

**Sextortion risk and protective factors: A meta-analysis**

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## **Abstract**

Sextortion, the threat to disseminate nude images or explicit videos of an individual to gain money, relationship, sexual favors, or additional sexual material, has become an ever-increasing problem with harsh negative consequences for those who become victims. This meta-analysis used the cyber lifestyles routine activities theory (CLRAT) to discover what risk or protective markers related to becoming a victim of sextortion. This meta-analysis included eight papers resulting in eight risk or protective markers. Risk markers analyzed regarding motivated offender (engaging in instant messaging and chatrooms yielded no significant results. Suitable target or target attractiveness identified being female and of a racial/ethnic minority group as both being statistically significant indicators of reporting sextortion victimization, while suffering depressive symptoms in the last 30 days and posting pictures online were not significant. Having both biological parents in the home proved to be a significant protective factor by lowering the likelihood of reporting sextortion victimization. Seeking sexual material online was considered an online deviant behavior but was not found to be statistically significant in this analysis. These findings illustrate the need for additional research and the importance of empowering capable guardians to discourage motivated offenders.

## Table of Contents

|                                                               |    |
|---------------------------------------------------------------|----|
| List of Figures .....                                         | v  |
| List of Tables .....                                          | vi |
| Chapter 1 - Introduction.....                                 | 1  |
| Chapter 2 - Cyber Life-Styles Routine Activities Theory ..... | 5  |
| Online Exposure and Proximity to a Motivated Offender .....   | 6  |
| Suitable Target/Target Attractiveness .....                   | 7  |
| Lack of Guardianship.....                                     | 9  |
| Online Deviance .....                                         | 10 |
| Chapter 3 - Present Study .....                               | 12 |
| Method .....                                                  | 12 |
| Inclusion and Exclusion Criteria.....                         | 13 |
| Analysis Plan .....                                           | 15 |
| Chapter 4 - Results.....                                      | 16 |
| Chapter 5 - Discussion .....                                  | 18 |
| Online Exposure and Proximity to Motivated Offender.....      | 18 |
| Suitable Target/Target Attractiveness .....                   | 19 |
| Lack of Capable Guardian .....                                | 20 |
| Online Deviancy .....                                         | 21 |
| Chapter 6 - Implications.....                                 | 22 |
| Chapter 8 - Limitations .....                                 | 24 |
| Chapter 9 - Conclusion .....                                  | 25 |
| References.....                                               | 26 |

## List of Figures

|                                              |    |
|----------------------------------------------|----|
| Figure 3.1 Identified Studies Flowchart..... | 14 |
|----------------------------------------------|----|

## **List of Tables**

|                                                                        |    |
|------------------------------------------------------------------------|----|
| Table 4.1 Risk Markers for Experiencing Sextortion Victimization ..... | 17 |
|------------------------------------------------------------------------|----|

## **Chapter 1 - Introduction**

Sexual extortion or sextortion has been described as someone threatening to use an explicit photo or video of a victim to make demands or pressure the victim into compliance (O'Malley & Holt, 2020). It is challenging to produce an accurate number of victims due to the underreported nature of this crime (Patchin & Hinduja, 2020; Thorn, 2020). However, one study of 5,568 middle and high schoolers in the United States found 5% of participants reported being victims of and 3% admitted to perpetrating sextortion (Patchin & Hinduja, 2020). Although these rates do not seem very high, according to a report by Thorn (2020), 1 in 3 victims never speak up about what has happened to them. This leads researchers to believe there are many more victims than are reported.

The consequences of sextortion are devastating, particularly when it comes to mental health (Patchin & Hinduja, 2020). In fact, rates of depression, anxiety, trouble trusting, feelings of isolation and shame, posttraumatic stress disorder (PTSD), hyper sexuality, and suicide are significantly higher among sextortion victims (Choi, 2017; Finkelhor et al., 2022; McGlynn et al., 2017; Patchin & Hinduja, 2020; Ojeda & Del Rey, 2022). There are also physical repercussions in the form of somatic symptoms like stomach issues, headaches, and heart trouble (Choi, 2017; Finkelhor et al., 2022; Patchin & Hinduja, 2020). Additionally, there are economic and employment costs associated with sextortion (Patchin & Hinduja, 2020). For example, one in eight victims ends up moving to escape the impacts of the abuse, necessitating new housing and employment (Thorn, 2020). Moreover, Wolak et al. (2018) found almost half of the sextortion survivors they studied reported losing close relationships.

Given these negative outcomes, it is important to explore what is known about sextortion and the factors that increase a person's chance of becoming a victim of sextortion in order to

prevent sextortion from occurring. Therefore, the purpose of this study was to conduct a meta-analysis to identify the risk and protective markers of sextortion to identify points of prevention and intervention. However, there is disagreement regarding the terminology in sextortion literature. As research emerges on this topic, attempts have been made to accurately describe this type of abuse. Terms such as cyber sexual abuse, nonconsensual porn, image based sexual abuse, coercive sexting, or self-generated child sexual abuse material have all been used (Kopecký et al., 2015; Lalor & McElvaney, 2010; Patchin & Hinduja, 2020; Thorn 2020). Moreover, sextortion has often been confused or coupled with events like nonconsensual pornography or revenge porn, neither of which are truly sextortion, as they lack the necessary component of the perpetrator threatening the victim with exposure (Patchin & Hinduja, 2020).

Although some studies reported perpetrators threatened to release the images to others (Ojeda & Del Rey, 2022), such as friends, family, school peers, or people with whom they work (Kopecký et al., 2015), others threatened to cause harm to loved ones if the person did not meet their demands (Kopecký et al., 2015). Often the demands included things like sending money or additional sexually explicit materials (Ojeda & Del Rey, 2022). However, some perpetrators pushed for a relationship in real life or sexual favors from the victim, while others' demands included perpetrating sexual abuse against siblings or friends (Immigration and Customs Enforcement, n.d.; Ojeda & Del Rey, 2022). This can increase the shame and prevent disclosure, which perpetrators often rely on to keep the victim silent and compliant. According to the FBI, compliance does not end the victimization; instead, it often emboldens the criminal (Immigration and Customs Enforcement, n.d.).

In addition to the threats associated with sextortion, previous research has found a specific script that sextortion tends to follow (Kopecký et al., 2015). The pattern discovered

consists of the perpetrator first preparing for contact with the victim, second contacting the victim, third establishing and deepening the relationship and manipulation of the victim, fourth preparing for the attack, and fifth attacking the victim (Kopecký et al., 2015). The initial contact almost always consists of some sort of flattery or an enticing offer, such as “hey, babe :) wanna chat?” and “hey, want to earn good money?” as common opening lines (Kopecký et al., 2015). The fact that this contact works when communicating with potential victims supports the finding that youth do not have a good understanding of internet safety because they allow communication to continue (Draucker & Martsof, 2010). This is particularly true given that 91% of the time the perpetrator misrepresents themselves or manipulates their profile to be more appealing (Wittes et al., 2016).

The next phase includes boosting the potential victim’s confidence in the perpetrator through compliments and encouraging exclusivity (Kopecký et al., 2015; Lalor & McElvaney, 2010). In other words, the offender wins their victim’s confidence and gives them validation, attempting to make the victim feel safe enough to send images. During this phase, the perpetrator also starts to get the victim to begin isolating. Perpetrators encourage them to shut the door or make sure no one can see what they are doing on their devices. The perpetrator also attempts to get the victim to switch from a public online space to private channels (Marcum et al., 2022). For example, it is common for males to meet perpetrators on video gaming platforms and then be encouraged to switch to Google Meets or Snapchat (Thorn, 2021). As the victim spends more time away from their family and friends, the control of the perpetrator grows (Marcum et al., 2022; Ramiro et al., 2019). Once the perpetrator has confidence and exclusivity in place, the threats of exposure begin if the perpetrator’s demands are not met. Although this pattern has been found, it does not explain what factors are associated with being a victim of sextortion.

Therefore, this study will use cyber lifestyle-routine activities theory to examine factors related to sextortion victimization.

## **Chapter 2 - Cyber Life-Styles Routine Activities Theory**

Originally developed by Reyns, Henson, and Fisher in 2011, cyber lifestyle-routine activities theory (CLRAT) has been used to explain how individuals become a victim in cyberspace. Building on the lifestyle-routine activities theory, CLRAT posits that online exposure and proximity to a motivated offender, a suitable target or target attractiveness, the lack of guardianship, and online deviance increase the likelihood of cybervictimization. Specifically, Reyns et al. (2011) define online exposure as how connected individuals are to the internet via the “(a) amount of time spent online each day, (b) number of online social networks owned by the respondent, (c) the number of times each day the respondent updates his or her online social network accounts, (d) the number of photos the respondent has posted online, and (e) whether the respondent uses Instant Messenger” (p. 1156). CLRAT measures proximity via interactions between the offender and a victim through chatrooms, social media, or other mediums and considers a suitable target anyone having some desirable quality the perpetrator is seeking (Yar, 2005). In the case of sextortion, perpetrators are generally seeking money, explicit images, sexual favors, or a relationship from their target (Holt et al., 2016; Kernsmith et al., 2018; Marcum et al., 2022; Mitchell et al., 2007; Patchin & Hinduja, 2020; Wolak et al., 2018).

CLRAT defines guardianship as physical and social presence preventing contact between offender and target (Reyns, 2011). Facets of physical guardianship in the context of cybervictimization are described as efforts put in place to prevent victimization, such as computer security systems, gaining knowledge about computers and the risks posed on the internet, physical location of the electronic device in a space where it can be monitored, and a person willing to intervene when necessary (Reyns, 2011; Yar, 2005). Social guardianship, on the other hand, is measured in terms of the attendance of other individuals who may suppress the

influence of the motivated criminal (Reyns, 2011). In other words, the social network of a target, or who their family, friends, peer, or social media network includes, influences their online interactions. For example, according to CLRAT, an individual will tailor their online interactions to align with their guardian's expectations (Reyns, 2011). This can be a protective factor, but it can also be a risk factor if their peers embrace online deviant behaviors, such as sexting or seeking pornography, which have been found to increase the likelihood of victimization (Holt et al., 2016; Mitchell et al., 2007; Reyns et al., 2011). An additional challenge is that offenders often present themselves as peers to gain the trust of and build a relationship with the victim.

### **Online Exposure and Proximity to a Motivated Offender**

Applying CLRAT to sextortion victimization, it is hypothesized that online exposure to a motivated offender would increase a person's likelihood of experiencing sextortion. Unlike other methods of victimization, online communication via chatrooms, messaging, and other means of communication allows perpetrators access and proximity to individuals with whom they would not have otherwise shared contact (O'Malley & Holt, 2020; Reyns, 2011). To illustrate, Holt et al. (2016) found that males who used chatrooms were more likely to experience sextortion victimization. Contrary to this hypothesis, two studies found that the amount of time spent online and computer usage were not correlated with sextortion victimization (Holt et al., 2016; Marcum et al., 2022). However, given that nearly all (97%) youth ages 13-17 years old reported utilizing the internet daily (Atske, 2022) and 24% reported being online "almost constantly" (Bhat, 2018), it is important to understand if time spent online is a risk factor for sextortion victimization.

Another risk marker related to online exposure and proximity identified in the literature was experiences with social media (Holt et al., 2016; Marcum et al., 2022; Mitchell et al., 2007; Wolak et al., 2018). In fact, Marcum et al. (2022) reported that the strongest predictor of

sextortion in their study was using dating apps. Holt et al. (2016), on the other hand, found that having a social media presence did not increase the likelihood of sextortion victimization, but they did find that the use of internet chatrooms was related to sextortion. In support of this finding, Wolak et al. (2018) found that the initial contact between perpetrator and victim came through social media sites and messaging services. This is an alarming finding given that 71% of teens use multiple social media platforms (Bhat, 2018).

### **Suitable Target/Target Attractiveness**

CLRAT also proposes that there are things about the “target” that may make them more suitable or appealing to the perpetrator (Reyns et al., 2011). Generally, when committing sextortion, the demands placed on a victim are money, additional explicit materials, sexual favors, or a relationship in real life (Holt et al., 2016; Kernsmith et al., 2018; Marcum et al., 2022; Mitchell et al., 2007; Patchin & Hinduja, 2020; Wolak et al., 2018). These demands influence what characteristics an individual may have that makes them more suitable as a target. For example, one factor that Reyns and colleagues (2011) examined was gender. This variable has also been studied when examining sextortion victimization, but has resulted in inconsistent findings (Holt et al., 2016; Kernsmith et al., 2018; O’Malley & Holt, 2020; Patchin & Hinduja, 2020; Wolak et al., 2018). In fact, Kernsmith and colleagues (2018) found the risk for sextortion among girls was 70% higher than it was for boys. Similarly, two separate studies reported that being female was the overall only consistent indicator of being a victim of sextortion, even when controlling for other factors (Holt et al., 2016; Wolak et al., 2017). However, Patchin and Hinduja (2020) found higher rates of victimization among males compared to females and Mitchell et al. (2005) found no difference between males and females in terms of sextortion victimization. One possible explanation for these inconsistent findings is offender motive

(O'Malley & Holt, 2020). Specifically, O'Malley and Holt (2020) found that perpetrators who were focused exclusively on minors had a strong preference for females (e.g., 71.3% of offenders targeted female victims exclusively), but that adult males were more likely to be victimized when the perpetrator was demanding money.

Another potential factor that may make an individual more suitable or appealing to the perpetrator is the sexual orientation of the victim. Specifically, it has been hypothesized that a perpetrator might consider a LGBTQ+ individual as a more suitable victim because they are less likely to speak up (Reyns et al., 2011) or more likely to comply because they fear being “outed” (Thorn, 2023). In support of this assumption, Patchin and Hinduja (2020) found those who identified as LGBTQ+ experienced sextortion at a significantly higher rate compared to their heterosexual peers (10.9% vs. 4.5% respectively).

Another factor that sextortion research has found to increase the likelihood of who is targeted is race. Although the research is not decisive, this factor has been included in several studies (Holt et al., 2016; Kernsmith et al., 2018; Mitchell et al., 2007). Specifically, although some researchers have found no relationship between race and sextortion victimization (Patchin & Hinduja, 2020), others have found an increased risk for experiencing sextortion among certain racial groups. For example, in their study of 1,500 youth 10-17 years old, Mitchell et al. (2007) found a correlation between being Black and experiencing sextortion victimization.

The offender may also be looking for a target of a specific age. The available literature indicates that teens are the largest body of sextortion victims (Charmaraman et al., 2022; Holt et al., 2016; Kernsmith et al., 2018; O'Malley & Holt, 2020). Though sextortion victimization has been reported as young as 11 and 12 years old, most research indicates an uptick starting at 13 years old (Charmaraman et al., 2022), with one study identifying age 15 as the most reported age

of becoming a victim (Patchin & Hinduja, 2020). Similarly, a study focused on college students found that those who reported becoming victims of sextortion had become victims as teens (Marcum et al., 2022). One possible explanation for this finding is the amount of free time youth spend online, engaged in social media or chatting with others, thus increasing their contact with potential offenders. Furthermore, this age group is starting to seek out romantic partners and have been found to be more easily fooled by a perpetrator posing as a peer or potential partner (Charmaraman et al., 2022; O'Malley & Holt, 2020; Patchin & Hinduja, 2020). O'Malley and Holt (2020) also proposed that this age group may be desirable targets because they have been found to be easier to manipulate and because one variation of sextortion, what they refer to as minor-focused offenders, actively seeks out children and youth; thus, making younger individuals more likely to experience sextortion. Wolak et al. (2018) also theorized youth are targeted for their immaturity and trouble getting help.

CLRAT also hypothesizes that when individuals put their own information and images online, it allows motivated perpetrators to identify potential targets who meet their personal preferences. In other words, photos, names, birthdays, other social media identifiers, hobbies, schools, email addresses, and phone numbers can all be gleaned by potential perpetrators and used to provide greater access to the victim allowing offenders to be selective about their targets (O'Malley & Holt, 2020; Patchin & Hinduja, 2020; Reyns et al., 2011). In fact, some studies have found that those who share information are at a higher risk (Klettke et al., 2019; Marcum et al., 2022; O'Malley & Holt, 2020).

### **Lack of Guardianship**

Guardianship in the context of CLRAT means a deterrent to the offender, not specifically the parent or guardian of the potential target (Shreck et al., 2002). In other words, law

enforcement, teachers, family members, neighbors, and even peers or parental control software can provide guardianship. Although Reyns et al. (2011) discussed online guardianship in terms of a person or resource put in place to protect an individual, the guardianship that has often been reported in the sextortion literature has primarily focused on parental monitoring of electronics (Holt et al., 2016). This may include things like the physical location of the family computer and the parental rules regarding social media usage or time spent online. Similarly, Charmaranan et al. (2022) found that when parents restricted social media usage, such as the age at which their children started using social media and who their children could be friends with on social media, teens were less likely to be victims of sextortion. Additionally, it has been found that supportive social surroundings have the potential to act as a capable guardian and the absence of that protective peer group and culture facilitates predatory access (Reed et al., 2019).

## **Online Deviance**

A commonly examined factor related to online deviance in the literature is sexting, which has been linked to sextortion victimization (Marcum et al., 2022). Specifically, studies found that sexting can lead to an increase in sextortion victimization due to the access this allows the motivated offender to have to the victim (Holt et al., 2016; Kernsmith et al., 2018; Reyns et al., 2014). This is particularly concerning as 1 in 6 youth reported that sending nudes is normal and acceptable and had sent nudes (Thorn, 2021).

Seeking out sexual material online was another common factor examined in some studies (Holt et al., 2016; Mitchell et al., 2007; O'Malley & Holt, 2020). Holt et al. (2016) reported those who viewed pornography online were found to be at an increased risk of victimization. Examining this through the lens of CLRAT shows that by seeking out sexually explicit material online, the victim and the perpetrator have a heightened risk of existing in the same space and

time (Reyns et al., 2011). In support of this assumption, Bossler et al. (2012) found that seeking out sexually explicit materials puts the seeker at risk of sextortion by exposing them to motivated offenders.

## **Chapter 3 - Present Study**

This study aimed to examine the body of literature related to risk and protective factors of becoming a victim of sextortion. Previous studies have been conducted to learn more about prevalence rates of sextortion, offender characteristics, incident variables, and victim relationship to offender. However, no study has conducted a meta-analysis to identify risk or protective markers associated with sextortion victimization. This illustrates a gap in literature that could aid in preventative efforts. Therefore, guided by CLRAT, this study aimed to examine: (a) if proximity and access to a motivated offender were risk markers for sextortion victimization, (b) what characteristics were associated with being viewed as a suitable target or victim of sextortion, (c) if lack of a capable guardian was a risk factor for experiencing sextortion, and (d) if engaging in online deviancy was a risk marker associated with sextortion victimization. By understanding how to avoid proximity to motivated offenders, what makes a target desirable, what guardian characteristics are protective, and how online deviancy relates to victimization, better informed education and policy can be developed to prevent sextortion victimization.

### **Method**

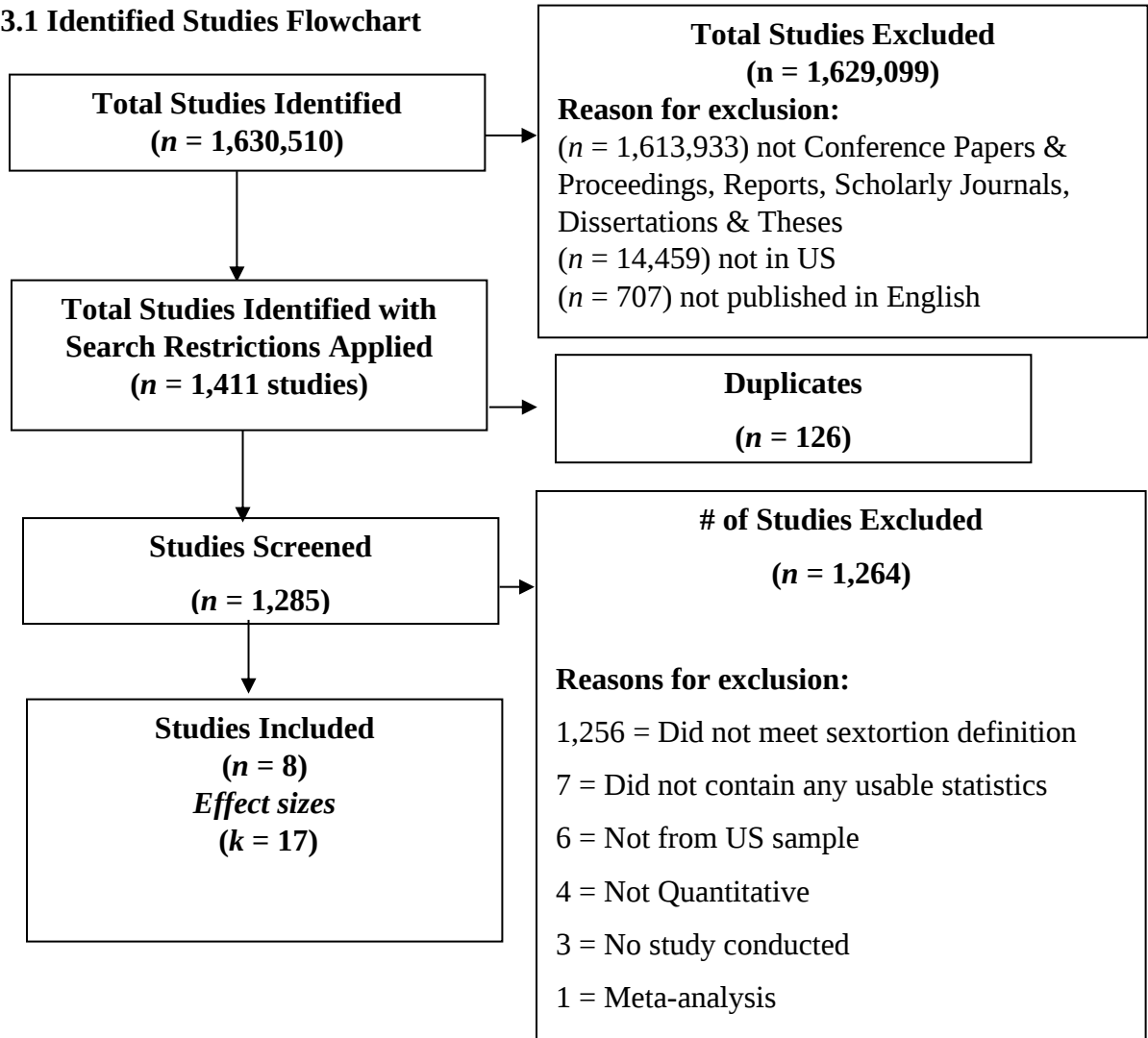
To identify studies for this meta-analysis, I used the following databases because of their content relevance to risk and protective factors regarding sextortion: APA PsychArticles, APA PsycINFO, ERIC, PAIS Index, ProQuest One Academic, PTSDpubs, and Sociological Abstracts. Initial searches included many irrelevant articles; thus, a research librarian assisted in refining the search criteria. Terms related to sextortion (sextort\*, “sexual extortion,” “sexual exploitation,” “non-consensual porn,” “nonconsensual porn,” “image-based sexual abuse,” “image-based sexual violence,” “image based sexual abuse,” “image-based sexual violence,” “sexual abuse”, “sexual violence”, sext\*, nude\*, “self-generated child sexual abuse material,”

“self-generated sexual abuse material,” “revenge porn\*,” groom\*, “sexual harassment” OR solicitat\*) and the fact that this act is an online phenomenon (cyber\*, internet, “technology facilitated,” online, “social media,” digital, OR virtual) were used to identify studies for this meta-analysis. In addition, I set those terms as “not full text” (noft) so articles that only briefly mentioned sextortion came up less frequently. Last, I set restrictions on the type of publication (Conference Papers & Proceedings, Reports, Scholarly Journals, Dissertations & Theses), the location (US), and the language in which it was written (ENG).

### **Inclusion and Exclusion Criteria**

This study included all articles available prior to August 2023 that met the following criteria: (a) examined sextortion, (b) were conducted in the United States, (c) were written in English, (d) included statistical information so that at least one bivariate effect size could be calculated. This resulted in a total of 1,630,510 studies. A total of 1,629,099 studies were excluded initially when the restriction was placed to include conference papers & proceedings, reports, scholarly journals, dissertations, and theses, in addition to only using articles published in English (see Figure 1). Of the remaining 1,411 studies, 126 were duplicates. The remaining 1,285 articles were screened by title and abstract to assure relevance to sextortion; this resulted in 62 studies included in the next round of screening. From there, 34 were excluded because, upon further inspection, they were not specifically about sextortion, leaving 22 publications. Upon further inspection, seven articles did not publish usable statistics, four articles used qualitative methods, three articles had not conducted a study, one was a meta-analysis, and one article was eliminated because it was not conducted in the U.S. This resulted in eight articles that met all the stated criteria.

**Figure 3.1 Identified Studies Flowchart**



## **Analysis Plan**

The data on risk and protective markers were analyzed using Comprehensive Meta-Analysis v. 4.0 (Borenstein et al., 2022). For risk and protective markers that were identified in at least two unique studies, an average effect size (unadjusted odds ratios) was calculated using a random-effects approach. A random-effects approach was utilized to account for population differences between studies, which increases the generalizability of the findings (Borenstein et al., 2010). Aggregate effect sizes were calculated for the following variables: instant messaging, chatrooms, being female, being a racial/ethnic minority suffering from depressive symptoms in the last 30 days, posting photos online, having both biological parents in the home, and seeking sexual material online.

## Chapter 4 - Results

In this meta-analysis the eight identified articles ranged in publication date from 2007-2022 and included 10,509 participants (9,696 minors; 813 adults). Unfortunately, there were very few studies that examined the same risk markers; thus, yielding minimal results. Specifically, although a total of 86 risk markers were identified, we were only able to include 8 in the meta-analysis (see Table 1). Of these 8 risk and protective markers, two were about exposure and proximity to a motivated offender (i.e., instant messaging and chatroom participation), four were related to suitable target/target attractiveness (i.e., being female, being a racial/ethnic minority, experiencing depressive symptoms in the last 30 days, and posting pictures online), one was related to lack of guardianship (i.e., not having both biological parents in the home), and one was related to online deviance (i.e. seeking out pornography online). Only three of these risk markers were found to be statistically significant for sextortion victimization, being female, being a racial/ethnic minority, and not having both biological parents in the home.

Although CLRAT hypothesized that online exposure and proximity to a motivated offender would increase a person's likelihood of experiencing sextortion, the risk markers included in the meta-analysis (i.e., chatroom participation, and instant messaging) were not statistically significant. The strongest risk markers for experiencing sextortion victimization were related to the suitability or attractiveness of the target. Specifically, being female increased the likelihood of experiencing sextortion by 181% ( $p < .001$ ) and being a racial/ethnic minority increased the likelihood of experiencing sextortion victimization by 61% ( $p = .011$ ). Experiencing depression symptoms in the last 30 days and posting pictures online were not statistically significant risk markers for sextortion victimization. The only other statistically significant finding was related to having a capable guardian. Specifically, having both biological

parents in the home decreased the likelihood of experiencing sextortion by 39% ( $p < .05$ ). In terms of online deviance, seeking out pornography online was not a statistically significant risk marker for experiencing sextortion.

**Table 4.1 Risk Markers for Experiencing Sextortion Victimization**

| <b>Risk/Protective Markers</b>     | <b><i>k</i></b> | <b><i>OR</i></b> | <b>95% CI</b> | <b>CLRAT<br/>Category</b> |
|------------------------------------|-----------------|------------------|---------------|---------------------------|
| Instant messaging                  | 2               | 0.67             | [0.05, 8.72]  | MO                        |
| Chat room participation            | 2               | 0.72             | [0.05, 11.00] | MO                        |
| Female                             | 3               | 2.80***          | [1.61, 4.92]  | ST                        |
| Racial/ethnic minority             | 2               | 1.60**           | [1.12, 2.31]  | ST                        |
| Depression                         | 2               | 2.20             | [0.65, 7.51]  | ST                        |
| Post pictures online               | 2               | 0.82             | [0.06, 10.44] | ST                        |
| Lives with both biological parents | 2               | 0.62*            | [0.38, 0.99]  | CG                        |
| Seeks out sexual material online   | 2               | 0.76             | [0.19, 3.03]  | OD                        |

Note: *k* = effect sizes; *OR* = unadjusted odds ratio; MO= Motivated Offender; ST= Suitable Target; CG=Capable Guardian; OD= Online Deviancy. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## **Chapter 5 - Discussion**

Sextortion continues to be a societal problem impacting many individuals and causing negative consequences. This was the first study to conduct a meta-analysis to identify risk and protective markers relating to sextortion victimization. Using the CLRAT lens to examine this important topic, the risk and protective markers were broken down into four main categories: access and proximity to a motivated offender, being a suitable target, having a capable guardian, and online deviancy (Reyns, 2011). This study found being female and of a racial/ethnic minority group increased the risk of sextortion victimization, while living with both biological parents decreased the risk of becoming a victim of sextortion.

### **Online Exposure and Proximity to Motivated Offender**

Though previous researchers have found online exposure and proximity to a motivated offender were related to sextortion victimization (Douin et al., 2015; Holt et al., 2016), this meta-analysis found no risk markers at this CLRAT level that yielded statistically significant results. One possible explanation for this finding is that some variables (i.e., use of dating apps and time spent online) were not able to be included in the meta-analysis because they were only examined in one study (Marcum, 2022; Mitchell, et al., 2007). For example, Marcum et al. (2022) found that the number of hours spent online was not a significant predictor of sextortion victimization. However, Holt et al. (2016) found that chat room use increased the risk of sextortion victimization. Moreover, Marcum et al. (2022) found that using dating apps increased the likelihood of experiencing sextortion by 189%, while Holt et al. (2016) found that social networking was correlated with, but not a significant predictor of, sextortion victimization. Although Holt et al. (2016) found that having a social media presence did not increase the

likelihood of sextortion victimization, they did find that the use of internet chatrooms was related to sextortion. Similarly, Wolak et al. (2018) found that the initial contact between the motivated offender and suitable target came through social media sites and messaging services. These findings suggest that it might not be the amount of time spent online, but how an individual is spending their time online that is related to sextortion victimization. Future research should explore individual platforms and the amount of time spent on those various to better understand if there is a correlation and, if so, how those variables are correlated with sextortion victimization.

### **Suitable Target/Target Attractiveness**

Similar to previous research, being a female was a significant risk marker for experiencing sextortion victimization in adolescence (Holt et al., 2016; Kernsmith et al., 2018; Patchin & Hinduja, 2020). Wolak et al. (2018) also found being female increased the risk of being victimized by 105% among adults. However, this study was not included in the meta-analysis because Wolak et al. (2018) used an adult sample while the other studies in the sample examined minor populations; thus, preventing a true comparison. Although the results do not explain why being female puts one at a higher risk of experiencing sextortion victimization, O'Malley and Holt (2020) found it to be based on personal preference of the offender. Another explanation proposed by Drouin et al. (2015) is that sextortion is merely an extension of intimate partner violence which primarily targets females. Further supporting Drouin's explanation, Kernsmith et al. (2018) found that sextortion follows the same pattern as coercive sexual abuse, which again primarily targets females.

In terms of race/ethnic minority status, though many of the included articles explored race, few did so in a way that allowed them to be compared in this analysis (Holt et al., 2016;

Kernsmith et al., 2018; Mitchell et al., 2007). For example, Kernsmith et al. (2018) only had options for “students of color” or “White students,” while Wolak et al. (2018) broke race/ethnicity into more specific groups (i.e., “White/Caucasian,” “Black/ African American,” “Native Hawaiian/Pacific Islander,” “American Indian/Alaska Native,” “Mixed race/ Multiracial,” “Hispanic or Latina/o ethnicity”). Due to these inconsistencies in how race/ethnicity was measured, we were only able to compare the categories of “white” or “not white.” As a result, though racial/ethnic minority status was found to be a significant risk marker, we were unable to determine which race or ethnicity was at a higher or lower risk of sextortion victimization. This finding is supported by previous research stating that racial and ethnic minority group members are more likely to report experiencing sexual abuse than those who are white (Mosely, 2002); thus, demonstrating that minority status may be a characteristic that makes a target more attractive to a motivated offender.

### **Lack of Capable Guardian**

In support of CLRAT (Reyns et al., 2011), this meta-analysis found that the lack of a capable guardian increased the likelihood of experiencing sextortion victimization. Specifically, similar to previous research, having both biological parents in the home did decrease the likelihood of experiencing sextortion victimization (Holt et al., 2016; Kernsmith et al., 2017; Mitchell et al., 2007), most likely by curtailing the motivated offender’s access to a suitable target. Although these findings suggest that it is beneficial to youth, in relation to protecting against sextortion victimization, to have both biological parents in their home, there is still much room for additional research. For example, we do not yet know if it must be biological parents to have a positive impact, or just multiple adults in the home who serve as a capable guardian (Holt et al., 2016). Further research should also be done to discover if other variations of guardianship,

such as grandparents or older siblings, serve as a protective marker. Moreover, there were a few studies that examined other factors that could serve as a capable guardian (i.e., physical location of the computer, parental software). However, they were only examined in one study so they could not be included in the meta-analysis. Future research should further explore the impacts of the family situation, use of restrictive software, and location of the computer as possible protective factors (Kernsmith et al., 2017; Leemis et al., 2018 Mitchell et al., 2007)

### **Online Deviancy**

CLRAT proposes that deviant online behavior such as seeking sexual material online may put an individual at a heightened risk for experiencing sextortion victimization (Reyns et al., 2011). However, this study found no markers that were statistically significant indicators of reporting sextortion victimization (Holt et al., 2016; Mitchell, 2016). This may be a result of few markers studied. CLRAT proposes harassing others online, stalking, or hacking in addition to sending nude photos and seeking sexual material are considered online deviant behaviors (Reyns et al., 2011) It is possible that a closer evaluation at these behaviors may identify additional risk markers. Though CLRAT proposes that online deviancy may lead to a greater likelihood of online victimization, in the case of sextortion, there does not appear to be enough evidence to currently support this claim. However, it is possible that these findings are a result of the minimal research in this area and that additional studies may yield additional support.

## **Chapter 6 - Implications**

The findings of this meta-analysis summarize the existing body of research and identify gaps in the literature. Specifically, the results of the meta-analysis suggest that females and those of racial/ethnic minority groups are more likely to experience sextortion and that having both biological parents in the home lowers the risk due to having a capable guardian who can serve as a protective factor (Holt et al., 2016; Kernsmith et al., 2018; Mitchell, 2007; Wolak, 2018). Moreover, the findings of this study illustrate areas guided by CLRAT that researchers have started exploring, as well as areas that need further exploration (Holt et al., 2016). For example, by identifying factors on multiple levels, parents, guardians, school staff, and others who work with minors, particularly females and racial/ethnic minorities, can be educated with accurate information, dispelling sextortion myths, to provide effective guardianship needed to protect youth. This may manifest in parental restrictions on apps, time spent online, and which social media platforms to join. This information can also be used by law enforcement agencies to guide their investigations and public outreach efforts such as speaking engagements, school visits, and infographics as has been used in other public safety concerns (O'Malley & Holt, 2020).

Another application may be in social medial platform policy formation by having safeguards in place for those who are most vulnerable (Marcum et al., 2022; O'Malley & Holt, 2020). For example, if middle school students are taught about the potential short- and long-term impacts of sending nude images of themselves, engaging in conversations with strangers in chatrooms, or posting pictures of themselves on social media, they may choose to be more judicious about putting themselves in proximity to motivated offenders (Bhat, 2018). Previous publications have suggested educational efforts target age and gender by tailoring curriculum to the myths and experiences they are most likely to encounter in their demographic (Marcum et al.,

2022; O'Malley & Holt, 2020). Incorporating these findings into school curriculum, such as sex education or basic internet safety training courses, may prove to be a good space for adding a level of guardianship to prevent sextortion victimization (Bhat, 2018; Holt et al., 2016; Marcum et al., 2022). This information should be paired with internet safety tips and strategies for disclosure in the event they do fall victim to sextortion (O'Malley & Holt 2020). Additionally, providing information to parents to educate them on internet safety hazards could provide another layer of capable guardianship (Leemis et al., 2018).

## Chapter 8 - Limitations

As with all studies there are limitations to this paper. Despite extensive efforts and thought on search terms and methods to maximize relevant results, it is possible that articles were missed. Though there were many articles that mention sextortion, few were exclusively about this topic, meaning the stats were about a variety of online sexual abuse experiences, and others did not have usable statistics about sextortion victimization. Often publications listed sextortion alongside other cyber sexual abuses such as nonconsensual porn sharing and revenge porn. This made identifying articles that contained relevant statistics very challenging. Owing to the difference in terminology and definition of sextortion, there may be other articles that were not identified for inclusion. Another limitation of this study is the few factors studied relating to a capable guardian and online deviance.

Additionally, it has been documented that publishers are more likely to accept articles with statistically significant findings. This can create a bias in the results of the meta-analysis when not all studies are included. Another factor to consider is that there may be papers that have not been published yet and, thus, did not come up in the search. Moreover, some sources have been published, but not in a format that provided usable statistics, such as in the case of the meta-analysis published by Patel and Roesh (2022), a report by Thorn (2023), and qualitative articles by Mitchell et al. (2005) and O'Malley and Holt (2020).

## **Chapter 9 - Conclusion**

In conclusion, these findings suggest females and racial/ethnic minority members are more likely to report experiencing sextortion victimization, while those who have both biological parents are less likely to experience sextortion. Given the growing number of individuals who experience sextortion, combined with the lack of research on this topic, additional studies are critically needed to gain a clearer understanding of risk markers for sextortion and how to protect individuals from becoming victims. This topic should be prioritized as gathering this information is important to educate individuals, particularly youth, and take steps to place capable guardians between suitable targets and motivated offenders who would like to harm them. Additional studies are needed to confirm the findings of this study and fill existing gaps, thereby being more capable of informing programming and policy. As research continues to go forward on this important topic, it is hoped that potential victims will be protected, and the negative mental, physical, social, and economic outcomes of sextortion can be avoided.

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