantic partner (whom they were with at the time) and 21.7% of the women victimized by a friend still had relationships with these individuals.

The incidents ranged from occurring less than a month before participation in the study to more than two years before. The incidents occurred (or the time when the women first learned of it) an average of 24 months ( $SD = 16.2$ ) before the study. Almost half the incidents (47.4%,  $n =$

72) occurred over two years prior, 16.4% ( $n = 25$ ) occurred 13 to 24 months prior, and 36.2% ( $n = 55$ ) occurred within the last year.

Most of the incidents (66.4%,  $n = 101$ ) were isolated events, but about a third (31.6%,  $n = 48$ ) were not and lasted for some extended period of time. For example, a picture was posted online and was not removed immediately. It was most common for incidents to last less than a week (54.2%,  $n = 26$ ), with most incidents lasting no more than a month (87.5%,  $n = 42$ ). Only 12.5% ( $n = 6$ ) reported incidents that lasted longer than a month, and three women (2.0%) reported incidents that were still occurring.

***Social and psychological symptoms. Relationship changes.*** When separated by relationship type (i.e., peer, family), most women did not report changes in the quality of their relationships. For friendships, 64.5% ( $n = 98$ ) of women experienced no changes, 75% ( $n = 114$ ) had no changes with their peers, 79.6% ( $n = 121$ ) reported no changes with their family, and 59.2% ( $n = 90$ ) had no change with romantic partners.

Due to the small number of women who reported changes in each type of relationship, the categories were collapsed into a dichotomous variable noting the presence (or absence) of change in any relationship type. When combined, 60.5% ( $n = 92$ ) of the sample reported some degree of change in their relationships. Of the women who reported changes, 40.0% ( $n = 34$ ; 22.4% of total sample) experienced only changes for the better, 16.3% ( $n = 15$ , 9.9% of sample) had only negative changes, and 43.5% ( $n = 40$ ; 26.3% of sample) had both positive and negative changes. For example, a woman might report some of her friendships improved while others deteriorated, or that her friendships got better while her relationships with her peers got worse.

***Depression.*** A majority of the women, 73% ( $n = 111$ ), had scores that were below the cut-off for a diagnosis of depression. For women who scored within the clinical range, 41.5% ( $n$



= 17) reported symptoms of mild depression (11.2% of total sample), 31.7% ( $n = 13$ ) reported symptoms within the moderate range (8.6% of total sample), and 26.8% ( $n = 11$ ) reported symptoms in the severe depression range (7.2% of total sample). In other words, only 15.8% ( $n = 24$ ) of the total sample reported moderate or severe symptoms of depression. Age was significantly inversely correlated with symptoms of depression ( $r = -.344, p < .001$ ), that is, as age increased, symptoms decreased. Chronbach's alpha for the BDI-II was .96, indicating high internal reliability.

*Anxiety.* Most women did not report clinically significant symptoms of anxiety (74.3%,  $n = 113$ ). Of the women that did fall within the clinical range, 61.5% ( $n = 24$ ) reported mild anxiety (15.8% of total sample), 33.3% ( $n = 13$ ) reported symptoms of moderate anxiety (8.6% of total sample), and 5.1% ( $n = 2$ ) reported symptoms of severe anxiety (1.3% of total sample). Those with moderate to severe anxiety represented 9.9% ( $n = 15$ ) of the sample as a whole. Age had a significant negative relationship with anxiety symptoms ( $r = -.33, p < .001$ ). The BAI demonstrated high internal reliability ( $\alpha = .94$ ).

*Trauma.* A small number of women, 7.2% ( $n = 11$ ), reported symptoms consistent with a clinical diagnosis of post-traumatic stress disorder. Another 1.3% ( $n = 2$ ) reported scores within the clinical range, but had experienced these symptoms for less than a month which is consistent with post-traumatic adjustment and does not necessarily indicate that these women would go on to develop post-traumatic stress disorder. Age had a significant negative relationship with trauma symptoms ( $r = -.30, p < .001$ ). The PDS-5 also demonstrated high internal reliability with a Chronbach's alpha of .97.

*Ethnicity.* As the sample was diverse, three multivariate analyses of variance were conducted to determine if there were between group differences in psychological symptoms. The

analyses were conducted with the four largest ethnic or racial groups in the sample, which were White women at 65.1% ( $n = 98$ ), South Asian women at 7.9% ( $n = 12$ ), Arab/West Asian women at 7.2% ( $n = 11$ ), and Black women at 7.2% ( $n = 11$ ). Bootstrapping was used to compensate for the small and unequal group sizes. The MANOVA for anxiety was significant ( $F(3, 125) = 3.23$ ,  $p = .03$ ) overall, but there were no differences for depression ( $F(3, 125) = 1.52$ ,  $p = .21$ ) or trauma ( $F(3, 125) = 1.27$ ,  $p = .29$ ). Post-hoc tests revealed that Arab/West Asian women were significantly more anxious than White women ( $p < .05$ ) but not Black ( $p = .08$ ) or South Asian women ( $p = .08$ ), and no other significant differences emerged between groups. A non-significant trend was observed in the means plots, in which the average symptom severity followed the same pattern for each ethnic group (see Figures 1 to 3). These results should be interpreted with extreme caution as the analyses were conducted with small and unequal group sizes. However, the pattern that emerged suggests that ethnicity may play a role in women's outcomes and should be investigated further.

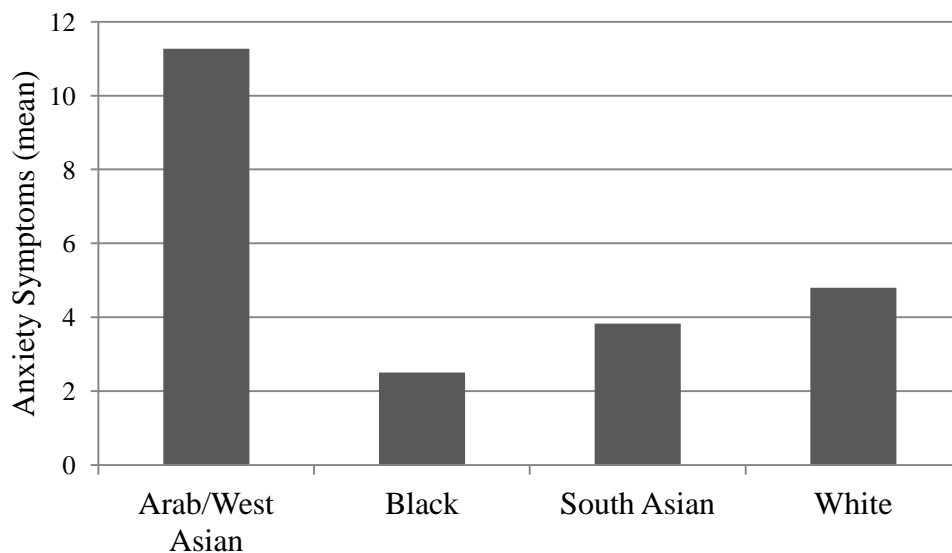
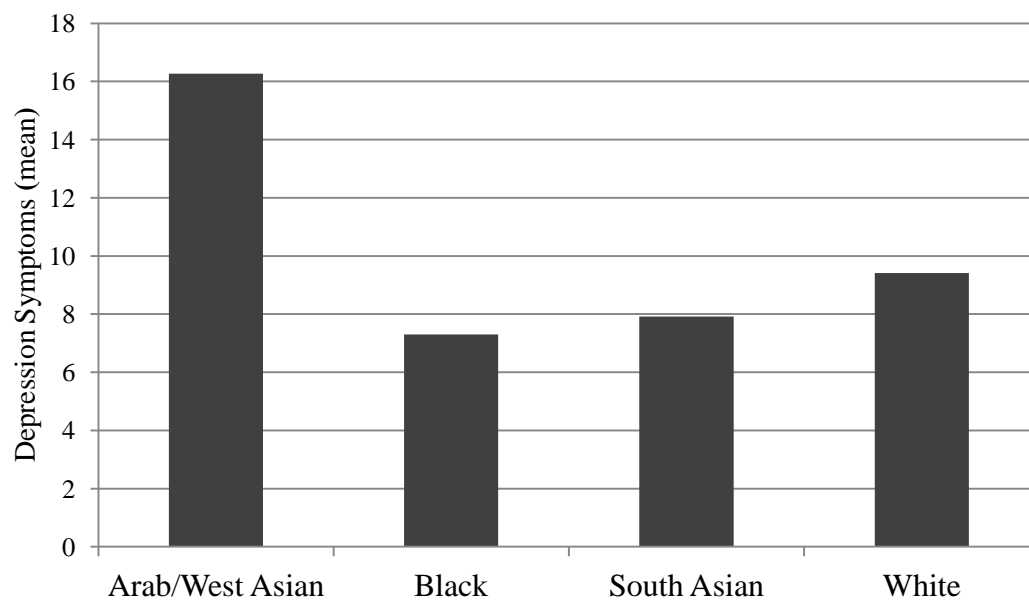
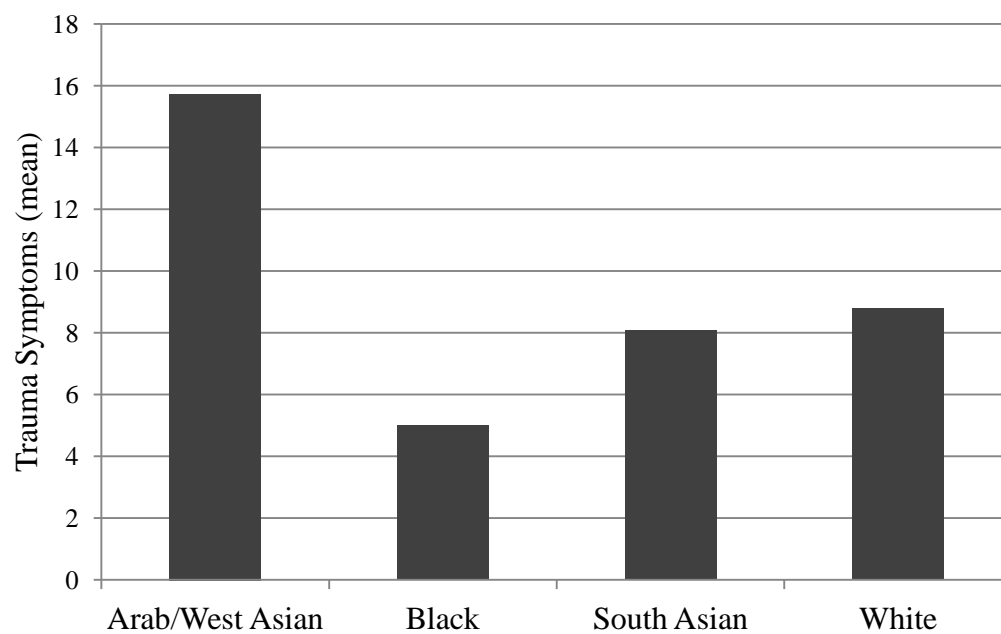


Figure 1. Anxiety symptoms (mean BAI scores) by Ethnicity



*Figure 2.* Depression symptoms (mean BDI-II scores) by Ethnicity



*Figure 3.* Trauma Symptoms (mean PDS-5 score) by Ethnicity

*Type of non-consensual image use and psychological symptoms.* A Kruskal-Wallis test was used to test for differences in depression, anxiety, and trauma symptoms between women who had their image used in different ways. A non-parametric test was selected as the residuals evidenced non-normality (positive skew). Four groups were used for the analyses: image taken without consent; image shared without consent; image posted online without consent, and; incidents including more than one of the previous acts. Incidents in the ‘other’ category were excluded as so few women fell into this category. There were statistically significant differences in depression ( $\chi^2(3) = 25.21, p < .001$ ), anxiety ( $\chi^2(3) = 23.81, p < .001$ ), and trauma ( $\chi^2(3) = 20.56, p < .001$ ) symptoms between types of incidents.

For symptoms of depression, an examination of the pairwise comparisons showed that women who had a sexual image taken without consent and women who had an image shared without consent both had average scores within the minimal depression range on the BDI-II ( $M = 8.67, SD = 11.12$  and  $M = 8.80, SD = 10.28$  respectively). Women whose images were used in more than one way reported the most symptoms with an average score of 20.75 ( $SD = 11.65$ ), which is in the moderate range. These women reported significantly more symptoms than women whose images were taken without consent ( $p = .006$ ), shared without consent ( $p = .009$ ), and posted online ( $p < .001$ ).

For anxiety, pairwise comparisons revealed women who had an image posted online reported the lowest levels of anxiety ( $M = 1.14, SD = 2.67$ ), and had significantly fewer symptoms than women who had their image taken without consent ( $M = 5.16, SD = 7.71, p = .009$ ), shared without consent ( $M = 3.93, SD = 5.73, p = .076$ ), and women whose images were taken/used in more than one way ( $M = 11.53, SD = 9.05, p < .001$ ). Like depression, there was no significant difference between women whose images were taken without consent and shared

without consent ( $p = .50$ ). Also similar to depression, women whose images were taken/used in more than one way had the highest levels of anxiety ( $M = 11.53$ ,  $SD = 9.05$ ) and their symptoms were significantly higher than women whose images were shared ( $p = .018$ ) and posted online ( $p < .001$ ). Interestingly, women whose images were used in multiple ways did not have more anxiety than women whose images were taken without consent ( $p = .064$ ).

For trauma, women whose images were taken/used in more than one way again evidenced the most symptoms ( $M = 24.88$ ,  $SD = 18.93$ ) and reported significantly more symptoms than women whose images were taken ( $M = 8.00$ ,  $SD = 12.08$ ,  $p = .003$ ), shared ( $M = 6.05$ ,  $SD = 9.93$ ,  $p < .001$ ), and posted without consent ( $M = 3.24$ ,  $SD = 5.60$ ,  $p < .001$ ). As with depression and anxiety, women whose images were posted online reported the fewest symptoms.

***Relationship changes and psychological symptoms.*** A one-way analysis of variance (ANOVA) was first conducted to examine if changes in relationship quality (regardless of valence and type) were related to symptoms of depression, anxiety, and trauma. Relationship change was significantly related to depression ( $F(1, 151) = 5.46$ ,  $p = .021$ ), anxiety ( $F(1, 151) = 5.69$ ,  $p = .018$ ), and trauma ( $F(1, 151) = 8.91$ ,  $p = .003$ ). A visual examination of the means plots revealed that women who reported more change had higher mean scores for depression (10.33 vs. 6.18), anxiety (5.73 vs. 2.98), and trauma (10.53 vs. 4.39). Separate analyses were not conducted for each type of relationship (i.e., friend, peer, family, and romantic) due to the small number of women who reported changes to each type (e.g., only 39 women, about 26% of the sample, reported their friendships had changed for the worse).

The impact of positive and negative relationship changes on depression, anxiety, and trauma were tested with two one-way ANOVAs. Positive change was not significantly related to depression ( $F(1, 151) = 2.16$ ,  $p = .14$ ), anxiety ( $F(1, 151) = 2.01$ ,  $p = .16$ ), or trauma ( $F(1, 151) =$

2.94,  $p = .09$ ). Negative relationship change was statistically significant for depression ( $F(1, 151) = 4.12, p = .04$ ), but not anxiety ( $F(1, 151) = 3.15, p = .08$ ) or trauma ( $F(1, 151) = 3.11, p = .08$ ).

A visual examination of the means plots showed that women who reported more negative relationship changes had higher mean scores for depression (11.04 vs. 7.36).

***Time since the incident and importance of online networks on psychological symptoms.***

Multiple regressions were used to examine the impact of time since the incident (in months) and importance of technology (phone, social networking sites/apps) on the severity of depression, anxiety, and trauma symptoms. Due to the significant relationship between age and psychological symptoms, age was included in the regression model. Bootstrapping was used to make the test robust due to positive skewness in the outcome variables.

For depression, the regression model was significant ( $F(4, 130) = 6.23, p < .001$ ) and accounted for 16.1% of the variance in reported symptoms ( $R^2 = .16$ ). The linear model is summarized in Table 2. Age ( $\beta = -.36, p < .001$ ) and importance of social networking sites ( $\beta = -.35, p = .001$ ) were both statistically significant predictors. As age and the importance of social networking sites increased, the equation predicted a decrease in symptoms of depression. Time since the incident and importance of phones were not statistically significant predictors of depressive symptoms.

Table 2

*Summary of the Linear Model for Symptoms of Depression.*

	<i>b</i>	<i>SE B</i>	$\beta$	<i>p</i>
Age	-.54	.15	-.36	<.001**
Time since Incident	-.24	.62	-.035	.70
Phone Importance	2.46	1.45	.18	.092
Social Network Importance	-3.82	1.16	-.35	.001**

Notes.  $R^2 = .16$  ( $p < .001$ ); \*\* Significant at the  $p < .01$  level.

For anxiety, the regression was significant ( $F(4, 130) = 6.23, p < .001$ ) and accounted for 18% of the variance in reported symptoms ( $R^2 = .18$ ). The linear model is summarized in Table 3. Age ( $\beta = -.40, p < .001$ ) and the importance of social networking sites ( $\beta = -.39, p < .001$ ) were the only statistically significant variables. As age and importance of social networks increased, the equation predicted lower levels of anxiety. Relationship changes with family, friends, peers, and romantic partners, and the importance of phones did not predict anxiety.

Table 3

*Summary of the Linear Model for Symptoms of Anxiety.*

	<i>b</i>	<i>SE B</i>	$\beta$	<i>p</i>
Age	-.40	.093	-.40	<.001**
Time since Incident	.20	.40	.045	.50
Phone Importance	1.04	.93	.12	.26
Social Network Importance	-2.76	.74	-.39	<.001**

Notes.  $R^2 = .18$  ( $p < .001$ ); \*\* Significant at the  $p < .01$  level.

For trauma, the regression equation was significant overall ( $F(4, 128) = 4.02, p = .004$ ) and accounted for 11.2% of the variance in symptoms ( $R^2 = .11$ ). The linear model is summarized in Table 4. Age ( $\beta = -.29, p = .004$ ) and importance of social networking sites ( $\beta = -.28, p = .015$ ) were significant. As age and importance of social networks increased, the equation predicted a decrease in trauma. Time since the incident and importance of phones were not statistically significant.

Table 4

*Summary of the Linear Model for Symptoms of Trauma.*

	<i>B</i>	<i>SE B</i>	$\beta$	<i>p</i>
Age	-.52	.18	-.29	.004**
Time since Incident	-.43	.75	-.054	.57
Phone Importance	1.86	1.77	.12	.30
Social Network Importance	-3.53	1.44	-.28	.015*

*Notes.*  $R^2 = .11$  ( $p < .001$ ); \* Significant at the  $p < .05$  level; \*\* Significant at the  $p < .01$  level.

**Positive outcomes.** A thematic analysis of the 143 qualitative responses was conducted to synthesize women's responses into themes (Braun & Clarke, 2006). When asked about positive outcomes or changes, 35.7% ( $n = 51$ ) of the women reported no positive changes and a further 5.6% ( $n = 8$ ) said that the incident had no impact (e.g., "My life has been the same since the incident"). These responses were excluded from further analysis, leaving a final dataset comprised of 86 responses.

Positive outcomes fell into three broad themes: stronger relationships; caution, and; personal growth. Stronger relationships was the most common theme, reported by 25.9% ( $n = 37$ ). Within this theme, women reported that relationships with friends, family and partners had



become stronger as a result of the incident as well as eliminating relationships that were not as positive. For example, “I have been able to realize who my true friends are and those who are not worth my time” and “It made a lot of my relationships closer and showed me all the support my family and friends have for me.”

The second most common theme was caution, reported by 22.4% of the women ( $n = 32$ ). This theme was characterized by an increase in cautionary behaviours, primarily related to sending sexual images and dating practices (e.g., “I stopped sending pictures to others” and “I don’t date on Tinder anymore”), and in how interactions with others are approached (e.g., “[I] learned to trust less” and “i [sic] take more time in relationships now, to get to know the person better”).

Personal growth was reported by 10.5% ( $n = 15$ ) and was characterized by increased understanding of the self as well as increased confidence and self-efficacy. For example, “I now know that I should only be with someone who respects [me] more than my ex-boyfriend,” “im [sic] a strong and more independent woman” and “I have become more confident in myself.”

## **Discussion**

This study investigated women’s experiences with having sexual images taken or used without consent (i.e., image-based sexual violence) and explored social changes and psychological symptoms. Incidents of image-based sexual violence have been described previously, usually as part of broader studies on technology-facilitated sexual violence, but much is still unknown about this specific form of violence both in terms of typical incident characteristics and victim experiences. These studies begin to answer these questions.

Contrary to the notion that most cases of non-consensual image use occur when a consensually sent image is later shared without permission (often following a break-up), women

in this study reported a variety of experiences. Often the literature suggests that in a majority of cases, images are originally taken by the victims themselves, a sentiment that appears to have originated from various media investigations and early reports (e.g., Levendowski, 2014). In the current study, women took the original image less than half of the time and only about a third reported that an image they took was later shared without permission. Unexpectedly, the most common type of incident was one where a sexual image was taken without consent (e.g., a sexual partner taking a picture following intercourse and refusing to delete it). Naturally, some women reported incidents comprised of more than one non-consensual act. For example, having an image taken without consent and then also shared with others or having an image of them both forwarded to people they knew as well as posted online without consent. These more complex incidents were reported by about 1 in 10 women. A very small number of women reported incidents that were different from the others, such as having their face edited onto a nude image and distributed or someone threatening to release sexual images. These tended to include direct threats and/or contact by the perpetrator, whereas the other incidents appeared to have more diverse motives and did not necessarily include directly targeting the women themselves (i.e., the woman was notified by someone who had seen the image). Some of these incidents, such as when images were shown or forwarded to others, may have been motivated by entertainment or to gain social status as they were similar to incidents described by youth in Ringrose et al.'s (2012) qualitative study who reported using images for such purposes.

It should be noted that prevalence estimates regarding how images are used will necessarily be biased in favor of women who are aware that their images were misused. This means that prevalence estimates (from victims) will underestimate the number of women who have been victimized by IBSV, possibly with the exception of cases where women are targeted

directly (e.g., images used for revenge). Studies of images that are posted online, such as in forums dedicated to non-consensual pictures of women, often describe images taken in secret (Henry & Flynn, 2019). This study captures a particular subset of women and as more research is done with perpetrators, the proportion of incidents involving selfies may decrease and the proportion of incidents committed by romantic partners or friends, for example, may differ from those reported in this study.

The vast majority of women knew the person who took and/or used their image without consent and this was most commonly a romantic partner. Romantic partners, former partners, and casual sexual partners were the perpetrators over half of the time. When taking into account friends and acquaintances, only a fraction of the incidents were committed by strangers or an unknown person. This replicates the literature on other forms of sexual violence where the vast majority of assaults are committed by people known to the victim, such as an acquaintance or intimate partner (e.g., Koss, Dinero, Siebel, & Cox, 1988; Ullman & Siegel, 1993). A recent study on online harassment found that a little over 20 percent of victims reported experiencing “personal or professional harm” as a result, but this increased to 77 percent when the perpetrator was a former romantic partner, which the authors suggested might be common in cases of sexual images used without consent (Ybarra et al., 2017, p. 4). Cases where images are used by current or former romantic partners to control or punish women could be conceptualized as intimate partner violence due to the similarity in tactics and research that shows perpetrators of offline abuse do use technology as an additional tool to abuse (Korchmaros et al., 2013; Stonard et al., 2014). These incidents perpetrated by intimate partners may have different correlates and outcomes than other types of image-based sexual violence. Harms may also be exacerbated when images are accompanied by targeted abuse or harassment, such as when contact information is

circulated online. As most incidents of image-based sexual violence seem to involve known perpetrators, this relationship warrants further investigation as researchers continue to explore models of recovery and outcomes for victims.

Many prevention campaigns contain messages directed at women and girls imploring them not to engage in sexting for fear that their images will later be used without consent (Albury & Crawford, 2012). Scholars have highlighted that such messaging frames girls and women as responsible for, or contributing to, their own victimization, which mirrors the content and function of rape myths and serves to deflect attention from the perpetrators and social norms that support gendered violence (e.g., Albury & Crawford, 2012; Draper, 2012; Karaian, 2013; Krieger, 2017; Ringrose et al., 2013). These campaigns not only engage in victim blaming by positing that women are responsible for the actions of others, they do not accurately reflect the reality of unauthorized image use. In the current study women created the initial image only about 40% of the time, suggesting that this phenomenon is not simply a case of opportunity or revenge following a break-up. The varied way in which sexual images were taken and used against women (including cases where the women took the images themselves) suggests that these acts are better understood as sexual violence and a way to exert control. Education and prevention efforts focused on women's (consensual) sexting are likely to be ineffective as they are based on problematic assumptions and do not target the causes of the issue.

Overall, the majority of women in this sample did not report symptoms of depression, anxiety, and trauma within the range for clinical diagnoses. This is consistent with the literature on sexual assault more generally, which has found that following a period of adjustment most women do not continue to experience severe psychological or social disruptions (e.g., Frazier & Berman, 2008; Resick, 1993; Rothbaum et al., 1992). It is worth considering that although the

overall symptom levels were low by standard scoring of scales, they could also be considered high given that the incidents occurred an average of more than two years prior to the study, assuming the symptoms are attributable to the online victimization.

The mean level of psychological symptoms followed a similar pattern for each type of incident. Interestingly, women who had a sexual image posted online consistently reported the lowest levels of depression, anxiety, and trauma. Women who had an image taken or shared without consent tended to report similar levels of symptoms and these groups both reported more symptoms than women whose images were posted online though these were not significant differences. The finding regarding posted images was unexpected. This category incidents may be distinct because women reported a wide variety of motives and perpetrators (e.g., a friend accidentally sharing an image or a professionally taken photo posted on the photographer's website), and some incidents did not seem intended to cause harm despite the fact that they were still distressing. This pattern may not hold true for women who were the targets of revenge pornography and/or campaigns of online harassment (who may instead be captured in the 'complex' category of incidents). It is also possible that women whose images were posted online, and those around them, interpreted their experiences differently than women whose images were used in other ways. Having an image posted online may be more readily seen as "wrong" and harmful than incidents where an image was used in another way (e.g., taken but not shared or shown to others but not put online) due to the potential for posted images to spread in perpetuity. This may mean that some women are (incorrectly) seen as more "legitimate" victims than others and offered more support and validation. Scholarship about who constitutes so-called legitimate victims exists for offline sexual violence, and is often tied to stereotypical gender roles ideals, racism, classism, and assumptions about harm (Anderson et al., 2018). All of which may

impact how women think about their own experiences and how others respond to them. As the discourse around online sexual violence often mirrors that of offline sexual violence, beliefs that influence reactions to offline victims may operate similarly for image-based sexual violence.

Unsurprisingly, women whose images were taken and/or used in more than one way (e.g., filmed without consent and the image posted online) reported the highest levels of psychological symptoms and significantly more than the other groups in almost all cases. These instances may be uniquely harmful as the nature of the victimization is more complex. Also, because more individuals are involved and the images were made and/or used in more than one way, it would be harder to control their spread and use. In Bates' (2015) study with victims of revenge pornography, loss of control was identified as a central theme in how the women experienced the incident. Increased symptoms for this group could also be caused by other factors that were not captured in the current study, such as the content of the image or how widely it was spread. Psychological symptoms tended to follow a similar pattern which could suggest that different acts have distinct correlates with well-being and recovery. However, it seems more likely that variables other than the act itself (e.g., uploading versus forwarding) play a role in shaping these differences, for example, if contact information was released with the image, the nature of the betrayal, or the content of the image (e.g., if it depicts a sexual assault). Future work should continue to investigate group differences and factors related to psychological distress (and recovery), as women who experience certain types of incidents may have an increased risk of developing depression, anxiety, PTSD, or other psychological disorders and negative outcomes.

As with incident characteristics, a non-significant but consistent pattern was seen in the severity of symptoms reported by different ethnic or racial groups and is being reported due to

the dearth of information on this topic. Statistical testing was only conducted with the four most common ethnicities present in the sample, which were Arab/West Asian, Black, South Asian, and White. Arab/West Asian women consistently had the most symptoms, but this only met criteria for statistical significance for anxiety and only in comparison to White women. The group sizes were unequal, which limits the conclusions that can be drawn due to questions around reliability; however, due to the sparse literature on women's outcomes overall and in particular with regard to ethnic differences, this analysis adds to the literature and suggests that research on ethnicity and women's symptoms following image-based sexual violence is needed.

Approximately 6 in 10 women reported some type of change (positive and/or negative) in the quality of their relationships. Women reported both positive and negative changes in their relationships. Of the women who experienced changes, a little over 80% reported a mixture of positive and negative changes or changes for the better. Interestingly, women who experienced any type of change in their relationships reported significantly more symptoms of depression, anxiety, and trauma than women whose relationships did not change. When the effect of positive and negative changes on psychological symptoms were examined separately, the only significant finding was that negative change was significantly related to depression (but not anxiety or trauma) meaning that women who experienced more negative change also reported more depression. This is consistent with other research which has found that negative social changes, including negative and unsupportive responses to disclosures of sexual assault, are related to more psychological symptoms (Campbell et al., 1999; Ullman et al., 2007), though no conclusions can be made about the direction of this relationship in the current study. For example, some women who experience depression may withdraw from social situations, which could decrease the perceived quality of their friendships and other women may feel depressed

and isolated after friendships deteriorate. The interpretation of this analysis is also limited by the relatively small number of women who reported changes in each type of relationship, meaning that further analyses were not possible. However, a non-significant pattern was observed in which women who reported more positive or negative changes also had more symptoms. When considering this alongside the finding that experiencing any degree of change was related to significantly higher levels of symptoms, it could be that the upheaval or social disruption caused by the event is (at least partially) responsible for increased distress. Alternatively, other factors or features of the incident could be responsible for explaining both the relationship changes and psychological distress (i.e., an image circulated within a highly conservative community). Future research should continue to explore the connection between image-based sexual violence, relationships, and psychological outcomes.

The finding that many women reported positive as well as negative changes in their relationships was unexpected. The qualitative data on positive outcomes expanded on this, in that the most commonly reported theme was stronger relationships. Women indicated that some of their relationships grew stronger and key supports were identified and that negative relationships were pruned. This is also consistent with the fact that most women no longer had a relationship with the person who took or used their images without consent. It is interesting to contrast women's descriptions of these relational changes as a positive outcome with the earlier finding that any change was related to higher levels of symptoms. This could suggest that there is no causal relationship between relational changes and symptoms (i.e., other variables account for the association) or that despite the negative effects that changes may have, women are finding new sources of strength or optimism at the same time. Given that the stronger relationships



theme was so prevalent, it seems likely that social support can contribute to coping and recovery following image-based sexual violence.

The importance of online social networks (but not phones) was a significant predictor of depression, anxiety, and trauma symptoms. For social networks, the nature of this relationship was the opposite of what was expected in that higher importance placed on online social networks predicted fewer symptoms of depression, anxiety, and trauma. This was surprising given the potential for these incidents to impact online social networks directly (e.g., by having an image circulated on a social media website). It is possible that women who place more value on online social networks put more time and energy into creating and maintaining these online relationships, which could change how images are received and viewed by others. For example, if an image is posted online and other people demonstrate support for the person in the image (either publicly with comments or through private communications) and censure for the person who posted it, it could minimize the negative impact on the victim. Research on adjustment following offline sexual assault has found that positive reactions and support from formal (e.g., support providers) and informal sources (e.g., friends and family) is associated with positive outcomes, such as increased help seeking and decreased psychological symptoms for survivors (Borja, Callahan, & Long, 2006; Orchowski et al., 2013; Weiss, Garvert & Cloitre, 2015). This may play a role in explaining the current findings as informal sources of support may be embedded in online social networks. Online relationships may also interact with offline supports in complex ways. The literature suggests that the role of social support in recovery from sexual assault varies based on individual factors, such as personality and sexual orientation, which warrant further investigation for image-based sexual violence (Borja, Callahan, & Rambo, 2009; Weiss et al., 2015). It should be cautioned that the current sample included women whose images

were used in various ways, and not all of these included having them uploaded or distributed online. Women whose images were posted online may represent a distinct group where this variable (importance of social networking websites/applications) may have a different relationship with symptoms and outcomes.

Increased age (being older) also predicted lower levels of psychological symptoms. These findings make sense as older women may have more established offline social networks or supports, such as stronger friendships, that could help them cope with or compensate for changes to other relationships, such as those with peers or friends who are less close. Women who are older may also have more psychological resources and coping skills to draw on and may also benefit from increased control and autonomy in other aspects of their life.

Past longitudinal studies of psychological changes following sexual assault have identified critical periods of change to be within 6 months of the event, but continuing for up to a year (Ellis, 1983; Frazier, Conlon & Glaser, 2001; Kilpatrick, Resick, & Veronen, 1981). Time since the incident was not significant predictor for psychological symptoms in the current study. This was unexpected as previous research on sexual violence suggests that negative outcomes decrease (and positive changes increase) over time (Frazier & Berman, 2008; Hansen, Hansen, Nielsen, & Elklit, 2017). It should be noted that women in the current study reported incidents that occurred about two years prior to participation, so while typical symptom trajectory is still unknown, the findings suggest that about a third of women may experience clinical levels of depression and anxiety, and a minority may develop PTSD, though it is not possible to conclude that these symptoms are related to their victimization at this time. It is possible that some women who experience image-based sexual violence have a shorter adjustment period or different psychological outcomes than women who experience offline sexual violence, but more research

is needed. Future research should use longitudinal designs and endeavor to study women in critical periods of change or as close as possible temporally to the incident.

As mentioned previously, loss of control is a common reaction to offline sexual violence and has also been identified as a significant concern among victims of revenge pornography (Bates, 2015; Frazier, 2003). Perception of control can apply to past, present or future behaviours and past control, which is the idea that women had control over past events or causes of a trauma (e.g., sending of an image), has been linked to self-blame and increased post-assault distress (Arata, 1999; Frazier, 2000; Meyer & Taylor, 1986). Attributions of control were not assessed in the current study, but some women may have engaged in self-blame because they took or sent the initial image of themselves, which could increase distress following the incident. Frazier (2003) found no relationship between future control, which is the belief that one can avoid (or has control over) future events, and distress following a sexual assault. However, the author noted that some women who engage in behavioural attempts to prevent future assaults may be doing so because they are experiencing more distress to begin with, while other women may find engaging in control behaviours decreases distress. In the current study, a number of women reported engaging in control behaviours, such as deciding not to take or send sexual images in the future. This may have allowed some women to regain a sense of control and ameliorate psychological symptoms, which is evidenced by the fact that when asked to describe positive changes following the incident, many women reported becoming more cautious and abstaining from sexting as a positive outcome. Although this may facilitate adjustment, it may also mean that they have internalized a narrative of sexuality and sexual violence where women and girls are supposed to constantly assess the risks of every situation and are seen as responsible for the behaviour and violence of other people - primarily men (Hall, 2004).

Finally, although the majority of women did not report any positive outcomes, and in some cases took the opportunity to reiterate how negative the experience was, many women were able to do so. The outcomes fell into three themes - stronger relationships, caution, and personal growth. It should be noted that although positive outcomes were reported, they were the result of the women's personal growth or experiences while dealing with the incident, and not the incident itself. Having stronger relationships, such as closer friendships, was the most commonly identified outcome. Following a sexual assault, research has found that positive support from others is related to fewer psychological symptoms (e.g., depression, trauma), fewer physical health problems, and positive life changes (Bryant-Davis et al., 2011; Campbell et al., 2001; Frazier et al., 2004). This is likely to also be the case for women who experienced strengthening of relationships with family, friends, and partners following incidents of image-based sexual violence.

As stated earlier, many incidents of image-based sexual violence involve the public distribution of the images. It was hypothesized that this could lead to negative changes to social networks and therefore increased distress (which may still be the case), but it appears that for many women, their relationships changed for the better or they experienced both positive and negative changes. Given the research on the healing power of positive social supports post-assault, if replicated this is a potential area for focus by clinicians or counselors, for example, by having women reflect on positive changes in relationships or identifying key support persons within their networks. The second type of positive outcome, and least common, was personal growth. These women described growth in terms of increased confidence and sense of self, but also in the form of personal understanding (e.g., career and relational goals). Improved relationships and personal growth are unequivocally positive, but this may be less so for the

theme of caution, in which women became more cautious in their own behaviours and with (trusting) others. An increase in cautionary behaviours may be adaptive, and as discussed previously, provide a sense of control but it could also potentially be maladaptive and lead to disruption or distress for some women. For example, if women restrict their behaviour to the point where they experience decreased freedom and satisfaction, or have difficulty trusting anyone going forward, not simply becoming more cautious. The potential for some women to overgeneralize cautious reactions may be related to, or a precursor for, the development of fear generalization, which is the tendency to overgeneralize maladaptive beliefs or fears, often associated with PTSD and anxiety disorders (Lissek & Grillon, 2010; Ready et al., 2015). Though more research is warranted, clinicians and counselors may wish to watch for such processes when supporting women who have experienced image-based sexual violence.

A significant limitation of this study is the lack of a control group, meaning that it is not possible to determine if the symptom profile present in this group of women was caused by their experiences of victimization. The fact that psychological symptoms were present in similar proportions to other studies with victims suggests that this may be the case. However, it is also possible that these symptoms could be attributed to a variable that was not measured or that victims of offline sexual violence were disproportionately represented in the sample, meaning that symptoms might be the result of other forms of victimization. There is a higher likelihood of the latter explanation if online and offline violence co-occurs for most women; however, the literature suggests that this may be the case for incidents that occur in the context of intimate partner violence, but is less likely when considering incidents of image-based sexual violence as a whole.

Another limitation is that, although the current study measured time since the incident, the design was cross-sectional so estimates of time may be subject to reporting errors (i.e., how long ago the incident occurred), particularly for more distal events, and conclusions about symptom trajectories are not possible. Ideally, future work should investigate changes over time prospectively for different types of incidents.

The current study also recruited women online, which may have excluded women who decreased the time they spend online or have stopped using social networking sites following an incident of image-based sexual violence. For example, women who experienced incidents where their contact information was included with a sexual photo or whose images were used as part of a larger campaign to stalk or harass may be among this group (and may have significantly different experiences). Future work should attempt to sample women through diverse methods, such as in community centres and through organizations that serve victims of digital exploitation and sexual violence as well as investigate outcomes using a comparison group.

Overall, it appears there may be some similarities in psychological symptoms between incidents of image-based and traditional sexual violence, although it is not possible to draw conclusions at this time. These findings contribute to the nascent body of work on a growing form of sexual violence. More research is needed, but interventions that are helpful for offline sexual violence, such as those that focus on strengthening social supports, may be appropriate to adapt for image-based sexual violence. Future work should continue to investigate the impact of these experiences and relationship to other forms of sexual violence in diverse samples with the aim of further developing theory and intervention in this area.

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### **CHAPTER III: How do women experience and conceptualize incidents of image-based sexual violence?**

Distribution and use of sexual images without consent is a growing concern as technology becomes increasingly important in the lives and relationships of young people. Online spaces are central arenas for socialization, and the use of technology, including the exchange of sexual images, is now a part of the formation and maintenance of romantic relationships for many young people (Burkett, 2015; Lenhart, Smith, & Anderson, 2015; Rappleyea, Taylor, & Fang, 2014; Ringrose, Gill, Livingstone & Harvey, 2012). Alongside the use of technology for consensual sexual exchanges, individuals have also used technology to capture, distribute, or otherwise use sexual images without consent, a form of (technology-facilitated) sexual violence called image-based sexual abuse or violence (Henry & Powell, 2015).

Having one's sexual image taken or used without consent has not been studied extensively though several studies suggest the experience is somewhat common. For adolescents and young adults, most estimates have ranged between 8 and 32 percent in U.S. and European samples (Dir & Cyders, 2015; Wood et al., 2015). It is worth noting that the prevalence in the European study increased to 42 percent when only female adolescents were considered. For adults, the prevalence of non-consensual image use was reported to be approximately 1 percent in the U.S. (Ybarra et al., 2017), but this may increase over time as those who have grown up with technology enter adulthood. Importantly, these percentages may underestimate how often images are forwarded or used without consent as many of the victims may be unaware of how their images have been used.

Image-based sexual violence appears to be a gendered phenomenon in that the victims tend to be girls and women, and the perpetrators tend to be boys and men (Citron & Franks, 2014; Rollins, 2015; Wood et al., 2015). This is also the case with regard to online and offline

requests for sexual images and cases in which someone is blackmailed or coerced online for the purpose of obtaining sexual images (Kopecký, 2017; Mitchell, Finkelhor & Wolak, 2007; Ringrose et al., 2012). A few studies have reported similar, or slightly higher, rates of victimization for men (Powell & Henry, 2016; Ybarra et al., 2017), though the perpetrators of these acts were still overwhelmingly male. Despite these findings, unauthorized image use still appears to disproportionately impact women and girls as the consequences of having one's image used without consent are perceived to be more severe and the experience reported as more harmful and upsetting than for boys and men (Fenaughty & Harré, 2013; Livingstone & Görzig, 2014; Ringrose, Harvey, Gill, & Livingstone, 2013).

Discussion of unauthorized use of sexual images as a form of sexual violence has only recently entered the public consciousness, as well as academic and legal literatures (e.g., Powell, 2010). A small body of research is emerging on the use of technology to commit sexual violence, and new laws have been created to make unauthorized use of sexual images a criminal act. However, these laws are few and far between, and some have been critiqued as perpetuating victim-blame, in that they only apply to women whose images were taken surreptitiously, and not those who had originally taken the images themselves as part of a consensual exchange (Levendowski, 2014). Analyses of the discourse around non-consensual image use suggests that these acts are often treated as part of normative sexual behaviour, and young girls in particular are cautioned against participating in sexual image exchange (sexting) as unauthorized use, usually by male partners or ex-partners, is an expected outcome. In contrast to an emerging body of scholarship and activist literature, studies have shown that unauthorized use of sexual images is not widely recognized as a form of sexual violence, in particular by adolescents (Ringrose et

al., 2012). Accordingly, many individuals downplay the impact of these incidents on the victims (Hasinoff, 2012; Henry & Powell, 2015), despite emerging evidence to the contrary.

Women whose sexual images were posted online without consent reported a wide range of negative psychological and social consequences, such as symptoms of post-traumatic stress disorder, interpersonal issues like loss of trust, decreased self-esteem, depression, and anxiety (Bates, 2015). Similarly, adolescents whose sexual images had been used without consent experienced symptoms of depression and anxiety (Englander, 2016), as did those who had been coerced into taking and sharing sexual images of themselves in the first place (Drouin, Ross & Tobin, 2015). Across forms of online victimization, including sexual harassment and unauthorized use of sexual images, girls and women consistently report these acts as distressing (Fenaughty & Harré, 2013; Livingstone & Görzig, 2014; Mitchell, Ybarra & Korchmaros, 2014; Powell & Henry, 2016), and Espinoza (2015) found that this distress predicted poor school attendance among adolescent girls. As the literature in this area continues to grow, it confirms Barak's (2005) assertion that the negative psychological, social, and occupational (economic and scholastic) outcomes of offline sexual harassment parallel those of the online sexual harassment of women and girls. There is no question that online spaces are increasingly important social and developmental spaces for young people, and violations that occur in these spaces carry risk of additional harms simply due to the fact that they occurred "publically" in such an important forum (Underwood & Ehrenreich, 2017). Unsurprisingly, the public nature of unauthorized sexual image use and subsequent loss of control have been cited as a significant source of anxiety and distress for victims of unauthorized image use (Bates, 2015).

What is missing from the literature is an examination of how women who have had their sexual images forwarded to others or used without consent understand these experiences beyond

simple descriptions of harms and outcomes. Women and girls do not exist in a vacuum, and cultural norms and myths about sexual violence shape how people define and understand these experiences. For example, when women's experiences of sexual assault differ from the culturally accepted "rape script," in which a woman walking alone at night is assaulted by a stranger, and are instead seen as part of the normal "sexual script" between men and women, it impedes women's attempts to label these experience as rape. Deming, Covan, Swan and Billings (2013) found that the more normative an experience was, and the more an account involved factors related to rape myths or false beliefs used to minimize and justify rape (Burt, 1980), such as the victim consuming alcohol, the less likely women were to consider it rape and advise a friend with this in mind. This echoes earlier research with victims in which women were less likely to consider their own experiences rape the farther their behaviour deviated from that of a stereotypical "ideal victim" (i.e., a sober, sexually naïve, white, middle class woman who fights back forcefully; Cassidy & Hurrell, 1995; Luginbuhl & Mullin, 1981; Viki & Abrams, 2002; Weis & Borges, 1973) and their experience from the stereotypical rape script (Koss, 1985). Research has found that significant numbers of women who have had an experience that meets the legal definition of rape or sexual assault do not define and label it as such (e.g., Bondurant, 2001; Hammond & Calhoun, 2007; Harned, 2005; Koss, 1985), and the process of doing so is complex, non-linear, and is impacted by a multitude of personal, social, and cultural factors (Johnstone, 2016).

Alongside a lack of comprehensive laws that recognize unauthorized sexual image use as a crime, let alone a form of sexual violence, discussions of sexual image exchange (sexting) that fail to distinguish between consensual and non-consensual acts contribute to the normalization of these behaviours (Krieger, 2017), supporting the extension of rape myths to online spaces and

actions. In this social and cultural milieu, it is expected that only a minority of women who have had their images used without consent will view this as sexual violence. Naming these experiences as sexual violence could impact victim behaviours such as the decision to seek support and how this is done, as well as the behaviour of others, such as how friends respond to the women disclosing these incidents. The research on labeling offline sexual violence suggests that labeling may be related to post-assault well-being (e.g., Littleton, 2007), though the relationship to outcomes is complex and appears to be mediated by factors such as coping style (Kelley & Gidycz, 2015).

This study used thematic analysis to explore how women understand and experience (i.e., think and feel about) incidents in which their sexual image was taken and/or used without consent (RQ1). Using a cross-sectional design, changes in how women thought and felt about the incidents at different points in time (i.e., between the time they first learned of their image being used to their thoughts and feelings at the time of the study) was also examined (RQ2). In addition to thoughts and feelings, this study examined how women labeled or conceptualized their experiences (RQ3). To answer these questions, an inductive qualitative approach was selected to analyze women's experiences, as thematic analysis is well-suited to knowledge-building and theoretical development when a topic is sparsely researched (Clarke & Braun, 2017). Additionally, a qualitative approach was used as the inclusion of women's voices from the outset of this literature is important from a social justice perspective and will help researchers and practitioners do work that speaks to women's concerns and experiences. The current study contributes to the limited research in this area by exploring women's experiences of image-based sexual violence in order to inform future research and intervention in this area and deepen our understanding of these experiences in women's lives.



## Method

**Participants.** The sample consisted of 38 adult women who had a sexual image taken of them and/or used without consent. Participants were primarily (~60%,  $n = 20$ ) recruited using online advertisements posted on social media (i.e., Facebook) and bulletin board websites (i.e., Craigslist). The rest of the sample was recruited via email from a list of women who had previously participated in research about their experience (and indicated they would like to be contacted). These women were originally recruited from a university research participation pool operated by the psychology department and open to students enrolled in select psychology and business classes, as well as the community using online methods consistent with the other participants in the current study (i.e., advertisements on social media). Participants averaged 27.8 years old ( $SD = 11.2$ ). The sample was diverse with more than one third identifying as women of color ( $n = 15$ , 39.5%) and just over half ( $n = 20$ , 52.6%) were students. Demographic characteristics of the sample are listed in Table 1.

Table 1

*Demographic Characteristics of Sample*

	%	$n$	$M$	$SD$	Min.	Max.
Age (years)		38	27.78	12.53	17	57
Ethnicity						
Black	13.2%	5				
East Asian	10.5%	4				
Indigenous	2.6%	1				
Latin American	2.6%	1				
South Asian	10.5%	4				
White	60.5%	23				
Student	52.6%	20				

**Materials.** An online survey asked participants to think of an incident where a sexual image of them was taken or used without their permission. If there were multiple incidents, the

women were asked to think about the most significant one and answer the questions with that in mind. Following demographic questions, women were asked how long ago the incident occurred (or how long it had been since they first learned about the unauthorized image use) in months, how long the incident lasted for (e.g., did it circulate over a period of time or was it an isolated incident where a picture was taken?), if they knew the person who took or used their image without consent, and if known, what their relationship to that person was. In a series of open-ended questions, women were asked: (1) to describe the incident of unauthorized image use in as much detail as they felt comfortable providing; (2) what they were thinking and how they were feeling when the incident first occurred; (3) what they think and how they feel about the incident at the present time, and finally; (4) if they had to label the experience, what they would call it?

**Procedures.** After clicking a link in the online advertisement/email, women were taken to a webpage with additional information about the study and the consent form. Women who consented were first taken to a page with screening questions to ensure eligibility for the study (i.e., adult women who had a sexual image taken/used without consent). Participants then completed an online survey about their experiences and those who opted to provide their information (in a separate survey) were compensated with a five dollar electronic gift card. Participants were also provided with resources and information about online sexual violence. This study received approval by the university's research ethics board.

## **Results**

**Incident characteristics.** Women reported experiencing a range of incident types, including having their image taken, shared with others, posted online, or a combination of these acts, without consent. Incident characteristics, including how the image was used, if the image

was taken by the victim herself, average time since the incident occurred (or the woman first learned of it), and relationship to the perpetrator are summarized in Table 2.

Table 2

*Summary of Incident Characteristics*

	%	<i>N</i>	<i>M</i>	<i>SD</i>	Min.	Max.
Image						
Taken without consent	13.2%	5				
Shared without consent	26.3%	10				
Posted without consent	23.7%	9				
Multiple (of above)	34.2%	13				
Other	2.6%	1				
Selfie	60.5%	23				
Perpetrator						
Romantic/Sexual	63.2%	24				
Friend/Acquaintance	31.6%	12				
Unknown	5.3%	2				
Time Since Incident ( <i>mos</i> )			20.7	14.9	1	52

**Coding procedure.** Responses for each question (i.e., thoughts/feelings at the time; thoughts/feelings at present, and, how they label the incident) were combined across participants to form three data sets for analysis (past thoughts/feelings, present thoughts/feelings, and label).

**Thematic analysis.** The data were analyzed for themes and patterns using the steps for thematic analysis outlined by Braun and Clarke (2006). Before coding, the data sets were first reviewed in order to develop a familiarity with the text and note initial observations. On this basis, some of the quotes from the ‘present thoughts/feelings’ data set were moved (also) to the ‘label’ data set, as many women spontaneously labeled the event when describing their current thoughts and feelings (e.g., “I was a victim of what is called ‘revenge porn’ on a sex website”).

The data sets were re-read and initial codes or features of the data that were potentially relevant to the research questions were generated (Clarke & Braun, 2017). All data extracts, or individual coded segments, were gathered for each of the initial codes. The initial codes were sorted into potential themes or larger patterns of meaning, as well as into sub-themes. Next, the potential themes were reviewed for internal consistency (of the coded extracts) to establish if there was sufficient evidence to justify each potential theme, if each of the potential themes represented a distinct entity, and finally, how well all of the potential themes represented the data set as a whole. The process was iterative, with several potential themes eliminated as they were not representative/did not address the research questions (i.e., description of actions) and others retained based on theoretical importance (instead of frequency; Braun & Clarke, 2006). For example, the conceptualization of the act as Revenge was retained as this is a motivation hypothesized to be central to these acts and much discussed in the literature. In this stage, candidate themes were dissolved and re-formed into larger over-arching themes when appropriate (e.g., women's descriptions of themselves as "naïve" were collapsed into the theme of Self Blame for RQ1/RQ2 and the theme Taken Advantage Of for RQ3). Also in this stage, the relationship, overlap, and differences between potential themes from each data set (initial understandings versus current thoughts and feelings) were considered. This produced a total of 11 themes pertaining to women's thoughts and feelings (past and present data sets) and six for the labeling data set. Each theme was then defined and named.

**RQ1: What did women think and feel about their experiences of image-based sexual violence?** For this research question, themes from both the past and present thoughts/feelings data sets were used. There were a total of 11 themes (most to least common): Perpetrator Blame (68.4%,  $n = 26$ ); Anger (57.9%,  $n = 22$ ); Lasting Impact (36.8%,  $n = 14$ ), which refers to

continued negative emotions and changes as a result of the incident<sup>1</sup>; Self Blame (47.4%,  $n = 18$ ); Shame (31.6%,  $n = 12$ ); Shock (26.3%,  $n = 10$ ); Fear (26.3%,  $n = 10$ ); Moving On (21.1%,  $n = 8$ ), which refers to growth, positive changes, and attempts to “move on” from the incident; Betrayal, referring to feelings of betrayal (21.1%,  $n = 8$ ); Sadness (18.4%,  $n = 7$ ), and; Hurt (10.5%,  $n = 4$ ). Examples and prevalence of each theme are provided in Table 2. The same themes emerged in both the past and present data sets, with the exception of two themes - Lasting Impact and Moving On - which were only in the present data set.

Conceptually the themes fell into two broad categories: emotions and reactions, and interpretations and meaning of the incident. Seven themes described emotions and reactions that the women experienced. These were: Anger; Betrayal; Fear; Hurt; Sadness; Shame, and; Shock. The remaining four themes related to women’s processing of the event, including the impact of the event in their daily lives – either as an event to grow and move on from (Moving On) or an event that had a continued negative impact (Lasting Impact) – and themes of responsibility (Self Blame and Perpetrator Blame).

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<sup>1</sup> In this theme, women described loss of trust as well as a variety of negative emotions that they continued to experience, some of which were the same as other themes (e.g., continued anger and shame) and were coded into both.

Table 2

*Women's Thoughts and Feelings about Incidents of Image-based sexual violence*

Theme	Prevalence	Examples
Anger	57.9% (n = 22)	<p>"I was appalled and angry."</p> <p>"I was furious!"</p>
Betrayal	18.4% (n = 7)	<p>"I was extremely angry and felt betrayed."</p> <p>"I feel broken in the trust I had given to someone I thought I knew."</p> <p>"It was a terrible fact that violated my trust in my friends, I thought that my friends were like my sisters now I know that it is not like that."</p>
Fear	26.3% (n = 10)	<p>"I was immediately thinking, I do not know this man and I do not know who he is sending videos of me to when I am not wanted to be filmed."</p> <p>"I felt fear, I did not think someone would do something like that, first by my friend who shared the photo with someone else without my consent and then they will publish it on the internet without my authorization."</p>
Hurt	26.3% (n = 10)	<p>"It was horrendous to see that video I remember that I vomited, it gave me a stomachache, I cried, because it hurt me to see my boyfriend doing something like that."</p> <p>"That guy was really not nice and hurt my feelings. I was young and remember feeling quite heartbroken."</p>
Lasting Impact	50.0% (n = 19)	<p>"I feel violated, I distrust constantly and still have anger issues."</p> <p>"I still feel embarrassed."</p> <p>"I'm not dating anyone I do not think I'll go out with someone for a while, I do not trust men, I do not go to parties, I do not drink drinks that someone offers me only that I can uncover, I'm more cautious."</p> <p>"It is traumatic to describe."</p>
Moving On	21.1% (n = 8)	<p>"I'm okay, wish it didn't happen but I'm glad it did."</p> <p>"I accept that it happened and although my trust with that human is nonexistent, I still try to only give my quality time and</p>

		be around people I trust in such vulnerable states.”
		“I should have just ignored the message and not engaged in the argument. I never found out if they posted the photo anywhere but I don't really care anymore.”
Sadness	18.4% ( <i>n</i> = 7)	<p>“I was very depressed and thought about suicide.”</p> <p>“I was sad ... I felt that I wanted to die.”</p> <p>“I felt sad [and] almost abused.”</p>
Self Blame	47.4% ( <i>n</i> = 18)	<p>“I regretted sending it and I felt exposed.”</p> <p>“What a mistake [about sending the selfie]”</p>
Shame	31.6% ( <i>n</i> = 12)	<p>“I was ... embarrassed because people in my work had the photo”</p> <p>“I was extremely ashamed.”</p>
Shock	26.3% ( <i>n</i> = 10)	<p>“I was shocked, actually had an anxiety attack.”</p> <p>“Shocked because it was the first time we argued and he took it too far.”</p> <p>“I thought it was a mistake that it was not possible for them to do something like that at school.”</p> <p>“I thought it was a dream that was not real.”</p>
Perpetrator Blame	68.4% ( <i>n</i> = 26)	<p>“Needless to say the relationship was over within a couple days of the incident.”</p> <p>“what a jerk!”</p> <p>“I could not believe that he would be so low to do such a thing.”</p>

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**RQ2: How did women’s thoughts and feelings change from the time they first learned of their image being used to the time of the survey?** The prevalence of each theme was compared across the past and present data sets. A summary is provided in Figure 1. Six emotion themes were less prevalent in women’s current thoughts and feelings as compared to when the incident first occurred. These were Anger (50% v. 26.3%), Fear (21.1% v. 7.9%), Hurt (10.5% v. 5.3%), Sadness (15.8% v. 10.5%), Shame (28.9% v. 13.2%), and Shock (28.9% v.

0%). The five themes that were more prevalent in the current reflections than in the past reflections were Betrayal (7.9% v. 18.4%), Lasting Impact (0% v. 50%), Moving On (0% v. 21.1%), Perpetrator Blame (34.2% v. 50%), and Self Blame (5.3% v. 44.7%). As expected, Lasting Impact and Moving On were exclusively in the present thoughts/feelings data set as they dealt with the ongoing or continued effects (Lasting Impact) of and reflections (Moving On) on the incident. These themes all involved some level of analysis or meaning-making. Examples of meaning-making include framing the incident as an act of betrayal/feeling betrayed, assigning blame, or evaluating the impact of the incident on their lives.

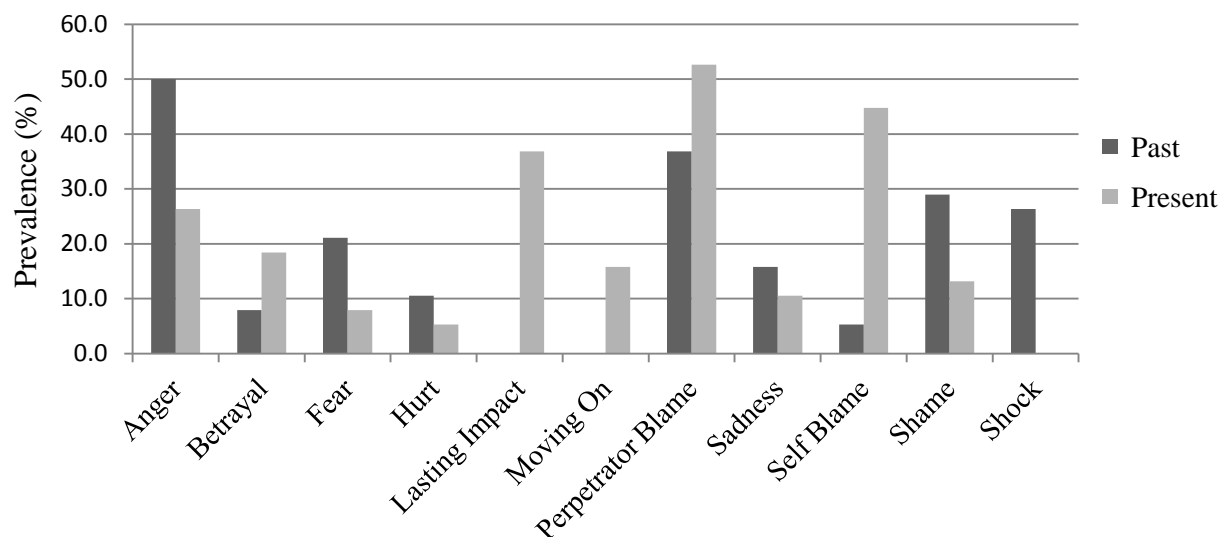


Figure 1. Prevalence (%) of themes in the past versus present data sets

**RQ3: How did women conceptualize or label incidents of image-based sexual violence?** Women's labels and incident descriptions were organized into six themes (most to least common): Breach of Trust; Taken Advantage Of; Learning Experience; Negative Experience; Revenge, and; Victimization. Examples of each theme are provided in Table 3. It should be noted that women's responses were coded into more than one theme if warranted.



Breach of Trust was the most common label, reported by 36.8% ( $n = 14$ ) of the women. In this theme, women viewed these incidents as privacy violations, often using the phrase “breach of trust” explicitly and referring to privacy.

The second most common interpretation was Taken Advantage Of, reported by 28.9% ( $n = 11$ ) of the women. In this conceptualization, women stated that they were naïve or had made an error in judgment by trusting the wrong person and were subsequently taken advantage of. In this label, women acknowledged the perpetrator’s actions but also viewed their own behaviour (e.g., sending a photo, drinking too much) as at least partially responsible for causing or contributing to the incident (self blame).

The Victimization label was described by 21.1% ( $n = 8$ ) of the sample. In this theme, women thought of themselves as victims of a crime or harmful act and the incidents as victimization. In this theme, the acts were described as intentionally harmful and the perpetrators were seen as responsible. For example, one participant elaborated, “I think the guy should have been punished legally.”

The Learning Experience label was present for 21.1% ( $n = 8$ ) of the women. In this theme, women discussed the incident as a source of learning or personal growth. Women acknowledged that the event was a negative experience, often referencing acute negative effects or reactions (e.g., feelings of shame or anger), but went on to describe the incident as one that they learned from.

In contrast, women who interpreted the incident as a Negative Experience (18.4%,  $n = 7$ ) characterized it simply as a bad thing or unfortunate event that happened. The incident was labeled in some way as a negative experience without any references to causal factors, individual actions (e.g., an intentional act or act of revenge by another person), or further analysis.

The final and least prevalent label, Revenge, was present for 10.3% ( $n = 4$ ) of the sample. These women described incidents in which a romantic relationship ended and their ex-partner took or used their image in some way with the intent to punish and/or harm them. In this theme, women explicitly labeled these incidents as acts of revenge.

Table 3

*Interpretations of Incidents of Image-based sexual violence*

Theme	Prevalence	Examples
Breach of Trust	36.8% (n = 14)	<p>“For me it is abuse of trust and transgression of my privacy.”</p> <p>“Breach of trust”</p> <p>“it was a huge breach of trust”</p>
Taken Advantage Of	29.9% (n = 11)	<p>“I had a moment where I lacked assertion and that's not going to happen again.”</p> <p>“I was a teenager and very naïve.”</p> <p>“I was drinking too much at that time and not very happy.”</p> <p>“I think I was naïve and careless, the way to protect this type of images was not correct.”</p>
Victimization	21.1% (n = 8)	<p>“I was the victim of some misfits.”</p> <p>“I was a victim of what is called 'revenge porn' on a sex website.”</p>
Negative Experience	18.4% (n = 7)	<p>“Offensive and insulting”</p> <p>“what a horrifying experience”</p> <p>“Definitely the worst thing that has ever happened to me.”</p>
Learning Experience	21.1% (n = 8)	<p>“Terrible experience. However I learned from it and I have moved on from it.”</p> <p>“Helpful but hurtful”</p> <p>“Betrayed, ashamed and the end result seems to be empowerment.”</p>
Revenge	10.3% (n = 4)	<p>“it was a really lame revenge move”</p> <p>“He was trying to get revenge.”</p>

## Discussion

This study used thematic analysis to examine women's descriptions and self-reported reactions to incidents of image-based sexual violence with the aim of understanding how they experience and understand these incidents. Differences in women's thoughts and feelings between when the incident first occurred and the time of participation in the study were examined using a cross-sectional design. In addition to thoughts and feelings, women were asked to label their experience in order to further explore how women conceptualized these incidents and if they labeled them as sexual violence.

The range of incidents that women experienced was varied, with almost all of the incidents perpetrated by people known to the women. This is similar to what is reported in the literature on rape, but the current study had a larger proportion of known perpetrators (94.8%) than what is sometimes reported (e.g., 75% of a large sample of women from a rape crisis centre; Larsen, Hilden, & Lidegaard, 2015), though reports over 90% are not uncommon among some groups of women, such as university students (Krebs, Lindquist & Barrick, 2010). This is not surprising as the nature of these incidents often involve images that were shared intentionally (e.g., with a romantic partner), taken with known others (e.g., selfies taken with a friend and later shared by that individual), or taken following sexual activity or in a change room at school, situations where the perpetrator(s) will be known. Although the victim may not know all of the individuals who participate in the sharing, downloading or forwarding of her image, introducing an additional element to the crime, she will often know the person who first shared or posted it. Relationship to the perpetrator has been shown to impact women's experiences following sexual violence in many ways (e.g., women who are assaulted by partners and relatives versus strangers experience more distress; Feehan, Nada-Raja, Martin & Langley, 2001), which suggests that

understanding how this plays out in image-based sexual violence may be an important next step for researchers and clinicians.

In the current study, in approximately 60% of the incidents the images were selfies (taken by the women themselves or with others) but it is important to note several things regarding this finding. First, discussions of image-based sexual violence often talk about incidents in which a selfie was sent to a partner (with consent) and later shared by the recipient as the only type of incident that occurs. The range of incidents described by the women in the current study emphasizes the need to broaden the conversation as well as re-focus it on the decisions of some individuals to take or use an image without consent instead of on the women in the image. Additionally, many women described contextual variables, such as being coerced by a partner to send an image or having a private image stolen, which suggests there is diversity even for incidents which involve self-taken images. Second, it is likely that many women who are filmed without consent are unaware of this fact, which could bias the research literature in favor of incidents where women do know how an image was used, such as when they are intentionally targeted or there is subsequent harassment. Third, in the current study some of the selfie incidents also involved images taken with the perpetrator, such as a picture with a friend in underwear or filming sexual activity with a partner. It is impossible to know, especially in cases involving a sexual partner, whether the images were taken with the intent of sharing or posting them or whether the self-taken images were coerced in some way. This may represent a tactic used by perpetrators to gain images of women and garner a measure of self-protection with claims that co-created images are theirs to use freely while relying on a culture of victim blame in which the woman's decision to take a nude image situates the blame with her.

When women discussed their thoughts and feelings about the incidents, eleven themes emerged, falling into two conceptual categories. First were themes that pertained to emotions and immediate reactions. These were: Anger; Betrayal; Fear; Hurt; Sadness; Shame, and; Shock. The second group included themes that involved some degree of interpretation or reflection on the incident. In this group, two themes pertained to blame (Self Blame and Perpetrator Blame) and two reflected on the impact of the incident in the women's lives. Many women described some form of continued negative impact (Lasting Impact theme) including a range of negative emotions, particularly a loss of trust going forward, and/or social changes, such as ceasing to date, stemming from the incident. Other women (in the Moving On theme) described healing or putting the incident behind them, which was often accompanied by positive life changes, learning, or personal growth as they did so.

Overall, the themes in the present study suggest that women's thoughts and feelings in response to image-based sexual violence may be similar to women's experiences following other forms of sexual violence. To start with, the acute emotional reactions described by women in the current study - Anger, Fear, Hurt, Sadness, Shame, and Shock – are commonly reported by women who have experienced offline sexual violence, including rape (e.g., dos Reis et al., 2016; Choudhary et al., 2012; Foa et al., 1991). There are no doubt many differences between online and offline sexual violence; however, women's emotional experiences of these events appear to be similar, which supports the framing of image-based sexual abuse as a form of interpersonal trauma and sexual violence. These findings are counter to the minimizing discourse popular in media coverage that frames incidents of image-based sexual abuse as “sexting gone wrong” and fails to recognize it as a form of sexual violence.

Parallels to the sexual violence literature were also seen in themes describing the impact of the incident in women's lives. Research has found that acute distress decreases for most women in the year following their assault but a minority go on to experience longer term psychological distress, including post-traumatic stress disorder, anxiety, and negative social and health changes (e.g., Atkeson, Calhoun, Resick, & Ellis, 1982). The Lasting Impact theme was present in half of the women in the current study, which is higher than some estimates reported in other studies on sexual violence. The current study was cross-sectional and the average time since the incident was almost 21 months, which suggests that although most women will cease to have symptoms at this time, the fact that some still do underscores that image-based sexual violence may be significant events with potentially lasting effects for women. Some of the lasting impacts reported in the current study, specifically around distrust of sending nude images via technology, may be sustained over time and be perceived as protective. However, loss of trust could also be a barrier to forming future relationships or maintaining current ones which was also reflected in the Betrayal theme in the current study and reported by Bates (2015) in her research with victims of revenge pornography.

Aside from loss of trust, women who described Lasting Impacts mentioned a variety of negative emotions stemming from the incident, including anger, embarrassment, hurt, trauma, and discomfort. It is possible that these women have similarities to the small proportion of rape victims who experience chronic or longer term negative psychological outcomes. These women may share some of the same predisposing factors, such as previous victimization experiences (Briere & Jordan, 2004). Related to this, women in the Moving On theme, which described growth, positive changes, and attempts to move on following the incident, may have similar experiences and trajectories as women who go on to be relatively symptom free post-assault.

In the final two themes, women assigned blame either to themselves (Self Blame) or to the person who took and/or used their image without consent (Perpetrator Blame). Self blame is a common reaction reported by victims of sexual violence and one that has been the subject of much study. Longitudinal research on the role of blame in women's post-assault outcomes suggests that women who blame themselves or their actions for the assault experience more psychosocial distress, including symptoms of depression and anxiety (Frazier, 2003; Koss & Figueredo, 2004). Surprisingly, research also suggests that engaging in high levels of perpetrator blame is also associated with worse psychological outcomes (Frazier, 2003).

Many psychological and individual factors likely mediate the relationship between blame and outcomes, but one factor that may be relevant for image-based sexual violence is control-related beliefs. Researchers posit that beliefs about control help explain the link between blame and psychological outcomes. For example, victims' beliefs that they can control their reactions to the assault in the present moment as well as prevent future assaults are both related to better outcomes (Frazier, 1990). Loss of control was a central concern among victims of revenge pornography (Bates, 2015) and the role of control beliefs may be particularly salient in image-based sexual violence due to the public and social nature of the act in many cases (i.e., images are put online or circulated, situations where a victim has no control over the spread of images). Future studies may wish to explore the role of blame and control beliefs in outcomes of image-based sexual violence given the increase in blame-related thoughts over time in the current study and their potential as a vehicle for change in therapeutic interventions.

When comparing women's thoughts and feelings at the time of the incident to those at the time of participation, a clear pattern emerged. Themes that pertained to emotions (i.e., Anger, Fear, Hurt, Sadness, and Shame) all decreased over time and the theme of Shock ceased to be



present at all. The themes that increased in prevalence were those from the second category, the themes involving reflection and processing of the experience (i.e., Betrayal, Perpetrator Blame, and Self Blame), including two themes – Lasting Impact and Moving On - that were exclusively found in the reports of current responses.

This pattern of change is consistent with recovery trajectories in which women experience a period of strong, negative emotions following incidents of image-based sexual violence, and these feelings decrease over time for a majority of women. This hypothesized trajectory is consistent with the literature on post-rape trajectories which reports that most women experience acute distress followed by a decrease in symptoms, although a minority do go on to have chronic symptoms (e.g., women with a history of childhood sexual abuse; Resick, 1993; Steenkamp et al., 2012; Walsh et al., 2012). Over time, interpretive thoughts and feelings increased, including notions of blame and the incident as a learning experience, which could suggest that as acute distress decreases, women are able to engage in reflection and meaning-making activities – though the relationship between these processes is unknown. Women discussed both positive changes, such as learning and growth, as well as ongoing negative effects, such as negative emotions and/or loss of trust) stemming from the incident. This echoes the multi-faceted experiences of women following rape, experiences that are not linear or one-dimensional and that describe harms as well as strengths (e.g., dos Reis et al., 2016).

The final research question asked women to label the incident. Women's labels and incident descriptions were organized into six themes: Breach of Trust; Learning Experience; Negative Experience; Revenge; Taken Advantage Of, and; Victimization.

Some researchers have argued that whether women label an experience as victimization is crucial to understanding their post-assault experiences and behaviour (e.g., Harned, 2004;

Orchowski et al., 2013). Of particular interest was examining the extent to which women conceptualized or labeled these experiences as sexual violence. Perhaps not unsurprising given the absence of this framing in the wider discourse on sexual images and the large number of women who do not label other forms of violence, sexual violence was not a label that women used to describe their experiences in the current study. Women also did not label these experiences as dating or intimate partner violence, despite many instances occurring within the context of a romantic or sexual relationship. However, several themes did acknowledge or use the more general label of victimization.

A minority of women – those using the Revenge and Victimization labels – conceptualized their experiences as victimization and defined themselves as victims. They differed in that women stated the perpetrator's actions were motivated by revenge in the Revenge theme. However, with both themes responsibility was placed with the perpetrator.

In Breach of Trust, the most common conceptualization, women acknowledged the perpetrator's actions as causal (like Victimization and Revenge) though not always intentional, and did not necessarily ascribe them a malicious quality or motivation. Instead of victimization, the language of betrayal and privacy violation was used. Non-consensual use of sexual images is often framed as a privacy issue in the media and literature and discussed in terms of broken social contracts (i.e., expectation of privacy). This conceptualization fails to take gender into account despite the fact that a majority of incidents are perpetrated by men against women and the ways in which these incidents tend to play out is disproportionately harmful for women as compared to men.

The second most common conceptualization was the Taken Advantage Of label, in which women acknowledged the perpetrator's deliberate actions but viewed their own actions or

behaviour as also causing or contributing to the incident (self blame). The women talked about errors in judgment (regarding who to trust with images) and referred to themselves as naïve. In her research with unacknowledged rape victims Johnstone (2016) argued that beliefs such as self blame function to prevent women from acknowledging an act as rape or sexual assault. As with Breach of Trust, this conceptualization focuses on individual actions and decisions in the absence of analyses of gender and social structures.

In the Negative Experience label, incidents were described only as a bad thing that happened with no reference to individual actions or responsibility. Even though these women did not talk about accountability, (privacy) violation, or victimization in this conceptualization, they still described the incidents as upsetting and harmful.

Most unlike the other labels was Learning Experience. In this conceptualization, women acknowledged that the incident was a negative experience but also one that they grew or learned from. The presence of this theme, sometimes alongside other labels (e.g., woman who labeled an incident as both Revenge and a Learning Experience) highlights that women understand experiences of image-based sexual violence in multiple ways. It suggests that these experiences can be both sources of strength as well as harm.

In sum, none of the women labeled their experience as sexual violence and only a minority unequivocally viewed the perpetrators as responsible for the incident. Additionally, there was no evidence of a gendered analysis or lens in how the women conceptualized these incidents, despite other research which has found that girls and women do acknowledge gender-related dynamics surrounding the exchange of sexual images (e.g., consequences are not the same for girls and boys; Ringrose, Harvey, Gill & Livingstone, 2013). The sexual violence literature suggests several reasons why women may not label an experience as sexual violence

which may be applicable to image-based sexual violence, such as minimization of the assault, endorsement of rape myths, or narrow stereotypical definitions of what constitutes “real” sexual violence (Hammond & Calhoun, 2007; Orchowski et al., 2013). Given that image-based sexual violence is often mislabeled as sexting (which refers to consensual image exchanges) and the impact of these incidents minimized, it is possible that these same factors could have influenced how women thought about their experiences in the current study.

Though the definition of image-based sexual violence as sexual violence is present in the literature, it still represents a minority of voices (Krieger, 2017) and this framing is largely absent in mass media coverage, which instead favors the language of privacy and risk (Draper, 2012). This narrative was reflected in the current study in both the absence of the sexual violence label and women’s description of behavioural changes, such as the decision to not send images in the future, when asked about their thoughts and feelings. Failure to define these incidents as acts of sexual violence makes critical reflection on issues involving gender, identity, and larger social structures less likely. These discussions are crucial to understanding the nature of these acts, linking them to other forms of sexual violence and oppression, and dismantling the underlying attitudes and structures that support them. For individual women, it is unknown how different conceptualizations relate to outcomes and psychosocial well-being following incidents of image-based sexual violence. It is possible that some of findings from the literature on unacknowledged rape victims could inform interventions for this group of women and is an avenue for future investigation.

The current study used a cross-sectional design to explore women’s conceptualizations of incidents of image-based sexual violence and asked women to describe their thoughts and feelings when the incident occurred and at the present time. Differences were found between

women's accounts of past and present, but questions of causality and specific changes over time were not possible with this design which limits how the findings can be interpreted. The findings suggested that women's experiences with image-based sexual violence have similarities to other forms of sexual violence and suggest that similar outcome trajectories may occur. Future studies should employ longitudinal designs and a larger sample to explore symptom trajectories, relationships between incident characteristics and outcomes, and the role of cognitive mediators (e.g., self blame) across and between groups of diverse women.

This research is an important early step in understanding women's experiences with image-based sexual violence, a diverse and increasingly common form of technology-facilitated sexual violence. It highlights several ways in which these incidents are similar to more traditional forms of sexual violence, which underscores the need for these acts to be recognized and treated as such. More research is needed to explore this emerging phenomenon and the ways in which existing knowledge about violence prevention and treatment are applicable to image-based sexual violence and can be adapted for advocacy, treatment, and prevention efforts.

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## **CHAPTER IV - “Check out this pic!”: Responses to receiving sexual images forwarded without consent**

New technologies have the potential to enhance quality of life and have allowed people to connect in unprecedented ways. However, like many new developments these technologies also have potential as tools of violence. The use of technology to commit acts of gender-based violence has taken many forms, such as online sexual harassment and cyberstalking, and increasingly, the taking and sharing of sexual images without consent. Non-consensual sharing of sexual images is a growing phenomenon with the potential for serious harm to the victims (i.e., the individuals in the images). This study investigated the effect of several individual and contextual factors on responses to receiving a forwarded sexual image of a woman, as research suggests that the negative outcomes of non-consensual use of sexual images are disproportionately experienced by girls and women (Draper, 2012; Ringrose, Harvey, Gill & Livingstone, 2013).

Differentiated from sexting, which is the consensual manufacture and exchange of self-produced sexual images, non-consensual use of sexual images is more aptly considered a form of technology-facilitated sexual violence, or sexual violence that is made possible through the use of various technologies (Henry & Powell, 2015). There are few studies of the prevalence of unauthorized use of sexual images (e.g., showing a photo to someone without consent) but estimates suggest that the problem is widespread. Research suggests that approximately 8 to 32 percent of adolescents (in US and Europe) have had their sexual images used without consent, and this increases to 42 percent when only female adolescents were analyzed (Dir & Cyders, 2015; Wood, Barter, Stanley, Aghtaie, & Larkins, 2015). For adults, a recent study found that approximately 1 percent of adults in the US knew that their sexual images had been used without

consent (Ybarra, Price-Feeny, Lenhart, & Zickuhr, 2017). As people who have grown up with networked technologies age, it is likely that this number will increase. The few studies that have looked at outcomes of having an image shared or put online without consent suggest that these incidents can be very distressing and victims may experience depression, anxiety, and symptoms of post-traumatic stress disorder (Bates, 2015; Englander, 2016).

A small body of research suggests that forwarding sexual images without consent is not uncommon. For example, research with youth and young adults reports that between 3 and 25 percent have forwarded sexual images to others and almost a third say they would show sexual images to others without permission to do so (Mitchell, Finkelhor, Jones & Wolak, 2012; Strassberg, McKinnon, Sustaíta & Rullo, 2013; Lim, Vella, Horyniak, & Hellard, 2016). Recipients of forwarded sexual images have an important role to play in preventing the further spread of images, but little is known about how people respond to receiving such images. The current study investigated the influence of individual and situational factors on recipient decisions to respond in either helpful or prosocial ways.

Showing sexualized or pornographic female images is normalized among young men and is viewed by some as a way to demonstrate power in a system that rewards heterosexuality and dominance over women (e.g., Albury & Crawford, 2012; Lucero, Weisz, Smith-Darden, & Lucero, 2014; Ringrose & Harvey, 2015). As technology has allowed, young men have extended this behaviour to the collection and misuse of sexual images produced by or obtained from young women in their peer groups. Interviews with young people have revealed that sharing sexual images without consent is a social act, often done as part of male bonding and to establish status within peer groups (Ringrose, Gill, Livingstone & Harvey, 2012). Conversely, when images of girls or women are distributed, they may be perceived as indicative of the girls' poor

character for violating sexist social norms in which girls are expected to place limits on sexuality and remain “chaste” by abstaining from acts such as sexting (Ringrose et al., 2013; Walker, Sanci, & Temple-Smith, 2013). Images of male bodies are not stigmatized the same way (Salter, 2016), and anecdotal accounts describing the non-consensual use of men’s images indicate that many of these incidents are not perceived to have serious negative consequences by the individuals whose images are so used (Krieger, 2017).

Bystanders or individuals who witness sexual violence are in a unique position to interrupt and respond to these events. Bystander motivations and barriers to responding in prosocial ways to potential (or actual) sexual violence have been extensively studied in the literature on traditional sexual violence. Situations involving non-consensual images differ in that technology can greatly increase the number and location of bystanders or individuals who come across or receive an image from someone else, which as Allison and Bussey (2016) suggest, makes targeting these people important for prevention.

Smith (2012) states that technology can change the context in which bystanders witness acts of online sexual violence, as they may be physically with the perpetrator and/or victim, or be separated (from the actors as well as the act) by location and time, creating a more complex set of factors that may influence their behaviour. In the literature, individuals who witness online acts of violence have been termed cyberbystanders (e.g., Palasinki, 2012). In the current study, people who receive or view sexual images of others without their consent via technology, but do not participate in forwarding or further sharing of images, are conceptualized as bystanders. A major concern for those whose images have been shared is the loss of control and possibility that the images have been widely shared (Bates, 2015). Accordingly, the role of bystanders is crucial as they represent the point at which further dissemination can be stopped (e.g., by reporting the

individual, notifying the victim, or expressing disapproval to the sender). It is important to investigate the factors that make decisions to help more or less likely. There are several factors that have been investigated in the traditional bystander literature, as well as a small body of work on bystanders responding to online situations (i.e., “cyberbystander effect”), that were used to inform the current investigation of bystander responses to non-consensual use of sexual images. The number of bystanders, the role of peer norms, gender, and attributions of blame and responsibility were investigated in the current study and previous work on these variables is discussed below.

**Number of bystanders.** The presence of other witnesses or bystanders has been shown to be an important contextual factor in determining how an individual will respond to various incidents where intervention would be warranted. The bystander effect describes the phenomenon where the more people that are present during an emergency, the less likely any one individual is to take action due to a feeling of lessened personal responsibility (Darley & Latané, 1968; Latané & Darley, 1968). Overall, research has found that the more people there are who witness an event, the less likely any one individual is to respond (Latané & Nida, 1981); however, some individual and situational factors have been shown to interact with group size to reduce or actually reverse the bystander effect. For example, bystanders are less likely to intervene if a situation is judged to be dangerous to them or if the perpetrator is present (Fischer et al., 2011). Other variables can also interact with group size to encourage or inhibit action depending on the specific context. For example, Levine and Crowther (2008) found that in a sexual harassment scenario, female bystanders were more likely to come to the aid of a female victim when other women were present than in situations where they were alone with or outnumbered by male bystanders, perhaps due to safety concerns. Similarly, another study found



that for female bystanders who witnessed a potential rape at a party, as the group size increased so did intent to intervene (Katz, Colbert, & Colangelo, 2015). These studies suggest that individual factors interact with the environment, such as with gender and perception of safety, to produce exceptions to the bystander effect, such as when women respond to sexual violence.

The bystander effect also appears to operate online in several contexts – a so-called “cyberbystander effect.” For example, researchers have found that cyberbystanders took longer to respond and did so at lower rates when there were more people present in response to online (and e-mailed) requests for help, online bullying, and online sex offenses against minors (Blair, Thompson, & Wuensch, 2005; Markey, 2000; Obermaier, Fawzi & Koch, 2016; Palasinski, 2012; Voelpel, Eckhoff, & Förster, 2008). This is a direct parallel to the traditional bystander effect in which the number of other witnesses impacts individual behaviour. Another parallel can be seen in Obermaier et al.’s (2016) study, where the bystander effect was lessened when cyberbullying was severe (a non-ambiguous emergency situation) and when individuals felt personally responsible to act, both of which are consistent with the traditional bystander literature. Allison and Bussey (2016) concluded in their review of the literature on responses to online bullying that the model proposed by Darley and Latané was applicable to online contexts, though it may not account for the dynamics of peer groups (including changing norms and prior experience with similar incidents) or bystanders who choose to join in the perpetration.

Kerstens and Veenstra (2015) suggest that technology and online environments themselves introduce another set of contextual variables that can influence bystander decision-making. One aspect of virtual environments that may enhance the bystander effect is that it is often difficult, if not impossible, to know how many other people have witnessed an event or viewed an image for example, which may result in an overestimation of the number of others

that are “present” resulting in greater diffusion of responsibility (Macháčková, Dedkova, Sevcikova, & Cerna, 2013). In the current study, it was hypothesized that individuals who receive sexual images without consent would be less likely to help when an unknown number of people also received the image, as well as when the image was received by multiple others, as compared to when they were the only recipient.

**Peer influence.** In the traditional bystander literature, one of the key factors that can inhibit or encourage bystander intervention is the reaction of other people and the fear of judgment from others. Lack of response from others may decrease prosocial intervention if bystanders are concerned about judgment from others, perhaps as a result of deviating from social norms that dictate it would be inappropriate to respond. For example, it has been documented that bystanders are less likely to intervene when a man is attacking a woman if they believe they are romantically involved, due to social norms that emphasize privacy and non-interference in “family” or personal matters of others (Shotland & Straw, 1976; West & Wandrei, 2001). Social norms, or the belief that one’s peers endorse certain norms, may operate online as previous research has shown that individuals internalize group norms and act on them even in the absence of the group (Ellemers, Spears, & Doosje, 2002). Research on bystanders to sexual violence has found that when people, male bystanders in particular, believe their peers would intervene, they themselves are more willing to take action, and conversely, bystanders are less likely to take action when they believe their peers are more tolerant of sexual aggression (Banyard & Moynihan, 2011; Brown & Messman-Moore, 2010; Fabiano, Perkins, Berkowitz, Linkenbach & Stark, 2003; Orchowski, Berkowitz, Boggis & Oesterle, 2016; Stein, 2007). Peer norms also appear to affect online behaviour, as research has shown that when bystanders saw peers communicate disapproval of online bullying, they were more likely to support the victim

(Anderson, Bresnahan, & Musatics, 2014). In Brown, Banyard and Moynihan (2014)'s study of actual bystander behaviours, they found that when male college students believed their peers would support intervention in sexual assault situations, they were more likely to have intervened themselves. For adolescents and young adults, perceived social consequences may be particularly influential (e.g., Casey, Lindhorst, & Storer, 2017).

In cases of unauthorized distribution of sexual images, peer norms are likely to influence bystander or image recipients' behaviour as the nature of the act itself is social. In the current study, it was hypothesized that individuals who believe that their peers approve of sharing sexual images without consent will be less likely to perceive the situation as worthy of intervention, and therefore will report lower intentions to take prosocial action.

**Victim blame and responsibility.** Individual beliefs about sexual assault and endorsement of rape myths in particular can impact willingness to intervene in sexual assault situations. Rape myths are false beliefs about rape (Burt, 1980) that “serve to deny and justify male sexual aggression against women” (Lonsway & Fitzgerald, 1994, p.134). Rape myths are used to justify victim blaming, in which a victim is perceived as responsible for the act of violence and therefore less “worthy” of intervention and empathy than other victims. Attributing responsibility to victims decreases bystander intervention more generally (Piliavin, Rodin, & Piliavin, 1969), and research has also found that individuals who endorse victim blaming are less willing to intervene in cases involving sexual violence and intimate partner violence, and vice versa (Burn, 2009; McMahon, 2010; Stein, 2007; West & Wandrei, 2001). It is likely that similar norms and beliefs will apply to situations where sexted images are disseminated, so that in cases where the victim is blamed or seen as more responsible for the distribution of her image without

consent (e.g., where the image was initially taken by the victim herself and sent to another person), image recipients will be less willing to help.

In studies of cyberbullying, several studies suggest that bystanders do engage in victim blaming when witnessing online bullying (Holfeld, 2014) and many endorse stereotypical beliefs about victims, such as that they are usually loners or lie about their experiences, as well as beliefs that bystanders should not take action when witnessing cyberbullying (Lampridis, 2015). Negative beliefs about victims have been linked to decreased empathy and lower intent to intervene in online bullying scenarios (Freis & Gurung, 2013). Bystanders also attribute different levels of responsibility to different victims of cyberbullying based on their behaviour, and were less likely to help individuals they viewed to be more responsible (Holfeld, 2014), which is why blame and responsibility-related beliefs were measured in the current study.

Analyses of media coverage of sexual assaults that were filmed and the images later distributed, and cases where sexted images were later used without consent, reveal that victim blame is pervasive and reflects an underlying culture where sexual violence is tolerated and supported when it is perpetrated against women and girls seen to be deserving of such violence (Dodge, 2016; Pennington & Birthisel, 2016). Much of the current discourse and prevention efforts that target unauthorized image use focus on the decision of girls and women to take a sexual image, beginning a causal chain of events where they, instead of the perpetrators, are seen as ultimately responsible for any unauthorized use of their images as they were aware of the potential for unauthorized use and decided to do it anyway (Albury & Crawford, 2012; Döring, 2014; Karian, 2014). This is also the case for traditional sexual violence in that when victims' behaviours are perceived as causal, that is, as something they should have anticipated could result in sexual violence but chose to do anyway (e.g., drinking alcohol or taking drugs), victims

are seen as more responsible (Cameron & Stritzke, 2003; Qi, Starfelt, & White, 2016). The elements of causality, choice, and awareness of the potential for sexual violence (implicit acceptance of risk), distinguishes attributions of victim responsibility from attributions of blame (Shaver & Drown, 1986). For example, an individual may believe that the woman who sent the image is responsible for how it was used, but assign blame to the person who shared the image without consent. As choice and causality are central to how sexual image exchange is viewed, the current study included victim responsibility as well as victim blame in the final model.

**Gender.** Research on non-consensual image exchange suggests that the practice is gendered, with boys/men sharing and forwarding images at higher rates than girls/women (Johnson et al., 2018), making bystander gender an important consideration. Previous research on the bystander effect has also found that men and women tend to intervene in different types of situations. For example, a meta-analysis by Eagley and Crowley (1986) reported that men were more likely to intervene in dangerous situations and women were more likely to intervene when situations were not dangerous. However, in situations involving sexual violence, women tend to have higher intentions to intervene, report fewer barriers to intervention, and are more likely to respond in helpful or proactive ways (Amar et al., 2014; Banyard, 2008; Banyard, Moynihan, & Plante, 2007; Brown et al., 2014; Deitch-Stackhouse et al., 2015). This finding may be partially explained by some of the factors previously discussed, like attitudes toward victims and perception of peer norms. The literature on sexual violence reports that men tend to endorse more victim blame and responsibility than women do (Aosved & Long, 2006). In accordance with this literature, the current study hypothesized that men would assign more victim blame and responsibility, report that their peers are more supportive of non-consensual image sharing, and report lower prosocial intentions.

A small body of research on bystanders to digital crime has emerged, but to date no prior study has investigated responses to receiving sexual images that have been forwarded without consent. This is important to study as image recipients have the potential to stop the spread of future images, send messages to the image-sender that the behaviour is unacceptable, and provide support to the victim. For offline sexual violence, bystanders have the potential to disrupt the act or engage in other helpful behaviours such as providing support for the victim. Research on the bystander effect has revealed a number of factors that influence bystander behaviours, and this literature has provided the foundation for sexual violence prevention programs that target bystanders (e.g., McMahon et al., 2015; Orchowski, Edwards, Hollander, Banyard, Senn & Gidycz, 2018). For sexual violence that occurs in online spaces, as in the case of unauthorized image use, bystanders may be able to intervene in a number of helpful ways (e.g., deleting the image or reporting the perpetrator); however, there is currently a lack of knowledge about potential barriers to prosocial responses. It is important to develop a similar body of knowledge about image recipients' behaviour to inform prevention efforts for online acts of sexual violence and aggression and the current study aims to address this gap.

**Current study.** This study examined how individuals responded to receiving forwarded images in a hypothetical but realistic situation in which a sexual image is shared without the consent of the individual in the image. It examined how the number of other recipients, peer norms around sharing sexual images without consent, and attributions of victim responsibility and blame impact their intent to intervene in prosocial ways. It also analyzed gender as a key variable based on research showing differential responses for men and women bystanders. Based on past research, the elements of the vignettes that were held constant were designed to be a realistic depiction of a common scenario in which the victim had originally taken and sent the

image as part of a consensual exchange, and the image later used without consent (Levendowski, 2014). The fact that the victim had originally taken and sent the image was expected to elicit higher perceptions of victim responsibility and blame than if the image was taken without her knowledge (or if it was left unspecified) as previous research has shown that women who send sexual images are often derided and seen as responsible for any subsequent use of them (Angelides, 2013; Ringrose et al., 2013), just as women who defy sexual scripts that dictate abstinence are often blamed for violence committed against them. This was done to increase the chances of finding a significant effect for victim blame and responsibility in order to examine their role in shaping responses to forwarded sexual images. The vignettes varied the number of recipients (group size) and compared responses to scenarios in which one individual, a small group, and an unknown number of others receive a nude image from a friend via text message. In summary it was predicted that:

H1: Recipients would be less willing to help when there were a greater number of other recipients and when the image was sent to an unknown number of others (a “cyberbystander effect”);

H2: Recipients would be less willing to help when they believed their peers were supportive of distributing sexual images of others (norms);

H3: Recipients would be less willing to help when they viewed the victim as more responsible and blameworthy, and;

H4: Recipients who are men would (a) report that their peers were more supportive of non-consensual image use, (b) assign more victim blame and responsibility, and (c) report lower intent to help than women.

## Method

**Participants.** A total of 174 adults, with an average age of 20.5 years ( $SD = 1.8$ ) participated in the study. The participants were recruited from a mid-size Canadian university through the psychology department's research participation pool and compensated with course credit. The sample was composed of 57.5% men ( $n = 100$ ) and 42.5% ( $n = 74$ ) women. The majority of participants identified as White (75.3%,  $n = 131$ ). The remainder identified as 8% Arab/West Asian ( $n = 14$ ), 4.6% South Asian ( $n = 8$ ), 4% Chinese ( $n = 7$ ), 2.3% Black ( $n = 4$ ), 2.3% South East Asian ( $n = 4$ ), 2.3% mixed ( $n = 4$ ), 0.6% Aboriginal ( $n = 1$ ) and 0.6% Latin American ( $n = 1$ ).

**Vignettes.** The vignettes instructed participants to imagine themselves in the following scenario and were then told how many other people had also received the image:

You are by yourself and receive a text message from your friend Dave. It says, "Jane just sent me this pic. Check it out" and has a picture of Jane, a girl you know (but are not friends with), naked from the waist up.

This was followed by one of three statements about the number of other people that received the image. These were: the participant was the only recipient of the image ("Your friend texts you again to say you're the only person he has sent it to"); the image was sent via a group chat to six other people ("He sent the message to a group chat that you have with 6 other mutual friends"), and; the participant does not know if the image was sent to anyone else ("You have no idea how many other people he has sent the image to").

**Measures. Bystander behaviours.** Participants rated the likelihood of performing 14 helpful behaviours on a Likert-type scale (response range: 1 = *definitely would NOT do this*; 3 = *might do this*; 5 = *definitely WOULD do this*). The list of behaviours was developed from the



literature on bystander responses to cyberbullying and offline sexual assault (e.g., Bastiaenssens et al., 2015; McMahon, Banyard, & McMahon, 2015). Direct and indirect helping behaviours (e.g., “I would send a message to my friend saying they shouldn’t be forwarding the image”) were adapted to fit the online nature of the act. Cronbach’s alpha was 0.94.

***Victim blame and responsibility.*** Victim blame was measured by asking “How much is Jane to blame for the image being forwarded?” (response range: 1 = *not at all to blame*; 5 = *completely to blame*). Victim responsibility was assessed by asking “How responsible is Jane for the image being forwarded?” (response range: 1 = *not at all responsible*; 5 = *completely responsible*).

***Sexting history.*** Participants were asked if they had ever sent a sexual image or video of themselves to another person using technology and if they had ever received and/or forwarded a sexual image or video from another person. The questions did not use the label ‘sexting’ and instead asked about specific sending and receiving behaviours.

***Peer norms.*** Peer norms were assessed with six statements about what participants’ close friends believe about the non-consensual use (forwarding, putting online, and showing others) of sexual images on a Likert-type scale (response range: 1 = *strongly disagree*; 7 = *strongly agree*). For each type of use, participants were asked about their peers’ attitudes in general (“My close friends believe that it is wrong to forward sexual images (that were sent to them) without the person in the picture agreeing to it”) and when the person in the picture is not aware of the non-consensual use. For example, “My close friends believe that it is wrong to forward sexual images (that were sent to them) without the person in the picture knowing about it (i.e., the person in the picture does not know it was forwarded)”. Cronbach’s alpha for the peer norms scale was 0.94.

**Bystander training.** The university where the study was conducted has a long-standing (i.e., over 10 years) program of campus-wide bystander training, workshops, and awareness campaigns (e.g., posters) for sexual assault prevention. For this reason, after completing all the other measures participants were asked, “Have you taken any programs, courses, or workshops about bystander behaviour (e.g., a session about how to intervene in emergency situations)?” and “Have you taken any programs, courses, or workshops about how to intervene in situations of (potential or actual) sexual violence?” to test for effects related to such training.

**Procedure.** All measures were completed online. At the outset participants were randomly assigned to read one of the three vignettes. After reading the vignette, participants rated how likely they would be to engage in a number of helpful behaviours after receiving the image and indicated how much responsibility and blame they ascribed to the victim. Following this, they were asked about their participation in consensual sexting and peer norms regarding sharing sexual images without consent. The study was approved by the university’s research ethics board.

## Results

**Sexting and non-consensual image use.** Almost half of the sample, 45.4% ( $n = 79$ ), had participated in consensual sexting by sending a sexual image of themselves to another person. There were no significant differences between men and women for consensual image sending ( $\chi^2(1) = 2.77, p = .10$ ). For non-consensual use of images, 62.1% ( $n = 108$ ) reported that someone had physically shown them a sexual image without consent (e.g., showed them their phone) and 42.5% ( $n = 74$ ) reported receiving a forwarded sexual image. Similarly, more participants reported having physically shown an image to others without consent (21.3%,  $n = 37$ ) than to have electronically forwarded one (3.4%,  $n = 6$ ). The least common behaviour was to have

uploaded or posted a sexual image of someone else online, reported by 2.3% ( $n = 4$ ) of participants. Men were significantly more likely than women to have been shown images ( $\chi^2(1) = 9.85, p = .002$ ), to have shown images to others ( $\chi^2(1) = 4.62, p = .03$ ), and to have received forwarded images ( $\chi^2(1) = 6.90, p = .009$ ). The small number of people who forwarded and uploaded images did not allow for gender comparisons.

**Peer norms, victim blame, victim responsibility, and intent to help.** The means and standard deviations for the peer norms scale, attributions of victim blame and responsibility, and intent to help (respond proactively) are presented in Table 1 for the overall sample, and for men and women. Independent sample  $t$ -tests were conducted to test for gender differences.

Table 1

<i>Average for Peer Norms, Victim Blame, Victim Responsibility, and Intent to Help by Gender</i>				
Attitude	Overall	Men	Women	Gender differences ( $t$ )
Peer norms	5.87 ( $SD = 1.23$ )	5.39 ( $SD = 1.31$ )	6.52 ( $SD = 0.76$ )	- 6.68**
Victim blame	2.11 ( $SD = 1.09$ )	2.46 ( $SD = 1.13$ )	1.65 ( $SD = .82$ )	5.24**
Victim responsibility	2.27 ( $SD = 1.16$ )	2.66 ( $SD = 1.16$ )	1.74 ( $SD = .95$ )	5.56**
Intent to help	3.24 ( $SD = .97$ )	2.71 ( $SD = .83$ )	3.95 ( $SD = .63$ )	- 10.80**

Notes: Higher scores on the peer norms scale indicate more peer disapproval of non-consensual image use; \*\* Significant at the .001 level ( $p < .001$ )

The mean for the peer norms scale was high (roughly corresponding to the “agree” response option) indicating that overall peers were not seen as supportive of non-consensual image use (e.g., agreement with items like “*My close friends believe it is wrong to post sexual pictures online without the person in the picture agreeing to it*”). There was a statistically significant difference in peer norms between men and women, in that men rated their peer groups as significantly more supportive of non-consensual image use.

Attributions of victim blame and victim responsibility were significantly positively correlated with each other ( $r = .80, p < .001$ ). The overall means for both were low and correspond most closely to the “*a little to blame*” and “*a little responsible*” response options. There was a statistically significant difference between men and women for attributions of blame and responsibility with men assigning victims more blame and responsibility than women. For victim blame, men had a mean score falling between the “*a little to blame*” and “*a moderate amount*” response options. Women had a mean score between the “*not at all*” and “*a little to blame*” response options. For victim responsibility, men had a mean score in between the “*moderate amount*” and “*a lot responsible*” options, and women had a mean score closest to the “*a little responsible*” response option.

The average on the intent to help scale was 3.24 ( $SD = .97$ ), which corresponds to the midpoint or “*I might do this*” response option. Three items had averages in the “*definitely would NOT*” to “*probably would NOT do this*” range ( $< 2.49$ ). These were: report the incident to a teacher, parent, or authority (e.g., police, residence advisor); send the image to [the victim] so she knows about it, and; tell [the victim] about the picture in person. Another three items were in the maybe or “*might do this*” range (2.50 to 3.49). These were: text/message [the victim] to tell her the picture is being sent to other people; comfort [the victim], and; reach out to [the victim] to see if there was anything [they] could do. Finally, there were eight behaviours with mean scores in the “*probably WOULD*” to “*definitely WOULD do this*” range. All of these involved communicating with the friend who sent the image. These included telling the friend in person/or via text or message: that he should not be forwarding the image; that he should not forward sexual images without consent; that [the participant] does not like it when he forwards sexual images, and; telling him should not send [the participant] those types of images. Again, there was

a statistically significant difference between men and women, with women having a higher mean score (intent to help).

**Exposure to bystander training.** Group differences between students who had taken a bystander program (of any kind and specific to sexual assault) and those who had not were compared for variables of interest (i.e., victim blame, victim responsibility, intent to help, and peer norms) in order to account for the influence of this training. Two multivariate analyses of variance (MANOVAs) revealed no significant differences in mean scores for any of the variables, so the analyses proceeded as planned.

**Influence of group size, peer norms, victim blame and responsibility, and gender on recipient behaviours.** Pearson correlations were calculated between peer norms, victim blame, victim responsibility, and the outcome variable - intent to perform helpful behaviours. All the variables were significantly correlated with intent to perform helpful behaviours (Table 2).

Table 2

*Correlations between Peer Norms, Victim Blame, Victim Responsibility, and Intent to Help*

	Peer norms	Victim blame	Victim responsibility	Intent to help
Peer norms	---	---	---	---
Victim blame	-.36**	---	---	---
Victim responsibility	-.40**	.80**	---	---
Intent to help	.56**	-.38**	-.36**	---

Note: Higher scores on the peer norms scale indicate more peer disapproval of non-consensual image use; \*\* Significant at the 0.001 level ( $p < .001$ )

A multiple regression was conducted with group size, peer norms (perception of how acceptable peer's think it is to use a sexual image without consent), victim blame, victim responsibility, and gender entered as predictors and intent to help as the outcome variable.

Gender was included as a predictor as men had significantly more supportive peer norms (in support of image sharing) and assigned more victim blame and responsibility than women. Group size was the first predictor entered in the model and was not a significant predictor of intent to help ( $R^2 = .01$ ,  $F(2, 171) = .80$ ,  $p = .45$ ). Peer norms was entered second and was a significant predictor of intent to help ( $R^2 = .33$ ,  $F(1, 170) = 82.41$ ,  $p < .001$ ) in that participants who saw their peers as less supportive of non-consensual image sharing had higher intentions to help. Victim blame and responsibility were entered next. Victim blame was a significant predictor of intent to help ( $R^2 = .37$ ,  $F(2, 169) = 9.65$ ,  $p = .002$ ) but victim responsibility was not ( $R^2 = .37$ ,  $F(1, 168) = .004$ ,  $p = .95$ ). Gender was entered last and was still a significant predictor of intent to help ( $R^2 = .51$ ,  $F(1, 167) = 48.35$ ,  $p < .001$ ) when the other variables were controlled, meaning that men's lower intentions to help go beyond the influence of their peers' greater acceptance of non-consensual image sharing and their higher victim blame. To summarize, peer norms, victim blame, and gender accounted for approximately 51% of the variance in intent to help while group size and victim responsibility did not play a role.

### **Discussion**

This study explored factors related to prosocial behavioural responses to receiving a sexual image forwarded without consent. Specifically, the impact of the number of other recipients (bystander effect), peer norms around image sharing, attributions of victim blame and responsibility, and gender on intent to help were investigated. It was hypothesized that individuals would be less likely to respond in helpful ways when other people had also received the image, when peer support for non-consensual image exchange was high, and when more blame and responsibility was attributed to the victim (the individual in the image). Additionally, it was hypothesized that men would report more supportive peer norms, higher levels of victim

blame and responsibility, and lower intent to help. Surprisingly, the diffusion of responsibility (bystander effect) hypothesis was not supported as the number of other recipients did not influence recipients' intent to help, nor did attributions of victim responsibility. However, peer norms, victim blame, and gender predicted more than half of the variance in prosocial responses.

The current study did not find support for the extension of the bystander effect related to diffusion of responsibility in cases of non-consensual image forwarding via text message, though it should be noted that a small group of recipients (as in the current manipulation) simply may not be large enough to make a difference online, whereas group sizes in the hundreds or thousands (which are possible on networks such as Facebook) might. Considering the literature on the bystander effect offline, there are some similarities as well as some major differences in context that may impact how, or if, the aspect of the bystander model related to number of bystanders applies to such online exchanges. First, noticing a situation and perceiving it as warranting intervention are crucial steps to taking action in Latané and Darley's (1970) model of bystander behaviour. A meta-analysis of the bystander effect revealed that bystanders are more likely to intervene in situations that are unambiguous and perceived as dangerous or more severe (Deitch-Stackhouse et al., 2015; Fischer et al., 2011; Hayes, 2018). As sharing sexual images without consent is not widely recognized as a form of sexual violence, these instances may not be interpreted as serious or harmful, and may be ambiguous in terms of if intervention is warranted and what a helpful response would be. Even if an individual does "notice" or recognize that sharing an image without consent is morally wrong, it still may not be perceived as an emergency because there is no immediate physical danger to victim (perception of dangerousness). Perceptions of seriousness and harm were not measured in the current study, but participants were more willing to communicate disapproval to the sender and less willing to

support the victim or report the incident (e.g., average score of 3.8 out of 5 for texting the friend versus 2.2 for notifying the victim), perhaps suggesting that forwarding images is seen as problematic but not harmful, or that people are uncomfortable with or unaware of how to support victims (i.e., self-efficacy). This is consistent with a recent study of Canadian youth that found individuals who minimized the harms of forwarding images (for victims) were more likely to share sexual images without consent (Johnson, Mishna, Okumu, & Daciuk, 2018). Beliefs about harm likely influence not only sharing behaviours, but how people respond to forwarded images as Banyard, Plante and Moynihan (2005) note that believing an incident is harmful or will negatively affect the victim is needed before individuals decide to intervene.

A second contextual factor that differentiates forwarded images from offline bystander contexts is that the act occurs via text message or social media applications (e.g., Snapchat). Texting is a form of computer-mediated communication, which has been thought to possess several features which change how people act and react to situations. In particular, distance from others in space and time (asynchronous communication) is thought to obscure the effects of victimization and subsequently decrease prosocial behaviour (Barak, 2005). For online exchanges, the temporal dimension (asynchronicity) could operate similarly to other types of proximity that have been studied in the bystander literature (e.g., physical closeness to a victim), in that when distance increases, people are less likely to intervene – meaning that virtual group size may not be influential. For example, individuals have more empathetic reactions when they are physically with someone who is being bullied online or are told about online bullying in person (by the victim) versus witnessing the bullying online and from a distance (Macháčková et al., 2013). Perpetrators of online aggression also use fewer psychological strategies to justify their behaviours as compared to offline aggression, suggesting that psychological and moral



barriers (e.g., guilt) to offending are lower in online spaces (Perren & Gutzwiller-Helfenfinger, 2012; Pornari & Wood, 2010). In addition to physical distance, an image is only a representation of an individual, and in a culture where trading images using technology is very common, images may be experienced as psychologically distinct and distant from the individual or event that is depicted. Related to the asynchronous nature of many technologies but distinct from the temporal aspect is the fact that many of the environmental and social cues, such as facial expressions (e.g., Marsh & Ambady, 2007), that facilitate prosocial behaviour in bystander situations are absent when images are received electronically.

Overall, participants in the current study reported low levels of victim blame, victim responsibility, and peer support for non-consensual use of sexual images. Sexist attitudes and beliefs about sexual violence (e.g., victim blame, victim responsibility) and peer norms have been shown to influence bystander responses offline as well as mediate the relationship between environmental “risk” factors (such as alcohol use) and bystander inaction (Cinquegrana et al., 2018; Orchowski et al., 2016; Piliavin et al., 1969), though these findings are not universal (e.g., Banyard, 2008). However, in the current study when beliefs and peer norms were analyzed together, only norms and victim blame remained predictive of recipients’ responses. Prior research has shown that peer support for sexual aggression and violence or the perception of support is a powerful predictor of willingness to intervene in situations of potential or actual sexual violence (Brown & Messman-Moore, 2010; Deitch-Stackhouse et al., 2015; Leone, Parrott, & Swartout, 2017). Accordingly, it was hypothesized that as victim blame and peer support for non-consensual image use increased, intent to help would decrease. These hypotheses were supported. The finding that support for non-consensual use of images was low overall could be used in psychoeducational programs aimed at correcting misperceptions of peer support

for sexual violence (i.e., as a social norm intervention), particularly among men. Providing accurate information about peer beliefs and behaviours is an effective way to change norms and existing bystander programs have had success changing beliefs around peer intervention in situations of potential sexual violence (Gidycz, Orchowski, & Berkowitz, 2011; Katz & Moore, 2013; Senn & Forrest, 2015). It should be noted that this study was conducted on a campus that has a number of campus-wide bystander training and education programs. Although there was no difference in norms and outcomes for students who had attended bystander workshops, the presence of campus-wide messaging (e.g., posters, advertisements) may have influenced student norms and attitudes and would not have been captured by the specific questions that were asked.

Peer norms have been reported to interact with demographic variables (such as gender and ethnicity) to influence bystander intervention in situations of sexual violence and online aggression (Allison & Bussey, 2017; Brown, Banyard, & Moynihan, 2014). Men in the current study rated their peer groups as more supportive of non-consensual image exchange than women and were less willing to help, which is consistent with the broader literature on sexual violence and may shape men's likelihood of perpetration as well (DeKeseredy & Kelly, 1995; DeKeseredy & Schwartz, 2016; Fabiano et al., 2003; McMahon, 2010). Considering the importance of peer norms in supporting sexual violence, participants' beliefs about peers may partially explain why men rated themselves as less likely to engage in helping behaviours. Men in the current study also attributed more blame and responsibility to the victim than women, again consistent with the literature in this area, though only blame inversely predicted prosocial responses. However, given that gender differences in responses persisted beyond those explained by peer norms, victim blame, and victim responsibility, more investigation is warranted into gender differences. The literature points to several attitudes and beliefs that were not measured in

the current study (e.g., endorsement of traditional gender roles or hostility towards women) that influence bystander behaviour, perpetration of sexual violence, and decisions to forward sexual images (Berkowitz, 1992; Johnson et al., 2018; Orchowski et al., 2016) that may help to explain the gender differences in the present study.

Literature on the bystander effect and the influence of peer norms suggest that closer relationships exert more influence on behaviour (van de Bongardt et al., 2015) and bystanders' relationship to the perpetrator and victim can influence intent to intervene (e.g., Amar et al., 2014; Burn, 2009). For example, Bennett, Banyard and Edwards (2017) found that when male (but not female) bystanders knew the perpetrator, they had lower intentions to help the victim. In the current study, for male participants the image was received from a friend whereas the image was of an acquaintance and someone belonging to an out-group (i.e., a woman), which could partially explain the gender differences that were found. Group cohesiveness was not measured in the current study but is known to impact bystander behaviour (e.g., Rutkowski et al., 1983). Relationship closeness and group cohesiveness may be particularly influential in situations of forwarded images, as Strohmaier, Murphy, and DeMatteo (2014) found that among adolescents, only 3% had forwarded images to an acquaintance but 26% had sent them to good friends. Future research should investigate how the interaction between peer norms, relationship closeness (of the perpetrator and victim), group cohesion, and gender influence behavioural intentions after receiving or being shown sexual images shared without consent.

Despite contextual differences between text exchanges and real-world emergencies that may lessen aspects of the bystander effect, such as the role of witnesses, other factors may still be relevant. In particular, the finding that women were more likely to respond proactively is suggests that responses to forwarded images are similar to responses to offline situations in that

women report higher intentions to intervene in cases of sexual violence and in the absence of physical danger, both of which apply to electronic image exchanges (Eagley & Crowley, 1986; Walker & Jeske, 2016).

Recent research also suggests that gender may interact with beliefs about intervention itself, as one study found that men viewed intervention to prevent sexual violence as more likely to have negative consequences (for themselves) and were less confident in their ability to intervene than women (Banyard, Moschella, Grych, & Jouriles, 2019). The situational-cognitive model of bystander decision-making (Casey, Lindhorst, & Storer, 2017), developed through focus groups with adolescents describing their decision-making processes in different scenarios, posits that decisions to intervene are a product of individual self-efficacy, beliefs, and intentions (i.e., Theory of Planned Behavior), environmental factors, like the number of other people present (i.e., Situational Model/traditional bystander theory) and factors related to the victim and perpetrator, group affiliation, and (if applicable) school climate. This theory describes many of the same factors that appear to be operating when sexual images are used without consent (e.g., relationship to perpetrator) and may prove a fruitful avenue to direct future work in this area.

Lastly, one finding from the current study that is relevant to understanding the dynamics of non-consensual image sharing was that it was more common for participants to have physically shown or been shown an image (without consent) than it was to have sent or received one electronically. This could be partially explained by fear of consequences (e.g., criminal charges) resulting from electronically sending images or putting them online, but previous research suggests that this is unlikely to be the case, or at most is only a slight deterrent (e.g., Strohmaier et al., 2014). Instead this finding suggests that sharing images is inherently a social experience and study of peer interactions is crucial to understanding the decision to forward or

otherwise use sexual images without consent. Prior qualitative research has found that sexual images of girls are used by adolescent boys to gain social status in the eyes of peers (Ringrose et al., 2012), a finding which is in line with the current results. It may also be the case that in situations where images are physically shown, the number of bystanders will influence individual responses (diffusion of responsibility) in a way that may not occur for digitally shared images, allowing for parallels to be drawn to the vast literature on the bystander effect. Future research should examine bystander responses to non-consensual image use when different social cues are present or absent (e.g., viewing an image when the person is present versus viewing it alone, being physically shown an image versus being forwarded one) in order to determine if these factors are influential and if so, to use this to guide prevention.

Prevention efforts aimed at promoting prosocial responses may wish to target how these situations are interpreted in order to frame intervention as an immediate need to stop the spread of images and decrease further harms to the victim. Existing sexual violence prevention programs that target bystanders (e.g., *Bringing in the Bystander*) highlight the need to shift wider beliefs and norms about what constitutes sexual violence and warrants intervention (Banyard, Plante, & Moynihan, 2004). Kelly's (1996) work on the continuum of sexual violence, which makes a connection between different forms of sexual violence – from acts that are frequent and not necessarily seen as sexual violence (e.g., sexual jokes in a workplace) to rape – on the basis of a common character and function (i.e., social control) may be useful in reframing acts of non-consensual image use as harmful despite the fact they may occur with relative frequency.

A limitation of the current study is that it investigated self-reported likelihood to intervene in helpful ways, but did not measure actual responses to receiving sexual images taken or forwarded without consent. Past research has found that variables that predict intent to

intervene may not predict actual bystander behaviour or missed opportunities to intervene, though they are related (e.g., Brown et al., 2014). This suggests that more attention is needed to determine the variables that predict behaviour and how people can be moved from intention to action. Related to this, the current study used a cross-sectional rather than a prospective or longitudinal design. Longitudinal research designs and studies that assess actual responses to forwarded images will help further develop the literature in this area. With self-report data, it is also possible that social desirability played a role in participant responding. Participants could have over-reported their intent to help and under-reported the extent to which they blamed the victim or viewed her as responsible. However, a relationship was found between several of the variables, suggesting that if anything, the magnitude of these relationships may be even greater than reported. The current study also used a convenience sample of young adults which could limit the generalizability of the findings; however, it did have a diverse and gender balanced sample which are strengths. Future research should investigate this phenomenon with community samples and adolescent populations. Finally, the current study assessed diffusion of responsibility using a scenario where the image was transmitted to multiple bystanders at the same time. Johnson and colleagues (2018) found that youth who shared sexual images were more likely to engage in diffusion of responsibility, but in the context of an image that was forwarded by multiple people (e.g., the original recipient sends it to a second person, who sends it to the youth). In these cases, participants viewed themselves as less responsible as the image had already been passed on. Expanding the research to reflect multiple ways of sharing, using, and receiving images – including physically showing images to others - is needed.

Overall, some of the factors that influence bystanders in offline contexts (i.e., peer norms, gender) were also influential in a scenario involving non-consensual image sharing, though

others were not (i.e., group size, victim responsibility). Peer attitudes and victim blame appeared to be powerful social cues that influence image recipients. If replicated, these findings suggest that sexist attitudes and beliefs about taking and using sexual images without consent are an appropriate focus for prevention. Prevention efforts targeting the non-consensual manufacture and use of sexual images may wish to adapt existing bystander programs and use lessons learned from prior work with sexual violence prevention to guide this emerging area. Future work should continue to explore the role of social influences, gender, and individual beliefs on responding to the non-consensual exchange of sexual images.

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## CHAPTER V – General Discussion

Taking and using sexual images of women and girls without consent is a form of gender-based violence that has blossomed and evolved as the nature and role of networked technologies has grown in daily life. This phenomenon has not been studied extensively but appears to be diverse, widespread, and increasingly common. The non-consensual use of sexual images is conceptualized in different ways in the research literature and wider cultural discourse, and many of these narratives fail to apply a gender-based analysis, instead favouring the language of privacy, bullying, and individual risk. The theoretical lens used in the current work situates these acts within a continuum of sexual violence (see Kelly, 1996) due to the gendered nature of perpetration (i.e., boys/men targeting girls/women), social responses (e.g., victim blaming, lack of fair legal recourse for adult women), and consequences for victims (i.e., harms are disproportionately experienced by girls/women). A feminist analysis was employed as these acts cannot be understood without also examining the broader social structures like patriarchy that support them (Bem, 2003; Sanday, 1981). In this work, taking and using sexual images without consent is defined as a form of technology-facilitated sexual violence, as outlined by Henry and Powell (2018), and termed image-based sexual abuse<sup>1</sup> or violence.

Little is known regarding the prevalence, range of behaviours, and factors related to perpetration, recipient or bystander decision making, and outcomes for victims of image-based sexual violence. This dissertation research employed multiple small-scale studies to explore psychological outcomes for adult women who had a sexual image taken of them and/or used without consent, how they conceptualized these experiences, and the influence of several

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<sup>1</sup> In Henry & Powell's (2018) classification of TFSV, image-based sexual abuse includes both the (actual or threatened) manufacture and use of sexual images without consent as well as sexting coercion (pressure to take/send sexual images). The current work uses the term image-based sexual abuse to refer exclusively to non-consensual manufacture and/or use of sexual images.

individual and contextual variables on bystanders' (image recipients) willingness to engage in helpful behaviours after receiving an image. The overarching aims of this project were twofold. First, to expand the literature on image-based sexual violence – specifically to explore women's experiences as victims (Studies 1 and 2) and bystander reactions to receiving non-consensual sexual images (Study 3). The second aim was to draw across all three studies to examine areas of similarity to and divergence from traditional offline sexual violence. Connections to the existing literature on sexual violence will inform emerging work on this topic and situate image-based sexual violence under the larger umbrella of sexual violence.

## **Background**

Studies of image-based sexual violence have produced prevalence estimates up to 60 percent for adolescents (Barrense-Dias et al., 2017; Wood et al., 2015) and 2 percent for adults (Ybarra et al., 2017). Generating reliable estimates has been complicated by differences in the definitions used, methods, and the fact that many individuals may be unaware that their image has been taken or shared with others. Despite the wide range of the estimates, it appears that incidents of image-based sexual violence are relatively common and widespread (i.e., documented in multiple countries).

A few studies have investigated the impact of image-based sexual violence directly and several more have examined it alongside a range of other online victimization behaviours (e.g., surveys of online bullying which include the use of images to harass). Bates (2015) and Englander (2016) reported outcomes for women and adolescent victims of revenge pornography that are similar to outcomes of traditional sexual violence, including depression, anxiety, loss of trust, and trauma. Studies that have assessed online sexual victimization more broadly (i.e., including multiple acts in their definitions) also suggest that these acts may have negative effects

in other domains, such as physical health, relationships, and academic or professional functioning (Espinoza, 2015; Reed et al., 2019). These studies tell us that women experience psychological harms as a result of some forms of image-based sexual violence but prevalence (i.e., what proportion of women experience clinically significant symptoms?) and symptom trajectory are unknown, particularly for different forms of image-based sexual violence (i.e., having an image taken but not shared, or shown to others but not posted online). The research is limited but suggests that image-based sexual violence is distressing and may cause a range of negative psychological outcomes.

As with prevalence and outcomes, not much is known about the range and typical features of these incidents. In the absence of an established research literature, anecdotal accounts and assumptions have informed the discourse, research, interventions, and legal remedies in this area. For example, a popular and unsubstantiated statistic, originating from a legal opinion article on copyright and sexual images (Levendowski, 2014) is that 80 percent of image-based sexual violence incidents originated with selfies. The evidence behind this claim is unclear and current research does not support this estimate, but this statistic has been widely cited in the media and literature and used to justify prevention efforts and media campaigns that target girls instead of focusing on perpetrators. Another example can be seen in how lawmakers in the Canadian House of Commons discussed non-consensual image use when making these acts illegal (Dodge, 2019). In these discussions, non-consensual use of sexual images was seen exclusively as a form of digital crime perpetrated using technology and in which images are posted online (Dodge, 2019). In these discussions, as well as in legal cases, the focus has been on the role that technology has played in allowing these acts to happen. Technology is seen as the cause instead of as a tool that simply provides a new way for sexual violence to be perpetrated.

Also, the view of image-based sexual violence as primarily incidents in which images are posted online is at odds with recent research that found that when youth do share sexual images without consent, the most common way of doing so is to physically show the image instead of electronically transferring it (Johnson et al., 2018). This is also consistent with findings from the current research in which women described their images being used in many ways, including being physically shown to others, as well as an unpublished exploratory study that asked students on a mid-size Canadian campus about their experiences with non-consensual use of sexual images (Krieger & Senn, 2015). Both of these assumptions create a narrow definition or prototype of image-based sexual violence that will exclude many women and girls, which may have implications for how they conceptualize these events as well as their interactions with others. For example, a young woman whose image was physically shown to a group of peers may not be seen as a victim in the same way as someone whose image was put online or circulated. Her experience could be minimized by herself and others despite emerging evidence (i.e., the findings of Studies 1 and 2) that suggests she may experience the same level of distress as women whose images were taken and/or used in another way. Research that documents the impacts of image-based sexual violence and other forms of technology-facilitated sexual violence on girls and women is also important to support (advocacy around) access to services. For example, the core criterion for a diagnosis of PTSD in the most recent Diagnostic and Statistical Manual (APA, 2013) is exposure to “death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence” (p. 271). If image-based sexual violence is not seen as a form of sexual violence or as a potential cause of serious injury (i.e., definitions of injury as exclusively physical), then most victims would not meet the criteria for a diagnosis and be unable to access certain services. One final pervasive but unsubstantiated assumption

about image-based sexual violence is that the prototypical event involves an ex-romantic partner (typically a man) posting sexual images of a woman online for revenge. This assumption not only excludes many women's experiences, but can shape the discourse around these incidents in potentially harmful ways. For example, one recent scholarly article argues that interpretations of image-based sexual violence that cite misogyny are incorrect and that these acts are "better understood as part of a growing culture of quick online revenge" (Stroud, 2014, p. 170). This analysis is not only based on an inaccurate understanding of image-based sexual violence (and in fact, empirical analyses suggest that revenge is usually not a factor for posted images; Banyard, Moschella, Grych, & Jouriles, 2019) but it obscures the gendered nature of these acts (which have been noted in the nascent literature) which could negatively impact prevention, policy, future research, and intervention. These examples highlight the need for research like the current project that explore the diversity of image-based sexual violence and explicitly use a gendered lens to understand and contextualize this emerging phenomenon.

### **Overview of Studies**

The current project was composed of three studies of image-based sexual violence that were conducted online using mixed methods. The first two studies investigated outcomes for women victims of image-based sexual violence (Study 1) as well as how these incidents were conceptualized and labeled by the women who experienced them (Study 2). The third study investigated how individual and situational factors influenced image recipients or bystanders' responses to receiving an image forwarded without consent using a hypothetical scenario. Across each of these studies, comparisons to the literature on offline sexual violence were made. A brief summary of each study is provided before progressing to an integrated discussion of the findings.



**Study 1.** This study explored psychological and social outcomes for women who were victims of image-based sexual violence using an online survey method. Specifically, this study looked at the prevalence of symptoms of depression, anxiety, and trauma (post-traumatic stress disorder) within the clinically significant range. It also evaluated positive and negative changes to relationships (peers, friends, family, and romantic partners) following the incidents and had planned to look at the impact of social changes to psychological symptoms but did not, as too few women reported changes in their relationships. Finally, this study followed other feminist work on sexual violence (e.g., Thompson, 2000) leaving open the possibility of post-traumatic growth, personal or political transformations that emerge from trauma and asked women about any positive outcomes that they experienced as a result of or stemming from the incident. One hundred and fifty-two adult women (16 years or older) who had a sexual image taken and/or used without consent were recruited through the university research participant pool and from the community using online advertisements on social media and bulletin board websites.

Approximately half of the sample was recruited from the university. The women who participated were in their mid-20s on average and were ethnically and racially diverse. In the survey, they described the incident (i.e., how their image was used, by whom, and when), any positive and negative changes in social relationships, and completed clinical measures of depression, anxiety, and trauma.

A minority of women reported changes to each category of relationship (i.e., friends, peers, family, and romantic relationships). However, when taken together, over half of the women experienced some degree of change to their relationships. The most common change, experienced by two out of every five women was to their romantic relationships, which is not surprising given that romantic partners were often the perpetrators. Across all relationship types,

women's relationships changed for the better and for the worse, with many women reporting both. For example, a woman might report that some friendships improved and others deteriorated. Women reported positive changes, or a mix of both positive and negative changes, in roughly equal proportions (about 40%), and fewer women reported only changes for the worse (about 20%).

Almost a third of the sample reported symptoms of depression, anxiety, or trauma within the clinical range. About a quarter of the women met the diagnostic criteria for depression and/or anxiety and less than 10% for post-traumatic stress disorder. The majority of women with depression (84%) and anxiety (90%) had symptoms in the mild range. A similar gradient does not exist for trauma, as the clinical measure uses a dichotomous cut-off point for diagnosis. Although most women did not go on to have clinical levels of distress, the results suggest that incidents of image-based sexual violence are harmful, but the variety in women's experiences (i.e., type of incident, resulting life changes) means that the effects are also diverse.

Analyses of the relationship between how an image was misused and psychological outcomes found that women who had an image posted online had significantly fewer symptoms than the other incident types, women who had their image taken/used in more than one way had significantly more psychological symptoms, and women who had an image taken or shared hovered in the middle. This pattern may indicate that features of the incident other than how an image was used could be relevant to women's outcomes. For example, when an image is posted online (i.e., the group with the lowest symptoms), the act maintains a certain distance as it was perpetrated solely in online spaces. However, when images are taken without consent or shared/sent to others there is almost always personal contact with the perpetrator, and for shared images, an added social element with the involvement of other people who are likely known to

the victim. The diversity of incidents that have multiple elements makes it difficult to theorize why these incidents are particularly harmful but they do appear to be distinct. It is possible that more complex incidents are most likely to be those in which an image is specifically used against the victim, last for extended periods of time, cause significant disruption to daily activities and social relationships, or that disclose personal information about the victim.

When asked about positive outcomes, women generally reiterated that the incident was distressing but many were also able to identify some positive outcomes. The positive changes women described were stronger relationships, increased cautionary behaviour (e.g., taking longer to trust people or not sending sexual images), and personal growth.

**Study 2.** This study built on the first and explored how women conceptualized (i.e., thought and felt about) as well as labeled their experiences of image-based sexual violence, and in particular, explored if they were framed as gender-based or sexual violence. It also examined changes in thoughts and feelings from the time of the incident to the time of the study using a cross-sectional design that asked women to reflect on both points in time. Thirty-eight women who had a sexual image taken and/or used without consent were recruited online or from an email list of (university and community) participants from the previous study interested in additional research projects. Approximately 60% of the sample was recruited from the community and half of the women were currently students. The participants were in their late 20s on average and were diverse in ethnic and racial identity. First the women provided information about the incident (i.e., what happened and when it occurred) and then completed a series of open-ended questions about their experiences. The women were asked what they thought and felt about the incident at the time it first occurred and at present, as well as what they would call the incident if they had to give it a label. Thematic analysis was used to analyze themes across the

past and present data sets before looking for differences between them and to analyze how women labeled their experiences.

Women's thoughts and feelings were organized into 11 themes. From most to least common, these were: Perpetrator Blame; Anger; Lasting Impact (i.e., continued negative affects (e.g., emotions) and changes as a result of the incident); Self Blame; Shame; Shock; Fear; Moving On (i.e., personal growth, positive changes, and attempts to "move on" from the incident); (feelings of) Betrayal; Sadness, and; Hurt.

When women's thoughts and feelings at the time of the incident were compared to those at the time of participation, themes that pertained to emotional impact of the violence (i.e., Anger, Fear, Hurt, Sadness, and Shame) all decreased over time and Shock ceased to be present at all. Unsurprisingly, the themes that were more present later were those that involved reflection or meaning-making (i.e., Betrayal, Perpetrator Blame, and Self Blame). Two themes – Lasting Impact and Moving On - were only found in the second set of responses, once time had passed since the incident first occurred.

Women's responses when asked to label what happened to them were organized into six themes. These were: Breach of Trust; Learning Experience; Negative Experience; Revenge; Taken Advantage Of, and; Victimization. About four in ten women labeled their experiences as a breach of trust (the most common label) and none of the women used labels that explicitly included a gendered dimension, such as violence against women. Two themes – Learning Experience and Negative Experience – reflected on the impact of the incident in the women's lives, either as a source of growth or as a source of ongoing negative (social or emotional) effects. Women often described their experience with more than one of these labels, illustrating the complex and multiple ways that women may make sense of these experiences.

**Study 3.** This study investigated how group size and individual attitudes influence the behaviour of recipients of forwarded sexual images. Image recipients are conceptualized herein as a type of bystander as they are digital witnesses to a criminal act which warrants intervention. As such, this experiment first aimed to test how the (virtual) presence of others influenced the likelihood of intervening in prosocial ways (bystander effect). The effect of group size (number of image recipients), gender, peer norms about sharing sexual images without consent, and attributions of victim blame and responsibility on image recipients' self-rated likelihood of helping the victim in various ways were analyzed. All participants were students recruited from a research participant pool. There were 174 participants and the sample was comprised of slightly more men than women, had an average age of 20 years old, and approximately three quarters identified as white. Participants were randomly assigned to read one of three vignettes in which a friend forwarded them a sexual image without the consent of the woman in the picture and that differed only in the number of other recipients that were specified (participant only, small group, or an unknown number of other recipients). Following this, they indicated how likely they would be to perform a number of helpful behaviours in response to receiving the image, how much blame and responsibility they assigned to the victim in the scenario, and reported (their perception of) how supportive their peers are of sharing sexual images without consent.

Group size and victim responsibility did not influence recipients' likelihood of helping the victim, but participants' gender, peer norms, and judgements of victim blame in the situation did. On average, women were more likely than men to help the victim regardless of their personal views, were less likely to assign her blame, and were less likely to report that their peers were supportive of non-consensual image exchange. After accounting for social norms and attitudes men remained less likely to help than women, which indicates that more research is

needed regarding men's attitudes and beliefs as they pertain to the prevention of non-consensual image sharing. It is important to note that students reported low levels of victim blame and perceptions of peer support for non-consensual sharing of sexual images overall but despite this, variations in these attitudes were still relevant in predicting intention to help.

### **Bringing the studies together: How is image-based sexual violence related to offline sexual violence?**

**Incident characteristics.** A total of 173 unique women participated in studies 1 and 2. The women were diverse with 63.0% of the sample identifying as white and were an average of 25.9 years old ( $SD = 9.60$ ). Comparing the two samples, there were no significant differences in average age ( $\chi^2 (1, 189) = 1.82, p = .18$ ), proportion of the sample identifying as white ( $\chi^2 (1, 189) = .35, p = .56$ ), black ( $\chi^2 (1, 189) = 1.45, p = .23$ ), or East Asian ( $\chi^2 (1, 189) = .22, p = .64$ ), which were the only racial or ethnic groups with enough women to conduct statistical comparisons. The samples did differ in that more women in Study 1 were students ( $\chi^2 (1, 189) = 9.56, p = .002$ ) and were employed ( $\chi^2 (1, 189) = 7.13, p = .008$ ).

In both Studies 1 and 2, women described the incidents of image-based sexual violence that they experienced. Comparing Study 1 to Study 2, there were no statistically significant differences in the proportion of incidents involving selfies ( $\chi^2 (1, 189) = .66, p = .42$ ) or the proportion of women who knew the perpetrator ( $\chi^2 (1, 189) = 1.26, p = .26$ ). There was a significant difference in the proportion of women who had their image taken and the proportion who reported complex incidents (i.e. those in which an image was taken/used in more than one way) between the two studies, but there were no significant differences for posted or shared images. Approximately 34% of the women in Study 1 and 16% in Study 2 had their image taken

without consent ( $\chi^2(1, 189) = 4.86, p = .03$ ) and approximately 14% of the women in Study 1 versus 32% in Study 2 reported complex incidents ( $\chi^2(1, 189) = 6.05, p = .01$ ). If the way in which an image is used impacts how women experience these incidents, as was suggested by Study 1, significant differences in the proportion of incident types between the two studies means that the samples are not completely analogous which may limit some of the conclusions that can be made. Also, given that these were not randomly selected samples, no firm conclusions can be drawn about which type of incidents are most common. However, the results do suggest that women have their images used in multiple ways and even among the women who originally took the image of themselves, the conditions in which the image was created (e.g., coerced, taken with the perpetrator) and/or misused (e.g., stolen off devices) varied widely. These findings run counter to the common prototype of image-based sexual violence as scenarios in which a sexted image is later shared by a former romantic partner in revenge (though this did represent a portion of the incidents).

For almost all of the incidents, women knew the person who took and/or used their image. This is similar to offline sexual violence in that the majority of incidents are committed by persons known to the victims (e.g., Larsen, Hilden, & Lidegaard, 2015). Although the proportion was higher than some studies of offline victimization (e.g., 76.7% of a sample of young adult women; Bhuptani, Kaufman, Messman-Moore, Gratz, & DiLillo, 2019), it is comparable to some groups of women, such as college and university students, for whom the proportion of assaults committed by known persons often exceeds 90% (e.g., 93% reported by Ullman, Karabatsos & Koss, 1999; 91.2% reported by Krebs, Lindquist & Barrick, 2010). These similarities make sense when the context or environment in which violence occurs is considered. For example, researchers commonly point to environmental factors, like campus cultures that

encourage social drinking or participation in Greek organizations, that are associated with increased risk of assault and are also contexts where the perpetrator is more likely to be someone known to the victim (Mohler-Kuo, Dowdall, Koss, & Wechsler, 2004; Walsh, Banyard, Moynihan, Ward & Cohn, 2010). In Studies 1 and 2, it makes sense that most women knew the perpetrator as many cases involved intimate situations, such as a photo being taken following sexual intercourse or the non-consensual use of an image that was originally sent by the victim to a person they knew. The acts are also similar to offline sexual violence in that both are acts that violate personal boundaries and infringe on personal safety and private spaces, although there may be differences in how boundaries and spaces are conceptualized (i.e., online versus offline, physical versus virtual), and are overwhelmingly committed by persons known to the victim, often current or former sexual or romantic partners.

It should also be noted that these estimates are biased in favor of women who knew their images were misused, so women who either took the picture in the first place or incidents where they were targeted purposefully, such as filmed at school in the changeroom. Studies of non-consensual images that are posted online, such as in forums dedicated to non-consensual pictures of women, often describe images taken in secret. Therefore this research captures a particular subset of incidents image-based sexual violence, and as more research is done focusing on perpetration, we may find that the proportion of incidents involving selfies, where the perpetrator is known to the victim, and the perpetrator is a romantic partner is lower than previously thought.

A subset of the incidents, specifically those in which a current or former romantic or sexual partner has taken, used, or threatened to use images to control or punish the woman, may be more aptly considered a form (or extension) of intimate partner violence, while others may be better theorized as sexual violence (e.g., sexual harassment, filming by strangers). Indeed,



research on intimate partner violence has found that abusive partners do threaten to release sexual images, use blackmail and coercion to obtain sexual images, and use images to control and harass (Korchamaros, et al., 2013; Stonard et al., 2014). Although the different contexts for these incidents suggests we need to draw on different research literatures to gain a fuller understanding of the phenomena, all of these acts are gender-based violence and are supported by the same larger social and cultural forces.

**Victim experiences.** Although victims of image-based sexual violence are not at risk of some negative outcomes experienced by victims of rape and other sexual assaults (e.g., STI transmission, pregnancy, physical injury; Campbell, Sefl, & Ahrens, 2003; Holmes, Resnick, Kilpatrick, & Best, 1996), the nascent literature had suggested that at least some outcomes may be shared. The studies conducted for this dissertation show a number of similarities in women's experiences to other forms of sexual violence. These are outlined below.

The first two studies found that women experienced both positive and negative changes following incidents of image-based sexual abuse – women in both studies discussed learning from the experience, particularly in terms of strengthening their interpersonal networks and support systems. It is important to note that many women also described becoming increasingly cautious in terms of trusting other people as a positive outcome. This is not necessarily negative but could present an issue for women whose inability to trust impairs or negatively affects their future relationships. In addition to descriptions of positive outcomes and growth, Study 1 found that only a minority of women reported clinically significant levels of depression, anxiety, and trauma despite acknowledging that the incident was distressing, which supports the idea that these events are potentially harmful but not automatically damaging for life.

Study 2 investigated changes in women's thoughts and feelings from the time of the incident to the present time using a cross-sectional design. Although changes could not be monitored over time, feelings of distress (e.g., anger, shock, sadness) were more present at the time of the incident, while meaning-making and reflection were more common after some time had passed. These results are consistent with the symptom trajectories of women following rape, in that the majority of women experience a period of acute distress followed by a decrease in symptoms after several months (Resick, 1993; Steenkamp, Dickstein, Salters-Pedneault, Hofmann, & Litz, 2012). Study 2 also suggested that while acute feelings of distress decrease, incidents of image-based sexual violence do continue to impact women – some more than others - as suggested by narratives related to making sense of these incidents (e.g., questions of responsibility, personal growth and learning) and continued negative effects. The minority of women who described continued negative effects may have similarities, such as a history of childhood sexual abuse, to the subgroup of women documented in the literature on rape and offline sexual violence that experience chronic or more severe negative psychological outcomes. However, previous victimization was not measured in the study. The suggestion that multiple post-victimization trajectories exist for image-based sexual violence, with most women experiencing a so-called recovery or resilience trajectory in which they experience a cessation of symptoms over time, is also consistent with the literature on women's experiences following offline sexual assault (e.g., Steenkamp et al., 2012).

In many ways, victim's experiences were similar to reports from the literature on traditional sexual violence. However, one area where the harms created by image-based sexual violence may differ from traditional sexual violence is in terms of online reputation specifically. Previous research with victims of revenge pornography has noted that women are concerned

with where their images have ended up and who has seen them (Bates, 2015). These concerns were only raised by two of the women in Study 2, which is likely due to the fact that the sample included women whose images were taken and used in multiple ways, including incidents in which images were never shared. Some women may have reported these concerns indirectly through their emotional state (i.e., that they were afraid), but did not specify what they were fearful of. In a recent discourse and legal analysis of a revenge pornography website, Langlois and Slane (2017) stated that online reputation is a growing concern for people in a society where professional and social interactions are routinely conducted online and virtual personas are the mechanism through which others are socially and economically evaluated. For women whose sexual images and personal information are put online, in other words, for victims of revenge pornography in particular, damage to online reputation is a harm that is unique to this form of violence. It is probable that women who have dealt or are dealing with revenge pornography (e.g., fighting to have their image removed from a website) would have ongoing concerns about online reputation and continued distress. Women targeted by this form of image-based sexual violence may be at increased risk of experiencing social, psychological, and economic harms resulting from the incident, and revenge pornography may constitute a distinct form of image-based sexual violence with unique trajectories and outcomes for victims, warranting further investigation.

**Bystander perceptions and intentions to help.** One feature of image-based sexual violence that differs from offline sexual violence is the involvement of other people through sharing, forwarding, uploading, or otherwise making an image public. In contrast, perpetrators of offline sexual violence often use isolation as a tactic to commit an assault (Amick & Calhoun,

1987). This makes bystander research and programming, already an important focus in the prevention offline sexual violence, potentially even more critical for online sexual violence.

Classic research on the bystander effect as well as newer research testing analogous situations in online spaces like chat rooms (e.g., Palasinki, 2012) suggests that the number of other people present when observing an emergency can influence an individual's intent to intervene. To date, although the bystander effect has been evaluated in some online contexts, it has not yet been evaluated for situations that require intervention but where the bystanders are "digital" witnesses via text message (e.g., receiving a text message depicting a crime). The current project hypothesized that a bystander effect would occur with recipients of forwarded sexual images, in that the more people an image was sent to the less likely any one person would be to act. This was tested in Study 3 using hypothetical vignettes but was not supported by the analysis. This could suggest that the manipulation was unsuccessful (e.g., too few bystanders were invoked) or that receiving texted images is a distinct context in which other factors are more influential in shaping behaviour.

In addition, or alternatively, it is possible based on the existing bystander literature that variables that are important in offline situations may function in four ways for online situations. First, some factors which are important offline may cease to be important or become less influential in online situations, such as proximity to the victim or perceptions of physical danger and strength. Second, other factors which are minimally important or not applicable (e.g., anonymity) in offline situations may become salient online and may be potential targets for change and prevention once borne out by research. For example, people may be concerned about the implications of their offline behaviour for their online reputation in all bystander situations, but this may become particularly important when interacting online. Third, variables may

function differently or have different relationships to each other and to outcomes than they do offline. For example, an effect may not have been found for group size not because it is not important, but possibly because the features of a group or audience that influence behaviour may be different. For example, diffusion of responsibility may be influential offline, but online, group size could interact with features like privacy settings online (i.e., size of audience, will actions be public and immortalized for others to see?) to influence behaviour. Lastly, some variables may be the same regardless of whether the situation is on- or offline, such as peer norms and victim blame, as suggested by Study 3.

Several factors that shape bystander behaviour offline were also important predictors of helping in the current study where sexual images were shared without consent by text. These were perceptions of peer beliefs about non-consensual image use, victim blame, and gender. In the literature on sexual assault, prosocial intervention is less likely among men, and among individuals who have peers that support sexual violence, and endorse rape myths and victim blaming attitudes (Amar, Sutherland & Laughon, 2014; Brown & Messman-Moore, 2010). In-depth treatment of these beliefs is found in the following section. These factors have been the targets of many education and prevention programs designed to promote prosocial intervention in situations involving potential or actual sexual violence. The findings in the current study suggest that elements of these programs may also be fruitful targets in the prevention of image-based sexual violence, though studies will first have to be done on how to adapt the content for online behaviours and contexts. However, bystanders do not make decisions in a vacuum and any discussion of individual decision-making must be situated in the larger sociocultural context, which is addressed in the following section.

**Cultural support for image-based sexual violence.** Despite limited research in this area, the impact of image-based sexual violence on women is often trivialized and incidents treated as less serious than offline sexual violence or the use of images that were (initially) taken without consent (Hasinoff, 2012). Some have even argued that it should not be illegal to forward sexual images (assumingly without knowledge that the subject did not consent) and instead that it should be considered an issue of morality or ethical wrongdoing (Citron, 2014). This echoes a long history of minimizing harms to women as a result of sexual violence (Citron, 2009) and follows in the footsteps of other forms of technology-assisted and technology-facilitated sexual violence, like online sexual harassment (Henry & Powell, 2015). In this discourse victims are, at best, treated as though their harms are less serious than victims of other forms of sexual violence, and at worst not considered to be victims of a crime at all. This is similar to cultural discourses that minimize the impact of other forms of sexual violence, like sexual harassment or coercive behaviour, and portray them as normal and harmless. By minimizing the harms and failing to connect these acts to other forms of sexual violence, the actions of perpetrators are supported and normalized while women and girls' experiences are excluded from the conversation. Research and testimony that counters these narratives is needed to re-frame non-consensual use and taking of sexual images as sexual violence.

A less common but equally problematic narrative that has emerged in the discourse around image-based sexual violence presents the opposite perspective - the belief that when images are taken, shared, or circulated, it results in severe lifelong negative consequences for the victims. This has been documented by Dodge (2019) in an analysis of comments made by judges presiding over cases where sexual images were put online without consent. In this analysis, judges' beliefs that having an image shared online results in lifelong damage influenced their

sentencing decisions. This reflects some elements of the ‘trauma of rape’ discourse described by Gavey and Schmidt (2011), in which the effects of rape are framed (among other things) as uniquely devastating, traumatic, and lifelong. While this narrative is positive in that it recognizes that image-based sexual violence is harmful and needs to be treated seriously, it ignores the fact that women experience a variety of outcomes, conceptualize these experiences in different ways, and most will not go on to experience debilitating lifelong effects. In the case of image-based sexual violence, like other forms of sexual violence, these reductionist narratives leave no room for discussions of women’s strength and resilience and ignore the diverse experiences and meanings that these events have for women and girls.

In addition to narratives about the impact of these acts, beliefs and attitudes about gender roles and sexual behaviour also work to support the perpetration of image-based sexual violence. Researchers have highlighted the role of the sexual double standard, which refers to different expectations of socially acceptable sexual behaviours for men and women and the resulting censure for individuals who act outside these bounds, in narratives around the digital exchange of sexual images (e.g., Draper, 2012). For example, men are expected to be sexual and are therefore lauded for sexual experiences while women are expected to remain virginal and setting boundaries to protect themselves from sexual violence.

In this framework, girls and women are discouraged from overt expressions of sexual desire and shamed or punished for engaging in sexual activity, meaning that if their activities become public (e.g., through rumors) they are shamed in a way that men are not (Ringrose, Harvey, Gill, & Livingstone, 2013). Girls in particular have to navigate these expectations in a culture where they are increasingly sexualized and expected to appear sexual (American Psychological Association, 2007), but not actually engage with their sexuality. This creates a

scenario which is difficult if not impossible to do successfully. Sexual objectification intersects with other facets of identity (e.g., ethnicity, age, disability, religion) creating unique pressures and issues. For example, disabled women may experience “asexual objectification” in that they are seen *as* their disability, instead of as individuals, and therefore not as sexual beings (Garland-Thompson, 2002). The opposite is seen in the interaction of sexism and racism with regard to Black and Indigenous women and girls, who are sexualized to a greater degree than White women. Scholars argue this reflects a greater degree of dehumanization which decreases barriers to perpetration of sexual violence (Anderson et al., 2018). In addition, there is evidence from the literature on offline sexual violence that women experience additional stresses and negative outcomes when targeted both for their gender and identity (e.g., Buchanan & Fitzgerald, 2008) and there is no reason to expect this effect to differ in online spaces. In fact, this is seen in the online harassment of women that specifically targets their multiple marginalized identities (e.g., derogatory online comments left for athletes who are lesbians highlighting departure from the male, heterosexual athletic ideal; LaVoi & Kane, 2011). The impact of this sexualization may result in increased pressure to appear sexual and send sexual images for some women and girls, or perhaps for those who are not seen as sexual beings, a desire to participate in sexting that may play out differently in terms of sequelae and personal risk.

The expectation that girls and women practice abstinence extends to sexting. When women do sext, this choice is often used by others to excuse non-consensual use of the images by placing the responsibility on the women/girls who violated social norms and failed to protect themselves (Salter, Crofts, & Lee, 2013). This is especially evident in campaigns and mass media messages that focus on girls’ decisions to take and send images as the way to prevent non-consensual distribution (Albury & Crawford, 2012). Girls/women are seen as accepting the risk



of any subsequent image use when they take or send images. In cases where images are taken without their knowledge or consent, the sexual double standard functions similarly by highlighting either the fact women were engaging in sexual activity that was then captured or that they were intoxicated, or both, and therefore to blame.

Conversely, in the sexual double standard boys/men are expected to always want and pursue sex from girls/women. For example, one way that young men may gain status in their peer groups is by obtaining sexual images of young women (Ringrose et al., 2013). This dynamic is used to normalize coercive behaviours by boys/men in their efforts to obtain images, behaviour that is experienced by many girls/women and seen as a normal and expected part of digital interactions, albeit one that is distressing (Ringrose et al., 2013; Temple et al., 2012).

Internalization of the double standard can be seen in the ways women conceptualized their experiences in both Studies 1 and 2. Women often blamed themselves for how their images were used by others and talked about their actions in terms of failing to protect themselves or having put themselves at risk – language that places responsibility and sexual gatekeeping functions on women (in this case themselves). This language reflects an individual risk management approach to violence prevention, an approach in which women are made responsible for preventing men's violence and functions to deflect attention away from the structural and cultural underpinnings of violence (Hall, 2004). This is also reflected in the fact that no woman labeled their experience as sexual or gender-based violence. Most commonly, these acts were framed as privacy violations or stemming from a mistake they made (and as a result of which they were taken advantage of) - interpretations that ignore the gendered nature and cultural supports around perpetration despite drawing on them for explanations. For example, in the Taken Advantage Of theme women often blamed themselves for incurring male

violence reflecting the idea that women are solely responsible for preventing sexual violence and endorsed the idea that if women fail to protect themselves, it is natural and expected that men will prey on them. This can be traced to the sexual double standard, in which men are posed as aggressors and women as responsible for managing this aggression, beliefs which are directly related to rape myths and victim blame.

Rape myths fuel and justify victim blaming in the case of image-based sexual violence just as they do for other forms of sexual violence (Burt, 1980; Lonsway & Fitzgerald, 1994). These beliefs not only impact how victims think about these acts, but impact perpetration and bystander behaviour as well. Study 3 found that higher levels of victim blame predicted lower intent to help and more intent to respond in harmful ways, including forwarding images (one form of perpetration). These findings suggest that these beliefs are important in shaping how individuals respond to incidents of image-based sexual violence and may support perpetration, particularly in cases where the barrier to perpetration may be low, such as when images are forwarded by others. Thompson and Morrison (2013) found that men's endorsement of rape myths predicted sexual coercion via technology and a recent survey of Canadian youth reported that individuals who engaged in victim blaming were more likely to report sharing sexts without consent (Johnson, Mishna, Okumu, & Daciuk, 2018). In the report by Johnson and colleagues (2018) as well as in Study 3, men endorsed more victim blame than women, a finding that is consistent with the literature on offline sexual violence (e.g., Davies, Gilston, & Rogers, 2012; Grubb & Harrower, 2009). All of this alludes to the fact that image-based sexual violence is perpetrated in a social environment that tacitly supports violence against women and views it as a legitimate way (by some) to gain status and reinforce existing inequities. Gender role expectations not only affect perceptions of and interaction with others, but also the self to the

degree that individuals have internalized these expectations. Individuals are socialized into gender roles and beliefs about gender through a process of social learning and reinforcement (e.g., pressure for men to establish their masculinity in the eyes of other men through sexual conquest of women; Berkowitz, 1992) in a sociocultural environment where white, heterosexual, male identities are privileged. In fact, scholars have posited that men's use of women's images without consent is a way of "doing [or performing] masculinity" for other men in their peer groups (DeKeseredy & Schwartz, 2016). This may provide a framework for understanding the finding in Study 3 that even once attitudes and peer norms were accounted for, men were still less likely to help than women. This is particularly important as unhelpful responses for image recipients can include the decision to share, save, or forward the image to others – behaviours which constitute perpetration.

There is also emerging evidence that masculine gender norms are related to perpetration of image-based sexual violence, as a recent study found that adolescents who endorsed traditional gender roles were also more likely to have shared sexts without consent and those who shared images were disproportionately male (Johnson et al., 2018). A relationship between adherence to traditional gender roles and perpetration and responses to sexual violence in men has also been found for offline sexual violence (Berkowitz, 1992; Orchowski et al., 2016). However, gender roles are internalized in different ways and masculinity and femininity are not monolithic concepts. Hegemonic masculinity, which encompasses the patriarchal belief that men should occupy positions of power and that the subordination of women is necessary to achieve this, and displays of hypermasculinity, or the exaggeration of traditionally masculine traits, have been singled out by sexual assault researchers in particular as problematic (e.g., Henry & Flynn, 2019). If image-based sexual violence is conceptualized as a form of

technology-facilitated sexual violence, meaning an online extension of the continuum of violence, then it is likely that hypermasculinity also play a role in online perpetration. There is limited research as this relates to image-based sexual violence, but there is some evidence to suggest that these attitudes do extend to images that are posted online. For example, a recent analysis of non-consensual images that were posted online found that contrary to popular assumption, the majority of postings were not motivated by revenge but posted for pornographic purposes and a desire by men to gain status within online communities of deviant peers that encouraged and supported image-based sexual violence (Henry & Flynn, 2019). This method of gaining status (i.e., by demonstrating power over women) is consistent with ideals of hegemonic masculinity and also suggests that the interaction between individual attitudes and those of peers (actual or perceived) is related to perpetration. Research has found that individual beliefs that support sexual assault, as well as those of peers, both predict men's sexual coercion via technology (Thompson & Morrison, 2013). This suggests that the relationship may be reciprocal and mutually reinforcing, conditions that may increase the risk of perpetration as well as inhibit helpful and supportive bystander (i.e., image recipient) responses.

Complicating this dynamic, these acts are also committed in an environment where pornographic images, often depicting violence against women (Cole, 2000), are normalized and easily, instantly accessible. The prevalence and availability of pornography has led to changes in sexual practices and expectations, and especially among youth, the normalization of digital image exchange, sexual and otherwise (e.g., Handyside & Ringrose, 2017). The presence of a social context where male bonding occurs through this exchange/group viewing of pornography is another social process through which image-based sexual violence is normalized and perhaps endorsed. Individuals, and particularly youth, may also be less connected to the potential

consequences of their actions due to the sheer frequency with which images are viewed and exchanged.

The literature on gender differences in offline bystander situations also suggests that beliefs about intervention, specifically differences in self-efficacy and anticipated outcomes of intervention in situations of sexual violence, could partially explain the differences found in Study 3. In general, bystanders are more likely to take action when they feel they are able to intervene (self-efficacy) and do not believe that there will be negative social consequences as a result (Casey, Lindhorst, & Storer, 2017; McMahon et al., 2015; Moynihan et al., 2011). Research suggests that bystander gender and adherence to traditional gender norms interact with the anticipated consequences of intervention and self-efficacy (Leone, Parrott, Swartout, & Tharp, 2016). A recent study of bystander behaviour found that men who had intervened when witnessing an incident of interpersonal violence (including sexual violence) reported experiencing more uncertainty and negative consequences than women who intervened, and men as a whole were more likely to anticipate negative consequences as a result of helping (Banyard et al., 2019). For sexual violence in particular, it is possible that men who intervene may anticipate (or experience) more negative consequences from peers because they acted outside the bounds of traditional masculinity. Social censure is used to encourage adherence to traditional gender and social roles in which men gain status through violence, sexual conquest, and power over others. In light of research that finds non-consensual use of women's images is one way that boys and men exercise that power, it is possible that men in Study 3, particularly those embedded in peer groups that endorse traditional and hypermasculine ideals, anticipated more negative consequences as a result of helping than women. More research is needed to explore perceived barriers to helping and the ways in which these might be gendered.

Despite evidence that the sexual double standard and rape myths influence the discourse around and bystander reactions to image-based sexual violence in the current studies, there was also evidence that incidents of image-based sexual violence were not viewed (by women mostly in their 20s) as particularly gendered. In Study 2, the ways in which women labeled their experiences did not acknowledge gender, for example, in the absence of labels like violence against women or sexual violence in favour of betrayal and being taken advantage of. This mirrors language that de-emphasizes gender in descriptions of offline sexual violence, such as labeling sexual harassment that occurs in schools as bullying, a practice that is harmful because it excludes gendered analysis and critique, denies particular legal or punitive measures, and deflects from structural and cultural considerations (Mikel Brown, Chesney-Lind, & Stein, 2007). It is important to note however, that while women did not use gendered labels, they also did not conceptualize these acts as bullying, a distinction that is important because this label is commonly found in research, mass media campaigns, and educational interventions and is problematic for the reasons previously described (Krieger, 2017). For these reasons, future research and discussions (such as this) that explicitly acknowledge gender are needed to fully understand these acts and to promote these understandings in the public sphere.

### **Limitations & Future Directions**

The three studies conducted were an attempt to look at image-based sexual violence broadly and from multiple perspectives. Due to limited knowledge about this phenomenon, depth was sacrificed for breadth. The studies focused on multiple aspects of image-based sexual violence, such as psychological outcomes and bystander reactions, which are underexplored yet central to how these acts are experienced and perpetrated. This shaped decisions around what information was collected and how, and introduced some limitations.

In Study 1, the biggest limitation is the absence of a control group. This decision was made as the intended comparison group was to be the literature on victims of offline sexual violence; however, it limits the conclusions that can be drawn from the study. Primarily, without a comparison to a comparable group of women who were not victims of image-based sexual violence, it is not possible to conclude that the prevalence of symptoms is related to the victimization experiences. Similarities to the prevalence rates reported in the existent literature suggest that these may be related to victimization, but more research using alternate designs is needed. Another limitation is that the psychological symptoms that were measured were selected based on their commonness in the literature on offline sexual violence. They are often framed as the major psychological symptoms that women experience. Clinical measures of depression, anxiety, and trauma were used to explore these symptoms for image-based sexual violence and facilitate comparisons to the existing literature. The use of clinical measures allows for standardized comparisons to be made between populations and studies but have also been critiqued for pathologizing reactions to oppressive conditions which shift the focus to individuals instead of larger social conditions (Brown, 2000; Marecek & Gavey, 2013). Quantifying women's psychological symptoms and distress in this way puts boundaries on the information that is gathered about (the uniqueness of) women's experiences as symptoms are measured against a set of diagnostic criteria that are culturally bound, externally defined, and political, but do not tell us about the circumstances in which the symptoms occur and the meaning for each woman. This is not to say that formal diagnoses are not welcomed by many people (e.g., eliciting relief and validation; Perkins et al., 2018) and helpful in accessing appropriate supports and tailored treatment, but the use of clinical measures in isolation shapes and limits what can be known and runs the risk of focusing on specific clinically significant symptoms to the exclusion

of other symptoms or effects that are important to the women themselves. Lastly, the use of a cross-sectional design means that no statements about causality or symptom trajectory can be made. Prospective, longitudinal research designs will provide more information about the outcomes and effects of image-based sexual violence.

To contextualize and build on the quantitative data in Study 1, Study 2 used a qualitative method to explore women's experiences of image-based sexual violence. An online survey using open-ended questions was used to elicit women's reactions and interpretation to incidents of image-based sexual violence. In Study 1, women were recruited from the university participant pool as well as the community using online advertisements. The desired number of participants was recruited quickly (within the span of several weeks). At the conclusion of Study 1, women who were interested in additional studies (i.e., Study 2) provided their contact information. The response rate from the email invitations was negligible so participants were then recruited using online advertisements similar to those used for Study 1, but in contrast, recruitment proceeded much more slowly. It is possible that people perceived the study would require more effort or time than Study 1 due to the use of open-ended questions or were less comfortable answering these types of questions online. Previous studies have found that disclosure of sensitive information can increase with online methods (Suzuki & Calzo, 2004; Turner et al., 1998), but it is also possible that this population could have additional concerns regarding online privacy and confidentiality given the nature of their victimization. The women who did participate in Study 2 also provided less detailed information than was anticipated. Future research with this population may be better conducted through in-person interviews as this would allow the researcher to build trust with the participants as well as elicit higher quality information through the use of follow up questions and prompts.



Study 3 measured the self-rated likelihood of responses to receiving a forwarded sexual image in varying conditions. A measure was created based on existing measures of bystander responses in offline situations and adapted to include behaviours appropriate to text. A survey with close-ended questions was used so that the influence of variables of interest on behaviour could be measured in a systematic way. The results of this study suggested several avenues for further investigation and potential targets for prevention and intervention efforts (i.e., peer norms). However, the use of close-ended questions meant that some behaviours or potential responses were excluded. Participants may also have responded in a particular way (i.e., more or less likely) due to the absence of contextual information. In the absence of previous research on the responses of image recipients, the factors and contextual variables that could influence decision-making are unknown. The literature on offline bystander behaviour may help identify variables of interest but the differences between online and offline contexts mean that significant differences will exist. There is an urgent need for more research on this topic. Additionally, studies should use qualitative methods to explore actual responses to and decision-making around receiving forwarded images.

All three samples were recruited online and used similar online survey methodology. This may have excluded some individuals from the studies, for example women without access to a computer that is private and secure, and certainly constrained the type of information that could be gathered. Similarly, Studies 1 and 2 investigated women's experiences using cross-sectional designs, which does not allow for a full investigation of how these events are experienced over time. Future work should be conducted using additional methods to sample and collect data, namely online and offline recruitment, in-person data collection methods (e.g., interviews, focus groups), and employ longitudinal designs. Qualitative investigations are needed

to further unpack the ways in which larger narratives around gender impact individual experiences and understandings of image-based sexual violence. For example, in the current studies and the literature on sexting, many women describe being repeatedly asked and/or coerced into taking and sending sexual images, a dynamic that connects to ideas of unconstrained choice and consent – concepts which are central to discussions of sexting and non-consensual use of images. The unequal social conditions and pressures faced by women and girls impacts the ability to make (unconstrained) decisions. For example, the possibility of sexual violence and concerns about safety form the landscape through which girls navigate social and sexual relationships. A girl may feel pressured to take and send a sexual image but fear there may be consequences if she does not (e.g., loss of relationship). Under these conditions, she may choose to send an image but do so in a way where she can minimize personal risk (e.g., excluding her face) if the image is ever distributed. This example echoes qualitative reports of girls' experiences with sexting (Renfrow & Rollo, 2014; Ringrose et al., 2012). Many of the dynamics around sexual image exchange are not black and white and thoughtful, qualitative designs will help to nuance our understanding and guide work in this area in a way that is in line with girls' and women's real world experiences.

Despite these limitations, these investigations expand our knowledge of online sexual violence and demonstrate many ways in which image-based sexual violence is similar to offline sexual violence. As a result, the vast literature on offline sexual violence may suggest additional areas that are important to investigate for image-based sexual violence and could also highlight ways in which these acts are different. For example, features of assaults that impact women's experiences of offline sexual violence, such as location, may have different meanings in technology-facilitated sexual violence due to the diffuse nature of technology and online spaces.

Though these variables may not function in the same way (e.g., women assaulted in their home are more likely to experience distress, Feehan et al., 2001), they may still be important (e.g., home may be analogous to safe and private online spaces, which may be eroded by cyber violence). Future avenues for this line of research also include further explorations into contextual variables that may influence how people respond to image-based sexual violence as image recipients, victims, support persons, and lay people within the community to which people may disclose their experiences to (e.g., informal supports like friends, family, or mentors). Differences in environmental or contextual factors between online and offline environments need to be explored further in order to uncover variables that are important in shaping the behaviour of image recipients and other online witnesses to technology-facilitated sexual violence.

A final direction for future research is to bring an intersectional lens to explorations of image-based sexual violence. For example, how do women's experiences and outcomes differ depending on their multiple intersecting identities? How do attitudes towards victims with particular (perceived or real) identities interact with bystander intervention? Given the other similarities found in this project between what was found based in relation to online sexual violence and what is known previously about offline sexual violence, it is likely that an intersectional lens will replicate what is currently known for offline violence. Emerging evidence seems to support this, for example, a recent study found LGBTQ youth were victims of image-based sexual violence at higher rates than other youth and adult women or men, a finding that is consistent with higher rates of sexual violence found offline for sexual minority individuals (Lenhard, Ybarra, Price-Feeney, 2016). As with offline sexual violence, beliefs that support the oppression of people who identify as other than white, cisgender, heterosexual, and male are likely to support both perpetration and decreased bystander reactions to image-based sexual

violence. Future work should endeavour to explicitly use an intersectional lens at and highlight the larger social conditions that shape sexual and identity-based violence. Lastly, this study did not investigate perpetration (except indirectly through non-helpful bystander responses). With technology-facilitated sexual violence more generally, the literature suggests there is overlap between perpetrators who commit violence both on- and offline, but some individuals do uniquely offend in online spaces. For image-based sexual violence, the barrier to perpetration is arguably lower (i.e., forwarding or showing a sexted image) and presumably often occurs when the victim is absent, or even is unknown. These factors likely increase the proportion of individuals who are willing to perpetrate and who may normalize these behaviours to the degree that they do not view them as perpetration at all. Studies of the proportion, features, correlates, and common types of perpetration (i.e., are there differences between individuals who only forward images and those who film people?) are needed to further the very limited knowledge in this area and drive prevention efforts.

This project has also made connections between the nascent literature on image-based sexual violence and the literature on cultural and social supports that facilitate traditional sexual violence. The cultural supports and beliefs detailed previously, such as the sexual double standard and victim-blaming, all function to support the perpetration of image-based sexual violence and exclude meaningful consideration of women's experiences from the conversation. In the absence of research on image-based sexual violence, these narratives continue to support perpetrators and influence cultural understandings and responses (e.g., legal, social) to the detriment of women and girls. This project employed multiple small scale studies to explore multiple aspects of image-based sexual violence and used both qualitative and quantitative methods to explore women's experiences in a meaningful way. In essence, these studies were

designed to further develop our understanding of these acts in order to counter and respond to harmful cultural narratives.

It would be simplistic to claim that the absence of research on this topic has allowed these beliefs to flourish. The cultural and social structures that support violence against women are embedded in the history and functioning of many institutions and longstanding practices, and solutions must therefore address these larger social structures. However, empirical research such as the current work is a crucial piece needed to inform prevention and treatment efforts and lay the groundwork for future research. A robust literature on these acts and the connection to offline sexual violence can inform advocacy and social changes that are more likely to be effective. This project is an early step in establishing and directing that literature.

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## APPENDIX A: PARTICIPANT POOL ADVERTISEMENT FOR STUDY 1

Title of study: Outcomes of women's experiences with non-consensual use of their sexual images

Researcher: Michelle Krieger and Dr. Charlene Senn (Supervisor)

Duration: 30 minutes or less

Credits: 0.5

Eligibility requirements: Women who have had a sexual image (picture, video) taken of them or used without their permission (e.g., a sexual picture of you was forwarded to other people), are older than 16 years, and who reside in Canada are eligible to participate.

Description: This study explores social and psychological outcomes for women who have had their sexual images taken or used without consent. If you agree to participate, the study will ask you to provide basic demographic information, a brief description of the incident in which your sexual image was taken or used without consent, and to answer a number of questions on social and psychological symptoms and changes you may have experienced after the incident.

**Note:** This study contains potentially sensitive questions that ask about sexual content. For example, "Have you ever received a sexual image from someone else via technology (e.g., a picture they took of themselves)?"



## **APPENDIX B: RECRUITMENT MATERIALS FOR STUDY 1 (COMMUNITY SAMPLE)**

Title of Study: Outcomes of women's experiences with non-consensual use of their sexual images

This research study explores social and psychological outcomes for women who have had their sexual images taken or used without consent. If you agree to participate, the study will ask you to provide basic demographic information, a brief description of the incident in which your sexual image was taken or used without consent, and to answer a number of questions on social and psychological symptoms and changes you may have experienced after the incident.

The benefit of participating is that by sharing your experiences you will contribute to the development of knowledge and research about non-consensual use of sexual images and how these experiences are conceptualized by women. This will help future research, education, and intervention efforts, and may help develop interventions to improve the lives of other women.

The study is online and will take no more than 30 minutes to complete.

### **Who can participate?**

Women who are 16 years of age or older, live in Canada, and who have had a sexual image (picture, video) taken of them or used without their permission (e.g., a sexual picture of you was forwarded to other people), and who reside in Canada are eligible to participate in this study.

**Note:** This study contains potentially sensitive questions that ask about sexual content. For example, "Have you ever received a sexual image from someone else via technology (e.g., a picture they took of themselves)?"

**If you are interested in participating, please click the following link for more information and to be taken to the study:**

[https://uwindsor.ca1.qualtrics.com/jfe/form/SV\\_b96iDf6nBi001kV](https://uwindsor.ca1.qualtrics.com/jfe/form/SV_b96iDf6nBi001kV)

\*\*\*Clicking this link does not mean you have to participate\*\*\*

If you have questions about the study, please contact me at [krieger@uwindsor.ca](mailto:krieger@uwindsor.ca). Please note that this study has received clearance from the University of Windsor Research Ethics Board.

## APPENDIX C: CONSENT FORMS FOR STUDY 1

Note: The text below includes both the consent form provided to participants recruited from the University of Windsor research participant pool and from the community. Differences are denoted with square brackets followed by the text for that group (i.e., [Participant Pool] ...).



### CONSENT TO PARTICIPATE IN RESEARCH

Title of Study: **Outcomes of women's experiences with non-consensual use of their sexual images**

You are asked to participate in a research study conducted by Michelle Krieger, M.A., a doctoral candidate under the supervision of Dr. Charlene Senn, from the Department of Psychology at the University of Windsor. The results from this study will contribute to Michelle Krieger's dissertation requirements.

If you have any questions or concerns about the research, please feel to contact Michelle Krieger at [krieger@uwindsor.ca](mailto:krieger@uwindsor.ca) or Dr. Charlene Senn at [csenn@uwindsor.ca](mailto:csenn@uwindsor.ca), or by phone at (519) 253-3000 ext. 2255.

### PURPOSE OF THE STUDY

The purpose of this study is to investigate women's social and psychological outcomes in response to having sexual images of them taken or used without consent.

### PROCEDURES

If you volunteer to participate in this study, you will be asked to do the following things:

First, provide some background information about yourself and event in which your sexual image was taken or used without your consent. At this time, if you are not eligible to participate (e.g., if you do not live in Canada, have not had a sexual image of you taken or used without consent, or do not identify as a woman), the survey will exit and you will be thanked for your time. Second, you will be asked to briefly describe the incident where your image was taken or used without consent and provide basic information about incident, such as how long ago it happened. Finally, you will answer questions about changes to your relationships (e.g., with friends), as well as, thoughts and feelings you may have experienced since the incident.

[Participant Pool only] Participants will receive 0.5 bonus points for 30 minutes of participation towards the psychology participant pool, if registered in the pool and enrolled in one or more eligible courses.

The survey questions are of a personal nature and deal with sexual content, changes in social relationships, and thoughts and feelings (e.g., sadness) you may have experienced. You have the right not to answer any question or questions that you do not want to and you can withdraw from the study at any time. If you believe that participation in this study would cause you discomfort, you may close your browser now or click the button at the bottom of this form to unenroll at this time. Although you may withdraw at any time, any data that has been previously submitted will remain in the study.

[Participant Pool] The survey is online and will take no more than 30 minutes to complete.

[Community] The survey is online and will take no more than 30 minutes to complete. At the conclusion of the survey, participants will be taken to a [separate page](#) to provide their contact information so the electronic gift card may be sent to them.

## **POTENTIAL RISKS AND DISCOMFORTS**

The questions in this survey ask about psychological and social outcomes you may have experienced following the creation or use of your sexual image without consent. You may experience some distress as a consequence of reflecting on this experience, and you have the right not to answer any questions that make you feel uncomfortable and to exit the survey at any time without penalty.

If you experience any emotional discomfort while completing the survey, feel free to withdraw at any time with no negative consequences. If you would like to speak with someone about the issues raised in this survey, resources are available on campus for this purpose including The Student Counselling Centre (phone: 519- 253-3000, ext. 4616; e-mail: [scc@uwindsor.ca](mailto:scc@uwindsor.ca)) and Health Services (phone: 519-973-7002). You will also be provided with local and online resources at the end of the survey, or at the time of exit if you choose to withdraw.

*If you would like to download or print a copy of the psychological resources before beginning the study, please [click here](#) for a PDF.*

## **POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY**

By participating in this project you are contributing to the literature on women's experiences of unauthorized use of their sexual images. Your participation will benefit the scholarly community by expanding our knowledge of possible psychological outcomes for people who have had similar experiences.

The knowledge gained from this research could inform intervention and education programs that address these issues in the community. This line of research could provide the public and the policy makers with information on the possible impact of unauthorized image use for women, allowing for more productive discussions, policies, and intervention programs.

## **COMPENSATION FOR PARTICIPATION**

[Participant Pool] This study will take no more than 30 minutes of your time, and is worth 0.5 bonus points if you are registered in the pool and you are registered in one or more eligible courses.

[Community] The survey is online and will take no more than 30 minutes to complete. As compensation for your time and effort, participants will receive a \$5 CAD electronic gift card to Amazon. At the conclusion of the survey, participants will be taken to a separate page to provide their contact information to receive the gift card. You are only eligible to receive compensation for participating in this study one time.

## **CONFIDENTIALITY**

Any information that is obtained in connection with this study and that can be identified with you or others will remain confidential and will be disclosed only with your permission. Identifying data will remain separate from your survey responses. The data will be kept on a secure server and will only be accessible by the principal investigator and the faculty supervisor involved in the research.

## **PARTICIPATION AND WITHDRAWAL**

You can choose whether to participate in this study or not. If you volunteer to participate, you may withdraw at any time without penalty. The investigator may withdraw you from this research if circumstances arise which warrant doing so. You may withdraw from the survey at any time by closing your browser window. In the case that you withdraw from the survey prior to completing the survey, your data will not be retained for analysis. You will not be partially compensated for your partially completed survey. Once you have submitted your survey (by clicking on the “submit” button at the end of the survey), it is no longer possible to withdraw your data.

## **FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS**

A summary of the research findings will be available to participants at the conclusion of the study on the University of Windsor Research Ethics Board website.

Web address: [www.uwindsor.ca/reb](http://www.uwindsor.ca/reb)

Date when results are available: September 2018

## **SUBSEQUENT USE OF DATA**

These data may be used in subsequent studies, in publications and in presentations by the researcher.

## RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: [ethics@uwindsor.ca](mailto:ethics@uwindsor.ca)

## SIGNATURE OF RESEARCH PARTICIPANT

I understand the information provided for the study *Outcomes of women's experiences with non-consensual use of their sexual images* as described herein. I confirm that no coercion of any kind was used in seeking my participation in this study and that I have read and fully understand the purpose of the research and its risks and benefits.

By clicking "I Agree" you are electronically signing this form agreeing to participate in this research. You will be taken to the survey.

**Please print a copy of this consent form for your records using the print option in your internet browser.**

☐ I Agree    ☐ I Do Not Agree

If you wish to prevent others who have access to your computer from seeing that you viewed this study's website, you can use the following information to delete your browsing history.

Google Chrome:	Settings→ History→ Clear browsing data
Internet Explorer:	Settings→ Internet Options→ General→ Delete browsing history
Safari:	History→ Clear history
Firefox:	History→ Clear recent history

**APPENDIX D: MATERIALS FOR STUDY 1***Screening Questions:*

Do you identify as a woman?

- ☐ Yes
- ☐ No

Do you currently live in Canada?

- ☐ Yes
- ☐ No

Please indicate which (if any) of the following experiences you have had (*select all that apply*):

- ☐ Someone took a sexual picture or video of me without permission
- ☐ A sexual image (or video) of me was posted online without my permission
- ☐ A sexual image (or video) of me was shared/sent to others without my permission
- ☐ A sexual image (or video) of me was used in some other way without my permission:

How old are you (in years)?

*Questionnaire:*

What ethnicity do you identify with (e.g., African-Canadian)?

Are you currently in a relationship (i.e., romantic or sexual)?

- ☐ Yes
- ☐ No
- ☐ Unsure

Are you currently employed?

- ☐ No
- ☐ Yes, part time
- ☐ Yes, full time

Are you currently a student?

- ☐ No
- ☐ Yes, part time
- ☐ Yes, full time

If you are enrolled in a degree program, what year are you in?

- ☐ 1<sup>st</sup> year
- ☐ 2<sup>nd</sup> year
- ☐ 3<sup>rd</sup> year
- ☐ 4<sup>th</sup> year
- ☐ 5<sup>th</sup> year (or above)
- ☐ Does not apply

If you are enrolled in a degree program, what type of program are you in?

- ☐ Arts and Humanities (e.g., history, philosophy)
- ☐ Social Sciences (e.g., psychology, sociology)
- ☐ Sciences
- ☐ Business
- ☐ Other \_\_\_\_\_
- ☐ Does not apply

Do you own a cell phone?

- ☐ Yes
- ☐ No

Is your cell phone a smartphone (e.g., Android, iPhone, Blackberry)?

- ☐ Yes
- ☐ No

How often do you use your phone?

- ☐ Less than once a day
- ☐ Once a day
- ☐ A few times a day
- ☐ About once an hour
- ☐ Almost constantly

How important is your cell phone to your life?

- ☐ Not at all important
- ☐ Slightly important
- ☐ Moderately important
- ☐ Very important
- ☐ Extremely important

Do you use social networking websites or apps (e.g., Snapchat, Facebook, Instagram, Twitter)?

- ☐ Yes
- ☐ No

How often do you use social networking websites or apps?

- ☐ Less than once a day
- ☐ Once a day
- ☐ A few times a day
- ☐ About once an hour
- ☐ Almost constantly

How important are social networks to your life?

- ☐ Not at all important
- ☐ Slightly important
- ☐ Moderately important
- ☐ Very important
- ☐ Extremely important

The following questions will ask you about a time when sexual images of you were taken or used without your permission.

If this has happened more than once, please complete the survey with the most significant incident in mind.

Please provide a brief description of the incident where your images were taken or used without permission (e.g., someone put a photo of you online).

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How long has it been since the incident occurred (that is, since you first found out)?

- ☐ Number of months: \_\_\_\_\_
- ☐ Less than a month ago
- ☐ It is still happening

*To help you remember, think of what else was happening around the same time (e.g., birthdays, events) and use that to construct a timeline.*

When was the image taken? \_\_\_\_\_

Who took the image? \_\_\_\_\_

Do you know the person (or persons) who took or used your image without permission?

\_\_\_\_\_

What was your relationship to them at the time (e.g., friend, ex-boyfriend)?

\_\_\_\_\_

What is your relationship to them now (e.g., friend, boyfriend)?

\_\_\_\_\_

Have your relationships with your peers (classmates, coworkers) changed since the incident first occurred?

- ☐ Not at all
- ☐ A little
- ☐ A lot
- ☐ Completely

Overall, relationships with my **peers** have gotten better.

- ☐ Strongly disagree
- ☐ Somewhat disagree
- ☐ Neither agree nor disagree
- ☐ Somewhat agree
- ☐ Strongly agree

How many of your relationships with **peers** have gotten better?

- ☐ None of my relationships
  - ☐ Some of my relationships
  - ☐ Half of my relationships
  - ☐ Most of my relationships
  - ☐ All my relationships
- 

Overall, relationships with my **peers** have gotten worse.

- ☐ Strongly disagree
  - ☐ Somewhat disagree
  - ☐ Neither agree nor disagree
  - ☐ Somewhat agree
  - ☐ Strongly agree
- 

How many of your relationships with **peers** have gotten worse?

- ☐ None of my relationships
  - ☐ Some of my relationships
  - ☐ Half of my relationships
  - ☐ Most of my relationships
  - ☐ All my relationships
- 

Have your relationships with your **friends** changed since the incident first occurred?

- ☐ Not at all
  - ☐ A little
  - ☐ A lot
  - ☐ Completely
-

Overall, relationships with my **friends** have gotten better.

- ☐ Strongly disagree
  - ☐ Somewhat disagree
  - ☐ Neither agree nor disagree
  - ☐ Somewhat agree
  - ☐ Strongly agree
- 

How many of your relationships with **friends** have gotten better?

- ☐ None of my relationships
  - ☐ Some of my relationships
  - ☐ Half of my relationships
  - ☐ Most of my relationships
  - ☐ All my relationships
- 

Overall, relationships with my **friends** have gotten worse.

- ☐ Strongly disagree
  - ☐ Somewhat disagree
  - ☐ Neither agree nor disagree
  - ☐ Somewhat agree
  - ☐ Strongly agree
- 

How many of your relationships with **friends** have gotten worse?

- ☐ None of my relationships
  - ☐ Some of my relationships
  - ☐ Half of my relationships
  - ☐ Most of my relationships
  - ☐ All my relationships
-

Has your relationship with your **family** changed since the incident first occurred?

- ☐ Not at all
  - ☐ A little
  - ☐ A lot
  - ☐ Completely
- 

Overall, relationships with my **family** have gotten better.

- ☐ Strongly disagree
  - ☐ Somewhat disagree
  - ☐ Neither agree nor disagree
  - ☐ Somewhat agree
  - ☐ Strongly agree
- 

How many of your relationships with **family members** have gotten better?

- ☐ None of my relationships
  - ☐ Some of my relationships
  - ☐ Half of my relationships
  - ☐ Most of my relationships
  - ☐ All my relationships
- 

Overall, relationships with my **family** have gotten worse.

- ☐ Strongly disagree
  - ☐ Somewhat disagree
  - ☐ Neither agree nor disagree
  - ☐ Somewhat agree
  - ☐ Strongly agree
-

How many of your relationships with **family members** have gotten worse?

- ☐ None of my relationships
  - ☐ Some of my relationships
  - ☐ Half of my relationships
  - ☐ Most of my relationships
  - ☐ All my relationships
- 

Has your relationship with your **romantic partner(s)** changed since the incident first occurred?

- ☐ Not at all
  - ☐ A little
  - ☐ A lot
  - ☐ Completely
- 

Overall, the relationship with my **romantic partner or partners** has gotten better.

- ☐ Strongly disagree
  - ☐ Somewhat disagree
  - ☐ Neither agree nor disagree
  - ☐ Somewhat agree
  - ☐ Strongly agree
- 

If applicable, how many of your **romantic relationships** have gotten better?

- ☐ None of my relationships
  - ☐ Some of my relationships
  - ☐ Half of my relationships
  - ☐ Most of my relationships
  - ☐ All my relationships
  - ☐ Not applicable
-

Overall, the relationship with my **romantic partner or partners** has gotten worse.

- ☐ Strongly disagree
- ☐ Somewhat disagree
- ☐ Neither agree nor disagree
- ☐ Somewhat agree
- ☐ Strongly agree

---

If applicable, how many of your **romantic relationships** have gotten worse?

- ☐ None of my relationships
- ☐ Some of my relationships
- ☐ Half of my relationships
- ☐ Most of my relationships
- ☐ All my relationships
- ☐ Not applicable

On this page are 20 groups of statements. Please read each group of statements carefully, and then pick out the **one statement** in each group that best describes the way you have been feeling during the **past two weeks, including today**.

If several statements in the group seem to apply equally well, click on the option that is farther down the list (closer to the bottom).

---

### 1. Sadness

- ☐ I do not feel sad.
- ☐ I feel sad much of the time.
- ☐ I am sad all the time.
- ☐ I am so sad or unhappy that I can't stand it.

---

### 2. Pessimism

- ☐ I am not discouraged about my future.
- ☐ I feel more discouraged about my future than I used to be.
- ☐ I do not expect things to work out for me.
- ☐ I feel my future is hopeless and will only get worse.

---

### 3. Past Failure

- ☐ I do not feel like a failure.
- ☐ I have failed more than I should have.
- ☐ As I look back, I see a lot of failures.
- ☐ I feel I am a total failure as a person.

---

### 4. Loss of Pleasure

- ☐ I get as much pleasure as I ever did from the things I enjoy.
  - ☐ I don't enjoy things as much as I used to.
  - ☐ I get very little pleasure from the things I used to enjoy.
  - ☐ I can't get any pleasure from the things I used to enjoy.
-

### 5. Guilty Feelings.

- ☐ I don't feel particularly guilty.
  - ☐ I feel guilty over many things I have done or should have done.
  - ☐ I feel quite guilty most of the time.
  - ☐ I feel guilty all of the time.
- 

### 6. Punishment Feelings

- ☐ I don't feel I am being punished.
  - ☐ I feel I may be punished.
  - ☐ I expect to be punished.
  - ☐ I feel I am being punished.
- 

### 7. Self-Dislike

- ☐ I feel the same about myself as ever.
  - ☐ I have lost confidence in myself.
  - ☐ I am disappointed in myself.
  - ☐ I dislike myself.
- 

### 8. Self-Criticalness

- ☐ I don't criticize or blame myself more than usual.
  - ☐ I am more critical of myself than I used to be.
  - ☐ I criticize myself for all of my faults.
  - ☐ I blame myself for everything bad that happens.
- 

### 9. Crying

- ☐ I don't cry anymore than I used to.
  - ☐ I cry more than I used to.
  - ☐ I cry over every little thing.
  - ☐ I feel like crying, but I can't.
-



### 10. Agitation

- ☐ I am no more restless or wound up than usual.
  - ☐ I feel more restless or wound up than usual.
  - ☐ I am so restless or agitated that it's hard to stay still.
  - ☐ I am so restless or agitated that I have to keep moving or doing something.
- 

### 11. Loss of interest

- ☐ I have not lost interest in other people or activities.
  - ☐ I am less interested in other people or things than before.
  - ☐ I have lost most of my interest in other people or things.
  - ☐ It's hard to get interested in anything.
- 

### 12. Indecisiveness

- ☐ I make decisions about as well as ever.
  - ☐ I find it more difficult to make decisions than usual.
  - ☐ I have much greater difficulty in making decisions than I used to.
  - ☐ I have trouble making any decisions.
- 

### 13. Worthlessness

- ☐ I do not feel I am worthless.
  - ☐ I don't consider myself as worthwhile and useful as I used to.
  - ☐ I feel more worthless as compared to other people.
  - ☐ I feel utterly worthless.
- 

### 14. Loss of Energy

- ☐ I have as much energy as ever.
  - ☐ I have less energy than I used to have.
  - ☐ I don't have enough energy to do very much.
  - ☐ I don't have enough energy to do anything.
-

### 15. Changes in Sleeping Pattern

- ☐ I have not experienced any change in my sleeping pattern.
  - ☐ I sleep somewhat more than usual.
  - ☐ I sleep somewhat less than usual.
  - ☐ I sleep a lot more than usual.
  - ☐ I sleep a lot less than usual.
  - ☐ I sleep most of the day.
  - ☐ I wake up 1-2 hours early and can't get back to sleep.
- 

### 16. Irritability

- ☐ I am no more irritable than usual.
  - ☐ I am more irritable than usual.
  - ☐ I am much more irritable than usual.
  - ☐ I am irritable all the time.
- 

### 17. Changes in Appetite

- ☐ I have not experienced any change in my appetite.
  - ☐ My appetite is somewhat less than usual.
  - ☐ My appetite is somewhat greater than usual.
  - ☐ My appetite is much less than before.
  - ☐ My appetite is much greater than usual.
  - ☐ I have no appetite at all.
  - ☐ I crave food all the time.
- 

### 18. Concentration Difficulty

- ☐ I can concentrate as well as ever.
  - ☐ I can't concentrate as well as usual.
  - ☐ It's hard to keep my mind on anything for very long.
  - ☐ I find I can't concentrate on anything.
-

### 19. Tiredness or Fatigue

- ☐ I am no more tired or fatigued than usual.
  - ☐ I get more tired or fatigued more easily than usual.
  - ☐ I am too tired or fatigued to do a lot of the things I used to do.
  - ☐ I am too tired or fatigued to do most of the things I used to do.
- 

### 20. Loss of Interest in Sex

- ☐ I have not noticed any recent change in my interest in sex.
  - ☐ I am less interested in sex than I used to be.
  - ☐ I am much less interested in sex now.
  - ☐ I have lost interest in sex completely.
-

How much have you been bothered by each symptom over the past week?

	Not at all	Mildly - It bothered me a little	Moderately - It bothered me a lot	Severely - I could barely stand it
Numbness or tingling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling hot	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wobbliness in legs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unable to relax	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fear of the worst happening	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dizzy or lightheaded	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heart pounding or racing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unsteady	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Terrified	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nervous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feelings of choking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hands trembling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shaky	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fear of losing control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Difficulty breathing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fear of dying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Scared	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indigestion or discomfort in abdomen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Faint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Face flushed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sweating (not due to heat)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Below is a list of problems that people sometimes have after experiencing a traumatic event.

Please read each statement carefully and circle the number that best describes how often that problem has been happening and how much it upset you over THE LAST MONTH.

Rate each problem with respect to the incident in which sexual images of you were taken or used without your permission.

	Not at all	Once a week or less/a little	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe
1. Unwanted upsetting memories about the incident	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Bad dreams or nightmares related to the incident	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Reliving the incident or feeling as if it were actually happening again	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Feeling very EMOTIONALLY upset when reminded of the incident	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Having PHYSICAL reactions when reminded of the incident (for example, sweating, heart racing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Trying to avoid thoughts or feelings related to the incident	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Trying to avoid activities, situations, or places that remind you of the incident or that feel more dangerous since the incident	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Not being able to remember important parts of the incident	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Seeing yourself, others, or the world in a more negative way (for	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

example, "I can't trust people," "I'm a weak person")					
10. Blaming yourself or others (besides the person who hurt you) for what happened	C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Having intense negative feelings like fear, horror, anger, guilt or shame	C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Losing interest or not participating in activities you used to do	C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Feeling distant or cut off from others	C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Having difficulty experiencing positive feelings	C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Acting more irritable or aggressive with others	C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Taking more risks or doing things that might cause you or others harm (for example, driving recklessly, taking drugs, having unprotected sex)	C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Being overly alert or on-guard (for example, checking to see who is around you, being uncomfortable with your back to the door)	C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Being jumpy or more easily startled (for example, when someone walks up behind you)	C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Having trouble concentrating	C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Having trouble falling or staying asleep	C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How much have these difficulties been bothering you?

- ☐ Not at all
  - ☐ A little/Once a week or less
  - ☐ Somewhat/2 to 3 times a week
  - ☐ Very much/4 to 5 times a week
  - ☐ Severe/6 or more times a week
- 

How much have these difficulties been interfering with your everyday life (for example relationships, work, or other important activities)?

- ☐ Not at all
  - ☐ A little/Once a week or less
  - ☐ Somewhat/2 to 3 times a week
  - ☐ Very much/4 to 5 times a week
  - ☐ Severe/6 or more times a week
- 

How long after the incident did these difficulties begin?

- ☐ Less than 6 months
  - ☐ More than 6 months
  - ☐ Not applicable - it has not been more than 6 months since the incident
- 

How long have you had these difficulties?

- ☐ Less than 1 month
- ☐ More than 1 month
- ☐ Not applicable - it has not been more than 1 month since the incident



**APPENDIX E: E-MAIL RECRUITMENT MATERIALS FOR STUDY 2**

Dear

My name is Michelle Krieger, and I am contacting you because you recently participated in a research study. I am conducting a study on women's experiences with having their sexual images taken or used without their permission. This could include anything from someone taking your picture to someone showing or forwarding a picture of you to someone else without your permission. If you have had an experience like this, you are eligible to participate in this research.

The purpose of this study is to explore women's experiences with non-consensual sexual image use and how women understand and think about these events. The study will ask you to provide some basic background information (e.g., age, employment status), a written description of the event in which your image was used without consent, and written answers to four open-ended questions that ask what you were thinking and feeling at the time the incident first happened (or when you first found out), and what you think and feel about it now. The study will be conducted online and will take no more than 30 minutes to complete.

There is no compensation for this study. The benefit of participating is that by sharing your experiences you will contribute to the development of knowledge and research about non-consensual use of sexual images and how these experiences are conceptualized by women. This will help future research, education, and intervention efforts, and may help develop interventions to improve the lives of other women.

If you are interested in participating, please click the following link for more information and to be taken to the study:

[https://uwindsor.ca1.qualtrics.com/jfe/form/SV\\_b96iDf6nBi001kV](https://uwindsor.ca1.qualtrics.com/jfe/form/SV_b96iDf6nBi001kV)

\*\*\*Clicking this link does not mean you have to participate\*\*\*

If you have questions about the study, please contact me at [krieger@uwindsor.ca](mailto:krieger@uwindsor.ca). Please note that this study has received clearance from the University of Windsor Research Ethics Board.

Thank you,

Michelle Krieger

## APPENDIX F: CONSENT FORM FOR STUDY 2



### CONSENT TO PARTICIPATE IN RESEARCH

Title of Study: **Women's experiences of non-consensual use of their sexual images**

You are asked to participate in a research study conducted by Michelle Krieger, M.A., a doctoral candidate under the supervision of Dr. Charlene Senn, from the Department of Psychology at the University of Windsor. The results from this study will contribute to Michelle Krieger's dissertation requirements.

If you have any questions or concerns about the research, please feel to contact Michelle Krieger at [krieger@uwindsor.ca](mailto:krieger@uwindsor.ca) or Dr. Charlene Senn at [csenn@uwindsor.ca](mailto:csenn@uwindsor.ca), or by phone at (519) 253-3000 ext. 2255.

### PURPOSE OF THE STUDY

The purpose of this study is to investigate women's social and psychological outcomes in response to having sexual images of them taken or used without consent.

### PROCEDURES

If you volunteer to participate in this study, you will be asked to do the following things:

First, provide some background information about yourself and a written description of the event in which your sexual image was taken or used without your consent.

Second, answer four questions about how you felt and what you were thinking at the time the incident first happened (or when you first learned about it) and what you currently think and feel about the event. You have the right not to answer any question or questions that you do not want to and you can withdraw from the study at any time. If you believe that participation in this study would cause you discomfort, you may close your browser now or click the button at the bottom of this form to unenroll at this time. Although you may withdraw at any time, any data that has been previously submitted will remain in the study.

### POTENTIAL RISKS AND DISCOMFORTS

The questions in this survey ask about a time when your sexual image was captured or used without your consent. For example, a time when someone you sent a sexual picture to showed it to another person without your permission. You may experience some distress as a consequence of reflecting on this experience. You have the right not to answer any questions that make you

feel uncomfortable and to provide as much or as little detail as you wish. You can also exit the survey at any time without penalty.

If you experience any emotional discomfort while completing the survey, feel free to withdraw at any time with no negative consequences. If you would like to speak with someone about the issues raised in this survey, resources are available on campus for this purpose including The Student Counselling Centre (phone: 519- 253-3000, ext. 4616; e-mail: [scc@uwindsor.ca](mailto:scc@uwindsor.ca)) and Health Services (phone: 519-973-7002). You will also be provided with local and online resources at the end of the survey, or at the time of exit if you choose to withdraw.

## **POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY**

By sharing your experiences you will contribute to the development of knowledge and research about non-consensual use of sexual images and how women think about these experiences. The knowledge gained from this research could inform intervention and education programs that address these issues in the community. This line of research could provide the public and the policy makers with information on the possible impact of unauthorized image use for women, allowing for more productive discussions, policies, and intervention programs.

## **COMPENSATION FOR PARTICIPATION**

The survey is online and will take no more than 30 minutes to complete. As compensation for your time and effort, participants will receive a \$5 CAD electronic gift card to Amazon. At the conclusion of the survey, participants will be taken to a separate page to provide their contact information to receive the gift card.

## **CONFIDENTIALITY**

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. No identifying data will be collected for this survey and any data you provide will be kept on a secure server and will only be accessible by the principal investigator and the faculty supervisor involved in the research.

## **PARTICIPATION AND WITHDRAWAL**

You can choose whether to participate in this study or not. If you volunteer to participate, you may withdraw at any time without penalty. The investigator may withdraw you from this research if circumstances arise which warrant doing so. You may withdraw from the survey at any time by closing your browser window. In the case that you withdraw from the survey prior to completing the survey, your data will not be retained for analysis. You will not be partially compensated for your partially completed survey. Once you have submitted your survey (by clicking on the “submit” button at the end of the survey), it is no longer possible to withdraw your data.

## **FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS**

A summary of the research findings will be available to participants at the conclusion of the study on the University of Windsor Research Ethics Board website.

Web address: [www.uwindsor.ca/reb](http://www.uwindsor.ca/reb)

Date when results are available: September 2018

## **SUBSEQUENT USE OF DATA**

These data may be used in subsequent studies, in publications and in presentations by the researcher.

## **RIGHTS OF RESEARCH PARTICIPANTS**

You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: [ethics@uwindsor.ca](mailto:ethics@uwindsor.ca)

## **SIGNATURE OF RESEARCH PARTICIPANT/LEGAL REPRESENTATIVE**

I understand the information provided for the study *Women's experiences with non-consensual use of their sexual images: Social and psychological outcomes* as described herein. I confirm that no coercion of any kind was used in seeking my participation in this study and that I have read and fully understand the purpose of the research and its risks and benefits.

By clicking "I Agree" you are electronically signing this form agreeing to participate in this research. You will be taken to the survey.

**Please print a copy of this consent form for your records using the print option in your internet browser.**

☐ I Agree    ☐ I Do Not Agree

**APPENDIX G: QUESTIONNAIRE FOR STUDY 2**

How old are you (in years)?

What ethnicity do you identify with (e.g., African-Canadian)?

Are you currently in a relationship (i.e., romantic or sexual)?

- ☐ Yes
- ☐ No
- ☐ Unsure

Are you currently employed?

- ☐ No
- ☐ Yes, part time
- ☐ Yes, full time

Are you currently a student?

- ☐ No
- ☐ Yes, part time
- ☐ Yes, full time

If you are enrolled in a degree program, what year are you in?

- ☐ 1st year
- ☐ 2nd year
- ☐ 3rd year
- ☐ 4th year
- ☐ 5th year (or above)
- ☐ Does not apply

If you are enrolled in a degree program, what type of program are you in?

- ☐ Arts and Humanities (e.g., history, philosophy)
- ☐ Social Sciences (e.g., psychology, sociology)
- ☐ Sciences
- ☐ Business
- ☐ Other \_\_\_\_\_
- ☐ Does not apply

Please indicate which of the following experiences you have had (*select all that apply*):

- ☐ Someone took a sexual picture or video of me without my permission.
- ☐ A sexual image (or video) of me was posted online without my permission.
- ☐ A sexual image (or video) of me was shared/sent to others without my permission.
- ☐ A sexual image (or video) of me was used in some other way without my permission:  
\_\_\_\_\_

**Please note:** If there has been more than one incident, complete the survey with the most significant one in mind.

How long has it been since the incident occurred (when you first found out)?

- ☐ Number of months: \_\_\_\_\_
- ☐ Less than a month ago
- ☐ It is still happening

*To help you remember, think of what else was happening around the same time (e.g., birthdays, events) and use that to construct a timeline.*

Please describe the incident in which sexual images of you were taken or used without your permission in as much detail as you are comfortable with providing.

*Please do not include any personal details about the individuals involved (e.g., names or social media profiles).*

---

---

When this first happened (or you first learned about what happened), what were you thinking?

---

---

---

When this first happened (or you first learned about what happened), what were you feeling?

---

---

---

Thinking about the incident now, what do you think about what happened?

---

---

---

Thinking about the incident now, how do you feel about what happened?

---

---

If you had to label your experience, how would you describe it?

**APPENDIX H: PARTICIPANT POOL ADVERTISEMENT FOR STUDY 3**

Title of study: Responses to Receiving Sexual Content from Peers

Researcher: Michelle Krieger and Dr. Charlene Senn (Supervisor)

Duration: 30 minutes or less

Credits: 0.5

Description: This study explores how people respond to a hypothetical scenario in which they receive a text from a friend containing sexual content. You do not have to have had any sexual experience, or experience with sexual content received from friends to participate in this study.

**Note:** This study contains potentially sensitive questions that ask about sexual content. For example, “Have you ever received a sexual image from someone else via technology (e.g., a picture they took of themselves)?”



## Appendix I: CONSENT FORM FOR STUDY 3



### CONSENT TO PARTICIPATE IN RESEARCH

Title of Study: **Responses to Receiving Sexual Content from Peers**

You are asked to participate in a research study conducted by Michelle Krieger, M.A., a doctoral candidate under the supervision of Dr. Charlene Senn, from the Department of Psychology at the University of Windsor. The results from this study will contribute to Michelle Krieger's dissertation requirements.

If you have any questions or concerns about the research, please feel to contact Michelle Krieger at [krieger@uwindsor.ca](mailto:krieger@uwindsor.ca) or Dr. Charlene Senn at [csenn@uwindsor.ca](mailto:csenn@uwindsor.ca), or by phone at (519) 253-3000 ext. 2255.

### PURPOSE OF THE STUDY

The purpose of this study is to investigate how people respond to receiving sexual images from peers, and how different factors might influence these responses.

### PROCEDURES

If you volunteer to participate in this study, you will be asked to do the following things:

First, provide some background information about yourself. Second, you will be asked to read a short description of a fictional scenario about receiving a message with sexual content, and then answer a series of questions about how you would respond. Finally, you will be asked several questions about sending and receiving sexual images and attitudes toward this within your peer group.

Participants will receive 0.5 bonus points for 30 minutes of participation towards the psychology participant pool, if registered in the pool and enrolled in one or more eligible courses.

Several of the survey questions deal with sexual content and are of a personal nature. An example of a question is "Have you ever received a sexual image from someone else via technology (e.g., a picture they took of themselves)?" You have the right not to answer any question or questions that you do not want to and you can withdraw from the study at any time. If you believe that participation in this study would cause you discomfort, you may close your browser now to exit the study. Although you may withdraw at any time, any data that has been previously submitted will remain in the study.

The survey is online and will take no more than 30 minutes to complete.

## **POTENTIAL RISKS AND DISCOMFORTS**

The questions in this survey contain sexual content and potentially sensitive topics but are similar to the kinds of things you might see on television or hear about in movies or on the internet. If you experience any emotional discomfort while completing the survey, feel free to withdraw at any time with no negative consequences. If you would like to speak with someone about the issues raised in this survey, resources are available on campus for this purpose including The Student Counselling Centre (phone: 519- 253-3000, ext. 4616; e-mail: [scc@uwindsor.ca](mailto:scc@uwindsor.ca)) and Health Services (phone: 519-973-7002). You will also be provided with local and online resources at the end of the survey, or at the time of exit if you choose to withdraw.

## **POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY**

By participating in this project you are contributing to understanding how individuals respond to sexual content shared via technology. Your participation will benefit the scholarly community by expanding our knowledge of the factors that may influence sharing of sexual images. This will provide a stepping stone for other research to be done in this area, as it will provide some data on common responses to shared images.

The knowledge gained from this research could inform intervention and education programs that address these issues in the community. This line of research could provide the public and the policy makers with a realistic picture of the issues and the types of activities that people are engaging in, allowing for more productive discussions, policies and intervention programs.

## **COMPENSATION FOR PARTICIPATION**

This study will take no more than 30 minutes of your time, and is worth 0.5 bonus points if you are registered in the pool and you are registered in one or more eligible courses.

## **CONFIDENTIALITY**

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. Identifying data will remain separate from your survey responses. The data will be kept on a secure server and will only be accessible by the principal investigator and the faculty supervisor involved in the research.

## **PARTICIPATION AND WITHDRAWAL**

You can choose whether to participate in this study or not. If you volunteer to participate, you may withdraw at any time without penalty. The investigator may withdraw you from this research if circumstances arise which warrant doing so. You may withdraw from the survey at any time by closing your browser window. You will not be partially compensated for your partially completed survey. Once you have submitted your survey (by clicking on the “submit” button at the end of the survey), it is no longer possible to withdraw your data.

## FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

A summary of the research findings will be available to participants at the conclusion of the study on the University of Windsor Research Ethics Board website.

Web address: [www.uwindsor.ca/reb](http://www.uwindsor.ca/reb)

Date when results are available: September 2018

## SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, in publications and in presentations by the researcher.

## RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: [ethics@uwindsor.ca](mailto:ethics@uwindsor.ca)

## SIGNATURE OF RESEARCH PARTICIPANT/LEGAL REPRESENTATIVE

I understand the information provided for the study *Responses to Receiving Sexual Content from Peers* as described herein. I confirm that no coercion of any kind was used in seeking my participation in this study and that I have read and fully understand the purpose of the research and its risks and benefits.

By clicking “I Agree” you are electronically signing this form agreeing to participate in this research. You will be taken to the survey.

**Please print a copy of this consent form for your records using the print option in your internet browser.**

☐ I Agree    ☐ I Do Not Agree

**APPENDIX J: QUESTIONNAIRE FOR STUDY 3**

What gender do you identify as?

- ☐ Male
- ☐ Female
- ☐ Non-binary \_\_\_\_\_

Do you currently live in Canada?

- ☐ Yes
- ☐ No

How old are you (in years)?

What ethnicity do you identify with (e.g., African-Canadian)?

Are you currently in a relationship (i.e., romantic or sexual)?

- ☐ Yes
- ☐ No
- ☐ Unsure
- ☐ Would prefer not to answer

Are you currently employed?

- ☐ Yes, full time
- ☐ Yes, part time
- ☐ No

Are you currently a student?

- ☐ Yes, full time
- ☐ Yes, part time
- ☐ No

If you are enrolled in a degree program, what year are you in?

- ☐ 1st year
- ☐ 2nd year
- ☐ 3rd year
- ☐ 4th year
- ☐ 5th year (or above)
- ☐ Does not apply

If you are enrolled in a degree program, what type of program are you in?

- ☐ Arts and Humanities (e.g., history, philosophy)
- ☐ Social Sciences (e.g., psychology, sociology)
- ☐ Sciences
- ☐ Business
- ☐ Other \_\_\_\_\_
- ☐ Does not apply

Please read and imagine yourself in the following situation<sup>1</sup>:

(Vignette 1) You are by yourself and receive a text message from your friend Dave. It says, "Jane just sent me this pic. Check it out" and has a picture of Jane, a girl you know (but are not friends with), naked from the waist up. Dave texts you again to say you're the only person he has sent it to.

(Vignette 2) You are by yourself and receive a text message from your friend Dave. It says, "Jane just sent me this pic. Check it out" and has a picture of Jane, a girl you know (but are not friends with), naked from the waist up. He sent the message to a group chat that you have with 6 other mutual friends.

(Vignette 3) You are by yourself and receive a text message from your friend Dave. It says, "Jane just sent me this pic. Check it out" and has a picture of Jane, a girl you know (but are not friends with), naked from the waist up. You have no idea how many other people he has sent the image to.

---

<sup>1</sup> Participants will be randomly assigned to view one of the three vignettes

After getting the text from your friend, how likely are you to do each of the following?

	Definitely would NOT do this	Probably would not do this	Might do this	Probably would do this	Definitely WOULD do this
I would text/ message my friend to say he shouldn't be forwarding the picture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would text/ message my friend telling him not to send me those types of pictures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would text/ message my friend that I don't like it when he forwards sexual pictures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would text/ message my friend telling him he shouldn't forward sexual pictures without permission.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would text/ message Jane to tell her the picture is being sent to other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would report it to a teacher, parent, or authority (e.g., police, residence advisor).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I see my friend in person, tell him not to forward any sexual pictures to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I see my friend in person, tell	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

him I don't like it  
when he forwards  
sexual pictures.

When I see my  
friend in person, tell  
him that he shouldn't  
forward sexual  
pictures.

When I see my friend in person, tell him that he shouldn't forward sexual pictures without permission.

I would comfort  
Jane.

I would reach out to Jane to see if there was anything I could do.

I would send the image to Jane so she knows about it.

I would text back a positive comment to my friend (e.g., complimenting her body).

I would text back  
congratulating my  
friend.

I would do nothing.

I would ask my friend if he had any more pictures.

I would tell someone  
else about the image.



I would screenshot  
or download the  
image.

☐☐☐☐☐

I would share the  
image with other  
people.

☐☐☐☐☐

I would text/  
message a sexual  
comment to Jane.

☐☐☐☐☐

I would text/  
message Jane with  
an insult.

☐☐☐☐☐

I would text/  
message Jane asking  
her to send me a  
sexual picture.

☐☐☐☐☐

I would post  
something negative  
online about Jane.

☐☐☐☐☐

Make a sexual  
comment to Jane the  
next time I saw her  
in person.

☐☐☐☐☐

Say something  
negative to Jane the  
next time I saw her  
in person.

☐☐☐☐☐

Tell Jane about the  
picture the next time  
I saw her in person.

☐☐☐☐☐

Ask Jane to send me  
a sexual picture the  
next time I saw her  
in person.

☐☐☐☐☐

-----

Please describe anything else you would do in response to receiving the image:

---

-----

How much is Jane to blame for the image being forwarded?

- ☐ Not at all to blame
- ☐ A little to blame
- ☐ A moderate amount
- ☐ A lot to blame
- ☐ Completely to blame

-----

How much is your friend to blame for the image being forwarded?

- ☐ Not at all to blame
- ☐ A little to blame
- ☐ A moderate amount
- ☐ A lot to blame
- ☐ Completely to blame

-----

How responsible is Jane for the image being forwarded?

- ☐ Not at all responsible
  - ☐ A little responsible
  - ☐ A moderate amount
  - ☐ A lot responsible
  - ☐ Completely responsible
-

How responsible is your friend for forwarding the image?

- ☐ Not at all responsible
- ☐ A little responsible
- ☐ A moderate amount
- ☐ A lot responsible
- ☐ Completely responsible

Please note: *The following questions ask about non-professional sexual images (pictures, videos), meaning they do not include sexual images of people within the adult entertainment industry (pornography).*

Have you ever sent a sexual image of yourself to another person using technology (text, e-mail, app)?

- ☐ Yes
  - ☐ No
- 

Have you ever received a sexual image from someone else via technology (e.g., a picture they took of themselves)?

- ☐ Yes
  - ☐ No
- 

Has someone ever forwarded/sent a sexual image of someone else to you (i.e., an image that they received) using technology?

- ☐ Yes
  - ☐ No
- 

Have you ever forwarded a sexual image (that was sent to you) to other people?

- ☐ Yes
  - ☐ No
- 

Have you ever uploaded or put a sexual image of someone else (that was sent to you) online?

- ☐ Yes
  - ☐ No
-

Have you ever physically shown other people a sexual image that was sent to you (e.g., someone looks at your phone)?

- ☐ Yes
  - ☐ No
- 

Has someone ever physically shown you a sexual image that was sent to them (e.g., someone shows you their phone)?

- ☐ Yes
  - ☐ No
- 

Page Break

---

My close friends believe that it is wrong to forward sexual images (that were sent to them) without the person in the picture knowing about it (i.e., the person in the picture does not know it was forwarded).

- ☐ Strongly disagree
  - ☐ Disagree
  - ☐ Somewhat disagree
  - ☐ Neither agree nor disagree
  - ☐ Somewhat agree
  - ☐ Agree
  - ☐ Strongly agree
- 

My close friends believe that it is wrong to forward sexual images (that were sent to them) without the person in the picture agreeing to it.

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree nor disagree
- ☐ Somewhat agree
- ☐ Agree
- ☐ Strongly agree

---

My close friends believe it is wrong to show sexual images (that were sent to them) to other people without the person in the picture agreeing to it.

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree nor disagree
- ☐ Somewhat agree
- ☐ Agree
- ☐ Strongly agree

---

My close friends believe it is wrong to show sexual images (that were sent to them) to other people if the person in the picture doesn't know about it (i.e., the person in the picture does not know it was shown to others).

- ☐ Strongly disagree
  - ☐ Disagree
  - ☐ Somewhat disagree
  - ☐ Neither agree nor disagree
  - ☐ Somewhat agree
  - ☐ Agree
  - ☐ Strongly agree
-

My close friends believe that it is wrong to post sexual pictures (that were sent to them) online without the person in the picture agreeing to it.

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree nor disagree
- ☐ Somewhat agree
- ☐ Agree
- ☐ Strongly agree

My close friends believe that it is wrong to post sexual pictures of other people (that were sent to them) online if they do not know about it (i.e., the person in the picture does not know it is online).

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Somewhat disagree
- ☐ Neither agree nor disagree
- ☐ Somewhat agree
- ☐ Agree
- ☐ Strongly agree

Thinking back to the scenario you read earlier, how many people (if any) did Dave send the image to?

- ☐ Just me
- ☐ A small group (including me)
- ☐ It didn't say
- ☐ I don't remember

Have you taken any programs, courses, or workshops about bystander behaviour (e.g., a session about how to intervene in emergency situations)?

- ☐ Yes
- ☐ No

Have you taken any programs, courses, or workshops about how to intervene in situations of (potential or actual) sexual violence?

- ☐ Yes
- ☐ No

## APPENDIX K: POST STUDY RESOURCES AND INFORMATION (EXAMPLE)

Thank you for taking the time to participate in this research. This study is looking at how women who have had their sexual images taken or used without consent think and feel about the experience. It will also explore if there is a relationship between how the images were used and how women conceptualize the experience.

Studies from the US, Canada and Europe reveal that approximately 2% of adults<sup>1</sup>, and up to 32% of adolescents<sup>2</sup> have had their sexual images used without their permission. Another study reported that 17% of the youth surveyed reported sending sexual images they had received to at least one other person<sup>3</sup>. This suggests that a significant number of people have participated in using other people's images without consent, and victimization experiences may be common. Sending sexual images without someone's consent can have serious emotional, social, and legal consequences for those involved. If the person in the image has not consented, this may constitute a criminal act.

*What does the law say about sending nude images?*

**Criminal Code Section 163.1** – The creation and distribution of images depicting sexual activity or the depiction of a sexual organ of a person under the age of 18 is a criminal offense (child pornography).

**Bill C-13** or the *Protecting Canadians from Online Crime Act* – Currently being discussed by the legislature. This bill proposes to make the distribution of non-consensual intimate images a criminal offense.

From the SexualityandU.ca:

“In general, the intended purpose of the child pornography law does not include the prosecution of teens for the taking and sharing of nude photos as long as the photos are kept private between the original partners (Slane, 2009). Nevertheless, sending nude photos of teens under age 18 over an electronic device is, technically speaking, a criminal offense.” (SexualityandU.ca, 2011, p.1)

*The full factsheet can be found here:*

<http://sexualityandu.ca/uploads/files/CTRsextingEnglishApril2011.pdf>

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<sup>1</sup> Ybarra, M., Price-Feeny, M., Lenhart, A., & Zickuhr, K. (2017). *Intimate partner digital abuse*. Data and Society Research Institute & the Center for Innovative Public Health Research. Retrieved from: [https://datasociety.net/pubs/oh/Intimate\\_Partner\\_Digital\\_Abuse\\_2017.pdf](https://datasociety.net/pubs/oh/Intimate_Partner_Digital_Abuse_2017.pdf)

<sup>2</sup> Wood, M., Barter, C., Stanley, N., Aghtaie, N., & Larkins, C. (2015). Images across Europe: The sending and receiving of sexual images and associations with interpersonal violence in young people's relationships. *Children and Youth Services Review*, 59, 149-160.

<sup>3</sup> Associated Press and Music Television. (2009). A thin line. Retrieved from: <http://www.athinline.org/MTV-AP>



Online Resources	
Information on Sexual Assault in Canada	
	<a href="http://www.springtideresources.org/resources/show.cfm?id=91">http://www.springtideresources.org/resources/show.cfm?id=91</a>
	<a href="http://www.springtideresources.org/resources/show.cfm?id=88">http://www.springtideresources.org/resources/show.cfm?id=88</a>
	<a href="http://www.springtideresources.org/resources/show.cfm?id=89">http://www.springtideresources.org/resources/show.cfm?id=89</a>
	<a href="http://www.springtideresources.org/resources/show.cfm?id=92">http://www.springtideresources.org/resources/show.cfm?id=92</a>
Canadian Sexual Assault Laws	
	<a href="http://www.aasac.ca/txt-fact-sexual-assault-abuse.htm">http://www.aasac.ca/txt-fact-sexual-assault-abuse.htm</a>
	<a href="http://www.sacc.to/sya/crime/law.htm">http://www.sacc.to/sya/crime/law.htm</a>
Resources for Women and Survivors of Sexual Assault	
	<a href="http://www.sacc.to/home/home.htm">http://www.sacc.to/home/home.htm</a>
	Pandora's Project - Online support and resources for survivors of rape and sexual abuse <a href="http://www.pandys.org/index.html">http://www.pandys.org/index.html</a>
Resources for Men and Partners of Survivors of Sexual Assault	
	<a href="http://www.mencanstoprape.org/">http://www.mencanstoprape.org/</a>
	<a href="http://www.acalltomen.com/page.php?id=51">http://www.acalltomen.com/page.php?id=51</a>
	<a href="http://www.womanabuseprevention.com/html/trauma__post-traumatic_stress_.html">http://www.womanabuseprevention.com/html/trauma__post-traumatic_stress_.html</a>
Technology & Sexual Violence	
	NeedHelpNow.ca Website providing support for those involved in self/peer sexual exploitation incidents. NeedHelpNow.ca
	Draw-the-line.ca Website with information about sexual violence, support for those involved, and information on how you can help as a bystander when you witness sexual violence. draw-the-line.ca
	Heart Mob Website to find support & support others that have experienced online harassment. <a href="https://iheartmob.org">https://iheartmob.org</a>

**VITA AUCTORIS**

Michelle Krieger was born in 1985 in Toronto, Ontario. She graduated from the University of Windsor with Bachelors degrees in Forensic Science (2007) and Psychology (2008), and obtained a Masters in Forensic Psychology from the Chicago School of Professional Psychology in 2011.