

Original article

Sextortion of Minors: Characteristics and Dynamics



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ABSTRACT

Purpose: Sextortion (threats to expose sexual images to coerce victims to provide additional pictures, sex, or other favors) has been identified as an emerging online threat to youth, but research is scarce. We describe sextortion incidents from a large sample of victims (n = 1,385) and examine whether incidents occurring to minors (n = 572) are more or less serious than those experienced by young adults (n = 813).

Methods: We ran advertising campaigns on Facebook to recruit victims of sextortion, ages 18–25, for an online survey. We use cross tabulations and logistic regression to analyze incidents that began when 18- and 19-year-old respondents were minors (ages 17 and younger) and compare them with incidents that began at ages 18–25 years. Most minor victims were female (91%) and aged 16 or 17 when incidents started (75%).

Results: Almost 60% of respondents who were minors when sextortion occurred knew perpetrators in person, often as romantic partners. Most knowingly provided images to perpetrators (75%), but also felt pressured to do so (67%). About one-third were threatened with physical assaults and menaced for >6 months. Half did not disclose incidents, and few reported to police or websites. Perpetrators against minors (vs. adults) were more likely to pressure victims into producing initial sexual images, demand additional images, threaten victims for >6 months, and urge victims to harm themselves.

Conclusions: Sextortion incidents were serious victimizations, and often co-occurred with teen dating violence. We describe resources so that practitioners can help victims find support and legal advice and remove posted images.

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IMPLICATIONS AND CONTRIBUTIONS

This research finds that sextortion perpetrators who victimized minors (vs. young adults) were more likely to pressure victims into producing initial sexual images, demand additional images, threaten victims for >6 months, and urge victims to harm themselves. Sextortion was often an aspect of dating violence. Half of incidents were undisclosed.

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Media, law enforcement, and policy makers are describing a new type of online exploitation of adolescents called "sextortion." Sextortion is one of several terms (e.g., sexting, nonconsensual sharing of sexual images, revenge pornography) that have been used to refer to the nonconsensual, malicious, or criminally motivated distribution of sexual images via cell phones and other digital media. Sextortion in particular refers to situations in which perpetrators threaten to expose sexual images to coerce victims to provide additional pictures, engage in sexual activity, or agree

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to other demands [1]. Other terms, such as sexting (i.e., selfproduction and distribution of sexually explicit images via digital media [2]), nonconsensual pornography (i.e., distribution of sexual images without consent [1]), and revenge pornography (i.e., malicious distribution of sexual images [1]) may include sextortion. But sextortion is essentially the *threat* to expose a sexual image to coerce the victim into doing something, even if exposure of the image never actually occurs. However, sextortion is not a term that legally defines a crime in federal or state law [3,4]. Laws are changing rapidly, but prosecutions for sextortion often rely on other criminal statutes, such as those against hacking, child pornography, harassment, extortion, stalking, and privacy violations [1,4]. We use the term sextortion because it is employed in government and policy reports and accounts by the media that describe threats to expose sexual images made to children and adolescents. For example, reports by federal agencies have called sextortion an emerging online threat to youth [5–7]. News stories have warned of perpetrators who target hundreds of teen victims [8]. One report described prosecutions for sextortion, many of which involved victims younger than 18 years [4].

Despite concerns about youth vulnerability to sextortion, there is little empirical research about its characteristics and dynamics. Accounts of cases have largely described two contexts for sextortion. One is perpetrators who target victims they meet online. Some sources describe elaborate online scams with hundreds of victims by perpetrators who hack remote computers or use fake personas and other ploys to acquire sexual images from victims and then threaten them [4,7,8]. How often youth might face sextortion by online perpetrators is unknown. A 2016 report by the U.S. Department of Justice found that sextortion is the most significantly increasing type of online child exploitation based on responses by more than 1,000 law enforcement investigators and related practitioners surveyed [5]. However, the report did not include estimates of numbers of cases or victims.

Other accounts of sextortion suggest it often co-occurs with teen dating violence [9,10]. Adolescents report frequent exposure to physical and sexual violence within dating relationships, with annual prevalence as high as 21% among girls and 10% among boys in a national sample of high school students [11]. Also, many teens receive unwanted digital communications about sexual images from dating partners, with girls reporting higher rates than boys. One survey of 3,745 dating high and middle school students found that 15% of girls and 7% of boys experienced "sexual cyber dating abuse": pressuring dating partners to send sexual photos, threatening partners if they did not, sending partners unwanted sexual photos, or making other unwanted communications about sex [12]. Thirteen percent of students who visited eight school-based health centers reported sexual cyber dating abuse in the past three months, and 33% of girls and 18% of boys had received requests for sexual images from partners [13]. Further, teen victims of sexual cyber dating abuse were more likely than non-victims to report other forms of physical and sexual dating abuse [12] and sexual violence by a non-partner [13]. Cyber dating abuse and requests for sexual images do not necessarily include threats to expose such images. "Sexting" is common within adolescent romantic relationships and peer groups [14–16]. However, girls especially report feeling coerced by romantic partners to send sexual images, and they report more negative consequences for sexting such as exposure of images and harassment by peers [14–17]. The pressures and consequences that adolescent girls may feel about sexual images are also attributable to gender inequality, which generates attitudes that allow

conquests by boys to enhance their status, whereas girls are subjected to harassment and shaming if their sexual explorations are exposed [14,17–19].

Sextortion victimizes adults as well as adolescents [4,10], and rates of intimate partner violence and cyber dating abuse are also high among young adults [20,21]. However, minors deserve special attention because of their immaturity and difficulty independently accessing help. Moreover, when youth are victimized by sextortion and teen dating violence, they may report significantly more health complaints and problem behaviors than nonvictims [11,22] and face negative outcomes that will interfere with their transition into adulthood. Longitudinal research with a nationally representative sample of youth found that girls who were victimized by dating partners when they were minors were more likely to smoke and have symptoms of depression and problems with alcohol at ages 18–25 years [23]. Boys who were victims were more likely to report antisocial behaviors and marijuana use. All were more likely to report suicidal ideation and be victimized by intimate partner violence as young adults.

The goals of this research about sextortion were to better understand the contexts, characteristics, and dynamics of sextortion committed against minors and to determine if and how cases in which minors were victimized are more serious than cases involving young adults. We collected data from victims aged 18– 25 years, recruited mainly via Facebook. Data about incidents occurring to minors were reported by respondents ages 18 and 19 who described sextortion incidents that occurred when they were 17 or younger (n = 572). These data were compared with incidents occurring to young adults (n = 813).

Methods

Procedures

We ran advertising campaigns on Facebook between July and September 2015 to recruit young adults, ages 18–25, who had been victims of sextortion. At that time, 82% of internet users aged 18–29 used Facebook, with 70% of users on the platform daily [24]. Facebook advertisements are an effective tool for recruiting hard to reach populations for social science research [25,26].

The Facebook ads featured images (e.g., people texting, the question, "Got nudes?") and text (e.g., "Sextortion. Has it happened to you? If a person has tried to make you do something by threatening to show sexual images of you to someone or post [them] online, please help by taking this anonymous survey. We want to stop this crime!"). Respondents clicked a link to enter the survey.

The advertisements were aimed at English-speaking Facebook users, aged 18–25, in the United States. Advertisements were focused at times to recruit respondents of varying educational levels, males, persons identifying as sexual and gender minorities, and 18 year olds. We targeted 18 year olds to increase the number of respondents likely to report episodes that occurred when they were minors. The University of New Hampshire Human Subjects Review Board approved all protocols.

We used Qualtrics Research Suite, a secure web-based data collection system, to administer the online survey. The survey took about 20 minutes to complete. An introduction explained that the survey was anonymous and respondents could skip questions they did not want to answer. The introduction and end of the survey included links to resources for sextortion victims, Table 1

Resources for victims and practitioners	Table I				
	Resources	for	victims	and	practitioners

Without My Consent aFocuses on "egregious online privacy violations" with an emphasis on nonconsensual distribution of sexually explicit images. Provides advice on responding to incidents including getting posted images removed, available criminal and civil remedies for victims, and protecting physical safety. Is creating a state by state database of possible criminal and civil remedies for victims.Cyber Civil Rights Initiative a www.cybercivilrights.org Or 844-878-CCRIFights "nonconsensual pornography and other forms of online abuse." Provides a 24 hour hotline and one-on-one support for victims, information to lawmakers for drafting legislation, educational resources, and a list of states with "revenge porn" laws with references to the applicable criminal statutes.California Department of Justice Cyber-exploitation site https://oag.ca.gov/cyberexploitation C.A. Goldberg Law FirmCombats non-consensual distribution or publication of intimate photos or videos by listing resources for victims, tools for law enforcement and technology industry best practices.Specializes in legal cases involving revenge porn and other forms of on- and offline harassment,	Organization and contact information	Mission
Cyber Civil Rights Initiative a www.cybercivilrights.org Or 844-878-CCRIFights "nonconsensual pornography and other forms of online abuse." Provides a 24 hour hotline and one-on-one support for victims, information to lawmakers for drafting legislation, educational resources, and a list of states with "revenge porn" laws with references to the applicable criminal statutes.California Department of Justice Cyber-exploitation site https://oag.ca.gov/cyberexploitationCombats non-consensual distribution or publication of intimate photos or videos by listing resources for victims, tools for law enforcement and technology industry best practices.CA. Goldberg Law FirmSpecializes in legal cases involving revenge porn and other forms of on- and offline harassment,	Without My Consent ^a www.withoutmyconsent.org	Focuses on "egregious online privacy violations" with an emphasis on nonconsensual distribution of sexually explicit images. Provides advice on responding to incidents including getting posted images removed, available criminal and civil remedies for victims, and protecting physical safety. Is creating a state by state database of possible criminal and civil remedies for victims.
California Department of Justice Cyber-exploitation siteCombats non-consensual distribution or publication of intimate photos or videos by listing resourceshttps://oag.ca.gov/cyberexploitationfor victims, tools for law enforcement and technology industry best practices.C.A. Goldberg Law FirmSpecializes in legal cases involving revenge porn and other forms of on- and offline harassment,	Cyber Civil Rights Initiative ^a www.cybercivilrights.org Or 844-878-CCRI	Fights "nonconsensual pornography and other forms of online abuse." Provides a 24 hour hotline and one-on-one support for victims, information to lawmakers for drafting legislation, educational resources, and a list of states with "revenge porn" laws with references to the applicable criminal statutes.
C.A. Goldberg Law Firm Specializes in legal cases involving revenge porn and other forms of on- and offline harassment,	California Department of Justice Cyber-exploitation site	Combats non-consensual distribution or publication of intimate photos or videos by listing resources
C.A. Goldberg Law Firm Specializes in legal cases involving revenge point and other forms of on- and online hardssment,	nttps://oag.ca.gov/cyberexploitation	for victims, tools for law enforcement and technology industry best practices.
www.cagoldberglaw.com or blackmail. and abuse.	www.cagoldberglaw.com or	blackmail, and abuse.
646-666-8908	646-666-8908	
Crisis Text Line Uses text messaging to serve anyone in crisis by connecting callers to crisis counselors, but specifically	Crisis Text Line	Uses text messaging to serve anyone in crisis by connecting callers to crisis counselors, but specifically
Text HOME to 741741 designed to respond to teens.	Text HOME to 741741	designed to respond to teens.
National Domestic Violence Hotline ^a Directs callers to resources in their communities when cases involve intimate partner violence,	National Domestic Violence Hotline ^a	Directs callers to resources in their communities when cases involve intimate partner violence,
1-800-799-7233 or www.thehotline.org including teen dating violence.	1-800-799-7233 or www.thehotline.org	including teen dating violence.
Love is Respect Directed at teens and operated by the National Domestic Violence Hotline. Includes information about	Love is Respect	Directed at teens and operated by the National Domestic Violence Hotline. Includes information about
www.loveisrespect.org or healthy relationships and resources for parents and educators.	www.loveisrespect.org or	healthy relationships and resources for parents and educators.
1-806-331-94/4 OF	1-866-331-94/4 0r	
IEXT: 10VEIS 10 22522	Pape Abuse & Incost National	Perpendente a wide range of covual victimizations with referrals to local covual accault convices
Rape, Abuse de intest national Responso de wide range of sexual victimizations with refering and activism	Network ^a	programs. Provides links to opportunities for volunteering and activism
1-800-656-HOPE or	1-800-656-HOPE or	programs. Fronties mike to opportainties for voluncering and activism.
www.rainn.org	www.rainn.org	
MaleSurvivor ^a Provides links to information about therapists and support groups and other resources for male	MaleSurvivor ^a	Provides links to information about therapists and support groups and other resources for male
www.malesurvivor.org survivors of sexual abuse.	www.malesurvivor.org	survivors of sexual abuse.
National Center for Missing & Exploited Children ^a Maintains online and telephone reporting systems for cases that involve child sexual exploitation,	National Center for Missing & Exploited Children ^a	Maintains online and telephone reporting systems for cases that involve child sexual exploitation,
1-800-843-5678 or including online solicitation of sexual images and sextortion. Cases are reviewed and forwarded to	1-800-843-5678 or	including online solicitation of sexual images and sextortion. Cases are reviewed and forwarded to
http://www.missingkids.com/cybertipline/ law enforcement agencies.	http://www.missingkids.com/cybertipline/	law enforcement agencies.

^a These resources were provided to respondents at the beginning and end of the online survey.

described in Table 1. We did not offer incentives for survey completion.

According to Facebook metrics, the advertisements reached 1,370,802 people. From these advertisements and other recruitment tactics (i.e., advertising on Twitter, links to the survey on the researchers' websites, links shared by members of the advisory panel that helped to develop the survey, and advertisements associated with relevant Google searches), 8,183 people began the survey and 28.5% (n = 2,337) reached the final page. Of these, 91.9% were referred from the Facebook advertising campaigns. We retained for analysis surveys that were substantially complete (n = 1,628).

Sample

We excluded respondents with missing data about age at the time a sextortion incident began (n = 78). Almost half of the remaining respondents (n = 1,550) reported incidents that began when they were minors (47.5%; n = 737). Respondents aged 18 and 19 when they took the survey reported 77.6% of these (n = 572). We used their reports for analysis because we wanted information about the most recent cases. Eighty-seven percent described incidents that occurred within 2 years before their participation in the survey. We compare their reports with those of respondents who were ages 18–25 when sextortion occurred (n = 813).

Measures

Measures were developed with input from a panel of experts who had experience investigating sextortion complaints and working with victims. These included employees of six technology companies, a victim advocacy group, an agency that handles reports of sextortion cases, and a law enforcement agency, as well as an individual victim advocate. Members of the panel participated in conference calls to discuss the goals and structure of the survey, and they reviewed, commented on, and pretested drafts of the survey.

Definition of sextortion. Respondents qualified for the survey by answering yes to the initial question, "Has someone threatened to show a sexual image of you to another person or post it online to make you do something?" If this had happened more than once, respondents were instructed to report about the first time. The survey defined sexual image as "a picture or video (real or fake) that showed you nude, only partly clothed or in a sexual pose."

Incident characteristics. The survey asked respondents about age, gender, education, ethnicity, and race; if they knew sextortion perpetrators in person or online only; how perpetrators acquired sexual images and their content; type and duration of threats; whether and how perpetrators carried out threats; disclosure to family and friends; reporting to websites and police; and the impact of incidents on respondents' offline lives (e.g., school-related problems, losing relationships with friends or family, seeing a medical or mental health practitioner).

Statistical analyses

We used IBM SPSS Statistics version 23 (IBM SPSS Statistics, IBM Corporation, Armonk, NY) for all analyses. We conducted cross tabulations and chi-square tests and to examine the characteristics of sextortion incidents that began when 18- and 19-year-old respondents were minors compared with those that started when respondents were young adults. We conducted a logistic regression to determine which characteristics were associated with episodes involving minors compared with young adults. The logistic regression model provides odds ratios adjusted for personal characteristics (e.g., age, gender, education), recentness of incident (2013–2015 vs. earlier), and whether the incident had ended at the time of the survey. The regression model included dichotomous variables shown to be significantly different at $p \le .05$ using chi-square tests comparing incidents occurring with minors versus young adults.

Results

Most 18- and 19-year-old respondents who reported incidents when minors were female (91%); 79% were white; 14% identified as Hispanic (Table 2). Approximately half were high school graduates, and another 31% had some post-secondary education. Three-quarters were ages 16 or 17 when the sextortion began; 5% were younger than 14.

Characteristics of sextortion incidents

Most respondents who described sextortion incidents as minors (59%) knew the perpetrators in person (Table 3). Of these perpetrators, 59% were current or former romantic or sexual partners, but 21% were friends or acquaintances and 15% were persons known from work or school. The great majority of in-person perpetrators (92%) were male; 52% were age 17 or younger. (Data about the subgroups of in-person and online relationships are not shown in the table.)

Table 2

Characteristics of sample, minors at start of sextortion incident (ages 17 and younger) compared with adults at start of incident (ages 18–25)

	Minors	Adults
	n = 572	n = 813
	n (%)	n (%)
Female***	521 (91.1)	627 (77.1)
Race		
White/Caucasian	453 (79.2)	637 (78.4)
Black/African American	23 (4.0)	29 (3.6)
Asian	16(2.8)	29 (3.6)
Native Hawaiian/Pacific Islander	2(.3)	5 (.6)
American Indian/Alaska native	12(2.1)	19 (2.3)
Mixed race/multiracial	18 (3.1)	23 (2.8)
Other race	2(.3)	6 (.7)
Missing ^a	46 (8.0)	65 (8.0)
Hispanic or Latina/o ethnicity	80(14.0)	100 (12.3)
Education		
Not high school graduate***	87 (15.2)	40 (4.9)
High school graduate or GED***	299 (52.3)	231 (28.4)
Some college or technical school***	177 (30.9)	384 (47.2)
College degree or higher***	6(1.0)	156 (19.2)
Age when sextortion incident began		
13 or younger	29 (5.1)	n/a
14 or 15	112 (19.6)	n/a
16 or 17	431 (75.3)	n/a
18 or 19	n/a	461 (56.7)
20–22	n/a	254 (31.2)
23–25	n/a	96 (11.8)

*** *p* ≤ .001.

^a Table shows missing data ≤5%. Data are missing because respondents declined to answer a question or answered "Don't know/Not sure."

Table 3

Characteristics of sextortion incidents, minors at start of sextortion incident (ages 17 and younger) compared with adults at start of incident (ages 18–25)

5 0 / 1		· ·
	Minors	Adults
	n = 572	n = 813
	n (%)	n (%)
	11 (70)	II (70)
Respondent (R) knew perpetrator (P) in-person	340 (59.4)	479 (58.9)
R knowingly provided image to P*		
Yes	431 (75.3)	557 (68.5)
Missing a	32 (5.6)	48 (5.9)
Nilssing	52 (5.0)	40 (3.9)
R first gave sexual image to P because		
$(n = 431/n = 557)^{o}$		
In a wanted romantic or sexual relationship	301 (69.8)	415 (74.5)
with P		
Pressured, tricked, threatened, or forced to	290 (67.3)	256 (46.0)
provide images***		
Other wave De convinced impages h		
Other ways Ps acquired infages		
Recorded image of R without consent **	124 (21.7)	238 (29.3)
Someone else gave image of R to P*	66 (11.5)	66 (8.1)
Created a fake image	49 (8.6)	48 (5.9)
Hacked into a device or online account to	22 (38)	46 (57)
acquire image	(=)	()
Missing	EE(0.8)	72(0,0)
IVIISSIIIg	56(9.8)	75 (9.0)
Image R was threatened with showed***		
Sexual acts, like masturbation or with another	122 (21.3)	280 (34.4)
person		
No sexual acts, but genitals	187(32.7)	227(279)
No sexual acts or genitals but other pudity	133 (23.3)	167(20.5)
Security Constraints of generalized and the security	104(10.2)	107 (20.3)
Sexual poses in revealing clothing, like	104(18.2)	98(12.1)
underwear		
What P demanded from R ^b		
Sexual pictures or videos of R***	378 (66.1)	327 (40.2)
For R to stay in or go back to relationship with	241 (42.1)	327(402)
D	211(1211)	527 (1012)
r The last second is second as a second is the interview.	200 (20 4)	177 (01.0)
To look a certain way or do certain things in	208 (36.4)	177(21.8)
pictures***		
To meet R in person*	125 (21.9)	141 (17.3)
To meet R online for sex***	170 (29.7)	151 (18.6)
For R to harm her- or himself***	75 (13.1)	61 (7.5)
Sexual nictures or videos of someone else	43 (75)	42(52)
Monou***	-13(1.3)	42(3.2)
Money	23 (4.0)	97(11.9)
R threats of online harm ^b		
Post sexual image of R online	369 (64.5)	543 (66.8)
Send or show image to friend or acquaintance	365 (63.8)	460 (56.6)
of R or P**		
Send sexual image to R's family	271(474)	365 (44.9)
Tag or include P's name with posted image*	271(41.4) 225(411)	305(44.5)
Consta false accounts an average line with posted image	233 (41.1)	280 (33.2)
Create fake accounts or sexual images	148 (25.9)	1/1(21.0)
depicting R*		
Post other personal information about R with	81 (14.2)	127 (15.6)
picture		
R threats of offline harm ^b		
Cet R in trouble at school or work	231(404)	280 (35 5)
Get K III trouble at School of Work	231 (40.4)	209 (33.3)
Come after R or stalk R in person	193 (33.7)	232(28.5)
Beat, rape, kill, or otherwise physically hurt R**	167 (29.2)	179 (22.0)
Harm R's family, friends, or pets	78 (13.6)	105 (12.9)
P made threats via ^b		
Cell phone**	380 (66 4)	476 (58 5)
Computer or related device	211(544)	460 (577)
	311(34.4)	409 (37.7)
In person	113(19.8)	145(17.8)
Duration of threats***		
Less than 1 week	97 (17.0)	229 (28.2)
Between 1 and 2 weeks	85 (14.9)	131 (16.1)
>2 weeks–1 month	90 (15.7)	100 (12.3)
>1_3 months	81 (14.2)	119(146)
2 Cmenths	40 (0, 0)	77 (0.5)
>>-o IIIOIIIIIs	49 (8.6)	77 (9.5)
>6 months	154 (26.9)	125 (15.4)
P carried out threats*	270 (47.2)	331 (40.7)
How P carried out threats online $(n = 270)$		
$n = 331)^{b}$		
Stalked online (repeated unwanted online or	195 (72.2)	228 (68 0)
coll phone contact)	155 (72.2)	220 (00.9)
cen phone contact)		
	(continued o	n next page)

Table 3

Continued

	Minors n = 572	Adults $n = 813$
	n (%)	n (%)
Sent a sexual image of R to someone	133 (49.3)	139 (42.0)
Posted a sexual image of R online	103 (38.1)	138 (41.7)
Posted personal information about R online	69 (25.6)	88 (26.6)
Hacked into an account belonging to R	54 (20.0)	75 (22.7)
Created fake accounts or photos depicting R	45 (16.7)	46 (13.9)
Acquired personal information about R's	36(13.3)	71 (21.5)
family		
How P carried out threats offline $(n = 270)$		
n = 331) ^b		
Stalked or harassed R in-person	116 (43.0)	125 (37.8)
Got R in trouble at school or work**	113 (41.9)	101 (30.5)
Beat, raped, or physically hurt R or tried to	88 (32.6)	106 (32.0)
Harassed or harmed R's family, friends, or	29 (10.7)	42 (12.7)
pets		
Impacts on respondents' offline life ^b		
Lost relationship with friend or family member***	263 (46.0)	275 (33.8)
Saw mental health or medical practitioner***	164 (28.7)	166 (20.4)
Left or changed school or had school-related problem***	78 (13.6)	48 (5.9)
Moved to new neighborhood, community, or town	58 (10.1)	103 (12.7)
Incurred financial costs**	45 (7.9)	106 (13.0)
Left or changed job or had job-related problem	43 (7.5)	74 (9.1)
None of these impacts on offline life**	31 (5.4)	75 (9.2)

P = perpetrator; R = respondent.

* $p \le .05$, ** $p \le .01$, *** $p \le .001$.

^a Table shows missing data ≤5%. Data are missing because respondents declined to answer a question or answered "Don't know/Not sure."

^b Respondents could give multiple answers.

Two in five incidents occurring to respondents when they were minors involved online relationships in which respondents never met perpetrators in person. Initial contact most commonly occurred via messaging applications (34%) or social networking sites (32%). More than half of respondents in online relationships (58%) stated that, "based on what they know now," perpetrators lied or gave false impressions during their first contact. Most of these lies involved perpetrators' ages (45%) and intentions in wanting a relationship with the respondent (45%).

Three-quarters of respondents who were minors when sextortion occurred knowingly provided sexual images to perpetrators. Of these, 70% did so because they were in a desired romantic or sexual relationship. However, two-thirds of those who provided images said they felt pressured, tricked, threatened, or forced to do so. Perpetrators also used other means to acquire images. In 22% of cases, perpetrators recorded images of respondents without their consent. About one in 10 perpetrators against minors created fake images, for example, by using software to meld victims' faces onto pornographic images. A small percentage (4%) acquired images by hacking. The "most explicit" image in cases occurring when respondents were minors ranged in content from depicting sexual acts (21%) or genitals (33%) to other nudity (23%) or sexual poses in revealing clothing (18%).

Most perpetrators who threatened respondents when they were minors did so to coerce them to provide additional images (66%). Some (42%) were trying to force respondents to return to or stay in relationships. In 36% of cases, perpetrators dictated to minors how they should look and what they should do in images;

in 13% they told respondents to harm themselves, for example, by cutting or committing suicide.

Perpetrators most commonly threatened to harm respondents as minors by posting sexual images online (65%) or sending images to friends and acquaintances (64%) or respondents' families (47%). Some threatened to include respondents' names with posted images (41%), and others said they would impersonate respondents online with fake accounts or fake sexual images (26%). Notable percentages of perpetrators threatened harm to respondents in offline venues by, for example, getting them in trouble at work or school (40%); stalking them in person (34%); or beating, raping, or even killing them (29%). Threats were most commonly made via cell phone (66%) or computer (54%), but one in five were threatened in person. One in four respondents who were minors during sextortion incidents endured threats that lasted more than six months.

Perpetrators carried out threats in about half of the incidents that happened to respondents when they were minors (47%). Almost three-quarters of those who carried out threats stalked or harassed respondents online (72%). Almost half exposed sexual images of victims by sending images to family, friends, acquaintances, or others (49%). Perpetrators who carried out threats also posted images online (38%), stalked or harassed respondents in person (43%), got them in trouble at school or work (42%), and committed physical or sexual assaults or attempted to (33%).

As a result of sextortion incidents, 46% of respondents who were minors lost relationships with friends or family; 29% saw mental health or medical practitioners; 14% left or changed schools or had school-related problems; 10% moved to a new community; and smaller percentages had job-related problems or financial losses. Only 5% reported none of these impacts to their offline lives.

Victim disclosure and reporting

About half of respondents who reported incidents when they were minors (51%) did not tell a family member, friend, or acquaintance (Table 4). Most non-disclosers said they were too embarrassed or ashamed (81%) or thought they might get in trouble if they told (68%). Of the 49% who disclosed sextortion, only about one-third told a parent. Few minors sought help from websites (18%) or reported to police (13%).

Characteristics of sextortion occurring to minors compared with young adults

As shown in Table 5, incidents that occurred to 18- and 19-yearold respondents when they were minors were more serious than those occurring to young adults in several ways. Perpetrators were more likely to demand additional sexual images from minors, and threats were more likely to last more than six months. Perpetrators were more likely to tell minors to harm themselves and such respondents were more likely to feel pressured, tricked, threatened, or forced into providing images initially. Respondents who were minors also were more likely to be female and less likely to be threatened with images that depicted sexual acts.

Discussion

Sextortion of minors is multifaceted with dynamics that often involve coercion on several levels. These include pressure on victims to produce sexual images, attempts to control victims with

Table 4

Disclosure and reporting by respondents, minors at start of sextortion incident (ages 17 and younger) compared with adults at start of incident (ages 18–25)

	Minors n = 572 n (%)	Adults n = 813 n (%)
Did not disclose incident to family member or	291 (50.9)	374 (46.0)
friend Dessen did not disclose to family on friend		
$(n - 201/n - 274)^{b}$		
(II = 251/II = 574) Too embarrassed or ashamed*	237 (814)	277 (741)
Thought might get in trouble***	199(684)	161(43.0)
Thought could handle it by self	134 (46.0)	191 (51.1)
Did not think they would be helpful	75 (25.8)	116 (31.0)
Afraid P would find out	73 (25.1)	74 (19.8)
Threats stopped before it got to that point	38 (13.1)	66 (17.6)
Did not occur to R	20 (6.9)	25 (6.7)
Disclosed incident to family member or friend	281 (49.1)	439 (54.0)
Disclosed to $(n = 281/n = 439)^{b}$		
Friend or family member younger than 18***	161 (57.3)	69 (15.7)
Adult friend, age 18 or older***	113 (40.2)	303 (69.0)
Parent	101 (35.9)	154 (35.1)
Other adult family member*	41 (14.6)	91 (20.7)
Family or friend ^b		
Helped end the situation or make it easier		
Yes	114 (40.6)	190 (43.3)
Missing ^a	38(13.5)	49 (11.1)
Did something to make the situation worse	52 (10 5)	CO (15 5)
Yes	52(18.5)	68 (15.5)
Missing Reported cituation to website or app*	37(13.1)	42 (9.6)
	104 (18.2)	103 (23 7)
Missing	36(63)	43(53)
Website or app $(n = 104/n = 193)^{b}$	50(0.5)	13 (3.3)
Did something helpful in response to		
report		
Yes	25 (24.0)	55 (28.5)
Missing	21 (20.2)	32 (16.7)
Was unhelpful in some way		
Yes	48 (46.2)	82 (42.5)
Missing	27 (26.0)	45 (23.3)
Did not report to website or app*	468 (81.8)	620 (76.3)
Did not report to website or app because (n = 468/n = 620) ^b		
Did not think it would be helpful	231 (49.4)	285 (46.0)
Too embarrassed or ashamed**	212 (45.3)	229 (36.9)
Afraid P would find out	146 (31.2)	161 (26.0)
Did not occur to R	112 (23.9)	140 (22.6)
Could not figure out how to make a report	59 (12.6)	87 (14.0)
Threats stopped before it got to that point**	58 (12.4)	117 (18.9)
Reported situation to police	75 (13.1)	128 (15.7)
P = perpetrator; R = respondent.		

* $p \le .05$, ** $p \le .01$, *** $p \le .001$.

^a Table shows missing data \leq 5%. Data are missing because respondents de-

clined to answer a question or answered "Don't know/Not sure."

^b Respondents could give multiple answers.

threats to expose those images, and threats that are carried out causing serious consequences to adolescent victims. About 40% of cases recounted by respondents victimized as minors involved perpetrators that teens met online, but most cases involved perpetrators victims knew in person often as current or former romantic or sexual partners. The great majority of victims were girls, and more than 90% of "in-person" perpetrators were boys or men. This marked gender disproportion is consistent with research showing that gender imbalance becomes more extreme as offenses involve more sexual aggression and intimidation [27],

Table 5

Logistic regression predicting characteristics of incidents that started when respondents were minors (ages 17 and younger) compared with those that started at ages 18–25 (n = 1,385)^{a,b}

	В	р	Adjusted odds ratio ^a	95% Confidence interval
P wanted sexual images of R	.875	.000	2.40	1.87-3.09
R was female	.720	.000	2.05	1.43-2.96
Threats lasted >6 months	.565	.000	1.76	1.31-2.36
P wanted R to harm self	.534	.007	1.71	1.15-2.52
P pressured, forced, tricked R to give images	.480	.000	1.62	1.27-2.05
Image showed sex act	475	.001	.62	.4782
P wanted money	754	.005	.47	.2880
–2 log likelihood	1634.260			
Model chi-square	213.449***			
R2 (Cox and Snell)	.143			
R2 (Nagelkerke)	.192			
McFadden	.114			

P = perpetrator; R = respondent.

**** *p* < .001.

^a We omitted some variables that were significantly different at $p \le .05$ using chi-square tests because of high inter-correlations, particularly individual variables for types of threats carried out which had high inter-correlations with threats made.

^b Adjusted for gender, age, race, ethnicity, education, recentness of incident, and whether incident had ended.

although self-selection into the sample also may have contributed to the disproportion of female respondents.

Although sextortion involved a variety of scenarios and both in-person and online relationships, all of these young victims were threatened with the humiliation of sexual images being exposed to family members, friends, or the public online. Noteworthy numbers of the young women who responded to the survey had endured, as adolescents, pressure to produce sexual images, online stalking, threats of assaults, and demands to harm themselves. About one-guarter endured threats that lasted more than six months. Almost half saw perpetrators carry out threats. Sextortion incidents also co-occurred with dating violence in which perpetrators stalked and assaulted victims. Needless to say, many respondents reported serious consequences from these episodes. Nearly half lost relationships with friends or family members, and three in 10 sought mental health or medical services. Some victims had school-related problems or had to move. Further, incidents that occurred to minors were more serious in several respects than those to respondents victimized as young adults. Perpetrators against minors were more likely to pressure victims into producing the initial sexual images, demand additional sexual images, threaten victims for more than six months, and urge them to harm themselves.

Despite the seriousness of these incidents, adolescent victims were reluctant to seek advice or help. Only half told anyone, even friends, about the sextortion, and few sought assistance from websites or police. This low level of disclosure contrasts with the much greater willingness of victims of more conventional teen dating violence to turn to others for help [28]. The low level of help-seeking appeared to stem from the shame and embarrassment that the mostly female victims felt and fears that they would be blamed for the situation.

Practitioners who treat and work with adolescents can help in several ways. Table 1 lists organizations that can serve as resources to sextortion victims, including emotional support and advice about removing images posted online and possible criminal and civil remedies. Other organizations listed can connect victims of dating and sexual violence with resources in their communities, provide educational materials on relevant topics, and assist with reporting cases to law enforcement agencies. Some have resources for concerned professionals such as law enforcement investigators, attorneys, legislators, and activists.

Prevention programs are another hopeful avenue for addressing sextortion, teen dating violence, and related problems. Several programs aimed at middle and high school students are effective at reducing teen dating and other forms of youth interpersonal violence. These include Safe Dates [29,30], Green Dot [31], and The Fourth R [32]. Although these programs do not directly address sextortion, they include elements that can help potential victims by teaching adolescents to recognize unhealthy relationships, building refusal skills for pressured situations, and educating bystanders about how to intervene. The Fourth R also works with parents to improve monitoring of children's media use [33]. Some of these programs also address the gender inequality that underlies dating violence and threats of sextortion used to humiliate girls and women [19]. Prevention and intervention practices can address gender-based norms and gender policing, such as the teasing or shaming done in public by males to uphold masculine norms [34]. Such messages can be used to emphasize that blame for sextortion incidents should be shouldered by perpetrators and not placed on the girls who are victimized by their threats.

Rapidly changing technology poses new and unanticipated problems for young people. Modern research approaches can help professionals to monitor such experiences and understand harmful situations that youth may be reluctant to disclose and seek help for. Sextortion is such a problem, and this study provides an example of how problems that occur largely online can be better studied, described, and addressed.

Limitations

Respondents do not constitute a representative sample of sextortion victims, so our findings cannot be generalized beyond this group. Also, the sample of respondents of color is small for all groups relative to the general population except for Hispanics. Respondents' characteristics and experiences reflect how we recruited respondents. We could not verify whether respondents met the age criteria for participation; it is possible that older or younger persons were included in the sample. Also, we have no data about the mental health of victims. Eighteen- and 19year-old respondents provided retrospective accounts of episodes that occurred when they were minors, and minors reporting at the time of the episodes might recall incidents differently. We did not have the resources to conduct the survey in languages other than English.

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