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The Relationship between Sextortion during COVID-19 and Pre-pandemic Intimate Partner Violence: A Large Study of Victimization among Diverse U.S Men and Women

Asia A. Eaton[a], Divya Ramjee[b], and Jessica F. Saunders[c]

[a]Department of Psychology, Florida International University, Miami, Florida, USA; [b]Department of Justice, Law & Criminology, American University, Washington, District of Columbia, USA; [c]Hiatt School of Psychology, Clark University, Worcester, Massachusetts, USA

ABSTRACT

In a large and diverse sample of U. S. adults, we assessed participants' experience with pre-COVID in-person intimate partner violence (IPV) victimization and with sextortion victimization during COVID to better understand the relationship between these phenomena. Experiencing sexual IPV pre-COVID increased the likelihood that men and women would experience sextortion during COVID. Men, Black and Native women, LGBTQ individuals, and emerging adults more often experienced sextortion during COVID than other groups. Implications for research on technology-facilitated sexual violence and practice with survivors are explored.

KEYWORDS

Sextortion; intimate partner violence; health disparities; COVID-19

While the widespread use of information and communication technology has brought about many societal benefits, such changes have also enabled online violence in various forms (Clevenger et al., 2018; Henry, McGlynn et al., 2020; Jane, 2020). For example, growing proportions of people in the United States are reporting experiencing online harassment, including stalking, sexual harassment, and threats (Vogels, 2021). The COVID-19 pandemic may have exacerbated this public health problem, as it necessitated a massive shift to web-based information and communication technologies (ICTs), enabling millions of Americans to work, attend classes, perform errands, and sustain social and civic connections while maintaining physical distance from others.

Indeed, since the start of the pandemic, nonprofit organizations, government institutions, and legal professionals in the U.S. have reported a substantial increase in technology-facilitated sexual violence (Boniello, 2020; CCRI, personal communication, June 2, 2020; FBI, 2020, 2021). Technology-facilitated sexual violence (TSFV) is defined as sexual abuse via electronic or digital means, and can include nonconsensual pornography (also known as "revenge porn"), deepfakes, cyber harassment, cyber stalking, cyber dating violence, and sexual extortion or "sextortion" (Henry & Powell, 2018). In all these forms of abuse,

CONTACT Asia A. Eaton aeaton@fiu.edu Department of Psychology, Florida International University, 11200 SW 8th St., DM 208, Miami, FL 33199, USA

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technology is used to violate a survivor's sexual autonomy, whether by producing, procuring, and/or distributing their intimate images without consent, and/or using intimate images to threaten and extort.

Technology-facilitated sexual violence

Empirical research on TFSV is sparse, though growing, and more work is needed regarding the manner in which technology is used to facilitate TFSV and who is most at risk of victimization and perpetration (Fisico & Harkins, 2021). According to Henry and Powell's (2018) review of existing empirical research, there are five types of TFSV studies on adults: 1) online sexual harassment, 2) gender- and sexuality-based harassment, 3) cyber-obsessive pursuit (cyberstalking), 4) image-based sexual exploitation, and 5) the use of a service to perpetrate an assault or coerce an unwanted sexual experience. While these are distinct dimensions, they can overlap and interact with each other depending on the type of offense being investigated.

Certain forms of TFSV have received increased scholarly attention over the last decade. For example, by 2020, sufficient work on the psychology of nonconsensual porn had been conducted to allow for a review of 32 empirical articles (Eaton & McGlynn, 2020). Nonconsensual porn (NCP) refers to the distribution of intimate images of individuals without their consent, including threats to share without consent (Citron & Franks, 2014). In this review, the authors found that NCP has been studied using a variety of psychological frameworks, including the Power and Control Wheel (Eaton et al., 2020), gender roles and sexual scripts (Hall & Hearn, 2019; Henry & Flynn, 2019; Van Oosten et al., 2020), social norms theory (Ehman & Gross, 2019), and individual difference theories (Pina et al., 2017).

However, other forms of technology-facilitated sexual violence are less researched, such as sextortion. Sextortion also appears to have increased during the pandemic according to complaints to the FBI Internet Crime Complaint Center (FBI, 2020, 2021). In this paper, we test the relationship between sextortion during the COVID-19 pandemic and pre-pandemic intimate partner violence (IPV) among diverse men and women in the U.S.

Sextortion

Sextortion, a combination of "sexual" and "extortion," is the act of threatening to expose or distribute sexually explicit materials unless a victim complies with certain demands (Acar, 2016; Clevenger et al., 2018; Powell et al., 2019; Wolak & Finkelhor, 2016). In this regard, it falls within the umbrella of NCP, but does not necessarily include the actual distribution of material (Citron & Franks, 2014; O'Malley & Holt, 2022). Sextortion is an evolving term, and may also be referred to as "threatening with NCP" or "online sexual coercion and extortion" (e.g., Equality Now, 2021).

As the majority of sextortion victims in the U.S. are under the age of 18 (Brookings, 2016; O'Malley & Holt, 2022), most academic research on sextortion has been done on minors (e.g., Gámez-Guadix & Incera, 2021; Patchin & Hinduja, 2020; Wolak et al., 2018). However, sextortion has been increasing among adults (Wittes et al., 2016), especially in the last few years (FBI, 2020, 2021). Based on the little work that exists on adult victims of sextortion, we know that sextortion can occur when perpetrators hack into victim's

electronic devices, accessing stored images and webcams (for a review including young adults, see, Paat & Markham, 2020). Sextortion may also be perpetrated as the result of sexual acts (consensual or forced) that are nonconsensually-recorded. Consensually-shared sexual images may also be used for sextortion by former and current intimate partners. Finally, perpetrators may target victims in scams, such as online dating scams where they are lured to a dating profile, groomed by a perpetrator, and then sexually extorted (Whitty, 2015).

In terms of perpetrator motivations for sextortion, sexual aggression and toxic disinhibition (expressing negative behaviors in an uninhibited manner online) were found to be positive predictors of self-reported likelihood of perpetrating TFSV, including image-based sexual exploitation (Zhong et al., 2020). Work by Wolak and Finkelhor (2016) found that perpetrators primarily wanted additional sexual images or videos, and less frequently wanted sexual favors or sought financial gain. More recent work by O'Malley and Holt (2022) analyzing 152 media articles and court documents specifically uncovered four different themes of sextortion perpetrators: minor-focused offenders, cybercrime offenders, intimate partner offenders, and transnational offenders. Thus, sextortion can be perpetrated by a variety of offenders, including intimate partners, friends, and strangers, for a variety of reasons.

Sextortion and intimate partner violence

Here, we examine the relationship between in-person IPV victimization and later experiences with sextortion during COVID-19. There are a number of reasons in-person IPV victimization before the pandemic should positively predict sextortion victimization during the pandemic. First, in-person IPV and sextortion may be related tactics committed by the same abusive partner. Indeed, research with college undergraduates by Ross et al. (2019) found overlap between sexual coercion and sexting coercion victimization in intimate relationships. Research also finds that abusive partners sometimes use intimate images to control their victims (Bates, 2017; Eaton et al., 2020). Based on a content analysis of 366 U.S. news articles, Eaton et al. (2020) established NCP as a form of IPV that can be perpetrated using intimidation, economic control, or coercion and threats (i.e., sextortion).

Next, even among those who changed intimate partners from before-to-during the pandemic, there is reason to expect a positive correlation between in-person IPV from a pre-pandemic partner and sextortion from a new partner during the pandemic. Specifically, research suggests that individuals in abusive relationships tend to leave those relationships for other relationships that also contain violence and aggression (Carbone-Lopez et al., 2012). For example, young women who experience dating violence in adolescence are more likely to experience dating violence in college (Smith et al., 2003). Thus, those experiencing abuse from one partner in the form of in-person IPV should be more likely to experience abuse from a later partner in the form of sextortion.

Finally, those who were victims of sextortion from someone other than an intimate partner may also share the risk factor of previous in-person IPV. Adults who have been victims of one form of violence have also been found to be victims of other types of violence- a phenomenon called polyvictimization (Hamby & Grych, 2013). For example, nationally-representative data from the National Intimate Partner and Sexual Violence Survey (NISVS) pilot study found that that women who had experienced violence by

intimate partners were typically more likely to also experience violence by non-intimate partners (Krebs et al., 2011). Experiences of polyvictimization in the form of both online and offline violence is also common (DeKeseredy et al., 2019). DeKeseredy et al. (2019) found that women who received sexts and other unwanted digital sexual messages and images were 3.4 times more likely to also be sexually assaulted offline than college students who never received such digital sexual messages. Indeed, polyvictimization may be especially likely when both forms of violence are sexual in nature (Gidycz et al., 1995; Sabina & Straus, 2008).

Therefore, our first hypothesis is that in-person IPV victimization before the pandemic should positively predict sextortion victimization during the pandemic for both women and men adults (H1). While some recent research has found links between cyber victimization and in-person experiences of psychological, physical, and sexual IPV among adults, that research has come from convenience samples, samples of college students, or samples of females only (e.g., DeKeseredy et al., 2019, 2018; Marganski & Melander, 2018; Reed et al., 2016) prohibiting generalization as well as limiting understandings of victimization risk across dimensions of social identity.

Sextortion and identity

Based on a person's social location, they may be more or less at-risk for TFSV such as sextortion. First, research finds that women are victimized more often by sexual crimes (e.g., rape and assault) than men in the U.S. (Statista, 2021), including TFSV (for a review, see, Henry, Flynn et al., 2020; for exceptions, see, Patel & Roesch, 2020; Powell & Henry, 2019). Sociological and feminist thinking on technology and gender has proposed that TFSV lies on a continuum of violence (McGlynn et al., 2017), as a result of old and new gender roles and scripts (Henry & Powell, 2015; Ruvalcaba & Eaton, 2020). Though there have been limited studies on the role of gender in sextortion victimization (Hinduja & Patchin, 2018; Powell & Henry, 2019), sextortion may also be used disproportionately against women because of the gendered nature of sexual violence and TFSV, driven by gender roles and sexual double standards. Thus, our second hypothesis is that women will more often report being victims of sextortion during the pandemic than men (H2).

Given the higher prevalence of TFSV among young adults (Paat & Markham, 2020; Ruvalcaba & Eaton, 2020), they may also be at greater risk for sextortion than adults of other ages. For example, work by Ruvalcaba and Eaton (2020) found that emerging adults in the U.S. (age 18–29; Arnett, 2014) had more often been victimized by NCP than adults in other developmental periods. This may be the product of their greater sexual and relationship experimentation compared to older adults (Maheux & Choukas-Bradley, 2021), as well as the high rate at which they use technology (Pew Research Center, 2021). Therefore, we also hypothesized that age would be negatively associated with TSFA victimization among adults, with emerging adults experiencing the highest levels of sextortion during the pandemic (H3).

Due to the social, economic, and health consequences of structural racism in the U.S., adults' risk for TFSV may also vary across racial/ethnic groups. First, Black and Native people in the U.S. have been found to be more at-risk for sexual violence, generally, than their White, LatinX, and Asian counterparts (Black et al., 2011). For example,

African American college women are more likely to report experiencing sexual assault than their White counterparts (Abbey et al., 1996), and Native Americans are twice as likely to experience a rape or sexual assault compared to those from other racial groups (Perry, 2004).

Black and Native individuals are also typically more likely than other groups to experience sexual and reproductive coercion in relationships (Grace & Anderson, 2018). In nationally-representative research by Basile et al. (2021), Black women and men had significantly higher lifetime prevalence of reproductive coercion in intimate relationships than other groups (Basile et al., 2021). Native women and men, meanwhile, have been found to have higher rates of lifetime sexual coercion than their non-Hispanic White counterparts (Caponera, 2018). Rates of adult sextortion across racial/ethnic groups, however, have not been directly examined to the authors' knowledge, perhaps as a result of racial/ethnic homogeneity in samples of sextortion victims (e.g., Wolak et al., 2018). In the current study, we hypothesize that Black and Native individuals will be more likely to report sextortion during the pandemic than other racial/ethnic groups (H4).

Finally, we expect that members of LGBTQ community will more often report having been victims of sextortion during the pandemic than heterosexuals (H5). LGBTQ individuals have been found to more often be victims of sexual violence and more likely to experience polyvictimization than heterosexuals (Daigle & Hawk, 2021; Schwab-Reese et al., 2021). Bisexual individuals have been shown to be especially at risk for rape and sexual violence committed by any perpetrator, and also of rape, physical violence, and/or stalking by intimate partner (Schwab-Reese et al., 2021; Walters et al., 2013). Research on adolescents has found that bisexual, homosexual, pansexual, asexual, and queer adolescents have more often been victims of online sextortion than heterosexual adolescents (Gámez-Guadix & Incera, 2021). However, this study will be the first to the authors' knowledge examining sextortion rates among LGBTQ adults in the U.S.

Methods

Qualtrics panels were used to apply proportional quota sampling (Trochim et al., 2015) to collect online survey data from diverse men and women adults across the United States. Quotas were established for age group (18–24, 25–34, 35–44, 45–54, 55–64, and 65+), region of the U.S. (South East, North East, Mid-West, West, and South West), gender (woman/transwoman, man/transman), race (White or European Non-Hispanic, Black/Afro-Caribbean/African, Latino/a or Hispanic, Asian, and Native American or Alaskan Native (Lavrakas, 2008), and sexual identity (LGBTQ, heterosexual). Additionally, we oversampled for racial and ethnic minorities, to give adequate power to statistical analyses comparing racial/ethnic groups. The sampling approach was not intended to produce a perfectly representative sample for the purpose of prevalence estimates, but to allow for adequately-powered examinations of associations between variables of interest, with robust comparative analyses across relevant population subgroups.

Data were collected in January–March 2021, marking approximately one year since the start of the pandemic in March 2020. Data collection included 3,150 adult U.S. participants. This larger sample was restricted to individuals who reported having a partner prior to COVID, resulting in a final data set of 2,006 participants (52.4% female). Fifty-four and a half percent of participants identified as "White or European (Non-Hispanic)," 10% as

Table 1. Sample demographics.

Variable	Grouping	%	*n*
Age			
	18–29	17.6	354
	30–40	25.1	503
	41–65	44.2	886
	65+	13.1	263
Education			
	Some High School	2.2	44
	High School/ GED	30	599
	Associate's Degree	16.8	335
	Bachelor's Degree	29.3	586
	Master's Degree	16.5	329
	Doctorate	2.4	48
	Professional Degree	2.9	58
Employment			
	Not Employed	36.2	725
	Employed Part-time	15.2	304
	Employed Full-time	48.7	975

"Black, Afro-Caribbean, or African," 14.9% as "Latino/a or Hispanic," 8.9% as "Asian," 9.4% as "Native American or Alaska Native," and 2.3% as "Other." Eighty eight percent identified as Heterosexual, 2.4% identified as gay, 1.4% identified as lesbian, 6.1% identified as bisexual, and 1.6% identified as "other." Twenty seven percent of participants indicated living in the South East U.S., 22% in the North East, 22% in the Mid-West, 17% in the West, and 12% in the South West. See Table 1 for additional demographic data.

Measures

Participants were asked to complete an online survey including measures assessing intimate partner violence victimization before the pandemic, sextortion victimization during the pandemic, and a number of demographic items. The survey also included additional measures not relevant to the current study, such as experience with other forms of cyber abuse, technology use, gender role attitudes, well-being, social support, and alcohol use.

In-person IPV victimization pre-COVID was examined using the psychological aggression, physical assault, and sexual coercion victimization subscales from the Revised Conflict Tactics Scale (CTS-2), which is considered reliable and valid (Archer, 1999; Straus et al., 1996). To assess these forms of IPV pre-COVID, participants were first asked "did you have a romantic partner before COVID-19 (e.g., boyfriend/girlfriend, spouse)?" Participants who answered "yes" to this question were then asked to complete the CTS-2 subscales by indicating "how many times your most recent partner did these before COVID-19." Across the three subscales, participants indicated the frequency with which each form of IPV victimization occurred, from *this has never happened* (0) to *more than 20 times before the pandemic* (6). An example of the 8-item psychological aggression subscale is "my partner insulted or swore at me" This subscale had a Cronbach's $\alpha = .90$ (Straus et al., 1996). The physical assault subscale is a 12-item subscale (e.g., "my partner punched or hit me with something that could hurt") with a Cronbach's $\alpha = .97$ (Straus et al., 1996). The sexual coercion subscale is a seven-item subscale with a Cronbach's $\alpha = .89$ (Straus et al., 1996). An example item is "my partner used threats to make me have sex."

Sextortion victimization was examined by asking participants if they had ever been the victim of sextortion. Sextortion was defined for participants as "the act of threatening to expose a nude or sexually explicit image in order to get a person to do something such as send more nude or sexually explicit images, pay someone money, or perform sexual acts." Response options included "yes, before the pandemic," "yes, after the pandemic," and "no, never." Responses were coded to reflect whether the participant had been a victim of sextortion during the pandemic (1) or not (0).

Statistical analysis

First, a series of chi-square analyses were conducted in SPSS 28.0 on the unweighted sample to examine associations between gender and race and sextortion victimization since the pandemic began. To examine the simultaneous effects of physical, sexual, and psychological IPV on sextortion during the pandemic, while controlling for age, race, and whether the sextortion was perpetrated by a partner or non-partner, data were analyzed in MPlus version 7.0 (Muthén & Muthén, 2007) using multi-group path analysis with multiple binary and continuous predictors and one logistic outcome. For MPlus to treat the *sextortion after the pandemic began* variable as a logistic outcome, we used mixture modeling that treated gender as a known observed variable. This type of modeling does not allow for paths to be constrained as is typically done in multi-group path analysis with a continuous dependent variable. To assess statistically significant differences between males and females, we conducted a series of Wald chi-square tests on each logistic regression of interest. These Wald chi-square tests allowed for an examination of whether each logistic regression pathway within the model was significantly different for males and females (Muthén & Asparouhov, 2002).

Results

Multi-group logistic path analysis

The relationship between physical IPV, psychological IPV, and sexual IPV victimization before the pandemic and sextortion victimization after the pandemic began were next examined for both men and women. Neither prior victimization by physical IPV (Male OR = 1.03, 95% CI [.99, 1.06], p = .16; Female OR = .96, 95% CI [.90, 1.02], p = .26) or psychological IPV (Male OR = .99, 95% CI [.96, 1.04], p = .98; Female OR = .96, 95% CI [.91, 1.01], p = .20) prior to the pandemic were significant predictors of sextortion once the pandemic began (see, Figure 1 for all multi-group logistic path analysis results). However, sexual IPV levels pre-pandemic were significant predictors of sextortion during the pandemic (Male OR = 1.05, 95% CI [1.02, 1.09], p = .01; Female OR = 1.17, 95% CI [1.06, 1.30], p = .009), partially supporting H1.

Higher levels of sexual IPV pre-pandemic resulted in 1.05 times greater risk of sextortion for men and 1.17 times greater risk of sextortion for women. A Wald test on this significant pathway indicated that the strength of this relation did not differ for men and women, χ (1) = 2.79, p = .09. Of the covariates also included in the model, IPV that was previously perpetrated by a partner was also a significant predictor of sextortion for both men and women (Male OR = 3.23, 95% CI [1.29, 8.10], p = .04; Female OR = 9.76, 95% CI [3.09,

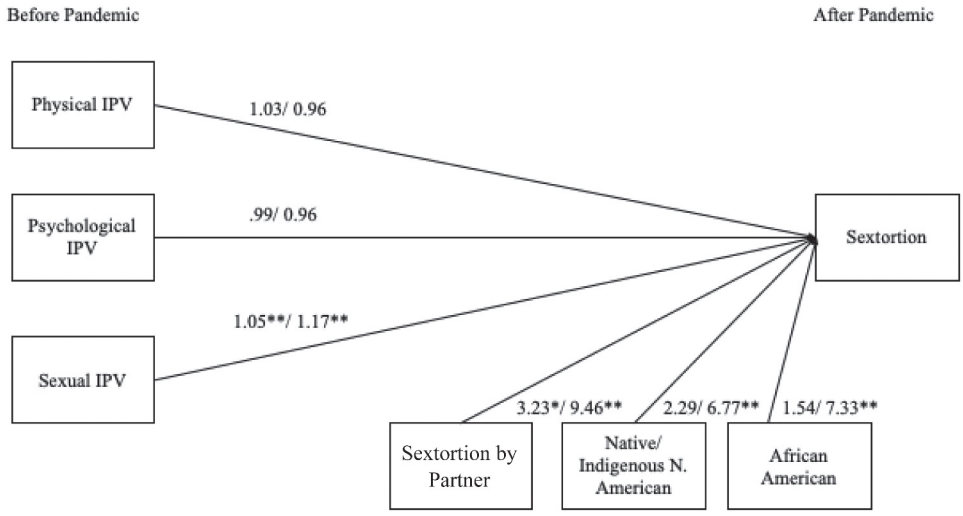

Figure 1. Multi-group logistic regression examining predictors of sextortion during the pandemic. *Note: Coefficients before the "/" represent estimates for males, coefficients after the "/" represent estimates for females. Only significant covariates are pictured ** $p < .01$ ***$p < .001$

30.86], $p < .001$). The strength of the effect of IPV that was previously perpetrated by a partner on sextortion during the pandemic was not significantly different by gender, $\chi(1) = 1.53$, $p = .22$.

Group level differences

Differences in the frequency with which sextortion since the pandemic was reported were identified by gender, age, sexuality, race, and race and gender combined. Four and a half percent of men and 2.3% of women reported experiencing sextortion since the pandemic began. In contrast to H2, a significantly higher percentage of men reported sextortion than women, $\chi2(1) = 7.82$, $p = .005$. Age at victimization did not differ between men and women, $t(65) = .22$, $p = .83$. However, participants who were victims of sextortion were significantly younger ($M = 38.64$, $SD = 14.46$) than participants who were not victims of sextortion during the pandemic ($M = 45.32$, $SD = 15.37$). Using logistic regression with age as a continuous variable, age was a significant, negative predictor of sextortion during the pandemic, OR = .97, 95% CI [.95, .99], b = −.03 ($\chi2(1) = 11.83$, $p < .001$), supporting H3. When examining individuals based on their developmental periods (see, Table 1 for sample distribution across developmental groups) those between the ages of 18–29 were most likely to report sextortion victimization during the pandemic, with 5.4% ($n = 19$) of this sub-sample reporting an experience of sextortion, followed by 4.3% ($n = 21$) of individuals between the ages of 30–40, 2.7% ($n = 24$) of individuals between the ages of 41–64, and 1.1% ($n = 3$) of participants over age 65, ($\chi2(3) = 10.63$, $p = .01$), further supporting H3.

Racial differences in the frequency with which sextortion was reported were also identified, $\chi2(5) = 14.35$, $p = .014$. Supporting Hypothesis 4, 7% percent of Black, Afro-Caribbean, or African and 5.3% of Native American or Alaskan Native participants reported sextortion, compared to 3.4% of Latinx, 2.8% of Asian, and 2.6% of White

participants. These racial differences were significant for women ($\chi2(5) = 21.32$, $p < .001$) but not for men ($\chi2(5) = 2.64$, $p = .76$). Seven percent of Black, Afro-Caribbean, or African women and 5% of Native American or Alaskan Native women reported sextortion, while 2.4% of Latinas, 2% of Asian women, and 0.8% of White women reported sextortion. Identifying as Native Alaskan or Indigenous North American compared to White (OR = 6.77, 95% CI [2.11, 21.78], $p < .001$), or as an African American compared to White (OR = 7.33, 95% CI [2.34, 22.98], $p < .001$), were significant predictors of sextortion during the pandemic for women but not men. Native Alaskan and Indigenous North American women were 6.77 times more likely than White women to experience sextortion, while African American women were 7.33 times more likely than White women to experience sextortion during the pandemic.

The distribution of sextortion during the pandemic also significantly differed by sexual orientation, $\chi2(4) = 15.50$, $p = .004$, in support of Hypothesis 5. Two-point-nine percent of heterosexual, 2.0% of gay, 7.1% of lesbian, 8.9% of bisexual, and 6.3% of participants who self-identified as "other" sexual orientation reported experiences of sextortion during the pandemic. The most commonly reported perpetrator of sextortion against victims was "a stranger" (29%), followed by "a current romantic partner" (20%), a "former romantic partner" (18%), a "friend outside of work or school" (9%), "someone I met online" (9%), "someone from work" (7%), "someone from school" (4%), and "someone I met outside of work or school" (4%). The frequency of perpetrator identity did not differ by gender, ($\chi2(7) = 11.09$, $p = .14$) or by race, ($\chi2(35) = 46.16$, $p = .10$).

Discussion

The COVID-19 pandemic has brought increased scientific, legal, and public attention to digital crimes that can be perpetrated from a distance, including technology-facilitated sexual violence (Boman & Gallupe, 2020). One of the forms of TFSV that has gained increased attention during the pandemic is sextortion (FBI, 2020, 2021), or the threat to distribute intimate materials unless a victim complies with a perpetrator's demands (O'Malley & Holt, 2022). A unique aspect of sextortion is that, unlike other forms of TFSV, the victim and perpetrator may never interact offline; perpetrators may gain possession of a victim's images through a variety of means, including coercion and hacking (Liggett, 2019).

In the present study, we surveyed a large diverse sample of U.S. adults to better understand the relationship between in-person IPV and TFSV victimization. We found that experience with sexual IPV pre-pandemic (but not physical or psychological IPV) was a significant predictor of sextortion during the pandemic for both men and women. In addition, we examined the occurrence of sextortion victimization during the pandemic across gender, race/ethnicity, and sexual orientation in the U.S. We found that men, Native American and Black women, and sexual identity minorities (specifically lesbians, bisexuals, and "others") more often reported sextortion victimization during the pandemic than their counterparts. Finally, we found that victims of sextortion during the pandemic tended to be younger than non-victims, with emerging adults (age 18–29) reporting the highest levels of victimization. This is consistent with research on TFSV in Australia finding that younger individuals were generally at greater risk for TFSV than other age groups (Douglass et al., 2018; Powell & Henry, 2019).

Sextortion and gender

Our finding that men were more often victims of sextortion during the pandemic than women was contrary to our initial predictions. However, not all work on TFSV finds that women are disproportionately victimized (e.g., Patel & Roesch, 2020; Powell & Henry, 2019). The primary forms of TFSV that appear to more often affect women include the distribution of NCP and online sexual harassment (for a review, see, Henry & Powell, 2018). Gender differences in the frequency of threats to distribute intimate images, however, has not been systematically examined among U.S. adults until now. Our research is consistent with findings from the office of Australia's eSafety commissioner in 2020, which found that seven out of 10 victims of sextortion in Australia were men (Yi, 2020).

There are several reasons U.S. men may have more often reported being victims of sextortion during the pandemic than women. First, recent research has highlighted gender disparities in unpaid care work and household-related work since the beginning of the pandemic (Xue & McMunn, 2021; Zamarro & Prados, 2021); it is possible that men had more time to spend online than women during the pandemic. Although the finding that men were more likely than women to be victimized was contrary to our hypothesis, a recent study with a representative sample of U.S. middle and high school students found that boys reported sextortion victimization more frequently than girls (Patchin & Hinduja, 2020). According to the authors of that study, there is a strong correlation between male offenders and male victims such that individuals with experience in one role are likely to also experience the other (Patchin & Hinduja, 2020). Male online dating patterns, such as being less selective than women (Whyte & Torgler, 2017), may have also contributed to the current finding. Finally, research indicates that men and highly educated individuals are more likely to be victims of cyberscams, including consumer, charity, and romance scams (Whitty, 2015); this victimization may extend beyond cyberscams to sextortion.

Sextortion and sexual IPV

The finding that sexual IPV pre-pandemic (and not physical or psychological) was positively associated with sextortion during the pandemic only partially supported our initial prediction. However, it is consistent with research finding that different types of sexual victimization (e.g., rape and verbal sexual coercion) are highly correlated (e.g., Abbey et al., 2004; Mellins et al., 2017). However, the limited work on the relationship between IPV and cyber abuse among adults rarely separately analyzes different types of IPV (e.g., sexual and nonsexual) and their individual relationships to different types of cyber abuse (e.g., sexual and non-sexual; Wolford-Clevenger et al., 2016). For example, work by Sargent et al. (2016) found that cyber victimization was related to psychological IPV among first-year college students. However, the type of cyber victimization participants reported could have included sexual and non-sexual types. Our work suggests that teasing apart the subtypes of victimization experienced by polyvictims may be key to understanding the nature of polyvictimization, generally, and predictors of sextortion victimization, specifically.

Limitations

This work represents the first study on sextortion using a large and diverse sample of U.S. adults during the COVID-19 pandemic. However, it comes with a number of limitations. First, the data were collected cross-sectionally. This inhibits our ability to establish temporal precedence for the different forms of sexual violence examined, and it increases the risk of within-survey order effects (Laursen et al., 2012; Shadish et al., 2002). Future research should examine the relationship between IPV types and TFSV using a longitudinal design.

Second, our data consisted only of self-reports, making it possible that differences obtained between groups, for example, were a function of group-level differences in sexual violence perceptions or norms, rather than actual rates of victimization. Next, our data were collected during the first year of the COVID-19 pandemic, and may not represent rates or relationships during non-pandemic periods, or during the subsequent part of the pandemic. Next, we did not assess how many times sextortion victimization occurred during the pandemic- only whether or not it had occurred. This measure prohibits us from examining the relationship between in-person IPV and TFSV frequency or severity.

Finally, the current paper did not test mediators of group-level differences in IPV. Future research should examine potential explanations for differences by race, age, gender, and so on. For example, age-related differences may be the result of emerging adults using technology more frequently than older people (Powell & Henry, 2017), or engaging in more relationship and sexual experimentation than older adults (Maheux & Choukas-Bradley, 2021).

Contributions to research

Our work contributes to research on TFSV in a number of ways. First, we uncovered a number of identity-related predictors of sextortion victimization that are shared with other forms of sexual violence, such as being a Black or Native American woman, a sexual minority, and young. This suggests that sextortion may operate like other forms of sexual violence, with similar identity features that offenders target (e.g., bisexuality) and similar sociocultural risk factors (e.g., social norms). Thus, theories like target congruence theory and lifestyles-routine activities theory, which were developed and are used to study in-person victimization, may also be useful for understanding online victimization (Snyder et al., 2021).

On the other hand, our finding that men more often reported being victims of sextortion during the pandemic than women suggests that sextortion may be unique from other forms of sexual violence. While women are generally more often victims of sexual violence than men, including TFSV (for a review, see, Henry, Flynn et al., 2020), sextortion may be more frequently targeted toward men (Yi, 2020). Clarifying the operational distinctions between different forms of TFSV is crucial for not only elucidating potential motivations for offending, but also for better addressing the nuances of victimization. For example, gaps in definitions of TFSV in the U.S. population have hindered public health efforts for cyber abuse victims (Fernet et al., 2021).

Nonetheless, even when men experience equal or greater rates of sexual violence than women, the nature and/or impacts of that violence may still be gender-differentiated (Powell & Henry, 2019). For example, work by Ruvalcaba and Eaton (2020) found that NCP victimization has a more negative relationship with well-being for women than men. Future research should therefore examine the consequences of sextortion for diverse men and women, as well as the consequences of sextortion and other types of TFSV for the family, friends, and later partners of primary survivors (Clevenger & Navarro, 2021).

Next, our research contributes to existing research by showing that only sexual IPV, and not other types of in-person IPV, was related to later sextortion. This is in line with calls to treat IPV as multidimensional (e.g., Lagdon et al., 2014), especially when understanding polyvictimization (Gilbar & Ford, 2020), and suggests that because different types of sexual violence co-occur, they may share some risk and protective factors. Possible shared predictors of sexual IPV and TFSV should be examined at individual, relational, social, and cultural levels.

Contributions to practice

The current research underscores the importance of adding screening for TFSV to existing IPV screening measures for both men and women in healthcare settings, particularly for individuals who have already been a victim of sexual IPV, and regardless of whether that prior IPV was perpetrated by a partner. Such screenings would allow doctors and clinicians to identify polyvictims and potentially disrupt a pathway to lifetime health disparities (Andersen et al., 2015). These screenings are especially important in communities that serve sexual and racial minority men and women, as the data from this study reinforce the finding that both groups are at increased risk for both in-person IPV and TFSV (Cho, 2012; Daigle & Hawk, 2021; Gámez-Guadix & Incera, 2021; Tjaden & Thoennes, 2000).

Finally, our research suggests that prevention programs aimed at reducing TFSV, like sextortion, should consider supporting participants in the development of skills, experiences, and beliefs that protect against multiple types of sexual violence. Teaching healthy relationship attitudes and beliefs, for example, has been shown to be a protective factor against polyvictimization (Wolfe, 2018). Such programs should also be sure to include supports and interventions aimed at boys and men, who show the same relationship between sexual IPV victimization and sextortion victimization as women, and who may be at greater overall risk for some types of TFSV.

Conclusion

Given the rise in TFSV over time, and sextortion during the pandemic specifically, it has become increasingly urgent to better understand the nature of cyber sexual abuse. This large, study of U.S. adults suggests that sextortion victimization can be predicted by gender, race, age, sexual orientation, and sexual IPV, with men, Native and Black women, LGBTQ people, and sexual IPV victims all being at greater risk for sextortion.

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References

Abbey, A., BeShears, R., Clinton-Sherrod, A. M., & McAuslan, P. (2004). Similarities and differences in women's sexual assault experiences based on tactics used by the perpetrator. *Psychology of Women Quarterly*, *28*(4), 323–332. https://doi.org/10.1111/j.1471-6402.2004.00149.x

Abbey, A., Ross, L. T., McDuffie, D., & McAuslan, P. (1996). Alcohol and dating risk factors for sexual assault among college women. *Psychology of Women Quarterly*, *20*(1), 147–169. https://doi.org/10.1111/j.1471-6402.1996.tb00669.x

Acar, K. V. (2016). Sexual extortion of children in cyberspace. *International Journal of Cyber Criminology*, *10*(2), 110–126. https://doi.org/10.5281/zenodo.163398

Andersen, J. P., Zou, C., & Blosnich, J. (2015). Multiple early victimization experiences as a pathway to explain physical health disparities among sexual minority and heterosexual individuals. *Social Science & Medicine*, *133*, 111–119. https://doi.org/10.1016/j.socscimed.2015.03.043

Archer, J. (1999). Assessment of the reliability of the conflict tactics scales: A meta-analytic review. *Journal of Interpersonal Violence*, *14*(12), 1263–1289. https://doi.org/10.1177/088626099014012003

Arnett, J. J. (2014). *Emerging adulthood: The winding road from the late teens twenties* (2nd ed.). Oxford University Press. http://dx.doi.org/10.1093/oxfordhb/9780199795574.013.9

Basile, K. C., Smith, S. G., Liu, Y., Miller, E., & Kresnow, M. J. (2021). Prevalence of intimate partner reproductive coercion in the United States: Racial and ethnic differences. *Journal of Interpersonal Violence*, *36*(21–22), NP12324–NP12341. https://doi.org/10.1177/0886260519888205

Bates, S. (2017). Revenge porn and mental health: A qualitative analysis of the mental health effects of revenge porn on female survivors. *Feminist Criminology*, *12*(1), 22–42. https://doi.org/10.1177/1557085116654565

Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., … Stevens, M. R. (2011). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 summary report*. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. https://www.cdc.gov/violenceprevention/pdf/nisvs_report2010-a.pdf

Boman, J. H., & Gallupe, O. (2020). Has COVID-19 changed crime? Crime rates in the United States during the pandemic. *American Journal of Criminal Justice*, *45*(4), 537–545. https://doi.org/10.1007/s12103-020-09551-3

Boniello, K. (2020, May 2). Virtual sextortion surging as more men stay home during coronavirus lockdowns. *New York Post*. https://nypost.com/2020/05/02/virtual-sextortion-scams-rising-during-coronavirus-lockdowns/

Brookings. (2016). *Sextortion: Cybersecurity, teenagers, and remote sexual assault*. https://www.brookings.edu/research/sextortion-cybersecurity-teenagers-and-remote-sexual-assault/

Caponera, B. (2018). *Sexual violence among Native Americans (American Indians and Alaskan Natives) in the United States and New Mexico*. New Mexico Coalition of Sexual Assault Programs, Inc. https://nmcsap.org/wp-content/uploads/NativeAmericanData_Feb2018.pdf

Carbone-Lopez, K., Rennison, C. M., & Macmillan, R. (2012). The transcendence of violence across relationships: New methods for understanding men's and women's experiences of intimate partner violence across the life course. *Journal of Quantitative Criminology*, *28*(2), 319–346. https://doi.org/10.1007/s10940-011-9143-9

Cho, H. (2012). Racial differences in the prevalence of intimate partner violence against women and associated factors. *Journal of Interpersonal Violence*, *27*(2), 344–363. https://doi.org/10.1177/0886260511416469

Citron, D. K., & Franks, M. A. (2014). Criminalizing revenge porn. *Wake Forest Law Review*, *49*, 345. https://scholarship.law.bu.edu/faculty_scholarship/643

Clevenger, S. L., Navarro, J. N., & Gilliam, M. (2018). Technology and the endless "cat and mouse" game: A review of the interpersonal cybervictimization literature. *Sociology Compass*, *12*(12), e12639. https://doi.org/10.1111/soc4.12639

Clevenger, S., & Navarro, J. (2021). The "third-victimization": The cybervictimization of sexual assault survivors and their families. *Journal of Contemporary Criminal Justice*, *37*(3), 356–378. https://doi.org/10.1177/10439862211001616

Daigle, L. E., & Hawk, S. R. (2021, March 22). Sexual orientation, revictimization, and polyvictimization. *Sexuality Research and Social Policy*. https://doi.org/10.1007/s13178-021-00543-4

DeKeseredy, W. S., Schwartz, M. D., Harris, B., Woodlock, D., Nolan, J., & Hall-Sanchez, A. (2019). Technology-facilitated stalking and unwanted sexual messages/images in a college campus community: The role of negative peer support. *SAGE Open*, *9*(1), 215824401982823. https://doi.org/10.1177/2158244019828231

DeKeseredy, W. S., Schwartz, M. D., Nolan, J., Mastron, N., & Hall-Sanchez, A. (2018). Polyvictimization and the continuum of sexual abuse at a college campus: Does negative peer support increase the likelihood of multiple victimizations? *The British Journal of Criminology*, *58*(5), 1107–1126. https://doi.org/10.1093/bjc/azy036

Douglass, C. H., Wright, C. J. C., Davis, A. C., & Lim, M. S. C. (2018). Correlates of in-person and technology-facilitated sexual harassment from an online survey among young Australians. *Sexual Health*, *15*(4), 361. https://doi.org/10.1071/SH17208

Eaton, A. A., Jacobs, H., & Ruvalcaba, Y. (2017). *2017 nationwide online study of nonconsensual porn victimization and perpetration: A summary report*. Cyber Civil Rights Initiative. https://www.cybercivilrights.org/wp-content/uploads/2017/06/CCRI-2017-ResearchReport.pdf

Eaton, A. A., & McGlynn, C. (2020). The psychology of nonconsensual porn: Understanding and addressing a growing form of sexual violence. *Policy Insights from the Behavioral and Brain Sciences*, *7*(2), 190–197. https://doi.org/10.1177/2372732220941534

Eaton, A. A., Noori, S., Bonomi, A., Stephens, D. P., & Gillum, T. L. (2020). Nonconsensual porn as a form of intimate partner violence: Using the power and control wheel to understand nonconsensual porn perpetration in intimate relationships. *Trauma, Violence, & Abuse*, *22*(5), 1140–1154. https://doi.org/10.1177/1524838020906533

Ehman, A. C., & Gross, A. M. (2019). Sexual cyberbullying: Review, critique, & future directions. *Aggression and Violent Behavior*, *44*, 80–87. http://dx.doi.org/10.1016/j.avb.2018.11.001

Equality Now. (2021). *Ending online sexual exploitation and abuse of women and girls: A call for International standards*. https://live-equality-now.pantheonsite.io/wp-content/uploads/2021/11/Ending-OSEA-Report.pdf

FBI. (2020, April 20). *Online extortion scams increasing during the Covid-19 crisis*. https://www.ic3.gov/media/2020/200420.aspx

FBI. (2021, September 2). *FBI warns about an increase in sextortion complaints*. https://www.ic3.gov/Media/Y2021/PSA210902

Fernet, M., Hébert, M., Brodeur, G., & Théorêt, V. (2021). "When you're in a relationship, you say no, but your partner insists": Sexual dating violence and ambiguity among girls and young women. *Journal of Interpersonal Violencei*, *36*(19–20), 9436–9459. https://doi.org/10.1177/0886260519867149

Fisico, R., & Harkins, L. (2021). Technology and sexual offending. *Current Psychiatry Reports*, *23*(59), 1–8. https://doi.org/10.1007/s11920-021-01269-1

Gámez-Guadix, M., & Incera, D. (2021). Homophobia is online: Sexual victimization and risks on the internet and mental health among bisexual, homosexual, pansexual, asexual, and queer adolescents. *Computers in Human Behavior*, *119*, 106728. https://doi.org/10.1016/j.chb.2021.106728

Gidycz, C. A., Hanson, K., & Layman, M. J. (1995). A prospective analysis of the relationships among sexual assault experiences: An extension of previous findings. *Psychology of Women Quarterly*, *19* (1), 5–29. https://doi.org/10.1111/j.1471-6402.1995.tb00276.x

Gilbar, O., & Ford, J. (2020). Indirect effects of PTSD and complex PTSD in the relationship of polyvictimization with intimate partner violence victimization and perpetration among men in mandated treatment. *European Journal of Psychotraumatology*, *11*(1), 1794653. https://doi.org/10.1080/20008198.2020.1794653

Grace, K. T., & Anderson, J. C. (2018). Reproductive coercion: A systematic review. *Trauma, Violence, & Abuse*, *19*(4), 371–390. https://doi.org/10.1177/1524838016663935

Hall, M., & Hearn, J. (2019). Revenge pornography and manhood acts: A discourse analysis of perpetrators' accounts. *Journal of Gender Studies*, *28*(2), 158–170. https://doi.org/10.1080/09589236.2017.1417117

Hamby, S., & Grych, J. (2013). Tracing the threads of the web: The epidemiology of interconnections among forms of violence and victimization. In *The web of violence* (pp. 9–27). SpringerBriefs in Sociology. Dordrecht:Springer. https://doi.org/10.1007/978-94-007-5596-3_2

Harwell, D. (2020, April 3). Thousands of Zoom video calls left exposed on open web. *The Washington Post*. https://www.washingtonpost.com/technology/2020/04/03/thousands-zoom-video-calls-left-exposed-open-web/?fbclid=IwAR3eGg-5v4YZRvis0baGTncTy6zv9g74WFrPelMIMANg-QHFzplqlPuxFd8&utm_campaign=wp_main&utm_medium=social&utm_source=facebook

Henry, N., & Flynn, A. (2019). Image-based sexual abuse: Online distribution channels and illicit communities of support. *Violence Against Women*, *25*(16), 1932–1955. https://doi.org/10.1177/1077801219863881

Henry, N., Flynn, A., & Powell, A. (2020). Technology-facilitated domestic and sexual violence: A review. *Violence Against Women*, *26*(15–16), 1828–1854. https://doi.org/10.1177/1077801219875821

Henry, N., McGlynn, C., Flynn, A., Johnson, K., Powell, A., & Scott, A. (2020). *Image-based sexual abuse: A study on the causes and consequences of non-consensual nude or sexual imagery*. Routledge.

Henry, N., & Powell, A. (2015). Embodied harms: Gender, shame and technology–facilitated sexual violence in cyberspace. *Violence Against Women*, *21*(6), 758–779. https://doi.org/10.1177/1077801215576581

Henry, N., & Powell, A. (2018). Technology-facilitated sexual violence: A literature review of empirical research. *Trauma, Violence, & Abuse*, *19*(2), 195–208. https://doi.org/10.1177/1524838016650189

Hinduja, S., & Patchin, J. W. (2018). *Cyberbullying identification, prevention, and response*. Cyberbullying Research Center (cyberbullying.org).

Jane, E. A. (2020). Online abuse and harassment. In K. Ross, I. Bachmann, V. Cardo, S. Moorti, & M. Scarcelli (Eds.), *The international encyclopedia of gender, media, and communication*. https://doi.org/10.1002/9781119429128.iegmc080

Krebs, C., Breiding, M. J., Browne, A., & Warner, T. (2011). The association between different types of intimate partner violence experienced by women. *Journal of Family Violence*, *26*(6), 487–500. https://doi.org/10.1007/s10896-011-9383-3

Lagdon, S., Armour, C., & Stringer, M. (2014). Adult experience of mental health outcomes as a result of intimate partner violence victimisation: A systematic review. *European Journal of Psychotraumatology*, *5*(1), 24794. https://doi.org/10.3402/ejpt.v5.24794

Laursen, B., Little, T. D., & Card, N. A. (2012). *The handbook of developmental research methods*. Guilford Press.

Liggett, R. (2019). Exploring online sextortion offenses: Ruses, demands, and motivations. *Sexual Assault Report*, *22*(4), 58–62.

Maheux, A. J., & Choukas-Bradley, S. (2021). Sexuality and mental health in emerging adulthood. In E. M. Morgan & M. H. M. van Dulmen (Eds.), *Sexuality in emerging adulthood* (pp. 452–470). Oxford University Press.

Marganski, A., & Melander, L. (2018). Intimate partner violence victimization in the cyber and real world: Examining the extent of cyber aggression experiences and its association with in-person dating violence. *Journal of Interpersonal Violence*, *33*(7), 1071–1095. https://doi.org/10.1177/0886260515614283

McGlynn, C., Rackley, E., & Houghton, R. (2017). Beyond "revenge porn": The continuum of image-based sexual abuse. *Feminist Legal Studies*, *25*(1), 25–46. https://doi.org/10.1007/s10691-017-9343-2

Mellins, C. A., Walsh, K., Sarvet, A. L., Wall, M., Gilbert, L., Santelli, J. S., Thompson, M., Wilson, P. A., Khan, S., Benson, S., Bah, K., Kaufman, K. A., Reardon, L., & Hirsch, J. S. (2017). Sexual assault incidents among college undergraduates: Prevalence and factors associated with risk. *PLoS ONE*, *12*(11), e0186471. https://doi.org/10.1371/journal.pone.0186471

Muthén, B., & Asparouhov, T. (2002). *Latent variable analysis with categorical outcomes: Multiple-group and growth modeling in Mplus*. Mplus Web Notes: No. 4. www.statmodel.com

Muthén, L. K., & Muthén, B. O. (2007). *Mplus user's guide* (Sixth ed.). Muthén & Muthén.

O'Malley, R. L., & Holt, K. M. (2022). Cyber sextortion: An exploratory analysis of different perpetrators engaging in a similar crime. *Journal of Interpersonal Violence*, *37*(1–2), 258–283. https://doi.org/10.1177/0886260520909186

Paat, Y. F., & Markham, C. (2020). Digital crime, trauma, and abuse: Internet safety and cyber risks for adolescents and emerging adults in the 21st century. *Social Work in Mental Health*, 1–23. https://doi.org/10.1080/15332985.2020.1845281

Patchin, J. W., & Hinduja, S. (2020). Sextortion among adolescents: Results from a national survey of U.S. youth. *Sexual Abuse*, *32*(1), 30–54. https://doi.org/10.1177/1079063218800469

Patel, U., & Roesch, R. (2020). The prevalence of technology-facilitated sexual violence: A meta-analysis and systematic review. *Trauma, Violence, & Abuse*. https://doi.org/10.1177/1524838020958057

Perry, S. W. (2004). *American Indians and crime- A BJS statistical profile 1992-2002*. Bureau of Justice Statistics, US Department of Justice, Office of Justice Programs. https://bjs.ojp.gov/content/pub/pdf/aic02.pdf

Pew Research Center. (2021). *About three-in-ten U.S. adults say they are 'almost constantly' online*. https://www.pewresearch.org/fact-tank/2021/03/26/about-three-in-ten-u-s-adults-say-they-are-almost-constantly-online/

Pina, A., Holland, J., & James, M. (2017). The malevolent side of revenge porn proclivity: Dark personality traits and sexist ideology. *International Journal of Technoethics*, *8*(1), 30–43. https://doi.org/10.4018/IJT.2017010103

Powell, A., Henry, N., Flynn, A., & Scott, A. J. (2019). Image-based sexual abuse: The extent, nature, and predictors of perpetration in a community sample of Australian adults. *Computers in Human Behavior*, *92*, 393–402. https://doi.org/10.1016/j.chb.2018.11.009

Powell, A., & Henry, N. (2017). *Introduction. Sexual violence in a digital age*. Palgrave MacMillian.

Powell, A., & Henry, N. (2019). Technology-facilitated sexual violence victimization: Results from an online survey of Australian adults. *Journal of Interpersonal Violence*, *34*(17), 3637–3665. https://doi.org/10.1177/0886260516672055

Reed, L. A., Tolman, R. M., & Ward, L. M. (2016). Snooping and sexting: Digital media as a context for dating aggression and abuse among college students. *Violence Against Women*, *22*(13), 1556–1576. https://doi.org/10.1177/1077801216630143

Ross, J. M., Drouin, M., & Coupe, A. (2019). Sexting coercion as a component of intimate partner polyvictimization. *Journal of Interpersonal Violence*, *34*(11), 2269–2291. https://doi.org/10.1177/0886260516660300

Ruvalcaba, Y., & Eaton, A. A. (2020). Nonconsensual pornography among U.S. adults: A sexual scripts framework on victimization, perpetration, and health correlates for women and men. *Psychology of Violence*, *10*(1), 68–78. https://doi.org/10.1037/vio0000233

Sabina, C., & Straus, M. A. (2008). Polyvictimization by dating partners and mental health among U.S. college students. *Violence & Victims*, *23*(6), 667–682. https://doi.org/10.1891/0886-6708.23.6.667

Sargent, K. S., Krauss, A., Jouriles, E. N., & McDonald, R. (2016). Cybervictimization, psychological intimate partner violence, and problematic mental health outcomes among first-year college students. *Cyberpsychology, Behavior and Social Networking*, *19*(9), 545–550. https://doi.org/10.1089/cyber.2016.0115

Schwab-Reese, L. M., Currie, D., Mishra, A. A., & Peek-Asa, C. (2021). A comparison of violence victimization and polyvictimization experiences among sexual minority and heterosexual adolescents and young adults. *Journal of Interpersonal Violence*, *36*(11–12), NP5874–NP5891. https://doi.org/10.1177/0886260518808853

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference* (2nd ed.). Houghton-Mifflin.

Smith, P. H., White, J. W., & Holland, L. J. (2003). A longitudinal perspective on dating violence among adolescent and college-age women. *American Journal of Public Health*, *93*(7), 1104–1109. https://doi.org/10.2105/AJPH.93.7.1104

Snyder, J. A., Scherer, H. L., & Fisher, B. S. (2021). Poly-victimization among female college students: Are the risk factors the same as those who experience one type of victimization? *Violence Against Women*, *27*(10), 1716–1735. https://doi.org/10.1177/1077801220952176

Statista. (2021). *Number of rape or sexual assault victims in the United States per year from 2000 to 2019, by gender*. https://www.statista.com/statistics/642458/rape-and-sexual-assault-victims-in-the-us-by-gender/

Straus, M. A., Hamby, S. L., Boney-mccoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, *17*(3), 283–316. https://doi.org/10.1177/019251396017003001

Tjaden, P., & Thoennes, N. (2000). Prevalence and consequences of male-to-female and female-to-male intimate partner violence as measured by the National Violence Against Women Survey. *Violence Against Women*, *6*(2), 142–161. https://doi.org/10.1177/10778010022181769

Trochim, W., Donnelly, J. P., & Arora, K. (2015). *Research methods: The essential knowledge base*. Nelson Education.

van Oosten, J., F., M., & Vandenbosch, L. (2020). Predicting the willingness to engage in non-consensual forwarding of sexts: The role of pornography and instrumental notions of sex. *Archives of Sexual Behavior*, *49*(4), 1121–1132. https://doi.org/10.1007/s10508-019-01580-2

Vogels, E. A. (2021). *The state of online harassment*. Pew Research Center. https://www.pewresearch.org/internet/2021/01/13/the-state-of-online-harassment/

Walters, M. L., Chen, J., & Breiding, M. J. (2013). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 findings on victimization by sexual orientation*. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. https://www.cdc.gov/violenceprevention/pdf/nisvs_sofindings.pdf

Whitty, M. T. (2015). Anatomy of the online dating romance scam. *Security Journal*, *28*(4), 443–455. https://doi.org/10.1057/sj.2012.57

Whyte, S., & Torgler, B. (2017). Preference versus choice in online dating. *Cyberpsychology, Behavior, and Social Networking*, *20*(3), 150–156. https://doi.org/10.1089/cyber.2016.0528

Wittes, B., Poplin, C., Jurecic, Q., & Spera, C. (2016). *Sextortion: Cybersecurity, teenagers, and remote sexual assault*. Brookings Institution. https://www.brookings.edu/research/sextortion-cybersecurity-teenagers-and-remote-sexual-assault/

Wolak, J., & Finkelhor, D. (2016). *Sextortion: Findings from a survey of 1,631 victims*. Crimes Against Children Research Center, University of New Hampshire. https://www.humantraffickingsearch.org/wp-content/uploads/2018/09/Sextortion_Report.pdf

Wolak, J., Finkelhor, D., Walsh, W., & Treitman, L. (2018). Sextortion of minors: Characteristics and dynamics. *Journal of Adolescent Health*, *62*(1), 72–79. https://doi.org/10.1016/j.jadohealth.2017.08.014

Wolfe, D. A. (2018). Why polyvictimization matters. *Journal of Interpersonal Violence*, *33*(5), 832–837. https://doi.org/10.1177/0886260517752215

Wolford-Clevenger, C., Zapor, H., Brasfield, H., Febres, J., Elmquist, J., Brem, M., Shorey, R. C., & Stuart, G. L. (2016). An examination of the partner cyber abuse questionnaire in a college student sample. *Psychology of Violence*, *6*(1), 156–162. https://doi.org/10.1037/a0039442

Xue, B., & McMunn, A. (2021). Gender differences in unpaid care work and psychological distress in the UK Covid-19 lockdown. *PloS One*, *16*(3), e0247959. https://doi.org/10.1371/journal.pone.0247959

Yi, B. L. (2020, March 12). *Growing number of young men in Australia targeted for 'sextortion.'* Reuters. https://www.reuters.com/article/us-australia-technology-crime/growing-number-of-young-men-in-australia-targeted-for-sextortion-idUSKBN20Z1MQ

Zamarro, G., & Prados, M. J. (2021). Gender differences in couples' division of childcare, work and mental health during COVID-19. *Review of Economics of the Household*, *19*(1), 11–40. https://doi.org/10.1007/s11150-020-09534-7

Zhong, L. R., Kebbell, M. R., & Webster, J. L. (2020). An exploratory study of technology-facilitated sexual violence in online romantic interactions: Can the Internet's toxic disinhibition exacerbate sexual aggression? *Computers in Human Behavior*, *108*, 106314. https://doi.org/10.1016/j.chb.2020.106314