Nonconsensual Distribution of Intimate Images: Exploring the Role of Legal Attitudes in Victimization and Perpetration

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Abstract

In the last 10 years, following widespread outcry among legal scholars and activists, 48 states passed legislation explicitly criminalizing the nonconsensual distribution of intimate images (NCDII) or what is colloquially known as "revenge porn." This increased authority granted to criminal justice agencies, coupled with greater media attention to NCDII incidents, may have influenced patterns of victimization and perpetration. Using a survey recently distributed to a sample of young adults ($N=713$), we find that NCDII perpetration is strongly related to previous victimization, risky online behaviors, and receipt of unsolicited images. Perceptions of police efficacy in addressing NCDII issues is the strongest predictor of attitudes toward both reporting victimization and the belief that perpetrators will experience some punitive consequence. We also conducted an experiment using vignettes with gender varying victim-offender dyads to explore how gender bias influences attitudes toward punishment for NCDII perpetrators as well as perceptions of "revenge porn" in incidents involving same-sex and mixed-sex couples; we find that respondents are less likely to attribute "revenge porn" or to suggest punitive responses when the perpetrator is female

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regardless of the gender of the victim. Importantly, we find initial evidence of a new typology of NCDII perpetrator that counters existing research on victim–perpetrator gender dyads: women who nonconsensually disseminate unsolicited intimate images sent by men. Collectively, our findings challenge the efficacy of existing criminal statutes, identify new challenges in effectively legislating against NCDII, and contribute to the body of work on gender-based violence, perceptions of police efficacy, and punitive attitudes.

Keywords

criminology, women offenders, violent offenders, dating violence, internet and abuse

Introduction

In 2019, former congressional Representative Katie Hill resigned from her position following allegations of inappropriate sexual conduct and publication of her nude images on the conservative website Red State and the Daily Mail. She later sued both sites, accusing them of violating California's "revenge porn" statute by publishing explicit images that had been distributed without her consent (Mehta, 2021). While her argument was dismissed on grounds of First Amendment protection, her public battle to remove the pictures and receive justice from the legal system brought new attention to the issue of nonconsensual distribution of intimate images (NCDII), colloquially known as "revenge porn." Former Rep. Hill joined a growing movement to move revenge porn from the civil to the criminal legal system: New Jersey and California were among the first to do so and, following public outcry over Rep. Hill's unsuccessful case, another 45 states and the District of Columbia followed suit. In 2015, major technology companies including Reddit, Facebook, Twitter, and Google announced a ban on posting nonconsensual images (Franks, 2017). Google agreed to remove photos when requested and Facebook began to use preventative measures to prevent photos from appearing on its site in the first place (Franks, 2017).

Existing research on the prevalence and consequences of NCDII primarily uses data from before this public outcry and subsequent broad attention to the issue of "revenge porn." As we will discuss, legal changes related to this phenomenon give rise to a unique opportunity to examine linkages between perceptions of NCDII as a problem, perceptions of legal efficacy in addressing NCDII, online behaviors, victimization, and offending in the present day. The rapid introduction of criminal sanctions for NCDII may deter individuals from engaging in these behaviors, particularly as new statutes have widened the scope of what can be

considered nonconsensual distribution. Additionally, increased attention to and anxiety over the ways the Internet and social media can be used by strangers and trusted partners to enact violence and interpersonal harm may discourage consensual image sharing, reducing the potential for NCDII offending.

In this study, we explore the prevalence of NCDII victimization and perpetration, patterns of consensual image-sharing of explicit photos, and attitudes toward mainstream institutions such as the police among a sample of college students at a major state university in the Midwest United States. We use a more expansive measure of NCDII that distinguishes between directly showing images to a peer, sharing images via digital communication, and posting images to public websites. Expanding this measure of behavior fills a gap in previous studies and demonstrates that NCDII behavior may be more prevalent than previously estimated depending on how it is defined. We improve upon existing work by exploring a more comprehensive array of actions and attitudes within the same sample, contributing to literature on sexual and gender-based violence, perceptions of police efficacy, and punitive attitudes. We use survey responses on self-reported victimization, self-reported offending, attitudes toward the police, and punitive attitudes to assess how these broad social changes have influenced behaviors ($N = 713$). We also conduct a vignette experiment to assess variation in punitive attitudes toward cases of NCDII based on the genders of victim–perpetrator dyads to examine how the gender of the perpetrator and the victim influence attributions of NCDII and punitive attitudes toward perpetrators. In the remainder of this paper, we outline the state of the literature on revenge porn and describe major legal and social changes that could differentially affect patterns of victimization, offending, image-sharing behaviors, trust in police and other mainstream institutions, and punitive attitudes toward perpetrators of revenge porn.

Nonconsensual Image Distribution: Offending and Victimization

We consider nonconsensual distribution of intimate images (NCDII) to include any act that involves the sharing of an intimate image of someone else without the permission of the photo subject (DeKeseredy & Schwartz, 2016; McGlynn & Rackley, 2016). This includes but is not limited to "revenge porn," a subtype of NCDII that takes place at the dissolution of a romantic or sexual relationship to shame, humiliate, or harm, most often by men against women (Halder & Jaishankar, 2013; Salter & Crofts, 2015).

Among young adults, *offending* rates range between 3% for behaviors such as forwarding or posting images of others (1% for adults) to 24% for any kind

of nonconsensual sharing (16% for adults) (Mitchell et al., 2012; Thompson & Morrison, 2013; Wood et al., 2015). While a sizeable body of literature examines why individuals consensually share intimate images (e.g., Dir & Cyders, 2015; Dir et al., 2013), there is little exploring the motivations underlying a perpetrators' decision to later share an image without consent. However, there may be other reasons that individuals (especially adolescents) choose to engage in NCDII (Hall & Hearn, 2017). In their ethnography of nonconsensual image sharing behaviors among young people in Denmark, Johansen et al. (2018) describe NCDII as 'visual gossip' used to create and reinforce relationships with peers. Individuals who received intimate images would share them with friends to make fun of the photo subject or to achieve a higher social standing (Ringrose & Harvey, 2015), acting out gendered norms of acceptable and unacceptable sexual behavior (West & Zimmerman, 1987).

Estimates of the prevalence of *victimization* from NCDII range from around 1% in adult or adolescent samples to 6% (adult) and 32% (young adult), depending on how expansive the definition of NCDII behaviors is (for a review, see Powell et al, 2020; Walker & Sleath, 2017). This wide range reflects different forms of NCDII behaviors: posting an image online or distributing an image through social media is associated with relatively low rates of perpetration compared to sharing images privately (Karasavva & Forth, 2021; Walker & Sleath, 2017). Victimization is greater among young adult women and for those who identify with a sexual minority (e.g., homosexual, bisexual, or other) (Priebe & Svedin, 2012; Stanley et al., 2016) though some studies have found that men and women are victimized at similar rates (Dodge, 2021; Eaton et al, 2017; Henry et al, 2017). Most perpetrators are men (Hearn & Hall, 2019). In a representative sample in the United States, 1 in 12 individuals reported experiencing NCDII at least once and 1 in 20 reported engaging in NCDII (Ruvalcaba & Eaton, 2019).

Experiencing NCDII has immense negative consequences on victims (Short et al., 2017). Interviews with young women who had experienced some form of NCDII revealed declines in overall mental health, anxiety, depression, post-traumatic stress, suicidal thoughts, increased alcohol and drug consumption, and low self-esteem and confidence (Bates, 2017; Bustamente, 2017). These symptoms are common among victims of cyberbullying but may be especially exacerbated for survivors of NCDII given the permanence of their intimate images on the Internet (Branch et al., 2017). Some report losing their job or missing out on employment opportunities (Citron & Franks, 2014).

Despite the prevalence of NCDII and its clearly detrimental impact on victims, there is little indication that individuals who have experienced NCDII turn to the police for help and support (Short et al., 2017). This may reflect their fear that the police will not take them seriously, humiliate them, blame them for their

own victimization, or simply state that there is nothing that can be done (Salter & Crofts, 2015). Among a sample of Australian policy makers, law enforcement officers, advocates, and others, one dominant narrative explaining low levels of police response to NCDII is the prevalence of victim-blaming and harm minimization attitudes among officers (Henry et al., 2018) alongside other critical themes identifying the role of inconsistent laws, jurisdictional limits, and a lack of resources. These trends, collectively, underscore the challenges of adequately addressing the needs of NCDII survivors and may be presently exacerbated given heightened attention to police misconduct following the murder of George Floyd in 2020 and subsequent social advocacy (Taylor, 2021).

Legal Changes

In the United States, NCDII was treated for a long time as an issue for the civil courts, not the criminal system (Patton, 2015). Survivors were left with no path to legal and judicial remedy and perpetrators were arguably free to engage in this salacious behavior with little concern for punishment. Broad anti-harassment laws were insufficient for addressing the unique case of NCDII—in one notable instance, a student named Holli Jacobs became a victim of "revenge porn" when her ex-boyfriend, Ryan Seay, posted her intimate images on Facebook and emailed them to her bosses. When Jacobs sought legal aid through the Miami-Dade County Police, she was told that "because she was over 18 and Seay hadn't technically stolen the photographs, there was nothing they could do" (Miller, n.d., as cited in Bustamente, 2017, pp. 362–363; see Bond & Tyrell, 2021). Because NCDII deals with the non-consensual *distribution* of an individuals' intimate images, the initial consensual sharing complicates straightforward legal remedies.

Despite disagreements regarding the need for specific criminal remedies (Bustamente, 2017; Calvert, 2014; Humbach, 2014; Jeong, 2013), legal scholars and social activists in favor of anti-NCDII legislation have proposed methods for creating a new unprotected category of speech (Cohen, 2015) or drafting federal legislation (Fay, 2018; Franks, 2016). They contend that the challenges to creating effective legislation in light of First Amendment concerns are certainly surmountable and, moreover, are morally necessary for protecting survivors of NCDII (Citron & Franks, 2014). Years of dedicated work, supported by social activist campaigns like End Revenge Porn (Jacobs, 2013) and research institutes such as the Cyber Civil Rights Initiative, have led major leaders in the technology industry to enact new policies against NCDII (Franks, 2018). Reddit, which was a major platform used by NCDII perpetrators, was the first to ban nonconsensual nude images in early 2015. Twitter and Facebook soon followed suit. Later that year, Google announced

it would honor requests to remove intimate images that were posted without permission, marking a change from their previous commitment to wholly unregulated search results (Franks, 2018). The same year, the Federal Trade Commission took steps to remove major "revenge porn" sites such as IsAnybodyDown, IsAnyoneUp and UGotPosted by charging their owners with extortion, theft, hacking, and identity theft. This effectively upended the business model of "revenge porn" websites (Finley, 2015).

The most notable change in recent years is the massive increase in the number of states that have enacted criminal laws related to NCDII. Between 2013 and 2017, 36 states and Washington DC passed legislation explicitly criminalizing NCDII; today, 48 states, DC, and Guam all have criminalized NCDII in some form (Cyber Civil Rights Initiative, n.d.). These expanded powers grant greater capacity for law enforcement to respond to NCDII complaints. The statutes differ considerably across states (see Appendix C). Some include explicit language outlining that for a particular behavior to be considered a criminal act, it must meet certain motivation requirements; in other words, they require that the perpetrator act out of a desire for revenge, or to humiliate and hurt the victim (McGlynn et al., 2017) despite a lack of evidence that perpetrators of NCDII are motivated only by these emotions. Others require that the victim experience serious emotional distress or financial loss or restrict criminalization to incidents involving current or former romantic partners. Still others mandate only that the perpetrator could reasonably be expected to know that sharing the image could cause distress.

The overwhelming wave of state laws penalizing "revenge porn" arguably gives more power for law enforcement officers to act on incidents of NCDII. However, it is unclear whether greater awareness of possible illegality relates to patterns of perpetration or attitudes toward the police (Karasavva & Forth, 2021).

Research Questions

These changes in the criminality of NCDII perpetration give rise to interesting questions about subsequent attitudes and behaviors related to victimization and perpetration. With these changes in mind, we ask (1) what are the sociodemographic correlates of self-reported victimization?; (2) what are the sociodemographic correlates of self-reported perpetration?; and (3) what is the relationship between NCDII-related attitudes, victimization, perpetration, and attitudes toward punishment and reporting? Because this study is exploratory in nature, we do not present specific hypotheses but rather work to uncover possible relationship that have not been identified in prior work.

Sample

To examine these topics, we collected survey data from a sample of college-aged students at a large Midwestern university ($N=713$) (approved by the university's Institutional Review Board) in August and September of 2021. Respondents were recruited from multiple 100–300 level classes in the Sociology and Criminology department selected using a convenience sampling approach. We introduced the survey using a script that emphasized confidentiality and the voluntary nature of participation. Potential participants were told that the survey would ask questions about their experiences sending and receiving intimate images. After initial data screening (for details, see Appendix A), listwise deletion was used to exclude observations with missing data in key predictors; the final analytic sample includes 713 observations. The average age of respondents is approximately 20 years old, and over half (58%) of the sample are upperclassmen (non-freshmen). The sample is predominantly students who identify as women (66%), 32% men, and less than one-and-a-half percent transgender or nonbinary. Due to the low frequency of transgender and nonbinary respondents, these observations are collapsed into a category with women as "non-men" given the study's focus on attitudes toward a behavior typically characterized as being committed by men. A majority of the sample is White (75%), approximately 8% identify as Hispanic or Latino/a/x, Asian, or Black, and about 3% identify as mixed race or something else. A majority (84%) of the sample identifies as straight and 26% identify as gay, lesbian, bisexual, or something else. Over half of the sample (57%) report that they are not currently involved in any romantic or sexual relationships. The full survey language is included in Appendix D; we describe relevant measures below in detail.

Voluntary Image Sharing Behaviors

The survey included several questions intended to describe the act of initially and voluntarily sharing an intimate image of oneself with another person. Given the prevalence of sharing intimate material among young people, participants were asked whether or not they had voluntarily shared a nude, mostly nude, or sexually explicit photo or video of themselves to another person in the last year. Participants were then asked if they had consensually received explicit images from another person in the last year. The survey included further descriptive measures of voluntary image sharing such as positive benefits (e.g., sense of thrill) and negative consequences (e.g., fear of how the image would be used). These measures are not used in the analysis for this study, but descriptive proportions are included in Appendix B for reference. We return to the role of voluntary image sharing in the discussion.

NCDII Victimization and Perpetration

To measure whether respondents have experienced or perpetrated any NCDII incidents, they were asked to indicate whether any of the following events had ever occurred, to the best of their knowledge: "Someone showed an explicit photo or video of you to another person without your permission (includes showing to someone using their phone screen, etc)," "Someone sent an explicit photo or video of you to someone else without your permission (via text message, etc)," or "Someone posted an explicit photo or video of you online without your permission." Respondents could indicate more than one type of incident and thus the categories are not mutually exclusive. Respondents were also asked to indicate if they had ever engaged in any of these behaviors themselves. If a respondent answered "Yes" to any of these prompts, they were asked to consider the most recent incident and indicate their relationship with the person who shared their image or the person in the image the respondent shared. Those who reported victimization were asked to indicate whether they had experienced negative outcomes as a result of the incident. Additionally, participants were asked if they have ever received any explicit media from someone that they did not consent to, a form of NCDII not traditionally associated with popular perceptions of image sharing. Additional descriptive statistics are included in Appendix B.

Perceptions and Attitudes Toward NCDII

One dimension of interest in this article is to measure young peoples' perceptions of NCDII behavior. To understand this, respondents were asked their opinion of how big a problem sharing others' explicit photos or videos without permission is in society today, using a 4-point Likert-type scale (1="Not a problem at all"; 4="a big problem"). Participants were then asked to indicate, to their best guess, what percentage of students at their university they think have experienced non-consensual distribution and what percentage of students have engaged in nonconsensual distribution. Finally, they were asked to indicate their perceived likelihood that an individual who engages in NCDII would face consequences from authorities for the incident (measured as a continuous variable of percent certainty).

Attitudes and Experiences With Surveilling Institutions

Participants were asked if they ever reported an incident of NCDII victimization to the police, ever been reported to the police for perpetration of NCDII, or had ever been stopped but not arrested by police. They were then asked a battery of questions designed to tap into overall attitudes toward the police

including whether the police can be trusted to make decisions that are right for their community, if most police officers do their job well, whether police officers take the time to listen to people, and whether police officers treat people fairly. These individual measures were used to create a scale with principal component analysis using polychoric correlation for ordinal variables (all factor loadings $>.5$, Cronbach's $\alpha = .90$) (Kolenikov & Angeles, 2009). This factor score indicates overall trust in police and perceptions of procedural justice (Gau, 2014; Nix et al., 2015).

Respondents were asked how effective they believe police officials are in dealing with cases of NCDII and how helpful they believe their local and campus police departments to be in handling NCDII. These measures are used in a scale indicating perceived ability of police to deal specifically with NCDII, calculated with principal component analysis using polychoric correlations (all factor loadings $>.5$, Cronbach's $\alpha = .77$). To measure perceptions of university resources relating to NCDII, respondents were asked to indicate how helpful they believe various university institutions would be in addressing an incident of NCDII victimization, including the Office of Sexual Misconduct Prevention and Response (Title IX), Student Code of Conduct Office, and Gender Equity Center. These measures are also used as a scale (calculated with principal component analysis with polychoric correlations) tapping into respondents' perceived ability of their own university's resources to help students affected by NCDII (all factor loadings $>.5$, Cronbach's $\alpha = .71$).

Experimental Vignettes

In addition to understanding perceptions of NCDII and social institutions' roles in responding to it, we also investigate how specific details of an NCDII incident may affect perceptions of severity and punitiveness. Specifically, the survey incorporates an experimental 2×2 vignette design testing how respondents' perceptions change in response to the genders of an NCDII victim–perpetrator dyad. Respondents were randomly shown one of four vignette scenarios describing an incident of NCDII. Each vignette includes a romantically involved couple whose genders are manipulated across vignette conditions.

> Jamie (20 years old, female) and Kris (20 years old, male) met each other during freshman orientation. They both chose the same major and started working as research assistants in the same lab. Shortly after, they began dating and sometimes sent each other nude photos and explicit texts. After dating for eight months, Jamie suddenly broke off the relationship. Jamie later found out that, after the breakup, Kris had shared an intimate photo Jamie sent him in a group chat of Kris' friends.

By manipulating the gender of the subjects across scenarios, we are able to measure differences in responses conditional on two dimensions: the gender of the victim vis a vis the perpetrator, and the gender makeup of the couple. Participants were asked to indicate whether, in their opinion, this situation constituted revenge porn and how the victim should respond. Then, respondents were asked what they thought would happen to the perpetrator if the victim reported the incident to campus or local police. These responses were used to create an indicator variable for whether a respondent believed the NCDII perpetrator would face any legal or school-related consequences. Finally, participants were asked in an open-ended question to describe what consequence(s) the perpetrator should face in this situation in their own opinion. For analytic purposes, indicator variables were coded to indicate whether a respondent received a scenario with a female perpetrator condition, or a same-sex couple condition. These indicators are used to compare means in outcomes across treatment groups and test for statistically significant differences. Vignette treatment group indicators are also used to control for respondents' assigned scenario in regression models that estimate outcomes measured after the vignette. Vignette assignment groups were checked for equality across all demographic characteristics, and no significant differences were found.

Analytic Strategy

We first present descriptive statistics for the sample and for each study measure of interest. We then present a series of regression results estimating the relationship of demographics, NCDII perceptions, attitudes toward authority, and experiences of NCDII with NCDII attitudes and engagement. Four binary logistic models are estimated to predict the likelihood of engaging in NCDII perpetration, likelihood that a respondent believes an NCDII perpetrator would face legal consequences, likelihood that a respondent believes an NCDII perpetrator would face school-related consequences, and likelihood that a respondent believes NCDII victims should file police reports of their incidents. These outcomes are coded as binary indicator variables, and thus suited to analysis using logistic regression. Continuous variables were visually assessed for normality before proceeding. Model fit was assessed using Hosmer–Lemeshow tests and multicollinearity was addressed by consulting the model variance inflation factors (see Appendix B). Additionally, we conduct a linear regression predicting respondents' perceived likelihood that NCDII perpetrators will face any consequences if reported to the authorities, measured as a continuous variable. All predictors are introduced in the same model for each outcome. To examine variation in NCDII attitudes by vignette scenarios, we present two-sample t-tests of means across treatment groups.

Results

Table 1 shows descriptive statistics of image sharing behavior, both consensual and NCDII. About half of the sample (45%) report sharing intimate images with another person in the last year, and 24% report ever sending intimate images with a stranger. A majority of the sample (64%) reports receiving intimate images in the last year and 62% report ever receiving unsolicited or nonconsensual intimate images from another person. A quarter of the sample reports having experienced some form of nonconsensual image sharing of their own intimate content (25%, 178 respondents) whether by showing, sending, or posting; this is on the higher end of the range reflected in previous studies of NCDII. A majority of victimization incidents occurred when a respondents' image was shown to another person (23%), of which 12% (88 respondents) report someone sent their photo via messaging to another person and 2% (17 respondents) report having had their picture posted online without permission. Of the 178 who reported any NCDII victimization, 82 had experienced more than one form of victimization and about half reported negative consequences from their experience. Victims most commonly identified previous partners as the image sharer (33%) followed by friends (22%) and current partners (17%). Several reported that their content was shared by a stranger (11%) or that they don't know who shared their photo (12%). Sixteen respondents indicated that they have filed a police report for an incident of NCDII. A vast majority of those who report NCDII victimization are women (74%) and a small proportion are men (25%) or non-binary (1%).

A smaller but still substantial proportion of the sample reported having engaged in any NCDII behavior (18%; 131 respondents), much higher than the 1 in 20 (5%) estimate reflected in representative samples (Ruvalcaba & Eaton, 2019). Of those who have engaged in any NCDII behaviors, about 94% report having shown someone else's explicit content to another person, 5% report having sent someone's explicit content to someone else via messaging, and only one respondent reported having posted someone's explicit content online without permission. Those who have engaged in NCDII behavior report having shared explicit content mostly of strangers (30%) and friends (27%), as well as previous partners (24%). One respondent who reported NCDII behavior also indicated that they have been reported to the police for such an incident. Interestingly, a majority of those who reported NCDII perpetration were also women (68%) versus 31% men and <1% transgender. This is likely due to the overrepresentation of women in the sample, but suggests interesting implications that are reviewed in the discussion.

Table 2 presents respondents' attitudes toward NCDII and their perceptions of authoritative institutions. Respondents generally strongly agree that NCDII

Table 1. Image Sharing and NCDII Descriptive Statistics (*N* = 713).

	Mean (%)	SD	Min.	Max.
Sent explicit image	0.45	0.50	0.00	1.00
Sent explicit images to stranger	0.24	0.43	0.00	1.00
Received explicit images	0.64	0.48	0.00	1.00
Received unsolicited explicit image	0.62	0.48	0.00	1.00
Victimization				
Intimate image shown	0.24	0.42	0.00	1.00
Intimate image sent	0.12	0.33	0.00	1.00
Intimate image posted	0.02	0.15	0.00	1.00
Any NCDII victimization	0.25	0.43	0.00	1.00
Relationship to perpetrator (n = 178)				
Current partner	0.17			
Previous partner	0.34			
Friend	0.21			
Family member	0.01			
Stranger	0.12			
Don't know	0.11			
Other	0.04			
NCDII negative outcomes	0.50	0.50	0.00	1.00
Perpetration				
Showed intimate image	0.18	0.38	0.00	1.00
Sent intimate image	0.05	0.22	0.00	1.00
Posted intimate image	0.00	0.04	0.00	1.00
Any NCDII perpetration	0.18	0.39	0.00	1.00
Relationship to victim (n = 131)				
Current partner	0.13			
Previous partner	0.25			
Friend	0.27			
Stranger	0.30			
Don't know	0.04			
Other	0.02			
Made NCDII report to police	0.02	0.14	0.00	1.00
Been reported to police for NCDII	0.00	0.05	0.00	1.00

Note. NCDII = nonconsensual distribution of intimate images.

is a large problem (mean 3.40 on a scale of 4). On average, respondents think that just under half of the student population at their university have been victims (45%) of NCDII or been perpetrators (42%) of such behavior. Respondents perceive a relatively low likelihood (~36%) that someone will get into trouble

Table 2. NCDII and Authority Attitudes Descriptive Statistics (*N* = 713).

	Mean/Prop.	SD	Min.	Max.
NCDII is a problem	3.40	0.74	1.00	4.00
Perceived % students as victims	44.60	21.04	0.00	100.00
Perceived % students as perpetrators	42.55	22.12	0.00	100.00
Likelihood of perpetrator being caught	36.19	28.03	0.00	100.00
Police attitudes (factor)	−0.02	1.61	−3.58	3.00
Perceived police NCDII ability (factor)	−0.05	1.33	−2.77	3.18
Perceived institutional ability (factor)	−0.02	1.32	−3.50	2.74
Stopped by police	0.22	0.41	0.00	1.00

Note. NCDII = nonconsensual distribution of intimate images.

with the authorities if they are reported for having engaged in NCDII. A small proportion (22%) report having been stopped by the police for something other than a traffic stop.

Regression Models

Table 3 presents a series of regression models predicting NCDII offending and a range of punitive attitudinal outcomes. Model 1 is a logistic regression estimating the odds of perpetrating any NCDII behavior including showing, sending, or posting someone's intimate image without permission. Having been a victim of NCDII increases the likelihood of perpetration by 58% ($p < .05$) and having been stopped by the police increases the likelihood by 71% ($p < .05$). Having received an unsolicited explicit image increases likelihood of perpetration by 90% ($p < .05$) and perceiving that a higher proportion of other students have engaged in NCDII increases likelihood by 3% ($p < .001$). Having a higher level of perceived institutional efficacy in dealing with NCDII decreases likelihood of NCDII perpetration by 17% ($p < .05$).

Model 2 is a logistic regression predicting the odds of respondent belief that an NCDII perpetrator will face legal consequences if reported to the police. Perceiving that a higher proportion of students have perpetrated NCDII decreases likelihood by 1% ($p < .05$), while having a greater level of perceived police efficacy in dealing with NCDII increases likelihood by 45% ($p < .001$). Model 3 is a logistic regression predicting the odds of respondent belief that an NCDII perpetrator will face school-related consequences if reported to the police. Being Black decreases likelihood by 53% ($p < .05$) while having a higher perceived efficacy of police and NCDII increases likelihood by 71% ($p < .001$).

Table 3. Logistic and Ordinary Least Squares Regressions Predicting NCDII Outcomes.

	NCDII Perpetration		Perpetrator Legal Consequences		Perpetrator School Consequences		Victim File Police Report		Perpetrator Likelihood of Being Caught (OLS)	
	OR	SE	OR	SE	OR	SE	OR	SE	Coef.	SE
Man	1.23	(0.310)	1.06	(0.200)	0.99	(0.201)	0.64*	(0.130)	0.68	(2.371)
Age	0.87	(0.105)	0.93	(0.083)	0.96	(0.089)	1.13	(0.112)	0.53	(1.119)
Race/ethnicity										
Asian	0.36	(0.199)	1.13	(0.341)	1.29	(0.415)	1.22	(0.432)	8.51*	(3.783)
Black	1.11	(0.444)	0.99	(0.328)	0.47*	(0.161)	1.49	(0.592)	4.81	(4.248)
Hispanic	0.66	(0.269)	0.71	(0.216)	1.44	(0.496)	1.40	(0.494)	8.12*	(3.818)
Other	0.45	(0.354)	0.55	(0.252)	1.41	(0.698)	0.60	(0.286)	11.76*	(5.638)
Upperclassman	1.10	(0.350)	1.35	(0.326)	0.67	(0.173)	1.16	(0.306)	−6.10*	(3.038)
Single	1.48	(0.337)	0.91	(0.157)	1.14	(0.208)	1.77**	(0.334)	2.13	(2.172)
NCDII victimization	1.58*	(0.367)	1.01	(0.197)	1.24	(0.261)	0.64*	(0.136)	−1.46	(2.473)
NCDII perpetration	.	.	0.96	(0.205)	1.15	(0.265)	0.69	(0.160)	1.15	(2.707)
Sent intimate image	1.27	(0.303)	0.97	(0.178)	1.36	(0.267)	1.11	(0.223)	2.26	(2.322)
Received unsolicited image	1.90*	(0.500)	1.07	(0.196)	1.38	(0.271)	1.53*	(0.307)	−0.61	(2.294)
Sent image to stranger	1.59	(0.385)	1.00	(0.207)	0.80	(0.174)	0.82	(0.185)	−2.64	(2.599)
Perceived % NCDII victims	1.00	(0.006)	1.00	(0.005)	0.99	(0.005)	1.01	(0.006)	0.11	(0.062)
Perceived % NCDII perpetrators	1.03***	(0.006)	0.99*	(0.005)	1.00	(0.005)	0.99	(0.005)	−0.04	(0.058)
Stopped by police	1.71*	(0.412)	1.21	(0.240)	0.93	(0.194)	0.69	(0.144)	−1.08	(2.482)
Police NCDII ability	1.08	(0.111)	1.45***	(0.117)	1.71***	(0.152)	1.52***	(0.136)	6.66***	(0.977)
Police overall ability	0.96	(0.075)	0.93	(0.057)	0.89	(0.059)	0.77***	(0.053)	0.68	(0.762)
Institutional NCDII ability	0.83*	(0.076)	1.13	(0.079)	1.02	(0.074)	0.94	(0.072)	0.50	(0.871)
Constant	0.31	(0.626)	4.12	(6.206)	8.72	(13.699)	0.11	(0.179)	29.47	(18.965)

Note. Models 1–4 include 713 observations; Model 5 includes 693 due to missingness on the dependent variable. NCDII = nonconsensual distribution of intimate images.

***p < 0.001. **p < 0.01. *p < 0.05.

Table 4. Effect of Victim–Perpetrator Dyad Gender and Sexuality on NCDII Outcomes.

| | Perpetrator Treatment | | Gender-Makeup Treatment | | | |
	Female Perpetrator	Male Perpetrator	Straight	Same-Sex	Min	Max
Revenge porn	0.82*	0.88*	0.83	0.87	0	I
Police report	0.61***	0.74***	0.7	0.66	0	I
Number of punishments	1.39	1.47	1.46	1.39	0	5
Legal consequences	0.53	0.53	0.52	0.54	0	I
School consequences	0.65	0.64	0.65	0.64	0	I

Note. NCDII = nonconsensual distribution of intimate images.
***$p < .001$. **$p < .01$. *$p < .05$.

Model 4 is a logistic regression predicting whether a respondent believes that NCDII victims should file reports with the police after experiencing an NCDII incident. Being a man (versus a woman, nonbinary, or transgender) decreases the likelihood by 76%, as well as having been a victim of NCDII ($p < .05$). Having a higher level of positive attitudes toward police also decreases the likelihood by 23% ($p < 001$). Having ever received an unsolicited intimate image increases likelihood by 53% ($p < .05$) and having a higher level of perceived ability of police with NCDII increases likelihood by 52% ($p < .001$). Interestingly, being single increases likelihood of recommending a police report by 77% ($p < .01$).

Model 4 is an OLS regression estimating respondents' perceived likelihood of an NCDII perpetrator facing consequences from the authorities if a police report is filed (measured as a percent). Being Asian or Hispanic increases perceived likelihood by about 8% ($p < .05$) compared to being White, and being in the "other"/mixed race category increases perceived likelihood of punishment by 12% compared to being White ($p < .05$). Being an upperclassman decreases perceived likelihood by 6% compared to being a freshman. A one standard deviation increase in the score measuring perceived ability of the police to deal with NCDII predicts a 6.6% increase in perceived likelihood of punishment ($p < .001$). For further detail about the models, see Appendix B.

Vignettes

Table 4 presents the results of *t*-tests measuring differences in means across vignette treatment groups. Overall, the only statistically significant differences are between those who received a vignette scenario with a female perpetrator

versus those who received a male perpetrator. Those who received scenarios with a male perpetrator were more likely to identify the scenario as revenge porn than those who received a female perpetrator ($p < .05$). Most seriously, there was a statistically significant difference in whether respondents indicated that the victim should report the perpetrator to the police—those who received scenarios with male perpetrators were much more likely to say the victim should file a police report than those who read scenarios of female perpetrators ($p < .001$). There are no statistically significant differences in any of the punishment-related outcomes by perpetrator gender treatment, and there are no statistically significant differences in outcomes by the couple sexuality treatment. To further examine these emergent patterns, we used content analysis to analyze the open-ended text responses to the question of what consequences they felt would be appropriate for the perpetrator (Hsieh & Shannon, 2005). Respondents who received the female perpetrator treatment often described a need for greater communication between the two parties and suggested that the incident may be a case of miscommunication. In contrast, respondents who received the male perpetrator treatment were notably hostile and called for harsh punishments including arrest, expulsion, and prison time.

Discussion

In the last two decades, incidences of nonconsensual distribution of intimate images (NCDII), including the massive leak of hacked photos from female celebrities and the dissemination of Rep. Hill's intimate images, have gained widespread national attention. Victims were often left with no recourse other than the civil court and faced an uphill battle to prove that the distribution caused irreparable financial harm and was done maliciously and intentionally. While some states, such as California and New Jersey, criminalized NCDII in the early aughts, it took concentrated social and legal advocacy for criminal NCDII statutes to become commonplace across the United States. Today, 48 states and the District of Columbia have laws that criminalize NCDII behavior in some fashion.

In this study, we examined the links between perceptions of NCDII perpetration and victimization as well as punitive attitudes in light of these legal changes. We distributed a survey to a sample of young adults containing questions related to NCDII victimization, perpetration, prevalence, attitudes toward surveilling institutions, punitive attitudes toward perpetrators, and varying perceptions of perpetrators based on gender ($N = 713$).

We find relatively similar proportions of self-reported perpetration and victimization to other studies, both of which are at lower prevalence rates than the perceived prevalence reported by the sample (18%, 25%, and ~50%,

respectively) suggesting that while a relatively large minority of respondents has experienced or engaged in NCDII, they believe the problem to be much greater (see Powell et al, 2020). This may reflect the influence of media coverage in promoting this issue—widespread attention may have created the impression that NCDII is widely prevalent. Interestingly, the strongest predictors of NCDII perpetration are previous victimization, sending explicit images, and receiving unsolicited explicit images (Karasavva & Forth, 2021; Powell et al, 2019, 2020). Coupled with our findings showing that most perpetrators are showing images on their phones to familiar acquaintances for the purpose of gossiping or making jokes (Clancy et al., 2020), we posit that our study reveals a new type of perpetrator. Previous research has focused on perpetrators, who are men, who distribute images of women at the dissolution of a romantic or sexual relationship for the purpose of shame or denigration. Indeed, newly created legal statutes were arguably designed with this perpetrator image in mind.

However, our new typology suggests NCDII perpetration may also include women, who receive unsolicited nude images, and show them to their friends to gossip about the image subject. The effect of perceived prevalence of other students engaging in NCDII on the likelihood of perpetration suggests that normalization of this behavior may contribute to engaging in it. This countermands the existing literature, which focuses on the harms perpetrated on women by men. While not as serious as sending or posting an image for revenge, these relatively innocuous behaviors may happen more frequently and likely still cause harm to victims, including embarrassment, shame, and worsened mental health. However, they complicate the legislative solutions to NCDII described above. Many state statutes include explicit motivation requirements—restricting potential criminal solutions to victims who can demonstrate malicious reputational harm. This could prevent victims who are men from seeking, or receiving, judicial reprieve to harms perpetrated against them by women. Results from our vignettes also indicate that perceived need for reporting diminishes when the perpetrator is a woman, suggesting that men who are victims of NCDII have little social standing if they attempt to seek redress. The perpetrators in our sample were not sharing the images of romantic partners, another requirement of many criminal statutes. Altogether, our results suggest existing criminal statutes, created to combat 'revenge porn', are insufficient to counter NCDII perpetrated by women against men for the purpose of gossip despite research suggesting that victimization in all forms is harmful. Notably, respondents who report NCDII victimization are strongly less likely to recommend that a victim of NCDII file a police report, suggesting that past experiences with victimization and authorities potentially influences seeking help.

Future research should continue to explore this new typology, focusing on how the context in which women engage in NCDII differs from the context in which men perpetrate NCDII. Legislative solutions could be crafted that delicately balance the needs of female victims, who are disproportionately the target of controlling vengeful behavior, and of male victims, whose victimization is preceded by the individual sending unsolicited nude images, itself a form of sexual harassment. Surveys and interviews with perpetrators of various gender identities can support policymakers as they refine existing legislation. Researchers should also ask about use of dating applications, which may provide a platform for NCDII perpetration, in all its forms, to occur. Research can also address limitations of our research including its reliance on self-report data (which is subject to recollection biases), a young adult sample (which may differ from adult and adolescent samples), and a limited time frame for reporting (which may have limited the amount of behavior captured amongst our sample). While we contribute to diversity in focusing on gender-specific patterns of NCDII, we note that a limitation is the racial homogeneity of our sample. We encourage future researchers to pursue a more diverse sample, incorporating the experience of non-White individuals. Family-wise error rate is not controlled in the analysis of this study in order to maintain statistical power, and we encourage replication of this research to observe if similar trends emerge among other samples.

Altogether, our study uncovers a new typology of NCDII perpetrator that counters existing research. We explore the relationships between attitudes related to NCDII and its associated helping and surveilling institutions, self-reported behaviors and experiences, and perceived efficacy of police and the justice system in addressing NCDII. Despite the limitations of our study, future research ought to continue to explore this new type of perpetrator to understand the boundaries of existing legal statutes and ensure that all victims can seek protection from the justice system.

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Supplemental Material

Supplemental material for this article is available online.

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