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Technology-Facilitated Sexual Violence: A Literature Review of Empirical Research

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Abstract

Technology-facilitated sexual violence (TFSV) refers to a range of behaviors where digital technologies are used to facilitate both virtual and face-to-face sexually based harms. Such behaviors include online sexual harassment, gender- and sexuality-based harassment, cyberstalking, image-based sexual exploitation, and the use of a carriage service to coerce a victim into an unwanted sexual act. This article reviews the current state of knowledge on these different dimensions, drawing on existing empirical studies. While there is a growing body of research into technology-facilitated harms perpetrated against children and adolescents, there is a dearth of qualitative and quantitative research on TFSV against adults. Moreover, few of the existing studies provide reliable data on the nature, scope, and impacts of TFSV. Preliminary studies, however, indicate that some harms, much like sexual violence more broadly, may be predominantly gender-, sexuality-, and age-based, with young women being overrepresented as victims in some categories. This review collects the empirical evidence to date regarding the prevalence and gender-based nature of TFSV against adults and discusses the implications for policy and programs, as well as suggestions for future research.

Keywords

technology, sexual violence, online sexual harassment, Internet communication, online victimization, revenge pornography

Introduction

Sexual violence and harassment are widely recognized as globally significant human rights problems.[1] According to estimates by the World Health Organization (WHO, 2013), 35% of women worldwide report having experienced either physical or sexual violence by a partner, or sexual violence by a friend, family member, acquaintance, or stranger. National studies and police data indicate the highly gendered pattern to sexual violence, with women continuing to represent the majority of victims and men overwhelmingly, although not exclusively, the perpetrators. Young women aged 16 to 24 years are widely recognized as being at greatest risk of experiencing sexual assault, and most often at the hands of a known man, such as a boyfriend, friend, or acquaintance, rather than a stranger (for prevalence studies, see, e.g., Australian Bureau of Statistics, 2013; Bureau of Justice Statistics [US], 2013; Office for National Statistics [UK], 2014). Further studies indicate that sexual harassment is likewise a persistent problem. National surveys in Australia indicate that 1 in 3 women experience sexual harassment in their lifetime compared to 1 in 10 men (Australian Human Rights Commission, 2012). The international literature thus demonstrates the persistent nature and prevalence of sexual violence and harassment and that these harms[2] are disturbingly common, highly gendered, and most often relational.

With the rapid uptake of Internet-enabled devices, such as computers, laptops, mobile phones, and tablets, and online communication services, such as social media networks and social applications, it is perhaps unsurprising that digital technologies might also be used as tools to facilitate sexually based harms. While empirical studies have highlighted perpetrators' use of technology to facilitate domestic violence (see Burke, Wallen, Vail-Smith, & Knox, 2011; Dimond, Fiesler, & Bruckman, 2011), dating abuse (see Stonard, Bowen, Lawrence, & Price, 2014; Zweig, Dank, Yahner, & Lachman, 2013), cyberstalking (see Sheridan & Grant, 2007; Spitzberg & Hoobler, 2002), and sexual exploitation of children (see Martin & Alaggia, 2013; Mitchell, Jones, Finkelhor, & Wolak, 2011), there is a dearth of empirical research examining the varied nature and prevalence of behaviors involving technology. Similar to the broader, umbrella term of "sexual violence" that is widely used in the research literature, we use a broad term to capture an array of abusive behaviors involving technology; what we call *technology-facilitated sexual violence* (hereinafter, TFSV). This conceptualization refers to a range of criminal, civil, or otherwise harmful sexually aggressive and harassing behaviors

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that are perpetrated with the aid or use of communication technologies.

To date, empirical studies of TFSV have almost exclusively focused on children and adolescents, and very little research has examined *adult* victimization or perpetration.[3] This article provides a literature review of the few existing empirical studies concerning the nature and/or prevalence of various forms of TFSV against adults. The findings of this review are organized according to five different, but interconnected, dimensions, which include (1) online sexual harassment, (2) gender- and sexuality-based harassment, (3) cyberstalking, (4) image-based sexual exploitation, and (5) the use of a carriage service to perpetrate a sexual assault or coerce an unwanted sexual experience.[4] The first section justifies the paper's terminology and inclusion of dimensions. The second section describes the method for the literature review. The third section then presents the key findings from existing empirical studies based on this literature review, and the final section discusses the implications for policy and practice.

TFSV: Parameters and Terminology

There are a number of terms that are used interchangeably to refer to digital abuse, cyberstalking, and cyberbullying in the broader research literature. For instance, empirical studies use terms such as ''electronic aggression'' (Bennett et al., 2011), ''electronic harassment'' (Fenaughty & Harre, 2013), and ''online harassment'' (Finn, 2004; Lindsay, Booth, Messing, & Thaller, in press) to refer to a range of behaviors. A small number of empirical studies specifically focus on the intersection between online victimization and sexual aggression or coercion. Thompson and Morrison (2013), for instance, use the term ''technology-based coercive behavior'' in their analysis of sexually based digital behaviors (e.g., asking someone online for sexual information about them, posting a sexually suggestive message or picture to someone's online profile, etc.). Gámez-Guadix, Almendros, Borrajo, and Calvete (2015, p. 145) refer to ''online victimization'' as ''pressure to obtain unwanted sexual cooperation or the dissemination of a victim's sexual content through the Internet.'' Reyns, Burek, Henson, and Fisher (2013) use Marcum, Higgins, and Ricketts's (2010) term ''cybervictimization'' to refer to receiving sexually explicit images, harassment, and sexual solicitation. These empirical studies on digital violence, however, tend not to categorize different behaviors into separate dimensions, and often ''online sexual harassment'' (Barak, 2005) or ''cyber harassment'' (Citron, 2014) serve simply as broad residual categories to capture a range of different digital acts of sexual aggression or harassment. This article, however, seeks to distinguish between different behaviors by referring to five overlapping dimensions. These dimensions include harassing or violent acts that involve unwanted sexual attention, speech acts, acts that cause fear or apprehension, image-based violations, or physical/contact offenses. The justification for this categorization is that it allows better tailored legal, policy, and prevention responses to these diverse behaviors. The impacts on victims vary between these different dimensions, perpetrators of one behavior are not the same as others, and criminal justice responses must respond differently to diverse victims and perpetrators in order to be fair, just, and effective.

Other scholars investigating online abuse and harassment tend not to focus on either sexual or gendered harms or violations, although they may include a couple of items relating to sexually based behaviors. Indeed, the line between sexual and nonsexual behaviors is not always clear-cut. One example is intimate partner cyberstalking where a perpetrator uses technology, such as global positional system [GPS] tracking, as a means of control and surveillance over his or her victim. Another example is calling someone a pejorative sexual and gendered name (e.g., a ''slut''), which may not be a form of online sexual abuse when used in good faith (e.g., in a comedy sketch or as a joke among friends). Second, although sexuality and gender are intricately related, not all forms of digital abuse are necessarily ''gendered.''[5] The widespread mob harassment of a female blogger, for example, might not necessarily constitute a form of gender-based harassment, unless gender is the reason or motivation behind the abuse (otherwise known as ''bias motivation'').

While there are murky distinctions that require further investigation, existing legislation on stalking, sexual harassment, and hate speech in offline contexts provide useful guidance on the construction of distinctions. The dimensions discussed in this article are modeled on these existing and not always unproblematic legal definitions. The criteria is that an act is done *because* of the gender or sexual orientation of the person or some or all people in the group, and/or is perpetrated with the intent to harm, and/or does result in significant harm to the victim; harms which might (or might not) be specifically ''gendered.'' This does not necessarily mean the perpetrator's motives have to be specifically or solely on the grounds of gender or sexuality, but rather the behavior is in part the result of a social context of gender inequality and hierarchization that in turn shapes normative expectations surrounding femininity and masculinity (Connell, 1987). This notion of gender hierarchy enables more nuance and complexity to be captured in terms of both perpetration and victimization. First, it enables an acknowledgment that men, boys, and transgender people are also victims of TFSV, in the same way that females and transgender individuals are also perpetrators of these behaviors. Second, this conceptualization enables a thorough investigation of the social constructs of masculinity and femininity in both online and offline spaces, including the gendered impacts of these behaviors, and the ways in which intersections of marginalization on the basis of age, race, religion, ethnicity, sexuality, and sex may play out in highly complex ways.

Keeping these important distinctions in mind, a range of online behaviors can be confidently excluded from the categorization of TFSV, such as people defacing a Facebook memorial page of a deceased person or other forms of cyberharassment, cyberstalking, and hate speech that are not explicitly or implicitly linked to sexual violence, or sexual- and gender-based harassment. Accordingly, the use of technology as a

surveillance and tracking device in the context of intimate partner violence is excluded in this review since such behaviors are not specifically forms of sexual violence or sexual harassment (although may of course be part of a pattern of abuse). On the other hand, as sexual violence is common in many abusive relationships, we do include some forms of cyberstalking in one of our five dimensions discussed below, when it is unwanted and repeated sexual pursuit that causes fear and apprehension. Likewise, on the same grounds, we include sexually motivated gender-based hate speech.

Method

Empirical research on TFSV is extremely sparse, and as such, the present study does not follow the systematic review approach. Instead the authors present a review of the research literature pertaining either to a collection of sexually based behaviors or to studies that individually examine a particular dimension of TFSV.

The analysis of the existing literature sought to explore the gendered prevalence, nature, and impacts of TFSV. All peer-reviewed journal articles that were included in this review specifically include one or more of the aforementioned five dimensions relating to adults over the age of 18 years or were on digital abuse more generally but related to adults over the age of 18 years and included at least 1 item relevant to TFSV. The review was based on an extensive electronic literature search using a variety of databases (e.g., Academic Search Premier, CINCH, Google Scholar, PsychINFO). Reference lists in each of the articles were also reviewed. Theoretical and/or legal articles were excluded if they were not based on empirical, quantitative research.[6] Only scholarly articles that were written in English since January 1, 1995, were included in the review.

Given the broad range of behaviors included in this study, a variety and combination of key words were used in the review, including cyberstalking/cyberbullying/online stalking/cyber harassment, distribution of sexual assault images/revenge porn/pornography/sexting, electronic/cyber/online sexual harassment/bullying/aggression/coercion, gender and online gaming, gender-based hate speech/vilification, sexploitation, technology/electronic/communication technology/digital/online/cyber communication technology and sexual violence/dating violence/sexual abuse, and virtual rape. The original literature search produced in excess of 500 articles, in part due to the broad range of key words used. Of these, a number were selected (based on the criteria above) from the abstract reading for further review or from reference lists of those selected articles. Of these articles reviewed, 11 were included in the final review because they met all of the inclusion criteria: the study included at least one item in their survey that fit with the authors' conceptualization of TFSV, the study was on adults and was quantitative in design, there was sufficient information regarding the methodology and results of the study, and the article was published in a peer-reviewed, English-language journal. A table of existing empirical research on adult forms of TFSV was constructed according to the different dimensions (see Table 1).

Table 1. Quantitative Studies on Technology-Facilitated Sexual Violence (TFSV).

TFSV Dimensions	Studies Identified
(1) Online sexual harassment	Ballard and Welch (in press), Baumgartner, Valkenburg, and Peter (2010), Burke, Wallen, Vail-Smith, and Knox (2011), Dreßing, Bailer, Anders, Wagner, and Gallas (2014), Finn (2004), Spitzberg and Hoobler (2002), and Staude-Müller, Hansen, and Voss (2012)
(2) Gender- and sexuality-based harassment	Ballard and Welch (in press)
(3) Cyber-obsessive pursuit (cyberstalking)	Ballard and Welch (in press), Burke et al. (2011), Dreßing et al. (2014), Spitzberg and Hoobler (2002), and Thompson and Morrison (2013)
(4) Image-based sexual exploitation	Burke et al. (2011), Dreßing et al. (2014), Drouin and Tobin (2014), Drouin, Ross, and Tobin (2015), Gámez-Guadix, Almendros, Borrajo, and Calvete (2015), and Thompson and Morrison (2013)
(5) The use of a carriage service to perpetrate a sexual assault or coerce an unwanted sexual experience	Baumgartner, Valkenburg, and Peter (2010), Gámez-Guadix et al. (2015), and Thompson and Morrison (2013)

Although not technically part of the literature review, in the discussion below, where there is a lack of empirical data specifically on digital sexual violence and harassment, the article refers to a number of existing empirical studies that explore more generally online digital abuse and violence. Likewise, some empirical studies on sexually based harms against children and adolescents are also discussed. Finally, a small number of surveys that have been published in nonacademic journals (e.g., surveys conducted by organizations) are referred to in order to supplement what is currently known about TFSV. The studies that do not fit the criteria listed above form part of the narrative discussion presented here but are not included in Table 1.

TFSV: Key Findings

To date, minimal research has been conducted on the manner in which communication technologies are used to facilitate diverse forms of sexual violence and harassment, particularly against adults. The authors, both individually and collectively, have examined some elements of this including challenges for law and policy agencies in responding to these behaviors (Powell, 2010; Henry & Powell, 2014). Their qualitative research, involving interviews with key stakeholders across

Table 2. Practice, Policy, and Research Implications.

Stakeholders	Recommendations
Practitioners (law enforcement, service sector providers)	• Training and resources for law enforcement to identify and respond to digital criminal violence, harassment, and cyberstalking • Collaboration between police and service sectors for evidence gathering • Training and resources to provide support and advice to victims (helplines and free support/advice centers) • Clear community codes of conduct; mechanisms for victims to report harassing behaviors and have content removed
Policy makers and law reform	• Introduction of specific criminal and civil legislation on Technology-Facilitated Sexual Violence (TFSV) behaviors • Public awareness campaigns on perpetrator and bystander responsibility • School curriculum packages on ethical digital relationships
Researchers	• Further quantitative/qualitative research on prevalence, nature/impacts of TFSV

legal services, police, and support services, suggests that TFSV is both highly gendered (because more women appear to be targeted, often by known male perpetrators) and increasingly common (see Henry & Powell, 2015a). Public submissions to a number of government and parliamentary reviews in recent years lend further support to the need for empirical data on both perpetration and victimization (see, e.g., Australian Law Reform Commission Inquiry into Serious Invasions of Privacy in the Digital Era, 2014; Department of Justice Canada, 2002; Parliament of the United Kingdom Communications Committee, 2014; Victorian Law Reform Inquiry Into Sexting, 2013). Little is currently known about the nature, scope, prevalence, impacts, and experiences among victims of these different but interconnected behaviors. Little is also known about the gender of perpetrators and victims and the intersections of other forms of discrimination and disadvantage on the grounds of race, age, socioeconomic status, and sexuality. Indeed, nearly all of the studies to date on digital victimization concern children and adolescents. Below the literature on each of the five dimensions is explored.

Online sexual harassment. Empirical studies demonstrate that online sexual harassment is a growing problem, especially among young adults in college or university settings (Lindsay & Krysik, 2012). Online sexual harassment, however, potentially captures a wide range of harassing behaviors, including cyberbullying, cyberstalking, gender-based hate speech, image-based sexual exploitation (i.e., ''revenge pornography''), and rape threats (these terms are discussed in the relevant sections below). The broader research literature on cyberstalking and online harassment does not always specify whether the harassment is ''sexual'' in nature. Different definitions are also employed making comparisons between studies and estimates of prevalence extremely difficult (see, e.g., Blumenfeld & Cooper, 2010; Finn, 2004; Hinduja & Patchin, 2008; Lindsay & Krysik, 2012).

Researchers often take a broader view of online harassment, inclusive of hate speech and sometimes cyberstalking. Barak (2005, p. 78), for example, lists three main forms of online sexual harassment, which include gender harassment (harassment on the basis of one's gender, including hate speech), unwanted sexual attention (sexually based comments and remarks), and sexual coercion (being coerced into an in-person or virtual sex act). As mentioned above, conceptual clarity and distinctions between these different behaviors can be usefully made with guidance from conventional (often legal) definitions. For example, sexual harassment is defined as ''unwanted or unwelcome sexual behavior, which makes a person feel offended, humiliated or intimidated'' (Australian Human Rights Commission, 2012). Offline stalking, on the other hand, may refer legally to repeated behaviors that cause the victim to feel apprehension or fear. Hate speech (or ''vilification'') is also treated separately under laws in many jurisdictions, where hate speech is defined as offensive and harmful speech.

Although there are inevitable overlaps between different dimensions, this article draws on the narrower definition of sexual harassment as provided in legal statutes as ''unwanted sexual attention online,'' defined by Barak (2005, p. 78) as ''uninvited behaviors that explicitly communicate sexual desires or intentions towards another individual.'' This may include either virtual or face-to-face contact in public forums or chat rooms or through private communications via mobile phone, e-mail, or Internet sites using either verbal comments or graphic images.[7]

To date, most empirical studies on online sexual harassment have focused on children and adolescents (see Bossler, Holt, & May, 2012; Ybarra, Espelage, & Mitchell, 2007). Some data exist, however, on the prevalence of online sexual harassment against adults. Finn (2004), for instance, examined online harassment more generally but included only 1 item on sexual harassment. Although his sexual harassment item only focused on the receipt of unwanted pornographic images, his study of college students at the University of New Hampshire ($n = 339$) found that more than half (58.7%) had received such images. In another study (again not specifically on sexual harassment), Goodson, McCormick, and Evans (2001) conducted a survey on Internet users' behaviors and attitudes when searching for sexually explicit material online, finding that 15.8% of their

sample of undergraduate students ($n = 506$) said that they had felt sexually harassed during chat room interactions, with more women reporting sexual harassment in chat rooms than men.

In another study, again more generally examining online victimization, and including only 1 sexual harassment item, Staude-Müller, Hansen, and Voss (2012) found that 68.3% of their German sample ($n = 9{,}000$) aged between 10 and 50 reported having experienced online sexual harassment, which the authors defined as included receiving pornographic material or being asked intimate questions. According to this study, females were far more likely to be exposed to online sexual harassment, although it is not clear what "being asked intimate questions" entails or how pornographic material was distributed or received.

In comparison to these broader studies of cyber harassment, Baumgartner, Valkenburg, and Peter (2010, p. 439) focused specifically on online sexual solicitation, which they define as "receiving unwanted requests to talk about sex or do something sexual." They found in their sample of Dutch adults ($n = 1{,}026$) that only 4.6% of men and 6.7% of women had been sexually solicited online in the past 6 months. This was compared to 5.6% of male adolescents and 19.1% of female adolescents who had been sexually solicited online in the past 6 months. Although the authors did not separate "receiving unwanted requests to talk about sex" from "doing something sexual", which are two different acts with potentially different impacts, the study does demonstrate a high rate of victimization among female adolescents. Their relatively overall low prevalence rate is similar to the results of a Pew Research Center (2014, p. 3) survey of adult Internet users, finding that 6% of respondents said they had personally experienced sexual harassment. The Pew Center survey, however, found that women were more likely than men to experience online sexual harassment (25% compared to 13%) and that young women aged between 18 and 24 experience online sexual harassment "at disproportionately high levels."

Finally, in Ballard and Welch's (in press) online survey of self-selected multiplayer online games (MMOGs; $n = 151$), 52% of participants frequently reported being cyber victimized and 23% being sexually harassed. While males and females reported similar rates of cyber victimization, male participants, according to this study reported higher rates of cyberbullying, and females reported significantly higher rates of sexual harassment than males during MMOG play. The study used a convenience sample of online, self-selected participants, and as such the findings are not generalizable but nonetheless provide an indication of the scope of the problem.

It is important to note that surveys that do not provide a definition of online sexual harassment to their respondents might yield overall conservative prevalence figures given that victims do not always label their experiences "sexual harassment". For example, the Pew Center study simply asked respondents whether they had experienced sexual harassment and did not provide a definition. This is indicated in studies on offline forms of sexual harassment where, according to one study, one in five (18%) people indicated they had not been sexually harassed but then went on to report having experienced behaviors that constituted sexual harassment according to the legal definition (Australian Human Rights Commission, 2012). Those surveys that specifically ask respondents about sexual harassment with a definition or examples provided, do not necessarily capture the range of sexually harassing behaviors seen with the rapid development of smart phone technology or social media use in more recent years.

Although it is not possible to report on prevalence of online sexual harassment based on these few existing studies on adult Internet users, these studies are relatively consistent in their findings that sexual harassment disproportionately affects women both in extent and impacts, particularly young women. For instance, in a study of undergraduate U.S. college students ($n = 342$), Lindsay, Booth, Messing, and Thaller (in press, p. 9) found that there were gender differences in terms of frequency of harassment, being harassed by a known person, and psychological impacts:

> Females reported more frequent incidences of harassment than males, with 34% reporting being harassed at least once by someone they knew, 17% having been harassed by someone that they did not know, 21% reporting being harassed by a significant other, and 31% reporting being harassed after they had asked the person to stop. Females also reported feeling fear as a result more often than males.

This is also consistent with empirical data on sexual harassment in the workplace. For example, the Australian Human Rights Commission (2012) telephone survey found that 1 in 5 women, compared to 1 in 20 men, reported experiencing sexual harassment in the workplace. The data are also relatively consistent with research on online sexual harassment against children and youth. For example, Bossler, Holt, and May (2012) found that 44% of female adolescents respondents had experienced online sexual harassment in the past 12 months compared to 26% of adolescent males. More research, however, is needed to understand prevalence, victimization, and perpetration of online sexual harassment against adults, particularly given the advances in technologies over the past 5 years.[8]

Gender- and sexuality-based harassment. According to Barak (2005, p. 78), gender harassment "involves unwelcome verbal and visual comments and remarks that insult individuals because of their gender ... [such as] posting pornographic pictures in public or in places where they deliberately insult, telling chauvinistic jokes, and making gender-related degrading remarks." Gender harassment can take place via chat rooms, forums, and through e-mail and social media sites. This article defines gender harassment more broadly to also include sexuality-based harassment which refers to harassment on the grounds of a person's sexuality or sexual orientation. Thus, gender and sexuality harassment refers to a course of conduct that causes harm and distress including (but not limited to) gender and sexuality-based hate speech,[9] rape threats, reputation harming lies, impersonation, false accusations of sexual

violence, and virtual rape.[10] Such behaviors may be perpetrated by individuals or mobs of individuals (Citron, 2014). Cyberstalking, on the other hand, refers to a course of conduct, involving any of the behaviors mentioned above (e.g., rape threats), perpetrated by a lone individual or a mob, that cause the victim to feel fear and apprehension, similar to the definition found in offline stalking definitions. Citron (2014, p. 3) acknowledges the distinction between the two, namely that cyber harassment causes emotional distress, whereas cyberstalking causes fear for one's safety or of bodily harm (discussed further below). Nonetheless, she discusses them interchangeably because, she notes, "they are accomplished by similar means and achieve similar ends." Although Citron's rationale makes sense, in this article gender- and sexuality-based harassment are treated as a separate dimension to cyberstalking, in line with other scholars who treat them as distinct in both online and offline contexts (e.g., Spitzberg & Cupach, 2014, p. 21).

Although there is some existing research on hostility toward online gamers more generally (see, e.g., Coyne, Chesney, Logan, & Madden, 2009; Gray, 2012), there is little empirical research, both qualitative and quantitative, on gender- and sexuality-based harassment in online environments. However, existing research does indicate that women may be subjected to more abuse online than men in chat rooms and online gaming environments (see, e.g., Ballard & Welch, in press). For example, researchers at the University of Maryland's Electrical Engineering and Computer Department carried out an experiment using fake male and female user names in the chat medium Internet Relay Chat (Meyer & Cukier, 2006). They found that users with female names received on average 100 sexually explicit or threatening messages per day, compared to users with male names who received on average 3.7 such messages. In a field experiment by Kuznekoff and Rose (2013), they likewise found in an observational study of networked violent video games with anonymous players, pre-recorded female voices received 3 times more negative comments than the male voice or no voice. In Fox and Tang's (2014) online survey ($n = 301$), they found that participants who reported social dominance orientation and conformity to certain types of masculine norms had higher scores on the Video Game Sexism Scale. However, the results are not representative due to the small numbers. In Ballard and Welch's (in press) online survey of self-selected MMOGs ($n = 151$), 48% of participants reported being called names with a sexual meaning. They found that males and heterosexuals perpetrated more cyberbullying against other gamers than do females or lesbian, gay, bisexual, or transgender people, and females experienced more victimization than males.

In addition, a few studies have examined misogynistic language in social media sites. For example, Bartlett, Norrie, Patel, Rumpel, and Wibberley (2014) collected English-language tweets from Twitter which in the first study included the word "rape" and the second study, misogynist language such as "slut" and "whore." In the first study, they found that an estimated 12% of tweets using the word rape were threatening. In the second study, they found that approximately 18% of tweets using the words slut or whore were misogynistic. Despite media and anecdotal reports regarding forms of simulated sexual violence ("virtual rape"), as well as graphic and aggressive written descriptions of rape ("rape threats") being directed largely at women in online environments, the authors could identify no prevalence studies of these specific forms of gender-based harassment.

Cyberstalking. Cyberstalking is commonly defined as an extension of offline forms of stalking using electronic means (see Reyns, Henson, & Fisher, 2012; Tokunaga & Aune, in press; see also Citron, 2014, p. 155). Like conventional stalking, cyberstalking typically involves behaviors that are unwanted, repetitive, intrusive, threatening, and harassing (Dreßing, Bailer, Anders, Wagner, & Gallas, 2014, p. 61). A number of empirical studies have investigated rates of cyberstalking, predominantly in the United States and among college student populations. Although the reports of online victimization vary widely, a study by Reyns, Henson, and Fisher (2012) reported that up to 41% of college students have being a victim of cyberstalking in the past. Some studies indicate that women were more likely than men to perpetrate cyberstalking (Alexy, Burgess, Baker, & Smoyak, 2005) and that men report more online victimization than females (Bennett, Guran, Ramos, & Margolin, 2011), while other studies found little differences between gender prevalence and impacts. For example, in one study, Reyns et al. (2012) found little gender differences; finding that 46.3% of females in their sample of college students ($n = 974$) reported cyberstalking victimization compared to 32.1% of males.

Yet, the empirical literature on cyberstalking is still emerging in comparison to the well-established field of research into the nature, extent, and impacts of stalking behaviors more generally. There is a dearth of literature, for example, focusing more specifically on online intimate partner stalking or monitoring (Darvell, Walsh, & White, 2011; Woodlock, in press) or online adult dating abuse (Borrajo, Gámez-Guadix, & Calvete, 2015). This is despite some studies identifying that the perpetration of online stalking overlaps considerably with conventional stalking and most often in intimate partner/ex-partner contexts (see, e.g., Cavezza & McEwan, 2014; Sheridan & Grant, 2007). A study by Burke, Wallen, Vail-Smith, and Knox (2011), for example, surveyed 804 undergraduate students regarding their experiences of technology-based partner monitoring and/or controlling behaviors (such as checking e-mail/call histories, making excessive texts/calls/e-mails, and using GPS or other devices to monitor a partner). They found that partner monitoring behaviors were common (up to 65% of females and up to 50% of males experiencing excessive phone calls) and that women were more likely than men to regard these as appropriate relational behaviors (Burke et al., 2011). This finding signals a potential shift in perceptions of stalking, also noted by Spitzberg and Cupach (2007), by which some intrusive and controlling online behaviors (e.g., excessive contact) are relatively indistinguishable from acceptable relational or dating practices or indeed only become harassing or cause fear when

accompanied by other abusive behaviors or when a relationship ends.

There is a lack of clarity over what constitutes "cyberstalking" as opposed to online sexual harassment or even "cyberbullying" (Dreßing et al., 2014; Shorey, Cornelius, & Strauss, 2015), as many empirical studies do not apply definitions requiring that the behaviors are repeated and cause the target to feel threatened or fearful for their safety (as discussed above). Some studies include instances of social media "stalking" such as monitoring a person's publicly available Facebook posts (Chaulk & Jones, 2011; Lyndon, Bonds-Raacke, & Cratty, 2011), impersonating a person's online identity (Spitzberg & Hoobler, 2002), or posting a person's photograph to a pornographic site (Finn, 2004), regardless of whether that behavior was part of a repeated pattern and/or caused fear. Nonetheless some scholars advocate that the term cyberstalking be reserved for its legal definition requiring repeated behaviors that cause fear and that alternative terms be used to name "less severe methods of online pursuit" that may or may not escalate to cyberstalking (DreBing et al., 2014, p. 65; see also Finn, 2004). For instance, Spitzberg and Hoobler (2002, p. 73) use the term "obsessive relational intrusion" (ORI) to refer to the "unwanted pursuit of intimacy through the repeated invasion of a person's sense of physical or symbolic privacy." They define "cyber-obsessional pursuit" (COP) describing such behaviors when conducted via digital or online means. Importantly, they note that while stalking/cyberstalking is often a form of ORI/COP, the concepts are distinct since stalking might instead be motivated by relational terrorism, control, or destruction. Furthermore, not all repeated relational intrusions cause a victim to feel fear, and sometimes these intrusions may be experienced as simply annoying or pestering (Spitzberg & Hoobler, 2002; see also Thompson & Morrison, 2013). In a survey of 235 U.S. college students, Spitzberg and Hoobler found that almost a third (31%) had experienced at least one form of COP.

Online obsessive relational pursuit aligns most usefully with the conceptualization of TFSV presented here. Rather than seeking to encompass a broad and indeed inconsistent definition of cyberstalking, we find it useful to focus on those cyberstalking behaviors that are characterized by sexual and/or relational pursuit. Such behaviors are not necessarily captured by other TFSV dimensions of sexual harassment, or gender/sexuality-based harassment, and in some cases may further meet the "course of conduct" and fear thresholds of criminal stalking.

Image-based sexual exploitation. There are two behaviors that come under this fourth dimension. The first is "sexting coercion," which Drouin and Tobin (2014, p. 412) define as "engaging in unwanted sexual behavior via sexually explicit text, pictures, or video." The second is the creation, distribution, or threat of distribution, of intimate or sexually explicit images of another person without their consent (also known as revenge pornography). Both have been the subject of very limited empirical research in the scholarly literature to date.

Nearly all of the existing empirical research concerns more broadly "sexting" practices among young people.[11] These various sexting studies yield different findings on prevalence, depending on the participant sample, sampling techniques, instruments, as well as the different definitions of sexting used in each study. As such, exact prevalence rates of sexting among young people are difficult to establish (Klettke, Hallford, & Mellor, 2014; Lounsbury, Mitchell, & Finkelhor, 2011). Despite this, studies tend to agree that sexting (receiving and/or sending sexually explicit text or images) is relatively common among young people (see, e.g., Crofts, Lee, McGovern, & Milivojevic, 2015; Mitchell, Finkelhor, Jones, & Wolak, 2012; Patrick, Heywood, Pitts, & Mitchell, in press). For example, in the first Australian study of sexting among high school students (based on the broader *Fifth National Survey of Australian Secondary Students and Sexual Health* survey [n =2,114]), Patrick, Heywood, Pitts, and Mitchell (in press) found that sexting overall was common but that prevalence rates varied depending on the type of activity. In particular, they found that 1 in 10 students had sent "a sexually explicit nude or nearly nude photo or video of someone else." In another recent Australian sexting survey (n = 1,200), Crofts, Lee, McGovern, and Milivojevic (2015) likewise found that sexting was common among young people but that only 6% of respondents had sent an image to another person without consent. However, they found that 20% had shown a "sext" to another person without consent but had not actually sent the image to anyone else.

Fewer studies have explored sexting behaviors among the *adult* population. Gámez-Guadix et al. (2015) found that approximately 66% of their sample of self-selected Spanish adults (aged 18–60; n = 873) reported having exchanged sexual content online at least once in the past. They found no differences between men and women in this practice but did find that sexting was more common among young people and nonheterosexuals. Gordon-Messer, Bauermeister, Grodzinski, and Zimmerman (2012) also found a high number (43%) of 18- to 24-year-olds (n = 3,447) have engaged in some type of sexting (receiving and/or sending), as did Reyns et al. (2013) who found in their study of college students (n = 974) that over 38% said they had either sent or received a sext message. These figures are in line with a U.S. study by Drouin, Ross, and Tobin (2015) who conducted a survey based on a convenience sample undergraduate students (n = 480). They found that one in five had been coerced into sending or sharing an intimate image. They found that while more women than men engaged in unwanted sexting, "sexting coercion victimization" was common among both men and women, and that these individuals were more likely to experience traditional forms of intimate partner violence (see also Drouin & Tobin, 2014). Englander (2015) conducted a similar study on sexting using a convenience sample of 18- and 19-year-old university students (n = 421). She found that 70% had experienced some degree of pressure or coercion in sexting, and that all respondents who felt "always pressured or coerced" were female. This led her to conclude that "males are much more likely to feel that they want to sext,

while females are more likely to feel pressured and coerced" (Englander, 2015, p. 19).[12]

Among these various sexting studies, the focus has been predominantly on college students and on the taking and sharing of the image, rather than the nonconsensual *distribution* of the image among adults, also known as revenge pornography.[13] In other words, although this body of research has demonstrated the prevalence of sexting and has also explored gender differences in terms of nature, scope, experiences, and impacts, little research has investigated the prevalence, scope, nature, experiences, and impacts of the second behavior falling under this fourth dimension that of image-based sexual exploitation. A small number of surveys have been conducted by scholars or organizations either on technology in intimate relationships or online victimization more generally. In relation to the latter, in Gámez-Guadix et al.'s (2015, p. 146) survey (discussed above), they defined online sexual victimization (OSV) as:

> some type of pressure through the Internet or mobile phones to obtain unwanted cooperation or sexual contact (e.g., share sexual information, send images with sexual content, or do something against the victim's wishes) and/or the distribution of dissemination by the perpetrator of sexual images or information of the victim against his/her will.

They found that OSV was more common among women, young, and middle-aged adults (e.g., 25–35 years) as well as nonheterosexuals. Furthermore, reporting of victimization increased significantly among this group according to the study, although they found that the dissemination of sexual images without consent was relatively low among respondents (3.7%). By way of contrast, a broader study on "technology-based coercion" found a slightly higher percentage (16%) had shared a sexually suggestive message or picture of someone without their consent (Thompson & Morrison, 2013).

In relation to broader surveys on technology and intimate relationships, the McAfee (2013) *Love, Relationships, and Technology Survey* of U.S. adults between the age of 18 and 54 ($n = 1{,}182$) found that 1 in 10 ex-partners had threatened to expose intimate images of their ex-partners online, with 60% having carried out the threat. This survey also found that men (12%) were more likely than women (8%) to have their photos distributed online, and such threats are more likely to be carried out against men (63%) than women (50%). In the second McAfee (2014) survey, 54% of respondents said they had sent or received intimate video, photos, e-mails, or text messages. Similarly, the National Campaign to Prevent Teen and Unplanned Pregnancy and Cosmogirl.com study (2008) in their study of young adults aged between 20 and 26 years ($n = 627$) found that 24% of women and 40% of men have had a nude or semi-nude image shared with them intended for someone else. Although both studies suggest men are more likely to have their nude images shared or distributed without their consent, the context in which such images are being shared, by whom, what, and where, has not been investigated. Overall, these findings on image-based sexual exploitation are relatively consistent with the sexting among young people surveys described above (Crofts et al., 2015 [6%]; Patrick et al., in press [10%]).

In relation to specific revenge porn studies, the only survey to date is the Cyber Civil Rights Initiative's (2014) *Effects of Revenge Porn Survey*. The survey was hosted on the *End Revenge Porn* website and respondents self-selected into the study. The survey had a total of 864 respondents, 90% of whom were women. The survey found that 80% of respondents had taken the image themselves and 93% said they experienced significant emotional distress due to their images being distributed without their consent. The results of the survey indicate that victims in this sample predominantly identified as female and that the impacts of these behaviors are gendered because of the sexual double standards that exist surrounding female sexuality. As respondents self-selected into the survey the results are not representative. The survey gives little indication of prevalence, and does not provide sufficient indications of gender differences in either victimization or perpetration.[14]

To date, there has been limited empirical research particularly on the phenomenon of revenge pornography. Although some broader studies included items relating to the distribution or sharing of intimate or sexually explicit images of another person without their consent, these results are limited because they did not investigate the impact or severity of these acts. In other words, existing studies have not explored the *context* surrounding the nonconsensual distribution of intimate images. Moreover, scholarly studies that included items relating either to sexting coercion or to revenge pornography rely on convenience samples of undergraduate students and are not representative of the general population. More research is thus needed to understand the prevalence, nature, and impacts of image-based sexual exploitation.

Technology-facilitated unwanted sexual experiences. Unwanted sexual experiences facilitated through digital technologies can be classified according to three behaviors. The first is sexual coercion or "sextortion," a form of coercion where a person procures "sexual cooperation by putting some kind of pressure on a victim" (Barak, 2005, p. 80). This may be in the form of blackmail, bribery, or threats such as demanding that the victim engage in either online or in-person sex acts or demanding the release of intimate images or information. The second form of unwanted experience is the use of digital technologies to perpetrate a contact sexual offense, for example, the use of a dating site or dating app to organize meeting up with a victim in person before then sexually assaulting them. The third concerns the use of technologies to solicit and arrange a third party to sexually assault a person, whether through deception, false identity, or other means.

Empirical studies thus far on online predatory sexual behaviors have been almost exclusively focused on children and adolescents, owing to community concerns about children's vulnerability and safety, and perhaps due to the erroneous assumption that only young people are victims of online predatory behavior (see, e.g., Beech, Elliott, Birgden, & Findlater, 2008; Craven, Brown, & Gilchrist, 2006). Only three studies could be identified that examined the prevalence of unwanted

online sexual experiences among adults. Baumgartner, Valkenburg, and Peter (2010), in a survey of 1,026 Dutch adults (aged 18–88), found that 4.6% of males and 6.7% of females had been asked to do something sexual when they did not want to. A further study by Thompson and Morrison (2013) found that 21.9% of male college students surveyed had engaged in at least one of five distinct technology-based sexually coercive behaviors. A substantially smaller proportion reported trying to persuade someone to talk about sex online when they did not want to (4.6%) and asking someone to do something sexual online when they did not want to (2.8%). Finally, Gámez-Guadix and colleagues (2015) found that 38% of 873 Spanish adults surveyed had experienced at least 1 of 10 online sexual victimization behaviors (see Table 1 for items surveyed). These studies did not, however, examine the role of technology in successfully facilitating coerced online sex (such as via webcam) or contact sexual offenses. Yet, the use of dating websites or apps and similar forums to facilitate sexual assault is an issue reportedly being encountered by both police (Powell & Henry, in press) and sexual assault services (Henry & Powell, 2014). While there are a plethora of studies about offenders' online grooming of children and young people for sexual abuse, this review identified no studies that sought to gauge the prevalence of related sexual predatory behaviors in the experiences of adult victims.

Discussion and Avenues for Future Research

This literature review sought to examine the empirical, quantitative literature on a range of TFSV behaviors experienced by adults. Research regarding TFSV among adults is still extremely new, and there are significant limitations in both the scope and number of empirical studies conducted to date. First, the instruments used in these studies vary widely, meaning that their findings are not comparable. The lack of standardized, uniform definitions was particularly problematic with a wide variety of behaviors being associated with particular categories, particularly online sexual harassment. Many of the studies were more broadly focusing on either technology and intimate relationships or technology and cyber victimization. As such, most studies only included a small number of items relating to the TFSV behaviors identified in this article. However, these studies did not examine the context underlying these acts. For instance, studies that included items on the nonconsensual distribution of intimate images did not examine the *impacts* of such behaviors.

Second, the quality of findings in the studies included in this review also varied. Some studies did not detail their methodologies rigorously. The generalizability of findings to entire communities or populations was not often discussed, with most studies not examining their participants' characteristics against target populations. Some studies made claims that there were gender differences in behaviors experienced, without giving frequency data regarding how often the behaviors were experienced. Many of the studies too overrepresented either male or female students in their samples.

Third, the mean age of all studies' samples was quite young. Most studies used an undergraduate college (university) student sample. This has significant implications for understanding TFSV, and there is as such limited knowledge of how middle to older aged groups experience such behaviors. Similarly, little is known of prevalence rates of TFSV in different racial, ethnic, or sexuality groups. Finn's (2004) study examined prevalence in different sexuality groups, finding that approximately one third who identified as gay, lesbian, bisexual, and transgender (GLBT) reported getting a harassing e-mail from someone they did not know, or barely knew, compared to only 14.6% of heterosexual students. This is not a significant finding, given only 16 students identified as GLBT, yet it is important that further investigation be undertaken in relation to TFSV against sexual minorities.

Anecdotal accounts, qualitative research, legal analysis, government inquiries, and media reports suggest that the range of sexually based harms that are identified in this article warrant further investigation. Indeed, part of the impetus for this review is the significant community and government concern regarding what appear to be rapidly increasing instances of sexual violence and harassment both online and via mobile phone or other communications devices. Following several high-profile cases in the United States, United Kingdom, Canada, Australia, New Zealand, and elsewhere, it has become evident that in many jurisdictions there are gaps in legislative responses to newly emerging harms, particularly where the use and distribution of sexual or intimate images is part of a pattern of online abuse or harassment. The authors' own qualitative research with key legal professionals and women's counsellor-advocates has identified cause for concern over the uses of online harassment and blackmail (dubbed "sexploitation" by some stakeholders), whereby sexual images in particular have been used to coerce or harass women in domestic and sexual violence situations (Henry & Powell, 2015a; see also Bluett-Boyd, Fileborn, Quadara, & Moore, 2013). Thus more than general bullying or harassment behaviors, what is emerging is the troubling extension of gender-based violence in online spaces.

This phenomenon is troubling, not because these behaviors necessarily constitute "new" harms, but rather because the reach, nature, and duration of these harms, as well as the current gaps in legal redress available to victims, makes them both insidious and difficult to respond to. Yet, it is clear that the community is raising concerns about these behaviors, and governments are framing legislative responses, even in the absence of empirical research. Further quantitative research into the prevalence and gender-based nature of TFSV would therefore usefully inform the development of legislative and regulatory responses, as well as community education focused on awareness raising and prevention.

Future research needs to focus on identifying the extent and nature of a range of TFSV behaviors, including prevalence and impacts of victimization and perpetration, the gender dynamics of these behaviors, individual actions taken to respond, and the outcomes of those actions. A nuanced approach to examining TFSV is most appropriate, and a mixed methods approach is

important to capture an array of behaviors, including those within intimate partner relationships, those that use various specific technologies (such as dating apps and sites), behaviors specific to certain environments (e.g., workplaces), and behaviors documented within the popular media. Future research also needs to investigate the relationship between violence and attitudes to violence, gender, and sexuality, and focus on the intersections between gender, sexuality, race, age, and other factors. Overall, prevalence data regarding adult experiences of TFSV are crucial to further informing both reforms to law and practice, and future research.

Conclusion

To date, the vast majority of empirical studies on different dimensions of online abuse and harassment focus on children and adolescents. In contrast, there are very few quantitative studies on adults and virtually no qualitative studies on the phenomenon of TFSV. Of the studies discussed here, few studies provide reliable data on prevalence, perpetration, and victimization. Most of the studies to date use convenience samples of college students. Overall, there is a clear lack of research into diverse forms of TFSV against adults, with the exception of some forms of online sexual harassment and cyberstalking. However, what these existing studies do indicate is that TFSV against adults is a growing problem with serious and wide-ranging impacts. Furthermore, although prevalence rates are difficult to establish due to different participant samples, sampling techniques, instruments, and definitions used, this body of research demonstrates that both women and men may be victims and perpetrators of online sexual violence and harassment; however, women, as well as lesbian, gay, bisexual, trans, intersex persons are more likely to be targeted for specific forms of digital abuse. This is perhaps not unsurprising, given what is already known about conventional forms of sexual harassment, sexual violence, and discrimination. Online forms of sexual violence and harassment likewise stem from the socially constructed beliefs and attitudes about gender and sexuality (including victim blaming and victim shame and stigma) as well as perpetrator motivations for power and control. Digital technologies then serve as a tool to perpetrate more conventional forms of gender- and sexuality-based violence and harassment, with different effects and impacts due to anonymity, the failure of regulation, as well as the sheer speed and vast reach of the Internet. Further empirical research is needed in order to shed light on the nature, scope, prevalence, and impacts of such behaviors.

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Notes

1. Sexual violence is an all-encompassing term that includes "any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic, or otherwise directed, against a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting, including but not limited to home and work" (World Health Organization [WHO], 2011). This definition captures physical acts, such as rape (generally considered to be a penetrative offense) or sexual assault (a physical attack not necessarily involving penetration) as well as noncontact offenses or behaviors, such as sexual harassment and sexual coercion. The term "sexual violence" and its widespread usage among academics and professionals indicates that violence is not simply a physical act involving physical injury. For instance, a rape can result in no direct physical injury to a victim's body but can have long-lasting psychological and physical impacts. Likewise, "domestic violence" is usually defined to incorporate finanical, emotional, and physical abuse. Throughout the article, the authors use the term sexual violence to encompass a diverse range of acts involving technology, drawing on the WHO definition. The authors discuss a diversity of acts increasingly identified in the research literature and provide analysis of the benefits and limitations of these definitions in the relevant sections.
2. Please note that the authors intentionally use the term "harms" throughout the article because such a term captures acts that may not be deemed a criminal offense or a civil wrong under law. While this is a broad and unspecified term, it has the benefit of capturing impacts on victims where some kind of physical, psychological, social, or financial harm has resulted.
3. The authors define an "adult" as a person over the age of 18 years, although they recognize that in some cultures, a child may be classified or defined according to a different chronological age, life experience, or emotional maturity.
4. The dimensions outlined in this article represent a refinement from the authors' previous work, where the dimensions were organized differently (see Henry & Powell, 2014, 2015a, 2015b). The dimensions are overlapping; for instance, the nonconsensual distribution of intimate images could be both a form of cyberstalking and online sexual harassment. The difficulty in constructing categories in large part stems from the complex entanglement between conventional and online behaviors, as well as the different terminology used in a range of studies examining digital abuse more generally.
5. Gender-based violence has been defined to mean "violence that is directed against a woman because she is a woman or that affects women disproportionately" (Art 3 d Council of Europe Convention). However, this definition problematically collapses "gender" with "women." In this article, the terms "sexual violence

and harassment'' are preferred, although recognizing that gender-based violence can be usefully thought of in relation to prevalence (e.g., women, men, or trans women/men being disproportionately targeted for specific forms of harassment and violence), nature (e.g., the victim's ''sexed'' body is a source of objectification, currency, ridicule, and insult), and impacts (e.g., victims experience more adverse impacts because of their gender). Gender, however, is not always the most important variable and an intersectional approach is preferable to understanding violence both offline and online. For instance, the sexual abuse of Iraqi prisoners at Abu Ghraib prison, or the targeting of men and young boys for the 1995 Srebrenica massacre during the conflict in the former Yugoslavia, are both examples of gender-based and racial/ethnic-based violence.

6. A small number of scholars have examined online digital abuse in relation to sexual violence and harassment from a conceptual/theoretical and/or legal framework of analysis (see, e.g., Henry & Powell, 2015b). Currently, there are very few empirical studies though on TFSV using qualitative methodologies, such as interviews with victim and stakeholders, focus group discussion, content analysis, or case law analysis (see Bluett-Boyd et al., 2013; Draucker & Marstolf, 2010; Henry & Powell, 2015a).
7. Note that unwanted sex-related e-mails (e.g., advertisements for Viagra) are not discussed in this article because any harms associated with such e-mails are not on a par with other harms discussed in this article.
8. In terms of online sexual harassment perpetration, Cooper, Delmonico, Griffin-Shelley, and Mathy (2004, p. 131) in their study on online sexual activity (''the use of the internet for any activity (text, audio, graphics) that involves sexuality''), found that approximately 14% of participants (n = 7,000) reported that someone had complained to them about their online sexual behavior. This study was not specifically on sexual harassment but rather focused on online sexual compulsivity, which the authors define as attempts to find sexual partners on the Internet as well as cybersex. It is not included in the final table (Table 1) because it is not clear whether respondents were referring to behaviors amounting to sexual harassment.
9. Gender or sexuality-based hate speech (or vilification) can be defined as offensive speech or conduct which can incite hatred or contempt on the basis of either sexuality or gender, and is done (out of ill will) because of the gender or sexuality of a person or all people of that group and is likely to offend, insult, humiliate, or intimidate an individual or a group of people. While in some legal jurisdictions, sexuality-based hate speech may be prohibited by law because it incites violence or discrimination against the group, in most common law jurisdictions, gender-based hate speech is not unlawful or criminal under law, unless it constitutes a form of criminal harassment or stalking (see Weston-Scheuber, 2012).
10. ''Virtual rape'' is used to describe a situation when a person's avatar (or digital representation of themselves) is subjected to simulated sexual violence by other avatars, most recently in three-dimensional virtual worlds.
11. The term ''sexting'' includes the sending of intimate or sexually explicit text, still images and videos from mobile to mobile or from mobile to Internet sites. ''Nonconsensual sexting'' is used interchangeably with the term ''revenge pornography''.
12. Reyns et al. (2013, p. 14) likewise explored the relationship between sexting and cyber victimization, although in their words did not ''disentangle the effects of sending and receiving sext messages separately.''
13. In addition to these various quantitative studies on adult forms of sexting, there is complementary qualitative research that has explored the perceptions and experiences of sexting among young people (see Albury, Crawford, Byron, & Mathews, 2013; Burkett, 2015; Crofts et al., 2015; Ringrose, Gill, Livingstone, & Harvey, 2012; Walker, Sanci, & Temple–Smith, 2013).
14. Although not reliable indications of prevalence or gender differences in victimization and perpetration, figures obtained by police and/or revenge porn helplines internationally provide an indicative picture. Since the establishment of the UK Revenge Porn Helpline, the August 2015 figures revealed that females constituted 75% of all people seeking advice and support. Furthermore, of the 25% of calls to the helpline from men, 40% identified as being ''homosexual'' (Gov.uk, 2015). In Japan, police records indicated that 110 cases of revenge porn were reported in December 2014 alone following the introduction of the new laws, with the majority of victims being female in their late 20s or older (Wright, 2015).

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