

# **TECHNOLOGY- ASSISTED CHILD SEXUAL ABUSE**

Offender strategies, abuse characteristics  
and psychological consequences

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Degree of Licentiate in Psychology  
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May 29, 2020

# ABSTRACT

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Internet communication technology has enabled new ways for adults to abuse children sexually. By communicating online via smartphones and web cameras, adults can incite children to show themselves naked or to perform sexual acts online. The aim of this licentiate thesis is to broaden our knowledge about Technology-Assisted Child Sexual Abuse (TA-CSA) and its consequences, by analyzing TA-CSA court cases (Study I: n = 122, Study II: n = 98) from Swedish courts (children aged 7–17, offenders aged 16–69). More specifically, Study I investigated how online offenders approached and incited children to engage in online sexual activity. The results show that offenders found their victims on all sorts of online platforms, indicating that they identified which sites children were using. Additionally, the study identified two strategies used by offenders – (1) pressuring the child and (2) building a relationship with the child. In contrast to previous research, which describes the use of pressure as an exception, pressuring the child was the most frequently reported strategy in this study. A majority of the offenders engaged the child in online sexual activity only (i.e. did not additionally abuse the child offline). This contrasts with the assumption made in previous research that most online offenders target children online with the aim of arranging an offline meeting. The relationship-building strategy had many similarities with what research has shown in the grooming of children. Study II investigated what kinds of sexual activities children were incited to perform online, and how the experiences and psychological health of the children were described in the court documents. The results show that some children experienced the abuse as threatening and distressing, and felt that they had no choice but to perform the sexual acts demanded by the offender. The study further revealed a wide range of sexual acts that the children were incited to perform, some of which were of an extremely violating nature. The court documents describe several potential vulnerability factors and several potential psychological consequences among the children, which are similar to those shown in research investigating offline CSA. In sum, this thesis emphasizes that TA-CSA can be a serious crime with potentially severe consequences for its victims. In light of this, it is suggested that TA-CSA should not be viewed as essentially different from, or less severe than, offline CSA.



## SVENSK SAMMANFATTNING (SWEDISH SUMMARY)

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Är sexuella övergrepp som sker via nätet mindre allvarliga än de som sker när offer och förövare möts? Forskning har visat att yrkesverksamma som arbetar med barn ibland inte tar internetrelaterade övergrepp på lika stort allvar som övergrepp som sker utanför nätet. Rättsväsendet har ansett det vara mindre sexuellt kränkande när en förövare tvingar ett barn att förgripa sig på sig själv, än när en förövare själv förgriper sig på ett barn, med följderna att gärningspersonerna kommit undan med mildare straff och lägre skadestånd.

Vad säger då den forskning som finns på ämnet? Faktum är att de fåtal studier som gjorts visar att internetrelaterade sexuella övergrepp mot barn kan ha allvarligare psykologiska konsekvenser än vad man tidigare trott. Forskningsfältet är dock ännu i ett tidigt stadie, och det finns många kunskapsluckor kvar att fylla. Medan forskning från flera decennier har kartlagt de processer som ligger bakom sexuella övergrepp mot barn samt vilka psykologiska konsekvenser det kan få, saknas ännu forskning vad gäller övergrepp som sker på nätet. Antalet polisanmälningar gällande internetrelaterade sexualbrott mot barn ökar både nationellt och internationellt, och för att kunna sätta in preventiva åtgärder, säkerställa att utsatta barn får tillräckligt stöd, samt lagföra förövarna krävs mer kunskap. I denna licentiatavhandling presenteras två studier som undersöker hur internetrelaterade sexualbrott går till, vilka handlingar de innefattar, samt vilka följder det kan få för offren. Till grund för studierna ligger en analys av samtliga svenska domstolsfall från år 2017 med brottsrubricering 'Utnyttjande av barn för sexuell posering' där övergreppet skett på nätet. Domstolsfallen inkluderar barn (ålder 7-17 år) som förmåtts att genomföra sexuella handlingar på internet.

Studie I undersökte hur internetförövare fick kontakt med barn på nätet och vilka strategier de använde för att förmå barnen att genomföra sexuella

handlingar via internet. Förövarna kom i kontakt med barnen via en mängd olika internetsidor (sociala nätverk, spel riktade mot barn, chattsidor eller sexuellt suggestiva sidor). Detta tyder på att det inte är några särskilda sajter eller appar som är specifikt drabbade, utan att förövarna hittar vilka forum barnen än befinner sig i. Studien identifierade två huvudsakliga strategier som förövarna använde sig av: antingen pressa barnet eller bygga en relation med barnet. Press (genom hot, mutor eller tjat) var, till skillnad mot tidigare forskning på sexuella övergrepp mot barn på nätet, den vanligaste strategin som beskrevs i domarna. Detta indikerar att den digitala utvecklingen medfört en ny tillfällesstruktur där förövare kan använda andra strategier än tidigare. Den andra strategin – att bygga en relation med barnet (genom smicker, vänskap eller kärlek) har många likheter med grooming, vilket omfattande forskning visat att förövare använder sig av för att förbereda barn för sexuella övergrepp, både på och utanför nätet. Vidare visade studien att en stor majoritet av förövarna endast förgrep sig på barnet på nätet, vilket motsäger antagandet om att internetförövare har som mål att begå övergrepp mot barnet utanför nätet. Detta fynd betonar vikten av att se de sexuella handlingar på nätet som övergrepp i sig, oavsett om förövaren även träffar barnet utanför nätet eller ej.

Studie II undersökte vad för typ av sexuella handlingar internetövergreppen innehöll, samt hur barnens upplevelser och psykologiska hälsa beskrevs i domarna. Resultaten visade att barnen hade förmått att genomföra en rad olika handlingar. Från att visa upp sig halvnakna, spela in filmer eller direktsända i webbkamera när de onanerade eller penetrerade sig själva, till att tvingas genomföra sexuella handlingar på syskon eller husdjur. I domarna beskrevs att vissa barn upplevde situationen som obehaglig, hotfull och att de inte hade något annat val än att lyda förövarns order. Några av övergreppen beskrevs som fysiskt smärtsamma. De möjliga sårbarhetsfaktorer hos barnen som beskrevs i domarna var av personlig karaktär (dåligt psykiskt mående, intel-

lektuella funktionsnedsättningar, låg självkänsla), relationell karaktär (ensamhet, stressig social miljö) samt beteendemässig karaktär (självskadebeteende). De psykologiska konsekvenserna till följd av övergreppen som beskrevs var personliga (psykologiskt lidande, självskade-, eller suicidalt beteende, sömnproblem och internaliserat självhat), relationella (svårighet att lita på folk, försämrade relationer, isolering samt rädsla för att vara själv), samt relaterade till barnens skolgång (svårt att klara av skolan). De psykologiska konsekvenserna i studie I har många likheter med vad forskning har visat kring barn som utsatts för övergrepp utanför nätet. Sammantaget visar resultaten att nätrelaterade övergrepp kan vara mycket allvarliga i sin karaktär samt orsaka ett stort lidande.

Resultaten från de två studierna i denna licentiatuppsats kan betraktas ur flera perspektiv. Genom ett utvecklingspsykologiskt perspektiv med fokus på de stora förändringar (biologiska, psykologiska, sociala, sexuella) som barn och ungdomar genomgår, kan man förstå hur de kan bli extra sårbara för förövarnas strategier. Genom att applicera ett teoretiskt traumaperspektiv går det att förstå att även internetrelaterade övergrepp kan vara traumatiserande för de barn som drabbas. Resultaten bör även diskuteras i ljuset av antagandet att övergrepp på nätet är en mindre allvarlig form av övergrepp, och det faktum att de flesta länder världen över saknar explicita lagar som kriminaliserar sexuella handlingar med barn på nätet. I denna uppsats föreslås att internetrelaterade övergrepp inte bör ses som väsentligt annorlunda eller mindre allvarligt än övergrepp utanför nätet.





## LIST OF PUBLICATIONS

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This thesis is based on the following two studies, referred to in the text by their roman numerals:

- I. Joleby, M., Lunde, C., Landström, S., & Jonsson, L. S. (2020). 'He demanded more pictures': Offender strategies when inciting children to engage in online sexual activity. *Manuscript submitted for publication*.
- II. Joleby, M., Landström, S., Lunde, C., & Jonsson, L. S. (in press). Experiences and psychological health among children exposed to online child sexual abuse: A mixed methods study of court verdicts. *Psychology, Crime and Law*.

The studies were financially supported by a grant from the Swedish Crime Victim Compensation and Support Authority (Brottsofferfonden) awarded to Associate Professor Carolina Lunde, University of Gothenburg, Sweden



## ACKNOWLEDGEMENTS

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Writing this thesis would not have been the same without all the brilliant and lovely people I have had the pleasure of working with. First of all, I would like to thank my three excellent supervisors, who generously shared their knowledge as well as their laughter with me – *Carolina Lunde, Linda Jonsson, and Sara Landström.*

As if this team was not enough, I also have the pleasure and privilege of being part of not one, but two, ambitious and supportive research groups – the research unit for *Criminal, Legal and Investigative Psychology (CLIP)* and the *Gothenburg Group for Research in Developmental Psychology (GRID)*. Thank you all for inspiration and fun times.

Thank you to my examiner *Ann Frisé*n and my reviewer *Therése Skoog* for your insightful feedback, which aided in making this licentiate thesis better. Thank you *Ann Backlund* for all your help with navigating through this PhD education.

Thanks to all my friends and colleagues in the department, especially *Maria Gröndal, Emma Ejelöv, Patrik Michaelsen, Linn Zulka, Èrika Ramos, Jonas Burén, Emelie Ernberg, Mikaela Magnusson, Sofia Calderon, and Timothy Luke*, for making it fun to go to work and to After Work.



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# PROLOGUE

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## Nellie

When Nellie was 13 years old, an unknown man contacted her online and offered her a voucher worth 190 euros if she showed herself on her webcam. Nellie thought it would be easy money and agreed to pose in her bra, unaware of the consequences that would follow. As soon as Nellie had shown herself on the webcam, the man logged off without giving her the voucher. Nellie became really stressed and deleted her account to avoid being contacted by the man again. Time passed by and Nellie didn't really think about the incident. But one day, two years later when Nellie was lying in bed about to go to sleep, the same man contacted her again, saying that he had been looking for her. He had taken a screenshot of Nellie in her underwear and he now threatened to send the picture to her parents unless she showed herself on her webcam again. Nellie tried to resist but the man kept texting her for several hours and the threats escalated the following day. Nellie was scared about what would happen if she didn't do as she was told and felt forced to obey. Later that evening, while her mother was preparing dinner, Nellie told her to not enter her bedroom for a while because she needed to "discuss something with a person". With her mother only a few feet away on the other side of the closed door, Nellie was forced to perform humiliating and painful sexual acts. Nellie would later describe how she felt like a marionette with strings that the man could use to control her.

*Radio documentary from Swedish Radio P3  
"Nätpedofilen i Husby [The internet pedophile from Husby]"  
Pernilla Wadbäck (reporter) & David Mehr (producer), 2019*



## **Adam\***

When Adam was around seven years old, he got to know a man on an online gaming site. At first, Adam thought it was cool to get to know him, as the man was well known within the game. They became closer and closer friends, but after a while the man started acting weird and asked Adam for photos. Although Adam did not like the nagging, he did not want to lose the man's friendship. Without him, Adam was lonely, and the man was very persuasive. At first, the man wanted Adam to send pictures of his feet. Adam agreed to this and the man gave him 10 euros in the game as compensation. Later, when looking back on this first picture, Adam described himself as "not very smart" for giving in to the man's request. Adam and the man stayed in contact for two years and got to know each other even better. According to Adam, they were friends. But things escalated. The man requested more pictures of Adam. First of his feet, later of his stomach, and eventually of his penis. Adam thought it felt wrong and initially refused. But he was obsessed with gaming money and the man offered him 50 euros. This was an amount nine-year-old Adam could not resist. After making the man promise he would not show it to anyone, Adam sent a picture of his penis.

*Radio documentary from Swedish Radio P1  
"Del 3/4: Gamer: Övergreppen [Part 3/4: Gamer: the abuse]"  
Emelie Rosén (reporter) & Ylva Lindgren (producer), 2020*

*\*The name Adam is fictitious*

# INTRODUCTION

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Digital technology and widespread access to the internet has rapidly changed the ways in which people communicate (e.g. Valkenburg & Peter, 2011). From the perceived safety of our own homes, we can communicate using videos, pictures or text with people all over the world. Along with the tremendous benefits and opportunities, this technological development also poses some challenges and risks. In this licentiate thesis, one such risk will be addressed – namely, when digital technology is used to facilitate the sexual abuse of children.

There is a wide range of sexual abuse that can be conducted with some connection to the online environment. One distinction that can be made (Greijer & Doek, 2016), is between CSA that is conducted offline and then shared online through images and videos, and CSA that is facilitated by the internet and digital technology. The type of abuse in focus in this thesis is the latter, which will be referred to as *Technology-Assisted Child Sexual Abuse* (TA-CSA). In contrast, the term online CSA is used as an umbrella term that includes both forms of sexual abuse with online components.

Police reports regarding TA-CSA are increasing in number (Bentley et al., 2019; BRÅ, 2020; Palmer, 2015) and the media report stories from children who have been abused online, such as the ones presented in the prologue, above. However, research on abused children's own experiences is scarce. While research over the last few decades has established the processes surrounding offline CSA and its psychological sequelae, we still need to investigate whether this also applies to TA-CSA, or whether the latter is to be viewed

as essentially different from offline CSA. The existing limited research indicates that the psychological consequences for victims of TA-CSA may include symptoms of post-traumatic stress disorder (PTSD) and generally poorer psychological health (Jonsson, Fredlund, Priebe, Wadsby, & Svedin, 2019). These consequences may be more severe than previously assumed by professionals working with children (Hamilton-Giachritsis, Hanson, Whittle, & Beech, 2017), and by the legal system (Net, 2015; B 11734-17). Furthermore, in order to be able to prevent children from becoming victimized online in the first place, to provide sufficient support for children subjected to TA-CSA, and to administer legal justice, increased knowledge about TA-CSA is needed.

The two studies included in this licentiate thesis aim to further our understanding of TA-CSA by investigating court cases in which children (defined as individuals under the age of 18) have been incited to engage in online sexual activity. More specifically, Study I investigated how online offenders approached children online, what strategies they used to incite children to engage in online sexual activity, and whether offender strategy was related to characteristics of the abuse, the victim or the offender. Study II investigated what kinds of sexual acts the children were incited to perform online, how the child's experiences and psychological health (before and after the abuse) were described in the verdicts, and how age and gender were related to characteristics of the abuse. In this thesis, the results of the two studies will be presented within the broader context of child development and analyzed in the light of theoretical frameworks of trauma.

The outline is as follows. Firstly, I will provide a brief overview of the main developmental changes that children and adolescents undergo in their transition into adulthood, and specifically of their sexual development. This is essential in order to understand how children may be vulnerable to an offender's strategies. Secondly, I will describe how the new digital landscape has

altered the possibilities for communication, how adolescents might use the internet for sexual purposes in different ways, and how this might make them vulnerable to approaches by adults with malicious intent. Thirdly, in order to be able to compare TA-CSA to offline CSA, I will present the prevalence, characteristics, and potential consequences of CSA in both online and offline settings. Fourthly, I will discuss the assumption that TA-CSA is a less severe form of CSA (Hamilton-Giachritsis et al., 2017; Net, 2015) and the fact that a majority of countries worldwide (68%) lack explicit laws criminalizing online sexually abusive acts (International Centre for Missing and Exploited Children [ICMEC], 2017). Fifthly, in order to discuss whether TA-CSA is in fact less severe than offline CSA, I will outline how the brain reacts to potentially traumatizing experiences. I will define some theoretical frameworks of how trauma develops in general, and in the case of CSA specifically, and investigate whether these theories apply to TA-CSA. Following this, I will provide a summary of the main results of the two studies included in this thesis. Lastly, I will discuss the results in relation to a broad developmental context and to the theoretical trauma frameworks presented in the introduction.

## Child and adolescent development

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The two studies include documents concerning children aged 7–17 who had been subjected to TA-CSA. To be able to understand their experiences, it is paramount to understand the developmental context in which they are situated, and how this context might make them particularly vulnerable to TA-CSA.

The developmental differences between 7-year-olds and 17-year-olds can be enormous, because going through childhood and adolescence involves a series of transitions from immaturity to increased maturity and responsibility in various domains in life. Younger children (i.e. middle childhood) grow and

develop slowly and steadily, and one of the most important tasks is that of developing a positive self-concept (e.g. Berger, 2018). During adolescence, the changes are more radical, involving the transition into young adulthood. In the following section, I will discuss the challenges that may arise when maturity in the different domains is not achieved concurrently. I will then focus on four major aspects of change: biological, psychological, social and psychosocial.

## Developmental maturity gap

Puberty is one of the most profound biological and social transitions, not only of adolescence, but of the entire lifespan (Lerner & Steinberg, 2009). Clearly, there are major changes to adapt to. As children become adolescents and go through considerable biological, psychological and social changes, they are faced with the task of coming to terms with a ‘new’ body, mind and social status, as well as with developing a positive sense of self.

The changes in the different domains do not necessarily occur simultaneously. It is therefore likely that an individual will mature in some domains sooner than in others, leading the individual to become caught in what can be described as a *maturity gap* (Moffitt, 1993). As Steinberg (2011, p. 6) puts it: “an individual can be a child in some ways, an adolescent in other ways, and an adult in still others”. To exemplify, one individual might develop an adult-like, fertile body and experience sexual interest during the early years of adolescence, while still having the cognition of a child and facing the social expectations of sexual abstinence. As a result, an adolescent might experience feelings and urges like an adult, without yet having received the social privilege of acting on them. On the other side of the coin, an adolescent might be seen and treated as more adult than they perceive themselves to be. For example, with an adult-like body, an adolescent might become an object for other people’s sexuality and receive attention and sexual invitations, despite not being cognitively mature or ready for them. Taken together, these aspects of the

maturity gap risk making adolescents particularly vulnerable to risky situations and impulsive behaviors that are not beneficial from a long-term perspective.

## Biological changes

The core aspect of the biological changes experienced during childhood is the onset of puberty, which is universal, inevitable and ubiquitous (Hollenstein & Loughheed, 2013), and there is widespread agreement regarding puberty's essential role in reproductive and sexual maturity (Lerner & Steinberg, 2009). The onset of puberty, which marks the start of adolescence, releases a range of hormones into the body and brain. This hormonal release initiates great changes in physical appearance, with the growth of pubic hair and a dramatic increase in height and weight for both genders, plus the growth of breasts among girls, and facial hair among boys (Berk, 2010; Susman & Dorn, 2009). Puberty also affects body shape, with girls' hips and boys' shoulders widening. Only during infancy does the body undergo more radical transitions than during adolescence (Lerner & Steinberg, 2009), and the adolescent's self-image may be temporarily threatened by these marked changes in physical appearance (McCabe, Ricciardelli, & Finemore, 2002; Wertheim & Paxton, 2011). Thus, coming to terms with these major bodily changes and feeling at home in one's new body might be quite a challenge, especially if it differs from the bodies of one's peers. When looking at a school class of same-age students in early adolescence, it becomes evident that the onset of puberty varies greatly between individuals, and the timing (i.e. early maturing, on-time maturing or late maturing) might affect body satisfaction and self-esteem (Lerner & Steinberg, 2009). One way to cope with this changed body is to share nude pictures of oneself online in order to receive affirmations about one's looks (Jonsson, Cooper, Quayle, Svedin, & Hervy, 2015). This is relevant to the subject of this thesis, because adults who want to sexually abuse children may take advantage of this.

Alongside the visually observable bodily changes, puberty culminates in reproductive maturity (Lerner & Steinberg, 2009), in which girls experience their first menstruation, and boys their first sperm emission. Hence, going through puberty means going through a biological transition from a sterile child's body to a fertile adult body. With the new adult body come new bodily functions (Hägström-Nordin & Magnusson, 2016), such as increased sexual interest and sex drive (McClintock & Herdt, 1996; Temple-Smith, Moore, & Rosenthal, 2015). As a result, adolescence is a time of sexual curiosity and, for many, their initial engagement in sexual activity (Diamond & Savin-Williams, 2009). The biological changes also involve maturation of the brain, which undergoes substantial development during childhood and adolescence.

## Psychological changes

The maturation of the brain affects the individual's way of thinking (i.e. cognition), enabling more complex and sophisticated cognition. Increased age means moving from the young child's focus on the here and now, to the ability to think about past and future events, as well as to contemplate hypothetical situations and abstract concepts (i.e. friendship, morality, philosophy etc.) (Burnett, Sebastian, Kadosh, & Blakemore, 2011; Pfeifer & Blakemore, 2012). Taken together, all these intellectual advances alter the ways in which children and adolescents think about the world.

During their younger school years, children develop a much more realistic and nuanced understanding of who they are thanks to more complex and logical cognition and increased social awareness (Berger, 2018). This period is also prime time for moral development, and research has shown that children develop their own morality, to which they can compare their own behavior (Killen & Smetana, 2014). Consequently, children develop self-conscious emotions such as pride, shame and guilt (Lewis & Sullivan, 2005).

For adolescents, one relevant shift in perspective that generally occurs is described as *adolescent egocentrism* (Elkind, 1967). This theory posits that adolescents, due to their newfound ability to introspect, tend to focus on themselves and what others think of them. This heightened self-consciousness displays two thinking patterns, called ‘the imaginary audience’ and ‘the personal fable’. In short, the imaginary audience shows a tendency to believe oneself to be the focus of everyone’s attention, and always being judged by others. The personal fable refers to being unable to recognize one’s small role in the grand scheme of the world, and instead believing that one is special and unique. Thus, egocentric thinking has been associated with risk-taking behavior in adolescence (e.g. Alberts, Elkind, & Ginsberg, 2007), and the fact that a personal setback in adolescence may take on unreasonable proportions due to being perceived as the end of the world. In the context of online CSA, the threat that someone might distribute compromising information, pictures or videos may be perceived as an insuperable calamity in the psychological world of adolescents.

Although numerous cognitive improvements occur during childhood and adolescence, the brain continues to mature into the early adult years and is only fully developed around the mid-20s (Kolb & Whishaw, 2001). The region to mature latest is the prefrontal cortex, which is responsible for higher executive functions such as decision-making, planning, adjustment to social situations, impulse control and risk-taking. Consequently, children and adolescents are limited in their ability to process these highly complex forms of cognition, which in turn might leave them vulnerable to getting into risky online situations, as well as poorly equipped to evaluate potential threats.

## Social changes

Amidst the biological and psychological changes, simultaneous changes occur in the social context in which children find themselves. They gradually



separate themselves from parental control and gain a new social status with increased freedom, responsibility, and independence (Lerner & Steinberg, 2009). This drive for independence expands their social world. Traditionally, this has been expressed through children being freer to spend time with friends. Nowadays, this increased freedom can also include having a mobile phone, which can be used to communicate with other people without parental supervision (Swedish Media Council, 2019). For adolescents, the increased freedom means that, in different stages, they reach an age at which new experiences are allowed. These include having a job, having sex, or drinking alcohol. Adolescence is the stepping-stone between childhood and adulthood, and is therefore characterized by successive stages of increased liberty.

For both children and adolescents, the peer group becomes more important as they spend less time with their parents and more with their peers (Gifford-Smith & Brownell, 2003; Laursen, 1996). The peer group is where they turn for guidance regarding attitudes and behaviors (Temple-Smith et al., 2015), and where they discuss future goals and are given advice (Brown & Larson, 2009). Therefore, children are (sometimes painfully) aware of the opinions, judgements and accomplishments of their peers (Berger, 2018). In consequence, the social world becomes paramount, especially for adolescents, for whom fitting in and being accepted by peers emerges as one of the most central concerns (Steinberg, 2011). Status and prestige become important elements of peer relationships, making adolescents more attentive to their reputations (Brown & Larson, 2009). Thus, the need for affirmation is increasingly important, and the risk of having a rumor or compromising information spread about them might be experienced as far more wounding for adolescents than for adults.

Not only does the context of peer relationships change during adolescence (e.g. less oversight by adults and more time spent together), but peer relations also grow more multifaceted. For instance, adolescents developed

more intimate and long-lasting friendships, and perhaps even their first romantic relationship (Brown & Larson, 2009). The internet can be used either to initiate new relationships (Wolak, Mitchell, & Finkelhor, 2002), or to reinforce already existing romantic relationships (Subrahmanyam & Greenfield, 2008a).

## Psychosocial changes

Psychosocial development, as the name reveals, comprises changes that are both psychological and social in nature. The changes of most relevance to this thesis are the development of *intimacy* and *sexuality*. While problems and challenges within these domains occur during all periods of the lifecycle, the developments in each of these areas are especially relevant during adolescence (Steinberg, 2011).

The maturation occurring during adolescence leads to both an increased capacity and greater opportunity for intimacy (Paul & White, 1990). To exemplify, the ability to form close intimate relationships requires cognitive skills such as perspective-taking ability and empathy, as well as behavioral skills such as acting in a trustworthy manner, making commitments, and communicating effectively (Lerner & Steinberg, 2009). The developments that take place during adolescence make it possible to form and maintain committed, meaningful, mutual relationships, with both friends and romantic partners.

Intimate romantic relationships might involve sexual activity, and developing one's sexuality is an important aspect of adolescence. Sexuality is not an entirely new issue to surface during adolescence (which will become evident in the next chapter), but adolescence is a fundamentally important time for this development (Temple-Smith et al., 2015). One of the key tasks is to figure out how to deal with sexual desire and to incorporate sex into one's relationships (Diamond & Savin-Williams, 2009), much of which involves tasks that require a certain degree of maturity. Forming sexual relationships

also involves major social concerns, making the development of sexuality into an obvious psychosocial task.

## Child and adolescent sexuality

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Sexuality is essential to human life. As previously stated, it is not a new issue arising in adolescence, since sexual questions, conflicts and crises might well arise before, or last long after, adolescence. In the extreme, the process of achieving sexual maturity can be described as beginning at conception and ending at death (DeLamater & Friedrich, 2002, p. 10).

Although it is methodologically difficult to investigate (studies are often based on observations by parents or preschool teachers), research has shown that children engage in different forms of sexual behaviors that seem to be normative and developmentally related (Kastbom, Larsson, & Svedin, 2012; Lamb & Coakley, 1993; Larsson & Svedin, 2001). According to parents' reports, more than 40% of 3–6-year-olds engaged in at least one of the following, or similar, behaviors: playing doctor, touching their own genitals, or looking at others while undressing (Larsson & Svedin, 2001). Among 7–13-year-olds, more than 40% asked questions about sex, touched their own genitals at home, or similar sexual behaviors (Kastbom et al., 2012). While sexual activity during childhood is mainly based on spontaneous curiosity, in adolescence it is more deliberate, and takes on a more explicit form. Autoerotic activities (sexual behavior that is experienced alone) are still common (Leitenberg, Detzer, & Srebnik, 1993), but as sexuality and dating are given a new social meaning, many adolescents also start to experiment with sexual activity with other people. Similar to previous generations, today's adolescents engage in gradually increasing intimate activities (e.g. kissing, making out, fondling, touching breasts and genitals through clothes, touching naked breasts and genitals) before engaging in oral sex or sexual intercourse (Diamond & Savin-Williams,

2009). As will be described later in this thesis, today's adolescents might also turn to the internet as an outlet for sexual activity.

Internationally, Sweden stands out as a sexually liberal country (Edgardh, 2002), and the cultural context is assumed to influence what behaviors are permitted among children (Larsson, Svedin, & Friedrich, 2000). Accordingly, Swedish studies in general report a higher prevalence of sexual behaviors among children than North American studies (Larsson et al., 2000), and it has been described that in Sweden being sexual is the norm (Wickenberg & Wedeen 2017).

Understanding that sexual curiosity is natural among children and adolescents is an important aspect of understanding the potential consequences of CSA. Sexuality is a significant aspect of development, and research has identified four important challenges for reaching sexual well-being (Brooks-Gunn & Paikoff, 1993). Firstly, feeling comfortable, satisfied and attractive in terms of one's physical appearance. How adolescents will feel about their bodies is dependent on their experiences of the changes into a sexually mature, adult-like body, as well as how others respond to this new body. Secondly, feeling that one's sexual desire is normal and acceptable. Thirdly, feeling comfortable about choosing to engage (or not to engage) in sexual behavior (alone or together with another person), and understanding that all sexual activity is voluntary. Fourthly, understanding the importance of safe sexual practices. Sexual health, in turn, has been associated with physical, social and mental health among both adults (e.g. Galinsky & Sonenstein, 2011; Laumann et al., 2006) and adolescents (Espinosa-Hernández, Vasilenko, McPherson, Gutierrez, & Rodriguez, 2017; Hensel, Nance, & Fortenberry, 2016), indicating that it might be an important factor in overall health. Evidently, being lured into engaging in sexual activity with an adult or forced to perform sexual acts against one's will, which is the focus of this thesis, seems to have the potential to harm sexual

well-being, and this seems to be applicable regardless of whether the abuse is conducted offline or online.

## Growing up in the new digital landscape

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Today's society is an "always on" society (Harris, 2014) in which the media are so pervasive and ubiquitous that people in general do not even register their presence in their lives (Deuze, 2011). As a result, children and adolescents do not make any distinction between life offline and life online (Swedish Media Council, 2017). Today's youth will face the same developmental challenges as their predecessors, but they will do so amidst new worlds for communication, friendship, play and self-expression (Ito et al., 2009). Therefore, in order to understand the psychosocial development of children and adolescents today, one cannot ignore online communication (Valkenburg & Peter, 2011) and, in order to understand online experiences, it is imperative to recognize the important role that the internet plays in the lives of today's youth.

Within a relatively brief window of time, the new communications technologies, with smartphones at the forefront, have created a new social landscape. Although people tend to be wary of change (Syvertsen, 2017), digital developments have entered people's lives at a rapid pace and fundamentally altered the ways in which we all communicate. Access to online information and services has become so important that several national governments even recognize internet access as a human right (Szozkiewicz, 2018). The estimated number of internet users around the globe amounts to an impressive 3.9 billion people (Statista, 2020a), which is half the world's population (Statista, 2020b). Thus, it seems fair to say that the internet connects people from all over the world. The number of internet users worldwide has doubled in just eight years (Statista, 2020a), demonstrating the tremendous speed of this development. In Sweden, 95% of the total population uses the internet, and

among 12–25-year-olds this figure is 99–100% (Internetstiftelsen, 2018). These figures are similar in other modern western countries (Statista, 2020c). This development can be described as a digital revolution, to say the least. Of course, this new digital landscape will affect the extent to which the internet will be used when exploring new aspects of life, and consequently the ways in which today's youth will develop into adults.

In contrast to adults growing up in the pre-digital era, today's youth were born into the digital world and have spent their entire lives surrounded by and using computers, videogames, cellphones and other digital devices (Orben, 2020; Prensky, 2001). Indeed, children are introduced to the internet at a very young age (Internetstiftelsen, 2018) and they use it as a natural arena for communication. Four out of ten 7-year-olds use their own mobile phone to send pictures and texts. Nine out of ten 10-year-olds own their own phone, and from around this age the use of social networking sites (SNS) becomes more and more popular. More than half of Sweden's 10-year-olds use SNS (Internetstiftelsen, 2018). Increasing age is related to increasing use of SNS. Thirty-seven percent of 9–12-year-olds use SNS daily, compared to 88% of 13–18-year-olds (Swedish Media Council, 2019). In summary, the data suggests that, as time goes on, children are going online more often, for longer periods, at younger ages, and for different purposes (Tracey & Francesca, 2019). While this online connectedness certainly offers a range of benefits, there are also some risks associated with it. Of relevance to this thesis is the fact that it creates new opportunities for people who want to find children to sexually abuse, because any child with access to an online digital device could become a potential victim (We protect Global Alliance, 2018).

## Exploring one's sexuality online

The new digital landscape offers a multiplicity of means and arenas for children and adolescents to explore and develop their intimacy and sexuality

online. Moreover, this takes place without the supervision of parents or school personnel (Valkenburg & Peter, 2011; Wängqvist & Frisé, 2016) and at a safe distance from siblings or friends. Many parents find it difficult to talk about sex with their children (Jerma & Constantine, 2010), and children prefer the internet over schools, peers or partners as a source of information about sex (Suzuki & Calzo, 2004). Online, there are ample opportunities to find information about the maturing body and sex (e.g. by using search engines) (Daneback & Löfberg, 2011), or to be part of creating it (e.g. by participating in online forums or chat rooms) (Subrahmanyam, Greenfield, & Tynes, 2004; Subrahmanyam, Smahel, & Greenfield, 2006). Consequently, the internet may serve an important role in adolescents' sex education (Daneback & Löfberg, 2011).

Another opportunity provided by the internet and online communication is sexual self-exploration in different ways (Valkenburg & Peter, 2011). In a Swedish study of mid- and late adolescents (15 and 18 years old), 35% of the girls and 74% of the boys engaged in online sexual activities of different kinds (Sorbring, Skoog, & Bohlin, 2014). This study used a broad definition of online sexual activity, and flirting was the most common behavior, while engaging in webcam sex was the least common. Furthermore, adolescents can use online discussion groups to ask questions or seek advice about sex (Daneback & Löfberg, 2011), view porn for informational purposes or for sexual excitement (Sabina, Wolak, & Finkelhor, 2008), enter chatrooms to discuss sex (Subrahmanyam et al., 2004), or engage in online sexual activity with other people (Döring, Daneback, Shaughnessy, Grov, & Byers, 2017; Subrahmanyam & Greenfield, 2008b). One way of engaging in sexual activity with other people is by sexting, which refers to the sending and receiving of sexually explicit imagery via some form of virtual messaging (Anastassiou, 2017). The prevalence of sexting varies from very low to quite high, depending on defini-

tion, methodology, and cultural context (Baumgartner, Sumter, Peter, Valkenburg, & Livingstone, 2014). Estimates indicate that 12% of American adolescents had sent sexts (Klettke, Hallford, & Mellor, 2014), 15% of pan-European 9–16-year-olds had received or sent sexts (Livingstone, Haddon, Görzig, & Ólafsson, 2011), and 27% of Swedish adolescents had engaged in voluntary sexual exposure online (Jonsson, Priebe, Bladh, & Svedin, 2014). The prevalence overall seems to have increased in recent years (Madigan, Ly, Rash, Van Ouytsel, & Temple, 2018).

Adolescents' participation in online sexual activities has led to widespread concern among parents, educators and the media alike (Anastassiou, 2017), who worry about the potential negative effects on well-being. On the one hand, research has shown that most online sexual contacts are positive experiences (Jonsson et al., 2019). For instance, sexting has been described as a way of flirting and meeting new people, seeking affirmation, having fun (Jonsson et al., 2015; Lippman & Campbell, 2014), and as part of a sexual-experimentation phase for adolescents who are not yet ready to engage in offline sexual activity (Anastassiou, 2017). On the other hand, research has shown that sexting is associated with mental health problems (e.g. anxiety, depression) and risky sexual behavior (Mori, Temple, Browne, & Madigan, 2019), and that many individuals experience (both internal and external) pressure to become involved in sexting (Englander, 2019; Walker, Sancu, & Temple-Smith, 2013). In a study investigating 51 adolescents who had engaged in sexting (Jonsson et al., 2015), as many as 10% of them reported that they had been coerced into sending nude images, which in turn might constitute a crime. In sum, in most cases sexting is no cause for concern, as most sexting is not associated with poor outcomes (Englander, 2012). However, it is of course important to be wary of its potential risks, as sexting can highlight potential vulnerability to victimization (Cooper, Quayle, Jonsson, & Svedin, 2016), and thus risk lead-



ing to more serious issues, such as the risk of the pictures being used for blackmail (so-called sextortion) (Wolak, Finkelhor, Walsh, & Treitman, 2017). Additionally, if an adult were to incite a young person (under the age of sexual consent) to engage in sexting, this would constitute the type of crime that is the focus of this thesis.

## Child sexual abuse

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The World Health Organization (1999, p. 15) defines CSA as “the involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the child is not developmentally prepared and cannot give consent, or that violate the laws or social taboos of society.” As evident from this broad definition, CSA can constitute a wide range of experiences, both offline and online. An accurate estimate of the prevalence of CSA is therefore difficult to obtain. Cultural and methodological differences between studies further complicate the comparison of results. For instance, studies including non-contact abuse (such as sexual solicitation and indecent exposure) will obtain very different results from studies that only include penetrative abuse. Differences in cultural beliefs, values, and taboos surrounding sexuality and sex might influence the willingness to disclose (Kenny & McEachern, 2000), leading to apparently lower prevalence rates in some countries and cultures. The lowest rates of CSA have been reported in Asia (for both males and females), and the highest rates in Africa (for males) and Australia (for females) (Stoltenborgh, Van Ijzendoorn, Euser, & Bakermans-Kranenburg, 2011). The choice of sample is also likely to have an impact, with lower prevalence among convenience samples such as college students (due to being a psychologically healthier group) than among representative community samples (Goldman & Padayachi, 2000). Similarly, the choice of method may have a major impact on the results. To exemplify, a

meta-analysis on the worldwide prevalence of CSA by Stoltenborgh and colleagues (2011), revealed that self-report studies yielded a 30 times higher prevalence rate than informant studies.

Although no exact numbers might be reachable, several large-scale studies provide an estimate of the presence of CSA. A review by Barth, Bermetz, Heim, Trelle, and Tonia (2013) reported that worldwide prevalence estimates ranged from 8–31% for females and 3–17% for males. Non-contact CSA was the most common form of abuse (50% for females, 31% for males), followed by mixed CSA (i.e. studies where different types of abuse had been inquired about, but only one prevalence rate was reported; 9–24% for females, 4–16% for males), contact CSA (defined as touching, fondling or kissing; 13% for females, 6% for males), and penetrative CSA (defined as oral, vaginal, anal or attempted penetration; 9% for females, 3% for males). In comparison, the meta-analysis by Stoltenborgh et al. (2011) showed a worldwide prevalence of 18% for females and 7.6% for males. In a review of the Nordic countries, Kloppe, Haugland, Svedin, Mæhle, and Breivik (2016) reported prevalence rates of 11–36% for ‘broadly defined CSA’ among females, and 3–23% for males. For contact CSA (here defined as sexual touching), the prevalence rates were 6–30% for females and 1–12% for males, and for penetrative CSA they were 1.1–13.5% for females and 0.3–6.8% for males. In the context of Sweden, a study by Priebe and Svedin (2009) investigating self-reported lifetime prevalence rates revealed 44.8% contact CSA (excluding penetration) for females and 13% for males. For penetrative CSA, the numbers were 13.5% for females and 5.5% for males. In contrast to the findings of Barth and colleagues (2013), non-contact CSA was the least reported, with 6.5% for females and 4.2% for males (Priebe & Svedin, 2009). In a more recent Swedish study (Jernbro & Janson, 2017), 40% of the females had experienced some form of CSA compared to 10% of the males, and for penetrative CSA the numbers were 7% versus 1%.

In terms of the development of exposure to CSA over time, Barth and colleagues (2013) concluded that CSA did not appear to be more common worldwide today than previously, whereas Kloppen et al. (2016) recognized that results over time were inconclusive, and to some extent contradictory (with some studies included in their review showing increases and some studies showing decreases).

In sum, despite some differences between studies, an extensive body of research has concluded that CSA is a global problem of considerable extent, and that higher rates of victimization for females compared to males are observed globally (Stoltenborgh et al., 2011). It is important to note, however, that these numbers refer almost exclusively to CSA that is conducted offline. Thus, the extent of TA-CSA is still unknown.

## Different types of online child sexual abuse

In the early 2000s, a few scholars identified that the internet could be used to facilitate child sexual abuse in different ways, such as sexual solicitation (Mitchell, Finkelhor, & Wolak, 2001) or child cybersexploitation (O'Connell, 2003). However, this area of research is not yet as well explored as CSA. Due to the infancy of the research field, many of the definitions regarding different types of online CSA are not very clear-cut, and some aspects have received little attention. To identify the gap in the research that is the focus of this thesis, I will describe three definitions of different types of online CSA and how they fail to cover all aspects.

Firstly, *grooming* has been identified as one of the most common ways in which offenders target children for sexual abuse, and it has been identified in both offline (e.g. Craven, Brown, & Gilchrist, 2006) and online (Black, Wollis, Woodworth, & Hancock, 2015; O'Connell, 2003; Williams, Elliott, & Beech, 2013) settings. A common definition of grooming is “a process by which a person prepares a child, significant adults and the environment for the

abuse of this child. Specific goals include gaining access to the child, gaining the child's compliance and maintaining the child's secrecy to avoid disclosure" (Craven et al., 2006, p. 297). A common way for offenders to prepare a child for subsequent sexual abuse is to systematically desensitize the child; for instance, by gradually introducing sexually explicit conversations and sharing sexual information (e.g. Berson, 2003). Online grooming has often been viewed as having the ultimate goal of leading to offline CSA, by arranging an offline meeting with the child. This implies that the online grooming is only a preparatory act (Chiang & Grant, 2017), and that it is viewed only as a precursor to abuse, which in turn minimizes the sexual activity that the child might be incited to perform online.

Secondly, *sexual solicitation* is often defined as requests to engage in unwanted sexual activity or sexual talk (e.g. Madigan, Villani, et al., 2018; Mitchell et al., 2001; Ybarra & Mitchell, 2008). Under this definition, a response from the child is not needed, and therefore little is known about the situations in which adults have actually achieved a sexual interaction with a child (de Santisteban & Gámez-Guadix, 2018). In addition, some of the features found in online grooming (e.g. sexual conversations) could arguably also be identified in sexual solicitation, revealing a partial overlap between the two definitions. Most importantly, neither of these definitions describe the activity of the child, meaning that little is known about what kind of involvement or activity the child had to take part in.

The third line of research is *sextortion*, which refers to an offender threatening to expose sexual images in order to coerce victims into providing additional pictures, engaging in sexual activity, or agreeing to other demands (Wolak et al., 2017). The phenomenon of sextortion is receiving increasing research attention, but is still dramatically understudied (Wittes, Cody, Jurecic & Spera, 2016). In contrast to online grooming and sexual solicitation, this line of research does in fact investigate online sexual *interactions* between adults

and children. According to the definition, however, sextortion can only be used against individuals who have created a sexual image in the first place. Thus, knowledge about how offenders persuade children who have *not* produced any sexual images to engage in sexual activity online is still scarce. Although research on all three concepts provides valuable knowledge, the need for a more holistic view is evident. Therefore, the aim of this thesis is to investigate TA-CSA regardless of whether the online contact resulted in an offline meeting and regardless of whether the offender used sextortion or not.

A further illustration of the lack of consensus regarding definitions and terminology that characterizes this understudied research field is the categorization of the different types of online offenders. Firstly, Briggs, Simon, and Simonsen (2011) divided online offenders into two sub-groups: *contact-driven* and *fantasy-driven*, based on the offender's motivation for offending. They described contact-driven offenders as using the internet as a medium to connect with victims, but with the intention of coordinating a sexual meeting offline. In contrast, fantasy-driven offenders used the internet as a sexual medium with the purpose of engaging the victim in cybersex. Secondly, Webster et al. (2012) identified three types of online offenders based on eight behavioral dimensions (e.g., previous convictions, online identity, contact with other offenders, offense-supportive beliefs, outcome of the offense, etc.). *Intimacy-seeking* offenders had no previous convictions, 'believed' that they were in a consenting romantic relationship with the child, and spent a significant amount of time talking before meeting offline; *adaptable* offenders tended to have been previously convicted of sexual offenses against children, and adapted their identity and behavior according to the young person with whom they were communicating; and *hyper-sexualized* offenders were characterized by owning an extensive collection of indecent images of children, and having significant contact with other sexual offenders. Thirdly, Kloess, Hamilton-Giachritsis, and Beech (2019) proposed what they called two different approaches: *indirect* or

*direct*, based on how the offender initiated contact and approached their conversations with victims. The indirect offender spent time getting to know the victim and engaged in aspects of relationship building, whereas the direct offender immediately introduced sexual content into the conversation. The three models base their categorizations on completely different aspects – Briggs et al. (2011) on offender motivation, Webster et al. (2012) on behavioral characteristics, and Kloess et al. (2019) on offender approach – and arrive at completely different categories.

Previous research on online CSA has indeed contributed with much valuable information regarding the ways in which online offenders communicate, but there are some limitations in the generalizability of the results. The vast majority of studies have investigated cases where offenders have been communicating with decoys, that is, adults posing as children (Black et al., 2015; Briggs, Simon, & Simonsen, 2011; Ioannou, Synnott, Reynolds, & Pearson, 2018; Lorenzo-Dus & Izura, 2017; Mitchell, Finkelhor, Jones, & Wolak, 2010; Williams et al., 2013). Many of these studies have specifically analyzed transcripts from conversations between online offenders and decoys volunteering for the organization Perverted Justice Foundation (PJF; [perverted-justice.com](http://perverted-justice.com)). The organization is a self-proclaimed “conviction machine” (Perverted Justice Foundation, 2007) with the goal of decoys gathering enough information about the potential offenders to send to the police to enable an arrest. As a result, the decoys respond openly to sexual solicitations (Briggs et al., 2011), and might be more likely to continue within a conversation even if it is uncomfortable (Williams et al., 2013) compared to how a real child victim might behave. This would lead the decoy to appear more compliant, which in turn might affect the strategy used by the offender, as he/she would not encounter any resistance from the ‘child’. In addition, the ‘relationship’ between an offender and a real victim would be very likely to develop more slowly than that between an offender and a decoy (Briggs et al., 2011). In support of this

argumentation, one study has shown that interactions with decoys from the PJF rarely include overt persuasion and never extortion (Schneevogt, Chiang, & Grant, 2018), whereas these strategies have been identified in a case study of an online offender interacting with real children (Chiang & Grant, 2018). Arguably, interactions with decoys lack the dynamic that a real child would provide in such interactions (Kloess, Beech, & Harkins, 2014). Consequently, in order to increase our understanding of the strategies used by online offenders, the next step would be to investigate cases involving real child victims to determine whether previous results are also applicable to these conversations.

Police reports regarding TA-CSA indicate that this type of crime might be increasing in prevalence (e.g. Bentley et al., 2019; ECPAT, 2019) but, not surprisingly, it is difficult to obtain estimates of how widespread it is. In a study of a representative sample of 5175 Swedish high school students (*M* age = 17.97), 330 (5.8%) answered yes to the question: “Have you gotten to know anyone on the internet during the last 12 months that you had sex with online?” (Jonsson et al., 2019). In answer to a subsequent question, 32 (9.7%) of these 330 students indicated that they had been persuaded, pressed or coerced into doing so. While this provides a valuable estimate of the proportion of the adolescents engaging in online sexual activity who are coerced to do so, it is not possible to translate this into a reliable estimate of the overall prevalence of TA-CSA. The reason for this is how the questions were phrased. Imagine, for instance, an individual who was subjected to sextortion (i.e. threats of having compromising images exposed unless s/he engaged in some kind of online sexual behavior, Wolak et al., 2017) by an unknown offender. This individual might not have perceived the coerced sexual acts as ‘having sex’, and will not answer yes to the first question (“Have you gotten to know anyone on the internet during the last 12 months that you had sex with online?”). Consequently, this individual would not receive the subsequent question (“Were you ever persuaded, pressed, or coerced into doing so?”), and would therefore fail to report

this victimization due to the way in which the questions were phrased. As a result, the 32 students (0.62% of the total sample) who had reportedly been sexually abused online are likely to represent an underestimate of the true prevalence of TA-CSA. A meta-analysis by Madigan, Villani, et al. (2018), showed that 11.5% of 12–16.5-year-olds had *received requests* to engage in unwanted sexual activities or sexual talk online. Similarly, a Swedish study reported that 11.2% of 15–17-year-olds had *been asked to perform sexual activities online* (Jernbro & Janson, 2017). However, neither of these studies revealed the prevalence of adolescents actually engaging in the requested behavior. Shedding some light on the issue, 8.2% of the girls and 7.4% of the boys among a sample of 2731 Spanish 12–15-year-olds reported that they had engaged in sexualized interactions with adults (de Santisteban & Gámez-Guadix, 2018). What the interactions entailed and whether they were voluntary was, however, not revealed. Hence, to my knowledge, no reliable data on the prevalence of TA-CSA among adolescents are available as of yet.

## Consequences of child sexual abuse

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A body of research has sought to explain the association between CSA and subsequent long- and short-term outcomes. While the methodologies used when investigating consequences of CSA do not allow the drawing of causal conclusions, numerous reviews and meta-analyses conclude that, across methodologies, samples, and measures, children subjected to offline sexual abuse are at risk of a wide range of medical, psychological, behavioral, and sexual disorders (Beitchman et al., 1992; Hailes, Yu, Danese, & Fazel, 2019; Kendall-Tackett, Williams, & Finkelhor, 1993; Maniglio, 2009; Paolucci, Genuis, & Violato, 2001; Polusny & Follette, 1995; Rowan & Foy, 1993; Spaccarelli, 1994). Among the most frequently reported symptoms are PTSD, sexual problems, suicidal behaviors, re-victimization, substance-misuse, fear and anxiety,



poor self-esteem, and interpersonal problems. Symptoms are not only psychological, but can also take physical form. For example, they can manifest as chronic non-cyclical pelvic pain, non-epileptic seizures (Maniglio, 2009), or general somatization (Polusny & Follette, 1995).

When combining the estimated prevalence rates of CSA with the wide range of potential consequences, it is clear that sexual abuse against children is a global public health problem. It is important to highlight, however, that around one third of the children subjected to CSA did *not* show any symptoms (Kendall-Tackett et al., 1993; Spaccarelli, 1994). Thus, CSA does not automatically lead to issues later in life. Moreover, there was no specific symptom that characterized a majority of sexually abused children, and there was no unique syndrome to identify victims of CSA. Following this, there is widespread agreement that CSA should be considered a general, non-specific risk factor for psychopathology (Beitchman et al., 1992; Kendall-Tackett et al., 1993; Maniglio, 2009; Spaccarelli, 1994). Similarly to the studies on the prevalence of CSA, these results refer almost exclusively to CSA that is conducted offline. Hence, research has yet to determine whether the same applies to TA-CSA.

To explain why the consequences of CSA vary so widely between individuals, researchers have sought an answer in the characteristics of the abuse. Penetrative abuse, longer duration, a closer relationship with the offender, and the use of force or threat of force have been associated with greater harm (Beitchman et al., 1992; Kendall-Tackett et al., 1993; Priebe & Svedin, 2009). While these characteristics are relevant to consider, they might not be the only explanations for the differences in symptoms. Spaccarelli (1994) underscored the need for integrative models that take into account not only the abuse variables, but also how individual differences and family-environment factors contribute to outcomes. If a child grows up in an overall supportive environment, a single experience of abuse might not have any noticeable consequences. In

line with this reasoning, Spaccarelli (1994) emphasized the need to further explore why children react differently to very similar stressors. This is a question to which I will return in one of the following sections, entitled *The development of trauma symptoms*.

Knowledge regarding the potential consequences of TA-CSA is still limited. A few recent studies on the subject, however, indicate that the consequences of this type of abuse can also be severe. Jonsson et al. (2019) showed that a group of adolescents with experience of TA-CSA (and no offline CSA) had poorer psychological health (measured by trauma symptoms) than a reference group, at least at the same level as adolescents with experience of penetrative offline CSA (and no TA-CSA). Similarly, in a study (based on interviews and questionnaires with victims, and questionnaires with professionals) by Hamilton-Giachritsis et al. (2017), the authors concluded that online CSA was no less impactful than offline CSA. Instead, they argued that, when technology was involved, it sometimes acted to complicate the impact of the abuse. More specifically, the fear of the offender still having footage of the abuse and the risk that pictures would be circulated could cause distress. Similarly, another study, based on two case examples of young girls who had had pictures of themselves circulated and/or sold online (Leonard, 2010) described how, when the pictures were distributed, it led to feelings of the abuse never ending, because each time someone looked at the pictures it felt like being re-abused. These findings resonate with the results of Jonsson and Svedin's study (2017), showing that children who knew that pictures of their abuse existed, and children who had had pictures of their abuse disseminated, reported higher levels of post-traumatic stress symptoms than children exposed to undocumented CSA. Furthermore, Hamilton-Giachritsis et al. (2017) argued that another complicating factor was that TA-CSA may lead to self-blame due to the victim's own 'active participation' in the abuse.

Although these studies point in the same direction, there is a common assumption that TA-CSA is less severe than offline CSA. For instance, professionals working with children have reported that TA-CSA was sometimes viewed as being of less immediate concern, child victims reported that their abusive experiences were being minimized (Hamilton-Giachritsis et al., 2017), and legally this type of crime leads to more lenient sentences (Net, 2015). The field is still understudied, and it is clearly important to study the issue further in order to provide children with the right support and legal protection.

## TA-CSA and the law

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The United Nations' Convention on the Rights of the Child (UNICEF, 1989) is ratified by 196 countries across the globe (The USA being the only country not to) and was implemented as law in Sweden in January 2020 (Swedish Social Committee, 2018). The convention explicitly states that all parties shall undertake all appropriate legislative, administrative, social, and educational measures, national, bilateral, or multilateral, in order to protect children from all forms of sexual exploitation and sexual abuse. However, while 63 of the 196 countries that have ratified the Convention on the Rights of the Child (UNICEF, 1989) have implemented some legislation regarding the online grooming of children, 133 countries have *no* such legislation (ICMEC, 2017).

The Council of Europe Convention on the Protection of Children against Sexual Exploitation and Sexual Abuse (“the Lanzarote Convention”) (Council of Europe, 2007), was the first international legal instrument to explicitly address child sexual abuse through information and communication technologies. The Lanzarote Convention defines the criminalized behavior as when an adult proposes to meet a child offline *and* the proposal has been followed by material acts leading to such a meeting. Therefore, activities in which an offender only

incites a child to engage in online sexual activity is not included. Only 34 countries worldwide have criminalized online grooming *regardless* of the intent to meet the child offline (ICMEC, 2017).

Clearly, there is worldwide agreement that children should be protected against all forms of sexual abuse, but there are some shortcomings in how these documents are formulated. While the lack of specific legislation does not necessarily mean that some forms of online CSA are not criminalized in other parts of a country's legislation, it nevertheless reveals a tendency to expect that all online offenders are aiming for offline meetings. Given that this has long been the assumption in the research literature as well, it is not difficult to understand why that is the case. However, this assumption minimizes the seriousness of the online sexual activities that children might be incited to perform, and may affect the ability to fight these crimes by means of the law.

## The Swedish legal context

Swedish legislation on grooming is similar to that of many other countries. In Sweden, the classification of a crime called "Contact with children for sexual purposes" (introduced in 2005), criminalizes the act of making an agreement to meet a child for sexual purposes and *thereafter take any action which is appropriate to promote such a meeting* (The Swedish Penal Code, chapt 6, § 10). While this paragraph does not criminalize sexual acts that have been conducted online, it is possible to use other classifications of crime to address this. However, Swedish sex-crime legislation was not initially designed to include online crimes, which imposes some restrictions on its application. For instance, according to Swedish sex-crime legislation, the level of sexual violation should be the focus when deciding under which classification to prosecute a crime (Prop. 2004/05:45). In the case of the rape of a child (Swedish Penal Code, chapt 6, § 1), the definition is having sexual intercourse with a child under the age of 15 (the age of sexual consent), or performing another sexual

act that, in terms of the severity of the offense, is comparable to intercourse. This means that such acts as penetration with fingers or objects can be considered rape. Historically, it is penetration by the offender's fingers or objects held by the offender that has been intended. However, in the case of TA-CSA, children might be coerced into penetrating themselves with their own fingers or other objects. Consequently, prosecutors must evaluate whether a child being coerced into penetrating him/herself should be viewed as equally violating as when someone else performs similar acts on them. Previous legal practice has not considered TA-CSA to be equally severe (Net, 2015; B 11734-17), and charges with lower penal values (i.e. exploitation of children for sexual purposes, sexual abuse of a child, sexual molestation of a child) have usually been used in cases of TA-CSA. Damages are based on the charge, together with the perceived degree of violation (The Swedish Crime Victim Compensation and Support Authority, 2017). In addition, the charge determines which legal coercive measures can be used (for instance, interception of phone calls, searching of premises, the right to detain), which might affect the possibility of conducting a successful investigation that can lead to a conviction. In turn, the charge has the potential to greatly impact upon the ability of the child to receive justice.

A few recent Swedish cases in which perpetrators have used serious threats to incite children to perform offensive sexual acts, sometimes in extremely humiliating contexts, have questioned the legal praxis of viewing TA-CSA as less sexually violating than offline CSA (Bering, 2017). In 2018, for the first time in Swedish history and as the first country in the world, a Swedish court of appeal sentenced a man for the rape of a child, for crimes that had been conducted solely online (B 11734-17). The man, while located in Sweden, had coerced children in the UK, the USA, and Canada into performing sexual acts on themselves. While this sentence will set an important precedent for other

Swedish courts, it is still only the most severe sexual acts that have been defined as rape. Consequently, many potentially harmful online sexual activities that children can be coerced into performing are not sufficiently criminalized.

In sum, TA-CSA poses many challenges for legislators across the world. Firstly, they have to keep up with new technologies that are constantly changing and leading to new ways for perpetrators to abuse children. Secondly, TA-CSA can involve many victims and be conducted over great distances, sometimes even crossing national borders (Wittes et al., 2016). Therefore, legislators will need to be able to cooperate internationally in order to fight these crimes. More research is required to provide legislators with empirical evidence upon which to base their decisions when they are faced with evaluating the severity of an online crime.

## The development of trauma symptoms

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In order to be able to understand why trauma occurs and if TA-CSA can cause it, it is imperative to understand what trauma is, how the brain is constructed, and how it communicates with our bodies (Bloom, 1999). As part of our mammalian heritage, we are biologically equipped to protect ourselves from harm; thus, we automatically respond to threatening or stressful situations as a way to prepare our bodies for an immediate reaction. When facing a potentially dangerous situation, the brain communicates to the body to speed up heart rate, increase blood flow, and prepare for a freeze, flight, fight, or fright response (Bracha, Williams, & Bracha, 2004). This stress reaction occurs immediately, taking a short-cut without passing through the frontal parts of the brain; hence, not enabling a cognitive evaluation of the potential threat (Kolb & Whishaw, 2001). After this initial reaction, the pre-frontal cortex is given the chance to make a more conscious and refined interpretation. If the perceived threat was a false alarm, the triggered alarm-state is aborted (Nordanger

& Braarud, 2017; Van der Kolk, 1994). However, if the initial stress is too high, the capacity to engage higher cognitive functions is severely impaired, making it difficult to consider the long-term consequences of our behavior or weigh all the possible options before making a decision. Instead, decisions tend to be impulsive and very poorly constructed (Janis, 1982). Added to this is the fact that this part of the brain is not fully mature until the mid-20s, making children and adolescents particularly vulnerable to making impulsive decisions (Crone & Van Der Molen, 2007; Halpern-Felsher, 2009). Furthermore, the brain is a social organ and is shaped in interaction with other people and with our experiences (Bidö, Mannheimer, & Samuelberg, 2018). The sensitivity of our senses is thus dependent on previous experiences.

Most people are likely to experience some form of potentially traumatizing events during their life course, such as car accidents, violence, robbery, or abuse (Aho, Proczkowska-Björklund, & Svedin, 2016; Felitti et al., 2019), but not all develop trauma symptoms apart from the initial stress reaction. In fact, a meta-analysis has shown that less than a fifth of children and adolescents exposed to potentially traumatizing events developed PTSD (the figure is higher for those who have experienced interpersonal trauma such as sexual abuse, and for girls) (Alisic et al., 2014). Potentially traumatizing experiences can also lead to a wide range of other symptoms, which is evident from the research on potential consequences following sexual abuse presented earlier.

One of the most influential models aiming to explain why some individuals develop psychopathology, while others do not, is the *stress and vulnerability model* of Zubin and Spring (1977). According to this model, each individual has a different threshold for stress due to a combination of inborn and acquired attributes. If the stress exceeds this threshold, the individual is likely to develop a psychopathological episode of some sort. This is the explanation for why some people develop mental illness as a result of potentially traumatizing experiences and some do not.

Adding all this together, it becomes apparent that the exact same situation can be perceived as stressful and traumatic by one individual but not by another (Bidö et al., 2018; Dyregrov & Nilsson, 1997; Van der Kolk, 1994). In other words, it is not the situation itself that is traumatic or neutral for a child, but the child's interpretation of it (Dyregrov & Nilsson, 1997). In light of this, it seems impossible to objectively evaluate whether one specific situation (offline CSA) should be viewed as more traumatizing than another (TA-CSA).

## The four traumagenic dynamics model

So far, I have described how traumatic experiences in general might cause psychological problems. In the following section, I will present a model explaining the trauma that may be caused by CSA more specifically. While this model has been used for several decades to describe trauma caused by offline CSA, many of its dynamics could also be applied to TA-CSA. Therefore, the model will later be applied to the results of Studies I and II (see section *General discussion*, below), in order to evaluate its applicability to TA-CSA.

Finkelhor and Browne (1985) proposed one of the first and most influential conceptualizations of the link between the experience of CSA and its sequelae. Their model – called *the four traumagenic dynamics model* – specifies how and why sexual abuse results in the various kinds of trauma that have been widely noted (e.g. Kendall-Tackett et al., 1993; Maniglio, 2009). The model proposes that, while all of the dynamics – *traumatized sexualization*, *betrayal*, *powerlessness*, and *stigmatization* – are generalized, it is their conjunction in CSA that makes the trauma of such an experience unique (Finkelhor & Browne, 1985).

*Traumatic sexualization* refers to the process by which sexual abuse shapes a child's sexuality in developmentally inappropriate and interpersonally dysfunctional ways. This can happen in a variety of ways. For instance, when a child receives affection, attention, privileges, and gifts as rewards for sexual



behaviors, the child learns to use sexual behavior as a strategy for manipulating others. It also occurs when frightening memories become associated with sexual activity in the child's mind. According to the model, children who have been traumatically sexualized might develop confusion and misconceptions about their sexual self-concepts, inappropriate repertoires of sexual behavior, and negative and abnormal associations with sexual activities. Finkelhor and Browne (1985) further emphasize that experiences in which the child is enticed into participating in the abuse are likely to be more sexualizing than those in which brute force is used.

*Betrayal* refers to the discovery that someone whom the child trusted, or was even dependent upon, has caused them harm. This dynamic is present to some degree in most abuse situations, but is often assumed to be dependent on the closeness of the relationship to the abuser (Finkelhor, 1987). However, an equally important factor is how taken-in the child feels by the offender. If a child felt loved and nurtured by the initial contact, the betrayal feels stronger than if the child was suspicious from the start. Interestingly, feelings of betrayal are not limited to the abuser, but can result if family members were unable or unwilling to protect the child from harm, or if the child was mistrusted when disclosing the abuse (Finkelhor & Browne, 1985).

*Powerlessness* refers to the process in which the child's will, desire, and sense of efficacy are repeatedly overruled; for instance, when the child's territory and body space is invaded against their will. Finkelhor and Browne (1985) argue that the sense of powerlessness is probably reinforced if the child experiences threats, coercion, violence, or fear.

*Stigmatization* refers to the negative connotations that surround sexual abuse and its victims. These include feelings of badness, shame, guilt, and worthlessness which become incorporated into the child's self-image. Much of this stigmatization stems from the attitudes and moral judgments that the victims hear from those around them, and is certainly reinforced if people react

with shock, hysteria, or blame after the child's disclosure (Finkelhor & Browne, 1985). However, even if the child is not subjected to blame from those around them, simply the fact of being a victim of CSA is likely to raise questions within the child, who may search for self-attributions to explain why it happened to them (Finkelhor, 1987).

According to this model, the four traumagenic dynamics are experiences that alter a child's cognitive or emotional orientation to the world and causes trauma by distorting the child's self-concept, worldview, and affective capacities (Finkelhor, 1987; Finkelhor & Browne, 1985). Consequently, when a person tries to cope with the world through these distortions, psychological and behavioral problems occur. More specifically, the model describes how traumatic sexualization might lead, for example, to sexualized behavior among children, sexual problems among adults, and negative attitudes toward one's sexuality or body. Betrayal might cause depression, extreme dependency, hostility, anger, or distrust of men or intimate relationships in general. Powerlessness can be associated with fear, anxiety, symptoms of PTSD, sleep problems, learning problems, difficulties at school, and general depression. Stigmatization may be related to isolation, low self-esteem, self-destructive behavior, and/or suicide attempts.

Furthermore, Finkelhor (1987) underlines that these dynamics are not limited to the abuse situation itself, but can also be applied to the child's life before and after the abuse. The four dynamics are ongoing processes and should be understood in relation to the child's life beforehand, and what happens afterwards. To exemplify, much of the stigmatization involved in CSA stems from the reactions at disclosure. A child might be relatively un-stigmatized by the abuse itself, but experience massive stigmatization if blamed by their family. Likewise, a child with substantial experiences of betrayal prior to the abuse (e.g. coming from an unstable family where the loyalty of family members is continually in doubt), may experience the betrayal of sexual abuse

as more serious than a child without experiences of prior betrayal. In this sense, the four traumagenic dynamics model also includes a vulnerability aspect to explain why children react differently to similar experiences.

## Summary

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From a child's perspective, is it different, perhaps less violating, to be sexually abused online than offline? This is a difficult question for researchers to answer but it is an important one because many legal opinions seem to assume that TC-CSA is less violating than CSA. This licentiate thesis aims to explore TA-CSA court cases in the hope of bringing some clarity to this matter. In this introduction, I have aimed to provide a broad context of child development, by describing the major changes that children undergo as they grow into adults, and gradually develop biological, psychological, and social maturity. This means that children have not yet developed the ability to undertake complicated cognitive tasks (such as risk assessments), which might make them particularly vulnerable to sexual abuse. Among older children, all the major changes that they are undergoing might lead to a somewhat tumultuous time, leaving them in a state in which they are easier targets for sexual abuse. In addition, the new opportunities afforded by online communication tools open up new possibilities for offenders to find and sexually abuse children, and most countries lack explicit laws targeting this type of abuse.

This introduction has also described how research has established that CSA is a global public health problem that risks leading to serious consequences for the victimized children, and it has highlighted that there is still a dearth of research investigating sexual abuse that is conducted online. Recent research indicates that TA-CSA may have serious consequences. By using theoretical frameworks of trauma, the introduction further described how trauma

is developed. All this information aids in a greater understanding of the research field that is valuable when interpreting the results of the two studies included in this licentiate thesis.



## SUMMARY OF STUDIES

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### Overall aim

The overall aim of the two studies included in this licentiate thesis was to increase knowledge regarding TA-CSA, in which a child is incited to engage in sexual activity online (regardless of whether this later results in offline CSA or not). While research from previous decades has thoroughly investigated offline CSA and established its usual characteristics and potential sequelae, it has yet to be determined whether the same applies to TA-CSA, or whether it needs to be viewed as an essentially different form of CSA. The two exploratory and descriptive studies aimed to investigate how TA-CSA happens, what sexual acts it entails, how the sexual acts relate to the age and gender of the children, and how the psychological health of the children was described in court documents regarding this type of abuse.

### Project summary

Studies I and II investigate court cases relating to TA-CSA in which children were incited to perform sexual acts or pose naked online. Both studies analyzed existing data in the form of written court verdicts. There were three main reasons for using court cases in the studies. Firstly, it is a major challenge to obtain data in cases of child sexual abuse. It is well established in research that children often delay disclosure of abuse (or never disclose it) to the authorities or adults (e.g. London, Bruck, Wright, & Ceci, 2008). A common way to investigate CSA is therefore by using retrospective studies in which adults report abusive experiences from their childhoods. However, digital technology

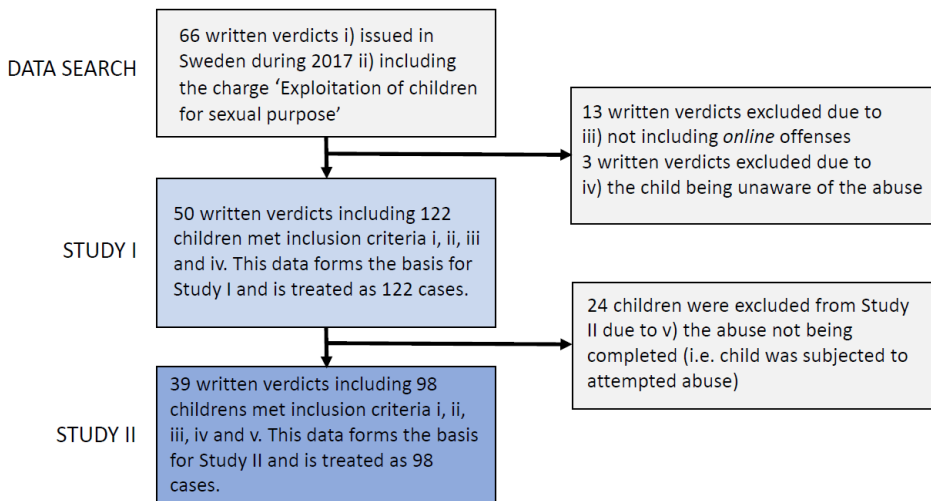
develops quickly and there is a need for immediate knowledge about up-to-date cases of TA-CSA, making court cases more valuable than retrospective studies when it comes to increasing knowledge about the current situation. Another way to investigate CSA is by surveying a community sample in order to identify sub-groups with experience of CSA. Since many of the victims of TA-CSA are younger than 15 (the age at which children are permitted to consent to participating in research in Sweden), a community sample survey would fail to target a large proportion of the victim group. Secondly, due to the sensitive nature of CSA, it is difficult to obtain detailed information about the characteristics of the abuse. When disclosing abuse, children's stories tend to be incomplete or fragmentary. Even in research investigating cases of CSA in which there is evidence of the abuse taking place, children tend to omit sexual information and sometimes even deny being part of sexual acts (e.g. Leander, Christianson, & Granhag, 2007). In contrast, court documents include detailed descriptions of the sexual abuse (because TA-CSA contains technical evidence such as photos, videos, or chat logs in almost all cases). For ethical reasons, this is also a non-intrusive way of obtaining such details. Thirdly, court documents provide insights into what aspects of the abuse and its victims are considered important from a legal perspective.

Both studies are based on the same data set, but Study II includes one additional inclusion criterion (making that dataset slightly smaller), in order to match the specific aims of that study.

## Data collection

After a court hearing, Swedish courts produce a written verdict in which they describe the case, state the reasons for their ruling, and include the relevant information that formed the basis for their judicial decision. This project gathered all the written verdicts (court documents) from all of Sweden's dis-

strict courts during a one-year period (2017), which included the charge ‘Exploitation of children for sexual posing’. This charge is used in most cases of TA-CSA in which the child is incited to show him/herself in photos, videos, or live on webcam. In order for the case to be included in the project, at least one offense had to be online, and the child had to be aware of the abuse (which excluded, for example, acts involving a child being photographed while sleeping). If the case included a subsequent court of appeal verdict (issued before 1 May 2018), this was also included in the project (by combining the two sets of court documents and treating them as one entity).



**Figure 1.** Flow chart showing data selection in relation to the inclusion criteria for Study I and Study II. The inclusion criteria were as follows: i) court case issued during 2017, ii) including the charge ‘exploitation of children for sexual posing’, iii) including at least one *online* offense, iv) the child had to be aware of the abuse (which excluded, for example, acts involving a victim being photographed while sleeping), and v) the TA-CSA was completed (thus excluding cases of ‘attempted exploitation of children for sexual purposes’).

In sum, 50 court documents including 50 male offenders (no female offenders) and 122 child victims met the inclusion criteria and thus constituted the database for this project. They were treated as 122 cases. In Study II, one



additional inclusion criterion was added, leading to a slightly smaller sample in that study. See Figure 1 for an overview of the data selection. In the studies we do not distinguish between children and adolescents, but refer to all of the victims as children, in accordance with Swedish legislation defining everyone under the age of 18 as a child.

## Coding manual

In order to extract and structure information from the 122 cases, we created a coding manual that included both qualitative and quantitative variables. For the qualitative variables, we gathered extracts from the court documents in full sentences. For example, under the qualitative variable called *strategy* (Study I), we gathered all information from the court documents that in any way described the contact between the offender and the child. For the quantitative variables, we quantified information from the court documents. For example, in the quantitative variable called *location of abuse* (Studies I and II), we categorized the information about where the abuse had taken place into a dichotomous variable with *TA-CSA* or *TA-CSA+offline CSA* as outcomes. To exemplify, the following extract “the complainant had been incited to masturbate in front of a webcam, and when meeting the offender offline, he forced her to have sexual intercourse with him” would be coded as *TA-CSA+offline CSA*.

## Study I

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### Aim

The aim of Study I was to investigate how online offenders approach real children for online sexual abuse (previous research has mainly investigated cases using decoys, i.e. adults posing as children). We did this by investigating which types of online platforms online offenders used to find their

victims and what strategies they used when inciting real children to engage in online sexual activity. There is a great variety of definitions and use of terminology regarding online offenders, illustrating the lack of consensus within this research area. In order to describe the two different strategies used by the offenders in this sample in as much detail as possible, we examined whether the strategy used by the offender was related to offender characteristics (age), victim characteristics (age, gender), or abuse characteristics (location of abuse, duration of sexual abuse, number of online victims). Due to the exploratory and descriptive approach of this study, we did not make any hypotheses.

## Cases and method

Study I included 122 cases (50 male defendants aged 16–69, *Mean* = 34.0, *Median* = 28.9, *SD* = 15.2, and 122 children aged 7–17, *Mean* = 12.35, *Median* = 13.0, *SD* = 1.93, 87% girls).

To analyze the data, we used an embedded mixed-methods design (Plano Clark et al., 2013), in which qualitative data (extracts from the court documents) regarding contact between the offender and the child were analyzed using thematic analysis in accordance with Braun and Clarke’s six-step model (2006). The results of this thematic analysis formed the main part of the study. The themes that were identified in the qualitative analysis were further analyzed using quantitative measures. We used visual inspection and descriptive statistics (percentage counts, histograms, bar charts) to explore the relation between the strategy used by the offender, and i) offender characteristics, ii) victim characteristics, and iii) abuse characteristics.

## Main findings and conclusions

Study I identified two main strategies used by the offenders when inciting children to engage in online sexual activity (see Table 1). The most frequently described strategy was *pressuring the child*. This was done in three

different ways: by using threats, using bribes, or repeatedly nagging. The other main strategy identified was *building a relationship with the child*. This was done by using flattery, posing as a friend, or expressing love. Some offenders used both of these strategies. Furthermore, Study I revealed that, in the vast majority of cases, the online contact did *not* culminate in an offline meeting.

The descriptive statistics showed some patterns between the different offender strategies and characteristics of the abuse, victims, and offenders. Firstly, children subjected to the pressuring strategies met the offender offline less often than children subjected to the relationship-building strategy. In addition, the pressuring strategy was related to the child performing the most violating sexual acts (all five children who were incited to sexually abuse another person or an animal were subjected to either threats or nagging). Offenders using the pressuring strategy tended to be younger than offenders using the relationship-building strategy. The children subjected to the pressuring strategy were in general older than the children subjected to the relationship-building strategy.

Most children did not know the offender prior to the online contact. Most of them met their offenders through a regular social media network, followed by online chats that randomized strangers to talk to each other, platforms that were sexually suggestive, or online games. Two fifths of the children were abused online on a single occasion, whereas a few children remained in contact with their offenders and were repeatedly abused over the course of several years.

In sum, Study I identified pressure as the most common strategy used by the online offenders in the current sample. This contrasts with previous research reporting pressure only as an exception. The relationship-building strategy had many similarities with the findings of research on the grooming of children in both offline and online contexts. In addition, some patterns in the data indicate that the pressuring strategy and relationship-building strategy are

related to some extent to different offender, victim, and abuse characteristics. Furthermore, the results showed that meeting the child offline is not always the goal of the offender. Taken together, these results demonstrate that TA-CSA should not be viewed only as a stepping-stone for future offline abuse, but rather as a primary goal for some offenders.

**Table 1.** Themes and sub-themes of offender strategies in Study I.

THEMES AND SUB-THEMES FROM STUDY I	
<b>Strategies used by the offenders to incite children to engage in online sexual activity</b>	
<b><i>Pressuring the child</i></b>	Using threats
	Using bribes
	Repeatedly nagging
<b><i>Building a relationship with the child</i></b>	Using flattery
	Posing as a friend
	Expressing love

## Study II

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### Aim

The aim of Study II was threefold. Firstly, we wanted to investigate the characteristics of TA-CSA. We did this by describing the kind of sexual activities that children were incited to perform online, and how the age and gender of the child was related to different characteristics of the abuse (the location of abuse, whether it happened on repeated occasions, and the type of sexual acts that the children performed). Secondly, we wanted to investigate how the children’s experiences were described in the verdicts. Thirdly, we wanted to examine how the psychological health of the children was described in the court documents. This latter goal had two purposes. One, we wanted to identify potential vulnerability factors for, and consequences of, TA-CSA. Two, we

wanted to provide insights into how often the psychological health of the children was considered important enough to be included in the written verdicts. Due to the exploratory and descriptive approach of this study, we did not make any hypotheses.

## Cases and method

Study II used one additional inclusion criterion (the TA-CSA had to be completed, hence excluding cases of ‘attempted exploitation of children for sexual purposes’), compared to the overall dataset for the project. Study II therefore included 98 cases (39 male defendants aged 16–69, *Mean* = 35.0, *Median* = 28.7 *SD* = 15.8, and 98 children aged 7–17, *Mean* = 12.3, *Median* = 13.0, *SD* = 1.92, 87% girls).

To analyze the data, we used an embedded mixed-methods approach (Plano Clark et al., 2013). We analyzed qualitative data (i.e. extracts from the court documents) regarding the psychological health of the children, and their experiences of the abuse, using the six steps proposed by Braun and Clarke (2006). The results of the thematic analysis constituted the main part of this study. In order to further describe the characteristics of TA-CSA, we analyzed quantitative data using binary logistic regression analyses to identify potential relationships between the age and gender of the child and i) the location of the abuse, ii) the type of online act, and iii) repeated abuse. In addition, we described the sexual acts that the children were incited to perform. In order to investigate how often the psychological health of the child was mentioned in the written verdicts, we used descriptive statistics (percentage counts) as well as statistical analyses comparing cases of TA-CSA only with cases including both TA-CSA and offline CSA.

## Main findings and conclusions

Study II shows that some children experienced the abuse situation as threatening in different ways, and many children reportedly experienced that they did not have any choice except to perform the sexual acts demanded by the offender. Additionally, the study shows that TA-CSA can encompass a wide range of sexual acts. The online sexual acts ranged from seemingly voluntary semi-nude posing to anal penetration with objects or performing sexual acts on an animal or sibling. They were sometimes performed under extremely violating and humiliating circumstances and were sometimes physically painful. About one fifth of the children also met their offender offline in addition to the TA-CSA and were subjected to offline sexual abuse (penetrative abuse or fondling).

Furthermore, the court documents described several individual factors that might have rendered the children particularly vulnerable to the abuse (e.g. poor psychological health, low self-esteem, loneliness) and several potential psychological consequences among the children following the abuse (e.g. psychological suffering, self-harming and/or suicidal behavior, internalized self-loathing, impaired relationships), many which are similar to previous research investigating offline CSA. For a full overview of the themes and sub-themes, see Table 2.

This study revealed that the psychological health of the child was only mentioned in court documents in less than half of the cases. Psychological health was more likely to be described in cases where the child had been sexually abused both online and offline, compared to cases of online abuse only.

In sum, Study II clearly illustrates the complexity of TA-CSA, and the seriousness of its consequences. Study II also question the idea that TA-CSA is a less severe form of abuse than offline CSA. When viewed from the experiences of the child, TA-CSA does not seem to be essentially any different from

more conventional forms of CSA. It is only different in the sense that it is achieved via the medium of the internet. Hence, the severity of sexual offenses that are committed online should not be trivialized.

**Table 2.** Themes and sub-themes in Study II.

<b>THEMES AND SUB-THEMES FROM STUDY II</b>	
<b>Children’s experiences of technology-assisted child sexual abuse</b>	
<i>Experiences of the situation</i>	Had no choice
	Threatening situation
	Feared that someone would find out
<i>Experiences of the sexual abuse act</i>	It was physically painful
	It was distressing
	It was both good and bad
<b>Potential vulnerability factors</b>	
<i>Personal</i>	Poor psychological health
	Low self-esteem
	Intellectual disabilities
<i>Relational</i>	Loneliness
	Stressful social environment
<i>Behavioral</i>	Self-harming behavior
<b>Potential consequences</b>	
<i>Personal</i>	Psychological suffering
	Sleeping problems
	Self-harming and/or suicidal behavior
	Internalized self-loathing
<i>Relational</i>	Trust issues
	Impaired relationships
	Isolating oneself
	Fear of being alone
<i>School</i>	Difficulties at school
<i>No problems</i>	No negative consequences

## GENERAL DISCUSSION

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The overall aim of this thesis was to increase our knowledge regarding TA-CSA, in which a child is incited to engage in sexual activity online. Research from previous decades has thoroughly investigated offline CSA and has established its most common characteristics and potential sequelae, but there is a dearth of research on TA-CSA. The studies in this thesis investigated the offenders' strategies, abuse characteristics, and the potential psychological consequences of TA-CSA. In this thesis, I intend to compare the results to previous research on CSA, and to discuss whether TA-CSA should be viewed as an essentially different, and less severe, form of CSA.

The main findings are that a large proportion of the offenders used pressuring strategies (Study I) and that some children perceived the situation as distressing or threatening, or felt that they did not have any choice except to perform the acts demanded by the offender (Study II). Other offenders used relationship-building strategies similar to grooming (Study I). An overwhelming majority of the abuse was conducted online only, with no offline contact between the offender and the victim (Study I). The children were incited to perform a wide range of online sexual acts, some of which were of an extremely violating nature (Study II). The court documents described several individual factors that might have rendered the children particularly vulnerable to this abuse, and several consequences following the victimization (Study II). In the following sections, the main results will be discussed in light of previous research on CSA, as well as in the context of child development and trauma theories.



## Offender strategies

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Study I identified two main strategies used by the offenders – *pressuring the child* and *building a relationship with the child*. In contrast to previous research, the use of pressure (by using threats, using bribes, or repeatedly nagging) was the most frequently described strategy. This finding indicates that the new digital landscape indeed seems to have altered the ways in which some offenders operate when targeting children for sexual abuse. Pressuring strategies have been identified to some extent in previous research on both offline CSA (bribes, violence, threats, and force, Craven et al., 2006), and on TA-CSA (blackmail/threats, insults, Kloess et al., 2019; coercion and aggression, O’Connell, 2003; bribes and threats, Whittle, Hamilton-Giachritsis, Beech, & Collings, 2013a), but they have never previously accounted for such a large proportion. There could be several explanations for why Study I found a higher frequency of pressuring strategies compared to other studies.

Firstly, the changed possibility structure (i.e. access to a large number of potential victims from all over the world). While offline offenders might need to be more deliberate so as not to scare off their potential victims, online offenders can ‘afford’ to try different strategies. This reasoning is supported by cases in which offenders have sent messages to hundreds, or even thousands, of different children, waiting for some of them to take the bait (see for example Ulricehamn tidning, 2017; FBI, 2015). Such strategies would not be possible without the internet.

Secondly, the time-frame of investigation is different. Previous research has often focused on the initial contact between child and offender, which could be defined as the initial hour of contact (Williams et al., 2013) up to conversations that lasted for a few days (Black et al., 2015). The studies in this thesis had no such limitations and included descriptions of the contact between child and offender from any time during their contact (lasting from a single

occasion up to several years). Some offenders might refrain from using pressure during the initial phase of the contact, but then resort to it after the contact has continued for a more extended period of time. However, 43% of the offenders who used the pressuring strategy abused the child on one occasion only (Study I), and thus used pressure during the initial contact.

Thirdly, the samples are different. This thesis is one of only a few investigating cases involving real child victims. Compared to decoys, who aim to receive as much information as possible to enable an arrest, real children are less compliant with the wishes and demands of offenders (Briggs et al., 2011; Williams et al., 2013). Consequently, offenders have to adopt more pressuring strategies when communicating with real children. Therefore, the results from research involving decoys do not directly translate to real children, and the present studies subsequently expand knowledge on a matter that until now has been largely unexplored.

Study I identified three subthemes to the pressuring strategy – using threats, using bribes, and repeatedly nagging. The threats could be either to reveal compromising information about the child (such as a picture or a rumor), or to hurt someone close to the child. From a developmental perspective, there are several explanations as to why using pressure may be an effective strategy. The brain is not fully developed until the mid-20s. As a result, children are limited in their ability to process highly complex cognition tasks such as risk-assessment, impulse control, and to some extent abstract or hypothetical concepts (e.g. Halpern-Felsher, 2009). When, for instance, an offender threatens to reveal compromising information or to hurt a loved one (Study I), children are not able to make as well-considered a risk-assessment as an adult could. In addition, some children were reportedly afraid that someone would find out about the sexual contact. Let us return for a moment to the so-called adolescent egocentrism (Elkind, 1967). This refers to the shift in perspective that leads

adolescents to focus on themselves and what others think of them. Due to believing oneself to be the center of attention and always being judged by others ('the imaginary audience'), the potential consequences of having compromising information disseminated might be perceived as even more serious. In addition, being unable to recognize one's small role in the grand scheme of the world ('the personal fable'), may cause the child to feel that the distribution of compromising information would be the end of the world. Offenders not only threatened to disseminate pictures or videos, but also to start a rumor or to hurt a loved one (Study I). This finding shows that sextortion (defined as threats to expose sexual images to coerce victims to engage in sexual activity, Wolak et al., 2017) comprises only one of several ways in which children can be threatened and coerced online. More importantly, it highlights the fact that children can fall victim to serious threats without having sent or uploaded a compromising picture to start with.

The second strategy used by the offenders was building a relationship with the child by using flattery, posing as a friend, or expressing love (Study I), all of which are strategies similar to those previously described in the research literature about grooming (e.g. Lorenzo-Dus & Izura, 2017; Marcum, 2007; Webster et al., 2012). Study I thus adds to the literature that has identified grooming among online offenders as well (e.g. Briggs et al., 2011; O'Connell, 2003). Throughout history, children and adolescents have been subjected to sexual abuse, and as we live more of our lives online (Swedish Media Council, 2019; Statista, 2020a; Digital Information World, 2020), it seems to be an inevitable development that sexual victimization also occurs there.

Many of the children ( $n = 38$ ) encountered the offender through a regular social media network (Study I). Some offenders posed as friends by being someone whom the child could talk to and confide in, who gave compliments and flattery, and expressed love. Some children ( $n = 5$ ) seemed to use the internet for their own sexual curiosity, and they encountered the offender on a

sexually suggestive platform (Study I). Adolescents are known to engage in gradually more intimate activities (Diamond & Savin-Williams, 2009), and engaging in online sexual activity without physical contact might form an introduction to later, more ‘serious’, sexual activities. In addition, sharing images of oneself online might be a way for adolescents to cope with the bodily changes they are undergoing. Some offenders took advantage of this by using flattery or expressing love as a way of encouraging a child to send pictures (Study I).

Many of the children remained in contact with the offenders for an extensive period of time (Study I). While this study does not reveal the children’s potential motivation for this, it is likely that some aspects of the relationships were positive and of value to a child at the time. It is therefore important to bear in mind the complex and sometimes confusing experiences that some of the children were striving to make sense of. Similar to cases of offline CSA, the relationship with the offender might have been one of closeness, trust, and genuine care for each other (Finkelhor, 1984), and only as the child grows older does he or she recognize the manipulation and the problematic aspects of sexual activity between adults and children (Finkelhor & Browne, 1985). Even though a child might claim to have given consent and to not have experienced the sexual contact as something negative (one case like this was identified in Study II), it would still be viewed as abuse in a legal sense. In most societies, it is illegal for an adult to engage in sexual activities with an underage child (in the case of Sweden, defined as under the age of 15). In consequence, a child *cannot* give consent. As previously mentioned, the different changes occurring during adolescence might lead the adolescent to experience sexual feelings and urges like those of an adult, without having received the social privilege of acting on them. A case like this illustrates the difficult situation this may create for the child, as they would be forced into a legal process (in most cases it was

not the child who reported the abuse to the police) in which he or she is viewed as a victim, although not perceiving themselves as such.

## Abuse characteristics

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The online sexual activities that the children were incited to perform (Study II) varied considerably and could be of an extremely violating nature as well as sometimes being physically painful (ranging from semi-nude sexual posing to violent penetration with objects or sexually abusing a sibling or pet). Previous research on online CSA has mainly focused on the activities of the offender (for instance, offenders grooming or sexually soliciting children), meaning that there is a lack of knowledge about the kind of involvement or activity experienced by the child. The results of Study II expand upon the results of such studies as Kloess et al. (2019), showing that children can be persuaded to engage in online sexual activities such as exposing body parts, engaging in sexual touching or penetration, and providing detailed descriptions of these acts. The results clearly illustrate that online sexual activity cannot be reduced to merely being a precursor to offline abuse (which many definitions of grooming do). Doing so would trivialize the abuse that can be conducted through online technology. In addition, contradicting the assumption that online offenders are aiming to arrange an offline meeting with the child, the vast majority of offenders did not meet their victim offline (Study I). This result adds to previous findings showing that some offenders solely seek sexual gratification online (Briggs et al., 2011; Kloess et al., 2019) by engaging children in online sexual activities.

Research on offline CSA has identified a few abuse characteristics that have been associated with greater harm. These are: penetrative abuse, longer duration, a closer relationship, and the use of force or threats (Beitchman et al., 1992; Kendall-Tackett et al., 1993; Priebe & Svedin, 2009). Studies I and II

identified all of these characteristics. Taken together, TA-CSA seems to include a lot of similar characteristics to offline CSA. This indicates that TA-CSA should not be viewed as a phenomenon that is distinct from other forms of CSA, but rather as just a new way to perform sexual abuse that has been enabled by new communication technologies.

## Vulnerabilities and consequences

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Study II identified several individual factors that might have rendered the children particularly vulnerable to abuse (e.g. poor psychological health, low self-esteem, loneliness, a stressful social environment, or intellectual disability). These findings support initial research on TA-CSA. Jonsson et al. (2019) found poorer psychological health, lower self-esteem, and more risk-taking behavior among victims of TA-CSA than in a reference group. Mitchell et al. (2001) found troubled youth to be particularly vulnerable to online sexual solicitation. Whittle, Hamilton-Giachritsis, Beech, and Collings (2013b) found risk-taking, low self-esteem, social isolation, having a disability, or having problems at home or at school to be risk factors for online grooming.

As described in the stress and vulnerability model developed by Zubin and Spring (1977), an individual's inborn and acquired attributes together determine their ability to cope with a stressful situation. The abuse situation was indeed perceived as stressful by many children (Study II). For instance, the situation was described as threatening, coercive, and as not giving the child any choice other than to perform the acts demanded by the offender. For some children, it evoked fear. Furthermore, both a potentially inborn vulnerability (intellectual disability) and several acquired vulnerabilities (e.g. loneliness and a stressful social environment) that might contribute to a child having a lower threshold for stress were identified (Study II). Interpreting the results with the help of this model (Zubin & Spring, 1977), the situation of TA-CSA might

have been perceived as stressful enough to lead to the development of psychopathology, in some individuals more than others. Study II describes several potential consequences of the victimization (e.g. psychological suffering, self-harming and/or suicidal behavior, internalized self-loathing, impaired relationships). Only in one case was it explicitly stated that the child had not been negatively affected by the abuse.

The four traumagenic dynamics model (Finkelhor & Browne, 1985) describes four different dynamics that explain how and why sexual abuse can result in various kinds of trauma. The four dynamics are: traumatic sexualization, betrayal, powerlessness, and stigmatization. The results of Studies I and II will be compared to these dynamics. Firstly, the model states that a child who receives affection, attention, privileges, or gifts in exchange for sexual behavior learns to use sexual behavior to manipulate others (Finkelhor & Browne, 1985). Study I showed that offenders used both bribes and gifts to engage children in online sexual activity, as well as paying them attention in the form of friendship, flattery, or love. Furthermore, the model states that children who have been enticed into participating in the abuse are likely to be more traumatically sexualized than those who have been brutally forced into it (Finkelhor & Browne, 1985). In all cases of TA-CSA in Study II, the children actively engaged in the abuse in different ways (by posing, masturbating, penetrating, or performing sexual acts on others). Evidently, the elements of traumatic sexualization can be easily applied to the cases of TA-CSA. Study II did not find any of the potential problems that Finkelhor and Browne (1985) described this specific dynamic as potentially leading to (i.e. sexualized behavior among children, sexual problems among adults, negative attitudes toward one's sexuality or body). However, Study II did not specifically investigate this. The fact that these problems were not described in the court documents does not mean that they were not (or in time would be) present among the children. Based on Study II, we cannot rule out the possibility that TA-CSA

might lead to these problems, nor confirm that it does not cause them. Studies employing other methods, and primarily other data, would be more suited to investigate this.

The second dynamic – betrayal – may occur upon discovering that someone whom the child trusted or was reliant upon had caused them harm. The betrayal is not only dependent on the closeness of the relationship, but could also depend on how taken-in the child felt themselves to have been by the offender, the realization that family members were not able or willing to protect them, or upon being mistrusted when disclosing the abuse. Most of the children did not know the offender prior to the online contact (Study II); thus, the relationship between victim and offender may in general be less close in cases of TA-CSA than in cases of offline CSA, where the offender is often a family member or someone else close to the child (Finkelhor, 1984). However, the fact that many children were in contact with the offender for a long period of time might indicate that a strong bond had developed. Feeling betrayed by family members' failure to protect them might be relevant to cases of TA-CSA because children are often abused in the perceived safety of their own homes (Internet Watch Foundation, 2018). Professionals have noted that victims of TA-CSA are more often blamed and seen as participating in the abuse than victims of offline CSA (Hamilton-Giachritsis et al., 2017). The dynamics of betrayal consequently seem to also be applicable to TA-CSA. Some of the problems that the model claims might arise from betrayal were found in Study II (depression and distrust of men), but others were not (extreme dependency, hostility, anger).

The third dynamic – powerlessness – refers to the process by which a child's desire, will, and sense of efficacy is repeatedly overruled. According to the model, this sense of powerlessness is probably reinforced if the child experiences threats, coercion, violence, or fear. Many offenders used threats and coercion (Study I) and some children experienced fear (Study II). Furthermore,



Finkelhor and Browne (1985) described how powerlessness may occur when a child's territory and body space is invaded against their will. While the offender is not physically present in TA-CSA, several quotes from Study II clearly demonstrate that the child's body space was indeed invaded. The quotes included, for instance, descriptions of children expressing pain, crying, or begging to be allowed to stop, while penetrating themselves against their will. Several of the problems that Finkelhor and Browne (1985) associated with powerlessness were also identified in Study II – sleep problems, school difficulties, symptoms of PTSD, and general depression, while some of them were not – fear, anxiety, and learning problems.

The last dynamic – stigmatization – refers to the negative connotations that surround sexual abuse and its victims. According to Finkelhor and Browne (1985), the mere fact of being a victim of CSA might be enough to cause stigmatization. Although there is a dearth of research on attitudes towards victims of TA-CSA specifically, it is reasonable to assume that online victimization also raises questions for the child about why it happened to them, which is enough to cause stigmatization (Finkelhor, 1987). In addition, Hamilton-Giachritsis et al. (2017) mention that children exposed to TA-CSA are more often blamed and seen as participating in the abuse. The model (Finkelhor & Browne, 1985) mentions that stigmatization can cause isolation, self-destructive behavior, and suicide attempts as potential problems, all of which were potential consequences identified in Study II. This model was developed several decades ago, long before the internet as we know it today. Nevertheless, the four dynamics and their consequences seem to fit fairly well with the cases of TA-CSA that make up Studies I and II. In sum, this indicates that, in many respects, TA-CSA is similar to offline CSA, aside from it being facilitated by technology.

Another way of explaining why CSA may cause harm is by using the model developed by Brooks-Gunn and Paikoff (1993). According to this

model, there are a few challenges that are important for achieving sexual well-being – feeling comfortable in one’s body, reaching sexual self-acceptance, and understanding the importance of mutual consent and safe sex. Our studies reveal that some of these were obviously violated, or made complicated. In the cases where the children experienced not having any choice but to participate (Study II) or were pressured to engage in sexual activity (Study I), it may be difficult for the child to develop an understanding that all sexual activity should be voluntary. In cases where the child has initially been sexually curious, but an adult has taken advantage of this by luring them into a sexually abusive situation, or if one of the child’s first sexual experiences leads to sexual victimization and to being part of a legal process, the child may have difficulties accepting sexual feelings as normal and acceptable. The fact that sexuality is essential to human life, and that sexual health has been associated with physical, social, and psychological health (Galinsky & Sonenstein, 2011; Hensel et al., 2016; Laumann et al., 2006), illustrates that TA-CSA can be a serious threat to a child’s overall well-being.

## Legal perspective

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Judging from the United Nations Convention on the Rights of the Child (UNICEF, 1989) and the Lanzarote Convention (Council of Europe, 2007), there is worldwide agreement that children should be protected from all forms of CSA. The question is whether our laws are adequate for the investigation and prosecution of TA-CSA (Wittes et al., 2016). Evidently, there are some limitations in the legislative documents (ICMEC, 2017) which pose challenges when applied to cases of TA-CSA. The first issue to address is that both the Lanzarote Convention (Council of Europe, 2007) and the legislation in 162 countries (ICMEC, 2017) have failed to criminalize online grooming *regardless* of the existence of intent for an offline meeting. In light of the findings in

this thesis, showing that a large proportion of online offenders do not abuse the child offline (Study I), and the seriousness of some of the sexual activities that children can be coerced into engaging in online (Study II), this is problematic. It is important to note that the lack of explicit laws criminalizing TA-CSA does not necessarily mean that other laws (e.g. sexual molestation, sexual exploitation) can be used to target these offenses. The phrasing of the Lanzarote Convention (Council of Europe, 2007), and other legislative documents, nevertheless has an important signal value on how to view and evaluate these crimes. The implication is that the online contact is subordinate, and that the danger first occurs when the offender proposes meeting the child offline *and* when the proposal has been followed by material acts leading to such a meeting (Council of Europe, 2007). The findings of Studies I and II contradict this view and highlight the importance of legally viewing the online contact itself as a possible offense.

Swedish legal practice has not considered TA-CSA to be equally as severe as offline CSA (Net, 2015; B 11734-17), and charges with lower penal values have been applied in these cases. The overall results of this thesis indicate that it is not reasonable to make such a general statement. TA-CSA is a complex phenomenon with the potential of leading to a wide range of psychological consequences. For this reason, there is no universal assessment applicable to all cases; rather, the specific circumstances must be considered in each case.

## Methodological considerations

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Both studies are based on the same set of archival data; namely, Swedish court documents, and therefore a discussion about the limitations of this type of data is warranted. The court documents are written by judges after the court

hearing, and include the reasons for the ruling together with the relevant information that formed the basis of the judicial decision (Swedish Code of Judicial Procedure, Chapt 30, § 5). Court documents reflect only what was brought up at the court hearing and not all the available information in the case. As a consequence, the data may be biased. Court hearings can last for several days, and the documents only contain the most relevant parts. Some of the documents in our data set contained a lot of information and descriptions, whereas other were very limited. One of the questions of primary interest in this thesis was the psychological health of the child, which was only mentioned in about half of the cases. The fact that a document did not mention the psychological health of a given child does not mean that this child did not suffer any psychological consequences. A lot of information about the cases is left out. Likewise, the fact that an offender was described as pressuring the child does not mean that this offender did not also engage in relationship building. Some information is more likely to be deemed important for the judicial decision, and thus to be included in the documents. Consequently, information that is included is likely to be reliable (e.g. descriptions of the content of the videos, testimonies of the changed behavior of the child), whereas missing information (e.g. no information about the psychological health of the child) does not reveal whether the child has been psychologically affected or not. That is, a lack of information is not informative, but the information that is provided is. The choice of using court document data therefore prevents us from drawing conclusions about the ‘true’ prevalence of the different variables investigated. It is therefore important to emphasize that the studies only aimed to describe the current cases and thus to exemplify possible experiences and consequences of TA-CSA.

The data set included *all* cases of exploitation of children for sexual posing conducted online from Swedish district courts during a one-year period. While this constitutes a thorough data collection, it is assumed that only a small percentage of TA-CSA cases are brought to the attention of the police, and are

then prosecuted. It is possible that these cases differ from other cases of TA-CSA that go unreported. For instance, it is possible that the cases that are reported to the police, and that reach the prosecution stage, are of a more severe nature than unreported cases. Therefore, the results may not be generalizable to other groups of TA-CSA victims, but may only serve as examples of the characteristics and consequences of the cases that are prosecuted.

The use of secondary sources means that the data was shallow (Braun & Clarke, 2013). This limited our ability to conduct in-depth interpretations. The nature of the data (being summaries of the child's testimonies, or secondary sources such as witnesses describing the psychological health of the child), instead motivated our analysis at a semantic level. Compensating for the shallowness of the data, the sample size was large measured by the standards of qualitative methods.

The two studies employed embedded mixed-methods designs in which the primary questions (offender strategies in Study I and experiences and psychological health of the child in Study II) called for qualitative approaches, and the secondary questions (relationships and patterns) aimed to enhance the interpretation through quantitative approaches (Plano Clark et al., 2013). A mixed-methods approach draws on the potential strengths of both qualitative and quantitative methods and allows researchers to explore diverse perspectives and view phenomena from different viewpoints (Shorten & Smith, 2017), thus providing more knowledge and insights about the research topic than either approach alone (Landrum & Garza, 2015). The overall aim of the two studies was to broaden the hitherto limited knowledge about TA-CSA. Given that this research field is in its infancy, we used an exploratory approach. At this stage, descriptive knowledge is valuable to further our understanding; thus, each study investigated all the variables, both qualitative and quantitative, that were relevant to the aims of each study.

Court documents were judged to represent valuable data because they provide information about real cases of TA-CSA which might be difficult to obtain for ethical reasons, due to its sensitive nature. By analyzing court documents, we were able to access sensitive data without causing any distress or intrusion into the lives of the victimized children. The court documents contain detailed descriptive information about the sexual abuse that would be both methodologically and ethically difficult to obtain using other methods. In addition, the court documents provided insights into how the judiciary evaluates cases of TA-CSA and what aspects are considered important.

## Ethical considerations

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The Regional Ethical Review Board in Gothenburg, Sweden approved both studies (Dnr: 634-17). As previously stated, using secondary data was considered the least intrusive method for obtaining information about TA-CSA, because the victimized children and their families (as well as the offenders) did not have to participate. In addition, written verdicts from Swedish courts are public records. In cases of sexual abuse, all personal information (name, social security number, address, etc.) regarding the complainant is classified in the document. In turn, all information about the defendant was omitted by the researchers during the coding process. Thus, no identifiable information about the victims or offenders can be found in the data set used in this project. Furthermore, all other identifiable markers (e.g. city names) have been excluded from the quotations used in the study manuscripts.

Another ethical aspect that was thoroughly considered were the connotations of the language used when describing the individuals in the study. Following the recommendations of the American Psychological Association (2010), encouraging researchers to reduce bias in written language and respect-

ing the dignity and inherent worth of all people, I mainly use the word ‘children’ when describing the individuals who were victimized, rather than referring to them as ‘victims’ (which they are in a legal sense). I do this because person-first language separates the person from a behavior or experience (Willis & Letourneau, 2018), and the children are just that – children. Likewise, I have chosen to use the word ‘offender’, rather than ‘perpetrator’, because it is more often used in official contexts (such as ‘offender treatment programs’), and carries fewer negative connotations.

## Implications for practice and research

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The two studies included in this thesis show that TA-CSA can involve a wide range of online sexual activities that children are either pressured or lured into performing. The children could perceive the abuse situation as threatening or coercive, and the sexual acts could cause distress and sometimes physical pain. Furthermore, the studies show that this online victimization had the potential to lead to a wide range of consequences on personal, relational, and behavioral levels, and that these consequences were similar to those demonstrated in research on offline CSA (Kendall-Tackett et al., 1993; Maniglio, 2009). Altogether, these findings highlight the importance of not trivializing the severity of this crime.

For parents, school personnel, and professionals working with children, it is imperative to understand the difficult and sometimes complex situations that TA-CSA may involve. The cognitive immaturity during childhood and the radical changes occurring during adolescence (Steinberg, 2011) might make children vulnerable to the malicious strategies employed by offenders. However, when an adult incites a child to engage in sexual activity, it is always the adult’s responsibility, regardless of the acts of the child. It is therefore of great importance that the victimized child receives help in lifting the burden of

shame. Children who are subjected to sexual abuse often carefully consider whether or not to disclose (e.g. Joleby, Jonsson, Landström, & Lunde, 2020), and how an adult responds to a partial disclosure may be critical for whether the child will disclose further details (Staller & Nelson-Gardell, 2005). Moreover, the responses of others affect the impact of the abuse (Hamilton-Giachritsis et al., 2017). For instance, parental support is consistently associated with the positive adjustment of sexually abused children (Elliott & Carnes, 2001), and self-blame can be triggered by unsupportive approaches from school, peers, and family (Hamilton-Giachritsis et al., 2017). Building on this, it is crucial that parents, professionals and other adults inform children that they are prepared to listen and that it is never too late to talk about possible abuse, even if the child has done something they regret (Save the Children, 2015). Likewise, if a child discloses TA-CSA, it is important to take it seriously and respond with reasonable actions. Routines for action following a disclosure of CSA should also explicitly include TA-CSA.

As for preventive measures, it is important that education about safe online practices includes the array of strategies that offenders can use. It is often assumed that offenders use the anonymity offered by the internet to present fake identities, but only a few offenders do so (Balfe et al., 2015). Instead, the majority of offenders employed pressuring strategies, which highlights the importance of also preparing children for such threats. Educators should integrate online safety awareness across the curriculum in order to inform children about safe online practices (such as the use of privacy settings), as well as how to block and report unwanted contacts. However, it is of great importance not to let such education imply false security. A crucial aspect of protecting children from TA-CSA is to remain involved in their online lives. Parents should support their children's exploration of the internet from an early age and focus on enhancing their coping skills and resilience to potential harm (Livingstone et al., 2011). By maintaining open communication, and showing interest in and



attention to their children's online activities, adults can signal that they are someone to whom the child can turn in need. Professionals should receive training about the dynamics and impact of TA-CSA, in order to provide victimized children with sufficient support. Furthermore, the specific circumstances of the abuse, as well as the potential individual vulnerability factors of the child, are important for professionals to consider when deciding on a treatment plan. An abuse situation that, to an outsider, does not appear especially traumatizing might well have been very traumatizing to the child, and vice versa.

At a governmental level, the legal discussion in this thesis highlights the importance of reviewing and ensuring adequate legislative provision for dealing with TA-CSA. It is important to acknowledge that internet offenders, victims, and the dynamics between the two are often unique and varied, and that CSA conducted online can be severe. Accordingly, it is not possible to make a general evaluation of an online sexually abusive act (such as "it must be considered more sexually violating when an offender penetrates the victim than when the victim on the instruction of the offender penetrates him/herself", B 11734-17); rather, each case must be evaluated individually. Furthermore, the results of these studies highlight the importance of criminalizing solely online sexual activities between adults and children in legislation, and not only cases where the offender is aiming and preparing for an offline meeting with the child. It is important to implement legislation that enables relevant parties to identify, locate, investigate, and prosecute online offenders (ICMEC, 2017). It is also important to be able to cooperate across international borders, because the new technologies have enabled abuse to be conducted even when the victim and offender are located on different continents (B-11734-17).

Although the present studies have expanded our knowledge of TA-CSA, several questions remain to be answered. The offenders included in this thesis used more pressure than previous research has reported. This indicates that

cases involving real child victims might differ from those involving decoys. To replicate this finding, it would be valuable to investigate cases with real child victims but to include data other than court cases; for instance, transcripts. To expand our knowledge about the victims, the next step would be to investigate first-hand information from children themselves, in order to receive detailed testimonies regarding their experiences of TA-CSA and how it has affected them. Future research should also adopt methodologies that enable evaluations of the prevalence of this type of abuse, and of its psychological sequelae among the victims. Research that adopts a holistic perspective on the phenomenon of TA-CSA is needed in order to integrate the results of the hitherto scattered research field.

## Conclusions

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The results of this thesis adds to the currently limited knowledge about TA-CSA. In sum, the results and discussions indicate that TA-CSA should not be viewed as essentially different from, or less severe than, offline CSA. Many of the findings are similar to those of research on offline CSA, and the characteristics of the abuse, the strategies used by offenders, and the somewhat vulnerable state that children might be in, together show that TA-CSA has the potential to lead to severe consequences for its victims. In light of this, it is important to view these crimes as potentially traumatizing experiences, and to provide victimized children with the support and legislative redress that they deserve.



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## APPENDIX

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- I. Joleby, M., Lunde, C., Landström, S., & Jonsson, L.S. (2020). 'He demanded more pictures': Offender Strategies when Inciting Children to Engage in Online Sexual Activity. *Manuscript submitted for publication.*
- II. Joleby, M., Landström, S., Lunde, C., & Jonsson, L.S. (in press) Experiences and Psychological Health Among Children Exposed to Online Child Sexual Abuse – a Mixed Methods Study of Court Verdicts. *Psychology, Crime and Law.*



I



III

**‘He demanded more pictures’: Offender Strategies when Inciting  
Children to Engage in Online Sexual Activity**

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MANUSCRIPT UNDER REVIEW

Authors’ Note

This work was supported by the Swedish Crime Victim Compensation and Support Authority under grant [08983/2016]. A portion of this research was presented at the annual conference of the European Association of Psychology and Law (EAPL) in July 2019. Declarations of interest: none.

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Acknowledgements

This work was supported by a grant from the Swedish Crime Victim Compensation and Support Authority [08983/2016]. The authors would like to express their gratitude to Jennifer Stråle for her assistance with data collection and coding, and to Timothy Luke for his help with visualizing the data.

### Abstract

The aim of the present study was to investigate how offenders approach and incite children to engage in online sexual activity. By thematically analyzing 122 legal cases of online-facilitated child sexual abuse (children aged 7-17 years, offenders aged 16-69 years), we identified two main strategies used by the offenders – *pressuring the child* and *building a relationship with the child*. In contrast to previous research, the use of pressure (by using threats, using bribes, or repeatedly nagging) was the most frequent strategy (used against 56 children). Building a relationship (by posing as a friend, expressing love, or using flattery, used against 25 children) echoes previous findings on grooming strategies among offenders. Differences and similarities in abuse, victim and offender characteristics between the two strategies are discussed. The findings are further compared to previous research and theory.

*Keywords:* offender strategy, online child sexual abuse, online grooming, pressure



## **‘He demanded more pictures’: Offender Strategies when Inciting Children to Engage in Online Sexual Activity**

New forms of communication technology, such as the internet and smartphones, enable people to communicate with others from all over the world, no matter where they are located. This has created a new social landscape that is beneficial in many ways, but it has also created new opportunities for adults who want to sexually abuse children. Any child with access to an online digital device can become a potential victim (WePROTECT Global Alliance, 2018), leading to an almost unlimited source of children within the reach of an adult with malicious intent. The marked increase in internet-related sexual abuse cases in recent years (e.g. Bentley et al., 2019; BRÅ, 2019; Palmer, 2015) confirms that the new communication technology is in fact being misused in this way. Whether and how technological developments have affected the way offenders operate is, however, still not clear. While offender strategies in *offline* child sexual abuse (CSA) have been the subject of extensive research during the last few decades, we have yet to establish whether the same strategies apply to *online* child sexual abuse (OCSA), or whether new technology has altered the way offenders target children for sexual purposes. This knowledge is crucial in the preventive work to protect children.

It is well established that offenders use grooming when targeting children for sexual abuse offline (Howitt, 1995). One of the most commonly used definitions of this process is that offered by Craven, Brown and Gilchrist (2006, p. 297), who state that grooming is:

A process by which a person prepares a child, significant adults and the environment for the abuse of this child. Specific goals include gaining access to the child, gaining the child’s compliance and maintaining the child’s secrecy to avoid disclosure.

Although this definition is based on offline grooming, many aspects of it can also be applied to an online setting. ‘Preparing a child’ can be done by interacting with the child on the child’s wavelength (van Dam, 2001), building rapport by showering the child with love and affection (Lorenzo-Dus & Izura, 2017; Marcum, 2007) and desensitizing the child by increasing the degree of sexualization and gradually violating the child’s boundaries (O’Connell, 2003; van Dam, 2001). All of this can be done both offline and online. Arguably, however, ‘preparing significant adults’ is not necessary in online grooming due to most children spending time online unsupervised by adults (ICMEC, 2017). Likewise, ‘preparing the environment’ might not be as important in online settings. That is, the internet provides access to potential victims all over the world, and the physical location does not impose any limitation (Webster et al., 2012).

Previous research has shown that online offenders use grooming strategies similar to the ones used by offline offenders (e.g. Briggs, Simon, & Simonsen, 2011; O’Connell, 2003). Furthermore, Whittle, Hamilton-Giachritsis, Beech and Collings (2013) summarize in their review that the behavior and purpose of grooming remain consistent across online and offline environments, despite potential variations in specific grooming techniques. They do, however, conclude that the research in support of this so far is limited.

Online offenders are, as with most offenders, a heterogeneous group (e.g. Kloess, Seymour-Smith, Hamilton-Giachritsis, Long, Shipley, & Beech, 2017), and different offenders have different goals and different strategies to reach their victims (Whittle et al., 2013). Consequently, researchers have created different models with the aim of explaining how online offenders differ from each other in these respects. In the section that follows, we will give a brief presentation of three such models.

First, Briggs, Simon and Simonsen (2011) divided online offenders into two sub-groups, *contact-driven* and *fantasy-driven*, based on the offender’s motivation for offending. Second,

Webster et al. (2012) identified three types of online offenders: *intimacy-seeking*, *adaptable*, and *hyper-sexualized*, based on eight behavioral dimensions (e.g., previous convictions, online identity, contact with other offenders, offense-supportive beliefs, outcome of the offense, etc.). Third, Kloess, Hamilton-Giachritsis, and Beech (2019) proposed two different approaches, *indirect* and *direct*, based on the way the offender initiated contact and approached their conversations with victims. The indirect offender spent time getting to know the victim and engaged in aspects of relationship-building, whereas the direct offender instead immediately introduced sexual content into the conversation.

Thus, the three models base their categorizations on completely different aspects – Briggs et al. (2011) on offender motivation, Webster et al. (2012) on behavioral characteristics, and Kloess et al. (2019) on offender approach – and arrive at completely different categories. This illustrates the great variety in definitions and use of terminology (Kloess et al., 2019), as well as the lack of consensus within this research area.

Another line of research of relevance is *sextortion*, which refers to when an offender threaten to expose sexual images to coerce victims to provide additional pictures, engage in sexual activity, or agree to other demands (Wolak, Finkelhor, Walsh, & Treitman, 2017). This line of research thus investigate online sexual interactions between adults and children. According to the definition, however, sextortion can only be used against individuals who have created a sexual image in the first place. Thus, the knowledge about how offenders incite children that have *not* produced any sexual images to engage in sexual activity online is still scarce. Although there is a growing body of research investigating OCSA, we are evidently still far from having established how online offenders target children for sexual purposes. This study aims to contribute to the thus far limited research on online sexual offenders, as well as addressing some of the limitations in previous research.

Previous research on the interactions between online offenders and their victims has contributed many important findings regarding the way online offenders communicate. However, the methods used entail some limitations in the generalizability of the results. The vast majority of studies have investigated cases where offenders have communicated with decoys, that is, adults posing as children (Black, Wollis, Woodworth & Hancock, 2015; Briggs et al., 2011; Ioannou, Synnott, Reynolds, & Pearson, 2018; Lorenzo-Dus & Izura, 2017; Mitchell, Finkelhor, Jones, & Wolak, 2010; Williams, Elliott, & Beech, 2013). More specifically, many of the studies have analyzed transcripts from conversations between online offenders and decoys volunteering for the organization Perverted Justice Foundation (PJF; [perverted-justice.com](http://perverted-justice.com)). The organization's goal is to enable an arrest, thus the decoys aim to receive as much incriminating information about the potential offenders as possible, to send to the police (Perverted Justice Foundation, 2007). The decoys therefore respond openly to sexual solicitations (Briggs et al., 2011), and might be more likely to continue within an uncomfortable conversation (Williams et al., 2013) compared to what a real child victim would. This would lead the decoy to appear more compliant, which in turn might affect the strategy used by the offender, as he would not encounter any resistance from the 'child'. Indeed, one study has shown that interactions with decoys from the PJF rarely include overt persuasion and never extortion (Schneevogt, Chiang, & Grant, 2018), whereas these strategies have been identified in a case study of an online offender interacting with real children (Chiang & Grant, 2018). In addition, the 'relationship' between an offender and a real victim would most likely develop more slowly than that between an offender and a decoy (Briggs et al., 2011). Arguably, interactions with decoys lack the dynamics that a real child would provide in such interactions (Kloess, Beech, & Harkins, 2014). Consequently, to increase the understanding of the strategies used by online offenders, the next step would be to investigate cases with real child victims.

Another limitation is that the majority of previous research has asserted that individuals who engage in online grooming do so for the purpose of arranging an offline meeting with the child. Not only does this assertion seem to be inaccurate in a not insignificant proportion of the cases (e.g., 41% of the offenders in Briggs et al., 2011 did not meet their victims offline), but it trivializes the sexual abuse that can be conducted through online media. By treating the sexual activities that offenders sometimes incite children to perform online (e.g. webcam sex) only as part of the grooming process, this minimizes the seriousness of these acts. This notion contradicts recent research showing the complex and sometimes extremely humiliating acts that children might be incited to perform, and the psychological suffering this might lead to (Joleby, Landström, Lunde & Jonsson, 2020; Jonsson, Fredlund, Priebe, Wadsby, & Svedin, 2019). Also, it limits our knowledge of the tactics used in online-facilitated offending (Black et al., 2015) in which the offenders do not meet their victims offline.

Taken together, we have identified two gaps in the literature that need to be addressed. First, cases with real children (in contrast to adults posing as children) need to be thoroughly investigated (Lorenzo-Dus & Izura, 2017) to shed light on the strategies online offenders use in naturally occurring cases. Second, cases in which the offender engages the child in online sexual activity (in contrast to grooming with the intent to abuse the child offline, and regardless of whether the offender use sextortion or not) need to be included to give a more comprehensive and accurate picture of OCSA. To our knowledge, only a few studies have explicitly investigated this as of yet (Kloess et al., 2019; Kloess et al., 2017; Shannon, 2008; Webster et al., 2012). All crimes in these studies were conducted prior to 2013 (2004-2006 in Shannon, 2008; 2009-2012 in Kloess et al., 2019; Kloess et al., 2017; before 2010 in Webster et al., 2012), and two of the studies (Kloess et al., 2019; Kloess et al., 2017) are based on transcripts from the same five offenders. Thus, there is a need for additional research to expand on this matter.

The study presented here aims to further our understanding of how offenders approach and target children for online sexual abuse. We will do this by analyzing court documents regarding cases in which offenders have incited real child victims to engage in online sexual activity (such as sending explicit photos/videos or performing sexual acts live on a webcam). More specifically, we aim to investigate:

- i) Through which types of online platforms online offenders find their victims.
- ii) What strategies online offenders use when inciting children to engage in online sexual activity.
- iii) Whether offender strategy is related to a) abuse characteristics, b) victim characteristics, and c) offender characteristics.

## **Method**

### **Context**

The current study forms part of a research project investigating online child sexual abuse from both victim and offender perspectives. The data used in this project includes court documents from Swedish courts that we have analyzed and coded, using an extensive coding manual. For a full description of the procedure for data collection and coding, see the precursor to this article (BLIND FOR REVIEW, but see Appendix for a blinded description of the procedure). A brief summary follows below.

### **Design**

This study adopted a mixed methods approach in order to investigate aspects of the cases that were both qualitative and quantitative in nature. The qualitative material (extracts from the court documents) was coded and analyzed using thematic analyses (Braun & Clarke, 2006). This qualitative analyses constituted the main part of the study, and aimed to answer the question: “What strategies did offenders use when inciting children to engage in online sexual activity?” The themes that arrived from the qualitative analysis were further analyzed using

quantitative measures, and aimed at answering the question: “Is offender strategy related to a) abuse characteristics, b) victim characteristics, and c) offender characteristics?” We also used descriptive statistics that aimed to describe the characteristics of the cases, and to answer the questions: “Through what online platforms did online offenders find their victims?”

### **Data collection**

After a court hearing, Swedish courts produce a written verdict (court document). The court document states the reasons for the ruling, and includes relevant information that formed the basis for the judicial decision (Swedish Code of Judicial Procedure). The data in the current study is based on court documents from all Swedish district courts. All court cases that met the following criteria were included: I) issued during 2017, II) including the charge ‘exploitation of children for sexual posing’ (including attempted and aggravated crimes, The Swedish Penal Code), III) including at least one *online* offense, and IV) the child had to be aware of the abuse (which for example excluded acts involving a victim being photographed while sleeping). The charge ‘exploitation of children for sexual posing’ that we used as an inclusion criteria in the current study is a non-contact offense in which the offender uses solicitation to induce a child to ‘pose sexually’ (The Swedish Penal Code). This classification was chosen due to it being used (in addition to other classifications) in cases of online CSA in which the child produced explicit photos or videos, or performed sexual acts in front of a webcam.

In total, 50 written verdicts, including 122 child victims, met the inclusion criteria and were thus included in the analyses. Accordingly, our data set includes all cases of ‘exploitation of children for sexual posing’ conducted online from Swedish district courts (and 16 subsequent Court of Appeal verdicts) during the one-year period of 2017.

### **Inter-rater agreement**

The level of coder agreement was calculated by letting two coders (the first author and a research assistant) separately code 20% ( $n = 25$ ) of the verdicts, selected at random. The

codings were subsequently compared for inter-rater agreement. Each variable was coded as 1 (coders agree) or 0 (coders disagree), and inter-rater agreement was calculated by dividing the number of agreements by the number of possible agreements (i.e., the number of variables). The total inter-rater agreement for the relevant variables in this study was 0.93.

### **Case characteristics**

The material involved 50 male defendants aged 16 to 69 ( $M = 34.0$   $SD = 15.3$ ). The number of victims with whom the defendants communicated ranged from 1 to 26 ( $M = 4.6$ ,  $SD = 4.5$ ), giving a total of 122 victims (87.4% girls, aged between 7 and 17,  $M = 12.35$ ,  $SD = 1.93$ , at the time of the (first) abuse). Consequently, the material consisted of 122 unique cases of offender-child relations.

OCSA can consist of a wide range of acts. A previous study investigating the same material, but from a victim perspective (BLIND FOR REVIEW), contains a more thorough description of the children and the characteristics of the abuse. Below is a brief summary to provide a context for the findings of this study.

In the current material, 24 children were exposed to attempted abuse, that is, a defendant asking for explicit pictures but the child refusing. Fifty-six children were incited to send sexualized or explicit photos or videos (nude or semi-nude, including the breasts, the genitals, or the buttocks), or to show the equivalent live in front of a webcam. Others were persuaded to perform sexual acts on themselves, such as masturbating ( $n = 11$ ) or penetrating themselves ( $n = 26$ ; orally, vaginally, or anally, with fingers or objects) and showing these acts via different means of electronic communication. Five children were coerced to perform sexual acts (e.g. oral sex) on another person (e.g. a younger sibling) or an animal live in front of a webcam. In addition, 19 of the children (15.6%) also met the defendant offline and were subjected to physical sexual abuse ( $n = 14$  penetrative abuse,  $n = 5$  fondling). These results have previously been reported in BLANK FOR REVIEW but are presented here for context.



Forty-six defendants were convicted (92% conviction rate) and sentenced to prison (38.1%), probation (28.3%), suspended sentence (15.2%), a fine (8.7%), or youth service (8.7%). The defendants were convicted on the following charges: Exploitation of children for sexual posing, sexual molestation, sexual abuse of a child, rape of a child, rape, sexual coercion, possession of child pornography, purchase of a sexual service, purchase of a sexual service from a child (for an offline crime), sexual exploitation (for an offline crime), and contact with children for sexual purposes (for an offline crime).

### **Quantitative measures and procedure**

We gathered data from the court documents in quantitative variables. The first variable was *Abuse place*, with a dichotomous outcome (Online CSA or Online/offline CSA). The second variable, *Sexual act online*, was categorical and described the most serious type of sexual act that the child had been incited to perform. Posing was categorized as the least serious, followed by masturbation, penetration, involving another person, and involving an animal as gradually more serious acts. The third variable, *Duration of sexual abuse*, was continuous and included the number of days between the first and the last occasion of sexual abuse. The fourth variable, *Criminal record*, included categorical information about the offender's previous criminal history (no previous convictions, previously convicted of a sexual offense, previously convicted of a non-sexual offense). The fifth variable, *Number of victims*, was continuous and described the number of OCSA victims in the current court case for each offender. The *ages* of victims and offenders were calculated at the time of the (first) abuse and the variables were continuous. The victim *Gender* variable was dichotomous (boy or girl).

The present study used descriptive statistics to describe the data. Table 1 presents information about personal characteristics, victim characteristics and abuse characteristics for each offender, divided up by strategy. We used visual inspections and percentage counts to look for differences in the distributions between the two strategies. The patterns found between

the strategy used by the offender and abuse characteristics, victim characteristics, and offender characteristics are presented in histograms, bar charts, and percentage counts (see Figures 1-4).

### **Qualitative measures and procedure**

All information describing the contact between the defendants and the victims was gathered in full sentences. The descriptions included the court's summaries of the contact, quotations from interviews and interrogations, or transcripts of chat logs. We named this string variable *strategy*. All descriptive information was gathered case wise, that is, all information about the interaction between *one* offender and *one* child was gathered as one case. This means that we treated our material, including fifty offenders targeting a total of 122 children, as 122 cases. We did this because each interaction between an offender and a child is unique, and it could not be assumed that offenders used the same strategy with different children. We analyzed the extracts using the qualitative approach of thematic analysis – a method for identifying, analyzing and reporting patterns within data (Braun & Clarke, 2006). We employed an inductive (data-driven) approach, which generates themes that are strongly linked to the data, rather than overlaying a theoretical perspective. The themes were identified on a semantic level, focusing on the surface meaning of the data. The procedures undertaken to ensure a rigorous thematic analysis followed the recommendations of Braun and Clarke (2006). First, the first author (who was also one of two people to code the entire data set) thoroughly read the material several times to re-familiarize herself with the data, and then systematically coded the material with descriptive labels. Throughout the coding, additional labels were developed as new features were identified, while reappearing elements were assigned existing labels. After labelling all the data, the first author created a mind map in which the labels were organized in relation to each other. Some codes were merged together and initial themes were generated. Second, the first author re-read the material and color-coded every piece of text that

related to any of the initial themes, to ensure that no extract was overlooked in the first round. Third, the first and second authors discussed and re-organized the initial themes. Fourth, the first author re-read the extracts and recoded segments where necessary, compared the initial themes to the original extracts, and re-organized some of them. Finally, the initial themes were transformed into descriptive sub-themes and organized under one main theme each. After this revision, the first and second authors discussed the themes further, and settled on a final draft. All four authors approved the final draft.

All quotations were translated into English and have been slightly edited to facilitate reading, and to avoid possible identification of the children.

### **Ethical considerations**

The Regional Ethical Review Board in (BLANK FOR REVIEW) has approved the project. Written verdicts from Swedish courts are public records. Nevertheless, all personal information or other identifiable markers (such as name, address, or personal identification number) have been omitted during the coding procedure. Consequently, no identifiable information can be found in the documents of this research project.

## **Results**

### **Sites where offenders find their victims**

In 56 of the 122 cases (45.9%), the court document described where the first contact between the offender and the child started (the conversation was occasionally moved elsewhere after initial contact, to enable unmonitored conversations and the possibility to share images or video chat). Thirty-eight children came into contact with their offender through a social media platform (e.g. Instagram, Facebook, Kik, or sometimes platforms evidently directed at younger children, such as Momio), six children through an online chat randomizing strangers to talk to each other (e.g. Omegle), five children through a similar, but more sexually suggestive, online chat platform (e.g. getnaughty, hotornot, or sugardaters), four children through an online game,

and three children via a text message to their cell phone. In addition, 20 of the children were acquainted or briefly acquainted with the offender before the time of the online abuse, hence the online contact was not the initial contact. In 36 (29.5%) of the cases, it was stated in the court document that the offender lied to the child about his identity, often claiming to be younger ( $n = 25$ ), and sometimes claiming to be female ( $n = 6$ ). In five cases it was not specified what the lie entailed. See Table 1 for more information about the characteristics of the offenders, the victims and the abuse.

### **Strategies for engaging children in online sexual activity**

In 81 of the 122 cases (66.4%), the court document included some kind of description of the contact between the offender and the child. In some documents, the descriptions were quite extensive and thorough, providing a relatively clear picture of how the contact between the offender and child unfolded. In other documents, the descriptions were very brief (e.g. a single sentence like “The complainant threatened to upload pictures of her unless she had sex with him”), but still provided an indication of the interaction between the offender and the child. This information was not limited to the initial contact between the child and the offender, but could include descriptions from their communication at any time during their contact. All descriptions were thematically analyzed to examine what strategies the offenders employed when inciting children to engage in online sexual activity. The analysis identified two main themes of strategies used by the offenders, with three sub-themes each. The main themes are presented in order of quantity, and so are the sub-themes within each main theme. For frequencies, see Table 2. Please note that there was an overlap in five of the cases (the child was subjected to both strategies), and that the descriptions in five cases were uncategorized.

### ***Theme 1: Pressuring the child***

This theme contains the offender strategies that include *pressuring the child* into performing the desired online sexual activities. The theme is divided into three sub-themes: *using threats*, *using bribes*, and *repeatedly nagging*.

The first sub-theme is the most extensive one and includes the different ways that offenders explicitly *used threats* to get the children to meet their demands. One common strategy that the offenders used was to say that they would reveal compromising information about the child to other people unless he or she performed certain acts or sent certain pictures that the offender demanded. This could involve threatening to inform the child's parents about previous sexual contact they had had, or threatening to disseminate degrading pictures or videos of the child:

He has ruthlessly exploited the complainant for several months and forced her into action by threatening that he would otherwise disseminate naked pictures of her. He demanded more pictures of the complainant and these eventually became increasingly explicit in character. He threatened to upload the pictures he had received online unless he received more pictures. The complainant sent more pictures to the defendant and some of them were quite explicit. (Offender 35: child 70, 12-year-old girl.)

Some offenders amplified their threats by communicating the amount of information they had about the child: "He let the complainant know that he knew where she lived and who her friends were." (Offender 39: child 82, 11-year-old girl.) For these threats to be successful, the child had to have performed some kind of compromising act to begin with. Other threats, however, did not require any previous acts by the child. These threats could instead be that the offender would start a rumor about the child, or threaten the safety of the child or his or her close friends or relatives.

The threats have consisted of the defendant claiming that he would injure or kill the complainant or other people close to her, and/or that he would upload [non-sexual] pictures of her on ‘porn and rape sites’ including a text urging people to find the girl, rape her and kill her family. (Offender 47: children 92-117, 11-15-year-old girls.)

The second sub-theme consists of the cases in which the offender pressured the child by *using bribes* to incite the child to perform sexual activities. The bribe could consist of money, objects (e.g. a cellphone, cigarettes), or any other currency attractive to the child, as illustrated in this example: “He would receive ‘skins (in-game purchases) and such stuff’ if he took off his clothes and masturbated on Skype.” (Offender 37: child 76, 12-year-old boy.) The offender could either specify the payment for a specific act: “She has been incited, for an offer of compensation of SEK 200 [approximately USD 20], to take semi-nude/nude pictures of herself and send the pictures to the defendant.” (Offender 12: child 15, 17-year-old girl.) Alternatively, the bribe could work indirectly by building up to a feeling of debt, exemplified here: “He had received that knife (a weapon in an online game) and wanted to give something back when the defendant kept asking.” (Offender 37: child 74, 13-year-old boy.)

The third sub-theme refers to how some offenders *repeatedly nagged* the child to do certain things or to send certain pictures: “The defendant was nagging and the complainant did what he asked because he did not want him to get mad.” (Offender 37: child 74, 13-year-old boy.) The nagging was sometimes described as frequent and systematic, as in this example where the offender and the victim met in a Facebook group for people looking for friends: “They talked and got to know each other, and then requests were sent to see the complainant in underwear or swimwear, and there is a lot of systematic nagging.” (Offender 18: child 26, 13-year-old girl.)

## ***Theme 2: Building a relationship with the child***

This theme contains offender strategies that include investing time and effort in building a relationship with the child, in order to introduce sexual topics at a later stage. The theme is divided into the following three sub-themes: *using flattery*, *posing as a friend*, and *expressing love*.

The first sub-theme describes how offenders *used flattery* as a way to manipulate the child and to achieve increased sexualization within the relationship. The offender showed appreciation towards the child or gave compliments. Some of the compliments targeted the child's appearance and body: "He wrote to her that she was good-looking, has a nice body and that he likes her." (Offender 32: child 54, 13-year-old girl.) Other compliments were of a more emotional nature.

He said that he loves the complainant if she does it [pose sexually]. [...] He said he loved her and asked if they could be together. (Offender 32: child 47, 9-year-old girl.)

The second sub-theme refers to the way in which an offender could build a relationship with the child by *posing as a friend*, and being someone that the child could talk to and confide in. The contact between the offender and the child, which sometimes lasted for a long time, could start off as a normal friendship.

They met in an online community where you could meet people from different countries and you would be randomized to talk to others based on similar interests, etc. [...] Both she and the defendant were into horses. (Offender 8: child 8, 13-year-old girl.)

By posing as a friend and claiming to have similar interests to the child, the offender could use conversations that were initially age appropriate and revolved around a friendship

with the child. Once the friendship was established, the offender could gradually introduce sexual content into the conversations.

The conversation with the defendant was initially innocent. [...] They talked on the chat function every day and sent perhaps around two to three hundred messages to each other. They were usually of a sexual nature but they also talked about everyday things. They also talked on the phone with each other. It was the defendant who wanted to talk on the phone. In the beginning, these conversations had innocent content but became increasingly sexual. (Offender 25: child 37, 14-year-old girl.)

The third sub-theme includes strategies whereby the offenders *expressed love* towards the child. Offenders sometimes used this as a straightforward tactic to get the child to perform the desired act, for instance: “What if I got to see your boobs without a bra teehee love you.” (Offender 18: child 26, 13-year-old girl.) At other times, the expressed love was part of a (perceived) romantic relationship that had developed between the offender and the child, as in this example of a 63-year-old offender who incited a 13-year-old girl to perform a large number of sexual acts, some of which were described as ‘extreme’.

Their contact got more and more intense and eventually a love relationship arose. [...] When they fell in love it was as if they became addicted to each other. They could be in contact with each other for eight hours a day, four hours in the morning and four hours in the evening. He talked with her daily, listened to her and was interested in what she did and how she felt. He supported her and said that she was good at various things. [...] The way she feels for him, she has never felt before. It was a normal romantic relationship, except for the age difference. The defendant became her whole world and she



did not hang out with her peers during her leisure time. (Offender 4: child 4, 13-year-old girl.)

### **Patterns between strategy and abuse, victim and offender characteristics**

*Patterns between strategy and abuse characteristics.* In these descriptive statistics, the five cases in which the child had been subjected to both categories were excluded. The duration of abuse varied significantly between cases: 40.2% of the children were abused on a single occasion, while others were in contact with the offender and were abused over the course of several years (see Figure 1). It was roughly as common for offenders who used a pressuring strategy to abuse a child on one occasion only (43.2%) as it was for offenders who used a relationship-building strategy (45.0%). There was also a large overlap between the two strategies when it came to abusing the child for a longer period of time (pressuring strategy *range* = 1-1461 days, relationship-building strategy *range* = 1-225 days). Children subjected to pressuring strategies were somewhat less likely to meet their offender offline (9.9%), compared to the children subjected to relationship-building strategies (20.0%). The children ( $n = 5$ ) who were incited to perform the most violating acts (performing a sexual act on another person or on an animal) were all subjected to pressuring strategies ( $n = 4$  to threat,  $n = 1$  to repeated nagging), see Figure 2.

*Patterns between strategy and victim characteristics.* In these descriptive statistics, the five cases in which the child had been subjected to both categories were excluded. The children subjected to pressuring strategies were in general older ( $m = 13.2$ ,  $SD = 1.4$  *range* = 10-17 years) than the children subjected to relationship-building strategies ( $m = 11.5$ ,  $SD = 2.1$  *range* = 8-14 years), see Figure 3. Interestingly, a large proportion of the children (pressuring strategy 44.7%, relationship-building strategy 25.0%, and full sample 36.4%) were thirteen years old at the time of the first abuse. The gender distribution between the two strategies was similar (pressuring strategy 84.3% girls, relationship-building strategy 90.0% girls).

*Patterns between strategy and offender characteristics.* In these descriptive statistics, the six offenders that used both strategies were excluded. The offenders using the pressuring strategy were overall younger ( $m = 27.0$ ,  $SD = 14.6$ ) than the offenders using the relationship-building strategy ( $m = 48.3$ ,  $SD = 16.2$ ), see Figure 4.

### Discussion

The present study aimed to further our understanding of how offenders approach and target children for online sexual abuse. Specifically, we wanted to investigate whether new technology has altered the way offenders operate. By analyzing court cases, we identified two main strategies employed by offenders when inciting children to engage in online sexual activity. In summary, the results showed a higher frequency of pressuring strategies compared to previous research. Furthermore, the results confirm previous research showing that some grooming strategies also apply to online offending.

The most frequent strategy described in the court documents was *pressuring the child*. The offenders could do this in different ways. The most common way of pressuring the child was by using threats, either to reveal compromising information about the child, or to hurt someone close to the child. The use of pressuring strategies has also been identified in previous research. Kloess et al. (2019) found, among the five offenders in their study, that offenders employing a *direct approach* used strategies that were more forceful, such as blackmail or threats. O'Connell (2003), who posed as a young girl in various chat rooms, described that some offenders adopted a more overt pattern of coercion. Whittle et al. (2013), in their review, mentioned that an offender may use intimidation and fear. In these studies, however, the pressuring strategies were typically presented as exceptions. In contrast, in the present study pressuring strategies were by far the most common strategies used by the offenders. There are several potential explanations for this. First, the present study is one of few investigating cases with real child victims. Thus, the high prevalence of pressure lends support to the claim by

Schneevogt, Chiang and Grant (2018) that data featuring adult decoys is not representative of interactions with real children. It is reasonable to assume that decoys will be compliant to the wishes and demands of the offender (as they aim to enable an arrest), while real children will be more reluctant. This leads to offenders having to adopt more pressuring strategies when communicating with real children. We therefore argue that the results from research on decoys do not directly translate to real children, and that the present study thus expands our knowledge on a matter that is largely unexplored. Second, previous research has often focused on the initial contact between the child and the offender which could be defined as the initial hour of contact (Williams et al., 2013) to conversations that lasted for a few days (Black et al., 2015). In contrast, the current study included descriptions of the contact between the child and the offender at any time. This finding indicates that some offenders might refrain from using pressure in the initial phase of contact, but use it after this contact has continued for a longer period of time. Furthermore, the offenders did not only threaten to disseminate pictures or videos, but also to start a rumor or to hurt a loved one. This finding shows that sextortion (defined as threats to expose sexual images to coerce victims to engage in sexual activity, Wolak & Finkelhor, 2016) only comprises one of several ways that children can be threatened and coerced online.

In the other strategy, the offender attempts to build a relationship with the child by using flattery, posing as a friend, or expressing love, all of which are strategies similar to the ones previously described in the research literature about grooming (e.g. van Dam, 2011; Lorenzo-Dus & Izura, 2017; Marcum, 2007; Webster et al., 2012). Flattering and making the victim feel special exploits the natural need for human beings to feel loved and cared for (Holt, Bremner, Sutherland, Vlieg, Passer & Smith, 2012). By talking about neutral topics, being a listener, and pretending to have similar interests, the offender might lead the child to feel comfortable before introducing sexual content. This echoes previous findings on online abuse (e.g. Katz, 2013)

and can be seen as a way of preparing the child for abuse, as described in Craven, Brown and Gilchrist's (2006) definition of grooming. Taken together, the present study adds to the literature that has identified grooming strategies among online offenders (e.g. Briggs, Simon & Simonsen, 2011; O'Connell, 2003).

In the introduction, we briefly described three different models of online offenders. We now aim to compare these to our results. Kloess et al. (2019) proposed a model based on the approach used by offenders. Thus, this model is the one that – superficially, at least – is easiest to apply to our data. Kloess et al. (2019) described an *indirect approach* in which the offender spent time getting to know the victim and engaged in aspects of relationship-building. This approach seems relatively applicable to the relationship-building strategy identified in the present study. Kloess et al. (2019) also described a *direct approach* in which the offender immediately introduced sexual content and used strategies that were more forceful. This approach has evident similarities with the cases in the present study where the offender used a pressuring strategy and only abused the child on a single occasion. In contrast to what has previously been assumed in the research literature, the present study resonates with the novel findings in Kloess et al. (2019) that online interactions between offenders and children do not always include grooming. However, the direct approach categorization is not entirely comparable to this study. The main reason for this is that the direct approach was described as being of a short-lived nature, whereas the pressuring strategy was also identified in interactions that lasted for a long period of time (up to several years). That is, the categorization by Kloess et al. (2019) takes into account how quickly the sexual content was introduced, while we base the categorization exclusively on the content of communication between the offender and the child, no matter when it unfolded.

The model proposed by Briggs et al. (2011) described *contact-driven* offenders as using the internet as a medium to connect with victims, but with the intention to coordinate a sexual

meeting offline. The *fantasy-driven* offender, by contrast, used the internet as a sexual medium with the purpose of masturbating and engaging a victim in cybersex. This categorization has both similarities with and differences to the results in the present study. All the offenders in this study did indeed seem to be *fantasy-driven*, based on their interest in engaging children in different kinds of cybersex. However, some of them also sexually abused them offline. In the present study, there does not seem to be a clear-cut distinction between offenders aiming to engage in cybersex and offenders aiming to arrange an offline meeting with the child. Instead, all offenders in our sample engaged in cybersex, thus the only difference is that one group of offenders ( $n = 19$ ) abused the children offline *in addition*.

While the *fantasy-driven* categorization (Briggs et al., 2011) is informative from an offender perspective (revealing the offenders motivation for offending), it trivializes the experience when viewed from the victim's perspective. In line with what Kloess et al. (2017) emphasize, the sexual acts that some children are incited to perform online feature serious forms of sexual abuse (see Joleby, Landström, Lunde & Jonsson, 2020), and describing them as fantasy enactments misrepresents the true nature of these acts.

The model proposed by Webster et al. (2012) described the following categories: *intimacy-seeking* offenders who had no previous convictions, 'believed' that they were in a consenting romantic relationship with the child, and spent a significant amount of time talking before meeting offline; *adaptable offenders* who tended to have been previously convicted of sexual offending against children, and who adapted their identity and behavior according to the young person with whom they were communicating; and *hyper-sexualized* offenders who were characterized by owning an extensive collection of indecent images of children, and having significant contact with other sexual offenders. Among the hyper-sexualized offenders, the contact was highly sexualized and escalated quickly, but offline meetings were less prevalent in this group. This model is the least applicable to our data, in that it is based on a wide range

of behavioral characteristics. This means that each category is very specific. By contrast, the present study showed considerable overlap (e.g. regarding time of contact, number of victims, previous convictions, and offline meetings) between the strategies, and some offenders even used both the pressuring strategy and the relationship-building strategy.

Contrary to the assertion in the literature that individuals who engage in online grooming do so with the purpose of arranging an offline meeting (e.g. Black et al., 2014; Malesky, 2007), only 15.6% ( $n = 19$ ) of the children in the present study met their offenders offline. Thus, offline abuse does not seem to be the primary goal for online offenders, who instead seem to seek sexual gratification online by engaging children in online sexual activity. This is especially true for offenders who used pressuring strategies (9.9%), compared to offenders who used relationship-building strategies (20.0%). Furthermore, offenders who used a pressuring strategy had an older group of victims than offenders who used relationship-building. It is not possible to determine from our data whether this is due to the preferences of the offenders (offenders aiming to build a relationship with a child, preferring pre-teens) or the responsiveness of the children (older children find it more difficult to endure threats about having compromising information distributed). However, these findings have implications for how interventions to teach children about OCSA should be devised. Contrary to common assumptions that offenders are hiding their identities and pretending to be someone else, this study shows that this is not the only (or even the most common) threat. Instead, this study highlights the importance of teaching children counter strategies if they are subjected to pressure and threats, especially in the light of these strategies leading to the most severe abuse. The finding that a disproportionately large proportion of the children were thirteen years old indicates that this age group might be particularly vulnerable to OCSA.

Echoing previous findings (e.g. Balfe, Gallagher, Masson, Balfe, Brugha & Hackett, 2015; Mitchell, Finkelhor, Jones & Wolak, 2010), the offenders used various social networking

sites to initiate contact with children. A few of the sites that children were approached on indicated some level of sexual curiosity by the child (e.g. getnaughty.com), whereas other platforms were unmistakably directed at younger children (e.g. Momio). After making initial contact, the conversation was often moved to unmonitored sites (e.g. Skype). Evidently, offenders who aim to find children to abuse sexually online find the sites that children use. A common feature of all the sites was the possibility to communicate with other people (from all over the world). This finding, together with the knowledge that children spend a lot of time online unsupervised by adults (ICMEC, 2017), suggests that grooming significant adults or grooming the environment (Craven, Brown & Gilchrist, 2006) is redundant in online grooming.

### **Limitations and future research**

The present study analyzed court documents from cases of OCSA. While this type of data is one of the strengths of the study (due to including real child victims), it also entails some limitations that need to be addressed. First, court documents only reflect what was brought up at the court hearing and subsequently deemed relevant enough to be included in the written verdict. This means that a lot of information about the case is not included, leading to a possible bias in the reported data. Of relevance for the current study, this bias is likely expressed as an underreporting of certain offender behaviors. It can be assumed that a judge is more likely to include an offender's use of pressuring strategies in the written verdict than an offender making small talk about everyday things with the child, because the first behavior (pressuring the child) is more likely to affect the legal decision than the latter (building a relationship with the child). What this means for our data is that there is a possible underreporting of relationship-building strategies in our data, whereas the volume of pressuring strategies reported is probably reasonably accurate.

Second, the study is based on the small percentage of OCSA cases that are brought to the attention of the authorities, and moreover result in a prosecution. It may be that cases

including more forceful strategies are more likely to be reported to the police, thus resulting in a bias in the data. The findings from this study might thus not be generalizable to all interactions between offenders and children.

In contrast to previous research, the present study identified pressure as a very common strategy. This finding needs to be replicated with larger samples and different methods. Due to the cases including children, it is difficult – for ethical reasons – to access the transcripts from their online contact in full (in comparison to conversations between offenders and decoys that are uploaded to the PJF website for everyone to access). It would, however, be advisable for future studies to do their utmost to access such material, as it would provide invaluable information about the interactions in these cases.

### **Conclusions and practical implications**

In summary, the results from Swedish court documents show that online offenders often use pressuring strategies. In contrast to most previous research, the present study investigated cases with real child victims. The fact that our results differ from previous results indicates that offenders' interactions with real children differ from those with decoys.

The results from the present study confirm previous research showing that some grooming strategies also apply to online offending. Moreover, the fact that the vast majority of the offenders in this study did not meet and abuse the children offline challenges the common assumption that online grooming tends to culminate in an offline meeting. This emphasizes the importance of the judiciary viewing the sexual activity that offenders incite children to perform online as severe and criminal, and not only as a precursor to offline abuse.

Altogether, the present study has contributed to narrowing the knowledge gap on offender strategies in interactions with real children. This, in turn, has broadened our view of offender strategies, as well as highlighting the importance of not taking too uniform a view of



sexual abuse conducted online. The findings may have implications for how we can understand, detect, and prevent OCSA.

Gaining a better understanding of OCSA has the potential to inform current approaches to policies and prevention (Kloess et al., 2019) and may assist in the development of effective intervention programs. Increased awareness of the strategies that online offenders might employ can be used to provide guidance to children on how to use the internet safely. It may also make it possible to identify potential online offenders before the contact has evolved into an abuse situation.

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**Table 1.** Descriptive statistics about each offender. Information about personal characteristics, victim characteristics and abuse characteristic, divided up by strategy.

Strategies used <sup>a</sup>	Offender characteristics			Victim and abuse characteristics				
	ID	Age <sup>c</sup>	Criminal record <sup>d</sup>	No of online victims	Gender	Age <sup>c</sup>	Duration of sexual abuse <sup>f</sup>	Abuse place <sup>g</sup>
Theme 1	3	18	No	1	f	16	182 days	On
Theme 1	10	69	No	1	f	14	678 days	On
Theme 1	12	30	Yes, SO	4 <sup>e</sup>	f	13-17	14-213 days	On/off
Theme 1	14	28	Yes, SO & NSO	1	f	13	8 days	On/off
Theme 1	15	25	Yes, SO & NSO	2	m	No info	61 days	On
Theme 1	26	16	No info	2	f	15	2-3 days	On
Theme 1	27	27	No	1 <sup>e</sup>	f	13	234 days	On/off
Theme 1	30	26	No info	1	f	12	37 days	On/off
Theme 1	34	16	No info	2	f	13	133-134 days	On/off
Theme 1	35	17	No	3	2 f, 1 m	11-13	1-350 days	On
Theme 1	39	23	No	2 <sup>e</sup>	f	11-14	48-1461 days	On
Theme 1	40	17	No info	2	f	12-13	5-97 days	On
Theme 1	47	39	Yes, SO & NSO	26 <sup>e</sup>	f	11-15	1-174 days	On
Themes 1 & 2	8	22	No	1	f	13	8 days	On
Themes 1 & 2	18	32	No	2	f	12-13	35 days	On
Themes 1 & 2	31	47	No	3 <sup>e</sup>	f	13-14	5-213 days	On/off
Themes 1 & 2	37	23	No info	7 <sup>e</sup>	m	10-13	1-466 days	On/off
Themes 1 & 2	49	45	No info	4	2 f, 2 m	13-14	1-116 days	On/off
Theme 2	32	35	Yes, SO	19 <sup>e</sup>	18 f, 1 m	7-13	1 day	On
Theme 2	4	63	No	1	f	13	225 days	On/off
Theme 2	11	51	No	1	f	14	199 days	On/off
Theme 2	20	65	No	1	f	14	27 days	On
Theme 2	22	41	No info	1	f	12	30 days	On
Theme 2	24	17	No	1	f	13	103 days	On/off
Theme 2	25	51	Yes, NSO	1	f	14	137 days	On
Theme 2	48	49	Yes, SO	1	m	12	107 days	On
Uncategorized <sup>b</sup>	16	43	Yes, SO	5	4 f, 1 m	10-14	1-38 days	On
Uncategorized <sup>b</sup>	23	51	No	1	f	14	1 day	On
No info	1	41	No info	1	f	No info	110 days	On
No info	2	62	No info	1	f	13	30 days	On/off
No info	5	20	Yes, SO	1	f	No info	1 day	On
No info	6	43	Yes, SO	1 <sup>e</sup>	f	14	532 days	On
No info	7	21	Yes, SO	1	f	12	57 days	On/off

No info	9	56	No	1	f	12	1 day	On
No info	13	18	No	1 <sup>e</sup>	f	No info	2 days	On
No info	17	20	Yes, SO	1 <sup>e</sup>	f	13	50 days	On
No info	19	24	No	3 <sup>e</sup>	f	13	122-353 days	On
No info	21	27	No	1 <sup>e</sup>	f	13	35 days	On/off
No info	28	54	No	1	f	No info	22 days	On
No info	29	38	No	1 <sup>e</sup>	f	12	244 days	On/off
No info	33	22	Yes, NSO	2	No info	No info	19-26 days	On
No info	36	19	Yes, SO	1	f	No info	123 days	On
No info	38	45	Yes, NSO	1	f	13	1 day	On
No info	41	20	No	1	f	14	220 days	On/off
No info	42	45	No info	1	f	16	2 days	On/off
No info	43	17	No info	1 <sup>e</sup>	f	No info	98 days	On
No info	44	29	No info	1	f	12	1 day	On
No info	45	29	No info	1	f	No info	5 days	On
No info	46	44	Yes, SO	1 <sup>e</sup>	No info	No info	39 days	On
No info	50	20	No info	1	f	14	6 days	On/off

<sup>a</sup> Strategies used by the offender as described in the thematic analysis. Theme 1 = Pressuring the child, Theme 2 = Building a relationship with the child.

<sup>b</sup> These descriptions included information about the contact between the offender and the child that did not fit into any of the themes (e.g. “Initiated a conversation. After a while into the conversation, ‘Send pictures of your mouse [female genitals].’”).

<sup>c</sup> Age at the time of the (first) sexual abuse.

<sup>d</sup> Previously convicted of a sexual offense (SO; e.g. rape, rape of a child, sexual molestation, possession of child pornography, or sexual coercion), a non-sexual offense (NSO; e.g. unlawful threat, unlawful coercion, or traffic offense), or both.

<sup>e</sup> These offenders were additionally charged in the current court case with offline sexual abuse against complainants ( $n = 1-11$ ) not included in this study (due to no offense being conducted online).

<sup>f</sup> Number of days from first occasion of sexual abuse until last occasion of sexual abuse.

<sup>g</sup> If the offender sexually abused the child/children included in this study online (On) or both online and offline (On/off).

**Table 2.** Themes and subthemes of the strategies used by the offenders when targeting children for online sexual abuse.

Themes	Subthemes	No of children per theme <sup>b</sup>	No of children per sub-theme <sup>c</sup>
<b>Pressuring the child</b>	Using threats	56	38
	Using bribes		14
	Repeatedly nagging		9
<b>Building a relationship with the child</b>	Using flattery	25	14
	Posing as a friend		8
	Expressing love		6
<b>Uncategorized</b> <sup>a</sup>		5	

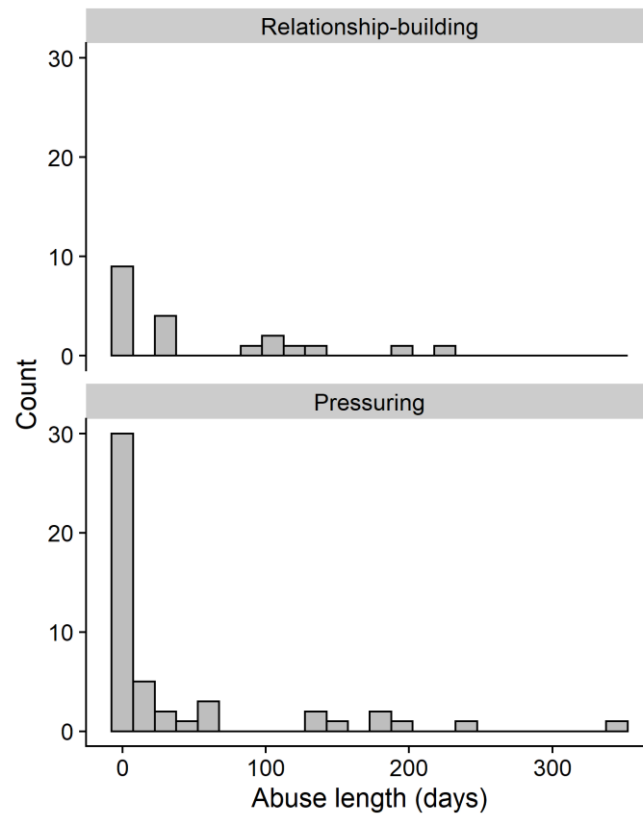
*Note:* The themes are based on the 81 cases (66.4% of all cases in the study) that included some kind of description of the contact between the offender and child.

<sup>a</sup> These descriptions included information about the contact between the offender and the child that did not fit into any of the themes (e.g. “Initiated a conversation. After a while into the conversation “send pictures of your mouse [female genitals]” or “not threat or coercion”).

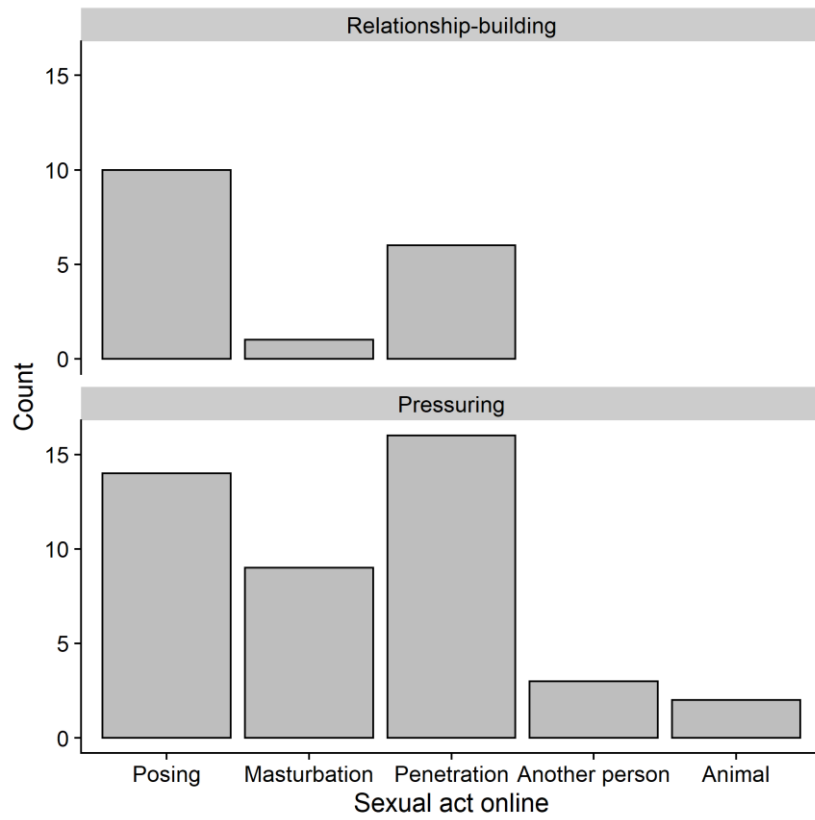
<sup>b</sup> Five children were subjected to both the pressuring and the relationship-building strategy.

<sup>c</sup> A child could be subjected to more than one of the sub-themes.





*Figure 1.* Number of days between the first and the last occasion of sexual abuse, divided up by strategy. Note: Two cases in the pressuring strategy (679 days and 1461 days) have been removed to avoid excessive length of the x-axis.



*Figure 2.* The most serious kind of sexual act that the child was incited to perform online, divided up by strategy.

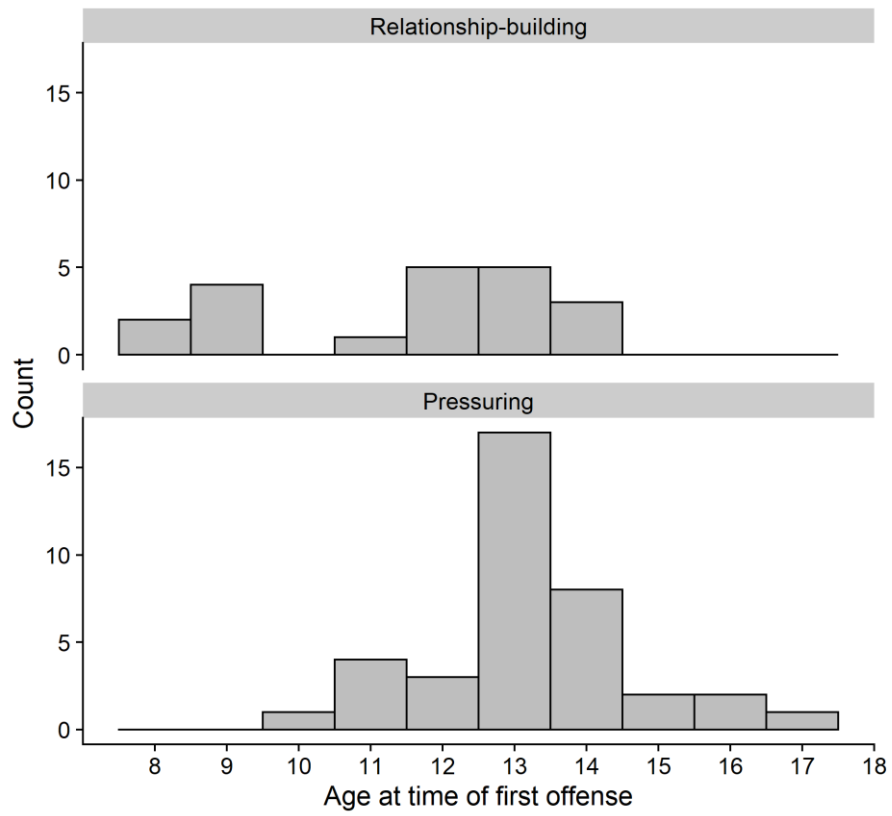
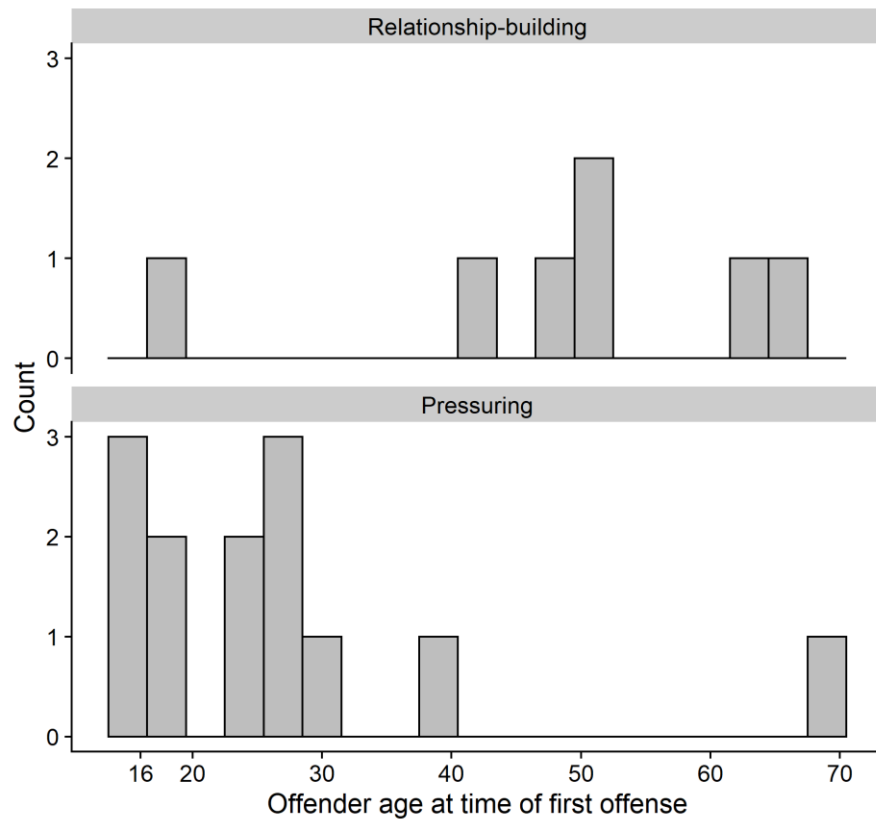


Figure 3. Age of the child at the time of the (first) offense, divided up by strategy.



*Figure 4.* Age of the offender at the time of the (first) offense, divided up by strategy.

**Experiences and Psychological Health Among Children Exposed to Online Child  
Sexual Abuse – a Mixed Methods Study of Court Verdicts**

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MANUSCRIPT IN PRESS IN  
*Psychology, Crime and Law*

Authors' Note

This work was supported by the Swedish Crime Victim Compensation and Support Authority under grant [08983/2016]. The study was pre-registered on Open Science Framework, see [https://osf.io/dcjgs/?view\\_only=e0308662a9814ab7a4dbd560dd1acdc5](https://osf.io/dcjgs/?view_only=e0308662a9814ab7a4dbd560dd1acdc5). A portion of this research was presented at the 29<sup>th</sup> International Congress of Applied Psychology (ICAP) and the annual conference of the European Association of Psychology and Law (EAPL) in June 2018. Declarations of interest: none.

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Acknowledgements

This work was supported by a grant from the Swedish Crime Victim Compensation and Support Authority [08983/2016]. The authors would like to express their gratitude to Jennifer Stråle for her assistance with data collection and coding.

### Abstract

Cases of online child sexual abuse (OCSA) are increasing dramatically in number, but research on this relatively new type of crime and its psychological consequences is limited, leading to major challenges for the judiciary. The present mixed methods study investigated 98 legal cases of OCSA (children aged 7-17 years,  $M = 12.3$ ,  $SD=1.92$ ) in Swedish District Courts to see if and how children's experiences and psychological health were described in the written verdicts. The results revealed that the children's psychological health was mentioned in less than half (48.0%) of the cases. Thematic analyses identified several potential vulnerability factors (e.g. poor psychological health, low self-esteem, loneliness) and several potential psychological consequences (e.g. psychological suffering, self-harming and/or suicidal behavior, internalized self-loathing, impaired relationships) among the children, all of which were similar to what research has shown among victims of offline CSA. The sexual abuse situation was often perceived as threatening, and many children felt that they had no other choice than to comply. In addition, the sexually abusive act was depicted as distressing and sometimes painful. In light of these findings, we suggest that OCSA should not be viewed as essentially different or less severe than offline CSA.

*Keywords:* online child sexual abuse, psychological consequences, children's experiences, court verdicts

## **Experiences and Psychological Health Among Children Exposed to Online Child Sexual Abuse – a Mixed Methods Study of Court Verdicts**

It has long been established that being sexually abused as a child might have severe consequences for the victim (Maniglio, 2009). Digital technology, however, has enabled a new kind of online child sexual abuse (OCSA) that is currently understudied (Wolak, Finkelhor, Walsh, & Treitman, 2017), and to some extent underestimated (Hamilton-Giachritsis, Hanson, Whittle, & Beech, 2017). Professionals who work in the field of sexual abuse may view OCSA as causing the victim less psychological harm, and thus being of less immediate concern compared to offline abuse (Hamilton-Giachritsis et al., 2017). In the legal context, it has not been considered equally violating to be subjected to online, compared to offline, offenses (Net, 2015; B 11734-17). Consequently, victims of OCSA have reported that their abusive experiences are being minimized (Hamilton-Giachritsis et al., 2017). In contrast, a recent study (Jonsson & Svedin, 2017) showed that adolescents with experience of OCSA reported similar levels of post-traumatic stress symptoms to adolescents who had experienced penetrative sexual abuse offline. In addition, when sexual abuse is conducted online, pictures or videos often exist that risk being disseminated. The dissemination of these abusive pictures has, in turn, been shown to correlate with the children's trauma symptoms (Jonsson & Svedin, 2017).

OCSA consists of a wide range of crimes, from having sexual conversations with children, downloading or distributing child sexual abuse images, ordering someone to perform a sexual assault on a child in front of a webcam for the person to watch, or grooming a child with the intention of performing an offline offense later on, to inciting a child to pose naked or perform sexual acts via photo, video or live webcam. In the current study, we will focus on the latter as this type of abuse is increasing dramatically (BRÅ, 2019), but has thus far received limited attention in the research literature (Palmer, 2015).

To date, there is a lack of prevalence studies on the topic. In a Swedish study from 2007 (BRÅ, 2007), 30% of 14- to 15-year-old children (48% of the girls and 18% of the boys) reported that unknown adults had contacted them online and made suggestions of a sexual nature during the last year. A recent Swedish study of 1653 highschool students showed that 35.7% of the girls and 10% of the boys had experienced pressure to send nude or semi-nude pictures (Burén & Lunde, 2018). In addition, although police reports are limited in their representation of the true prevalence, police data can provide an indication of the extensiveness of OCSA and its development. In Sweden, the number of police reports regarding exploitation of children for sexual posing (The Swedish Penal Code, Chapter 6, Paragraph 8) has increased by 1151% between 2008 and 2018 (BRÅ, 2019). The UK reported a 42-49% annual increase in the rate of online sexual abuse in recent years (Bentley, Burrows, Hafizi, Kumari, Mussen, O'Hagan, & Peppiate, 2019). Alarming, victims of OCSA seem to be growing dramatically in number as a group (Palmer, 2015), and this is evidently a group of abused children in need of extensive attention.

Previous research on OCSA has focused on sexual solicitation (i.e., unwanted sexual contact online, e.g., Mitchell, Finkelhor, & Wolak, 2007), online grooming with the intent to meet offline (e.g., Kloess, Beech, & Harkins, 2014), sextortion (i.e., using threats to expose a sexual image in order to make a person do something, e.g., Wolak & Finkelhor, 2016), and the production or distribution of child sexual abuse images (e.g., Gewirtz-Meydan, Walsh, Wolak, & Finkelhor, 2018; Quayle & Jones, 2011). Much of previous research has also asserted that the goal for online perpetrators is to arrange an offline meeting with the child. This assumption, however, ignores the fact that not all online perpetrators aim for an offline meeting (see e.g. Briggs, Simon & Simonsen, 2011), and disregards the sexual acts that children can be incited to perform online. This paper will therefore focus on a different aspect of OCSA that has previously received little research attention (Palmer, 2015). That is, OCSA in which the child



is incited to participate actively in the abuse, for instance by producing nude or semi-nude pictures or performing sexual acts live in front of a webcam. The fact that the child can be perceived as participating in the abuse contributes to the risk of being blamed (Hamilton-Giachritsis et al., 2017). This adds to the importance of further investigating this type of OCSA. To date, knowledge and understanding is limited. By analyzing court verdicts using an explorative approach, we set out to investigate what kinds of sexual acts children are incited to perform online, and how the courts describe the victim's experiences and psychological health.

### **Online child sexual abuse – a challenge for the judiciary**

Contrary to the common belief that OCSA has less of an adverse impact on the victim, the involvement of technology might complicate the impact of the abuse (Hamilton-Giachritsis et al., 2017). First, children have constant access to the internet via their smartphones. For example, in Sweden it is estimated that 85% of all 9- to 12-year-olds and 97% of all 13- to 18-year-olds have their own smartphone (Swedish Media Council, 2017). In the UK, the numbers are 35% of all 8- to 11-year-olds and 83% of all 12- to 15-year-olds (Ofcom, 2018). Thus, children are constantly accessible to potential perpetrators. Places that could normally be considered 'safe zones', for example the classroom, buses, and the bedroom (depending on who the perpetrator is), are not protected (Jonsson, Warfvinge, & Banck, 2009). Second, the child's own involvement in, or their initiative for, sexual contact may increase their feelings of shame and guilt (Jonsson & Svedin, 2017). Third, OCSA is conducted via electronic means and thus often includes pictures and/or videos of the abuse. The risk of these pictures being spread over the internet, a place where pictures never cease to exist, may add to their trauma (Leonard, 2010). Indeed, if pictures of the child are disseminated it is possible for unknown perpetrators all over the world to access pictures of the abuse for an unlimited time. It is probable that this lack of closure will complicate the recovery process. Victims who have pictures of their abuse disseminated online thus face the psychological pressure not only of

processing the trauma of the experienced abuse, but also of developing coping strategies to deal with the possible ongoing dissemination (Gewirtz-Meydan et al., 2018; Leonard, 2010). In support of this notion, research has shown that children who know that pictures of their abuse exist, and children who have had their abusive pictures disseminated, report higher levels of post-traumatic stress symptoms than children exposed to undocumented CSA (Jonsson & Svedin, 2017). A tragic real life example of this is the case of a 15-year-old Canadian girl (Houlihan & Weinstein, 2014), who by the age of 11 was pressured into showing her breasts to a stranger online via her webcam. The stranger did not stop here, but blackmailed the girl and sent the explicit photo of her to all her Facebook friends, which resulted in the girl being bullied at school. To escape the harassment she relocated to a new school, but the online stranger followed her every step and disseminated the picture to the girl's new classmates. History repeated itself and the girl changed school again and again, until she could not cope anymore and committed suicide. The stranger – a 36-year-old Dutch man – was sentenced to ten years in prison, and the case received widespread international media coverage as it shed light on the seriousness of online crimes.

According to the Convention on the Rights of the Child (ratified by 196 countries; Sweden ratified it in 1990, and it will become Swedish law in 2020), countries are obliged to protect children against all kinds of sexual abuse (Art. 34, Unicef, 1989). However, as technology advances, the legislation is falling behind and most countries lack explicit laws that criminalize online sexually abusive acts (ICMEC, 2017). Arguably, victims of OCSA are not legally protected in the same way as victims of offline CSA (Net, 2015). One obvious difference between online and offline CSA is the person who performs the physical act of touching. In offline sexual abuse, the perpetrators can fondle or penetrate the victims (e.g., Finkelhor, Hotaling, Lewis, & Smith, 1990), whereas in online sexual abuse the perpetrators might incite the victims to perform these actions on themselves. This might be an important

distinction when legally evaluating these crimes (The Swedish Prosecution Authority, 2016), and so far there is uncertainty about how these cases should be judged.

### **Sweden's legal response to OCSA**

The current study is based on Swedish court verdicts; hence, an introduction to the Swedish legal system and sex crime legislation is necessary. In Sweden, cases of sexual abuse (like all criminal cases) are handled in general courts: the District Court (first level), the Court of Appeal (second level), and the Supreme Court (third and last level). If the complainant or the defendant is not satisfied with the ruling in a lower court, they have the right to appeal to a higher court. However, the Supreme Court only raises cases for review in a small fraction of all appeals and only if there is a need for precedents in the specific area (The Swedish Code of Judicial Procedure, Chapter 54, Paragraph 10). All courts produce written verdicts in which they state the reasons for their ruling and include relevant information that formed the basis for judicial decisions (Swedish Code of Judicial Procedure, Chapter 30, Paragraph 5). Such information often include a description of the testimonial, documentary, or tangible evidence presented in court as well as information about the police investigation, the criminal actions and the complainant's injuries and suffering.

The current Swedish sex crime legislation is not specifically adapted for online crimes. Instead, the general sex crime legislation (The Swedish Penal Code, Chapter 6, Paragraph 8) is applied to all sorts of sexual abuse, regardless of whether it has been conducted online or offline. In the Swedish legislation, the level of sexual violation should be the focus when deciding under which classification to prosecute a crime (Prop. 2004/05:45). Consequently, prosecutors must evaluate whether being forced to perform sexual acts on oneself (which often is the case in OCSA) should be viewed as equally violating as being physically sexually abused by someone else. Previous legal practice has not considered OCSA to be equally serious (Net, 2015; B 11734-17), and charges with lower penal values have been used in cases of OCSA.

The charge, together with the perceived degree of violation, is what damages are based on (The Swedish Crime Victim Compensation and Support Authority, 2017). Also, the charge determines which legal coercive measures can be used. This, in turn, might affect the possibility of conducting a successful investigation that can lead to a conviction.

In conclusion, OCSA is often viewed as less serious than offline CSA (e.g. Hamilton-Giachritsis et al., 2017). New research, however, indicates the opposite (e.g. Jonsson, Fredlund, Priebe, Wadsby & Svedin, 2019), which makes it imperative to investigate a) what sexual actions children are incited to perform online, b) how these acts affect the children's psychological health, and c) how the legal system treats these cases and the children's victimization.

### **Aim and research questions**

By analyzing court verdicts from cases of OCSA in which children (in this article defined as individuals under the age of 18) were incited to produce nude or semi-nude pictures or perform sexual acts online, the current study aimed to answer the following research questions:

- I) How were the age and gender of the child related to a) the location of the abuse, b) repeated abuse, and c) the type of sexual act?
- II) What sexual acts were the children incited to perform online?
- III) How were the child's experiences described in the verdicts?
- IV) How was the child's psychological health described in the verdicts?
- V) Was the child's psychological health and experiences described in the verdicts?

### **Method**

#### **Design**

This study used a secondary study design, as it analyzed existing data in the form of written court verdicts. Secondary sources were judged to represent the best data in relation to

the aims of this study, as they provide information about real cases of OCSA, which can otherwise be difficult to obtain due to the sensitive nature of these cases. The court verdicts are written by judges after the court hearing. As court hearings can last for several days, a lot of information about the case must be left out to give room for the most relevant parts. The court verdicts can, thus, provide an insight to which aspects of OCSA and its victims that are considered important. Due to the explorative and descriptive approach of this study, we did not have any hypotheses. We analyzed the material using a mixed methods approach, in which the qualitative analyses constituted the main part, and the quantitative analyses were used to provide a context.

### **Data collection**

**Source of data.** The main source of data for this study was written verdicts from cases of OCSA in which children had been incited to perform sexual acts or sexual posing online. The inclusion criteria were as follows: I) issued during 2017, II) including the charge ‘exploitation of children for sexual posing’, III) the verdict had to include at least one *online* offense, and IV) the child had to be aware of the abuse (which for example excluded acts involving a victim being photographed while sleeping). The charge ‘exploitation of children for sexual posing’ is a non-contact offense where the perpetrator uses solicitation to incite a child to pose sexually (The Swedish Penal Code, Chapter 6, Paragraph 8). The crime can be conducted both online and offline. We chose to use this charge as an inclusion criterion, because when a child is incited to perform sexual acts in front of a camera, the production of the picture leads to it falling under this classification. Thus, this charge is used in most cases of OCSA. This data set is part of a larger research project, investigating OCSA from a victim and an offender perspective. Due to the focus on victims in the current study, one additional inclusion criterion was added: V) the OCSA was carried out and completed. Thus, all cases of

*attempted* exploitation of children for sexual purposes (which constitute a crime according to the Swedish Penal code, Chapter 6, Paragraph 8) were excluded from the current study.

**Document search.** This study analyzed written court verdicts for OCSA cases issued in a Swedish District Court between January 1 and December 31, 2017. If a case had a subsequent verdict from any of the higher courts, it was included in the data set. Due to time constraints, however, the date of the last search for subsequent verdicts was set to May 1, 2018. After this date, one additional subsequent Court of Appeal verdict had been released. Our data set, thus, includes *all* cases of exploitation of children for sexual posing conducted online from Swedish District Courts, and *all except one* subsequent Court of Appeal verdict during this one-year period. The cases represented 24 of Sweden's 48 District Courts, and five of Sweden's six Courts of Appeal. The written verdicts varied greatly in terms of length (from 6 to 250 pages,  $M = 36$  pages) and level of details (from not mentioning the gender or age of the child to including thorough descriptions of the child and extracts from chat logs).

The data collection process involved four stages. In stage one, the first author and a research assistant searched the Karnov database, applying criteria I and II. Karnov is a legal database that includes all written verdicts, issued in 2013 or later, from Swedish District Courts, Courts of Appeal, and the Supreme Court. They performed this procedure twice in order not to miss any relevant written verdicts. This search resulted in 99 hits, of which a first screening identified 66 of the verdicts as meeting inclusion criteria I and II. In the second stage, the first author and a research assistant thoroughly read the selected 66 verdicts against criteria III and IV. Through this process they excluded thirteen verdicts because no crime was conducted online, and three verdicts because the children were unaware of being abused (in one verdict the child was asleep, and in the other two the children were under the age of three). In total, 50 written verdicts (including 122 children) from Swedish District Courts met these inclusion criteria. In stage three, the first author and a research assistant searched for subsequent Court

of Appeal or Supreme Court verdicts pertaining to the cases included in the study. Sixteen of the 50 included verdicts were tried in a Court of Appeal and these verdicts were thus added to the material. For the relevant cases, verdicts from the District Court and the Court of Appeal were combined and instances thereafter treated as one entity. None of the current cases was tried in the Supreme court. In stage four, criteria V was applied, excluding the 24 cases of *attempted* abuse (e.g. a defendant asking for pictures but the child refusing). In total, 98 cases (39 defendants targeting 98 children) were included in the following analyses (see Figure 1 in supplementary material for flow chart).

**Coding manual.** We created a coding manual aimed at extracting both qualitative and quantitative variables from the written verdicts. As a basis for the coding manual, we used a set of variables identical to the one used in the study by Ernberg, Magnusson, Landström, and Tidefors (2018), investigating court cases of CSA among preschoolers (e.g., charges, legal outcome, age of defendant). In addition, variables specified for OCSA (e.g., Did the child also meet the defendant offline? What kind of actions was the child incited to perform?) and for the specific purpose of this study (e.g., How was the child's psychological health described in the verdicts?) were added. To further develop the first draft of the manual, 16 randomly (i.e. non-systematically) selected written verdicts from years prior to 2017 were coded but not included in the final analysis. By using this data-driven method, old variables could be refined, and new variables could be added, based on what was found in the verdicts. The procedure worked as follows: First, the first author randomly selected and coded seven verdicts to refine and create new variables. Second, the three first authors discussed the revised coding manual. Subsequently, the first author and a research assistant together coded an additional nine verdicts. Fourth, a second draft of the revised manual was created with new and refined variables. The written verdicts used so far in the creation of the coding manual were not included in the study material, but solely used in the creation of the manual. The fifth, and last,

step, however, was conducted on the actual data material. The first author and a research assistant separately coded verdicts and cross-compared the two coding documents. This procedure was repeated three times (on a total of 21 verdicts) until both consensus and saturation were reached. The finalized coding manual contained 103 quantitative and 16 qualitative variables (49 variables copied from the coding manual by Ernberg et al. 2018, and 70 variables added through the aforementioned procedure) and can be found on [osf.io/BLANK](https://osf.io/BLANK) FOR REVIEW.

**Inter-rater agreement.** To calculate the level of coder agreement, 20% ( $n = 25$ ) of the cases, selected at random using a random generator, were coded by the first author and a research assistant separately. Subsequently, the codings were compared. Agreement for each variable was coded as either 1 (coders agree) or 0 (coders disagree). The inter-rater agreement was calculated as the number of agreements divided by the number of possible agreements (i.e., number of variables). The total inter-rater agreement for the relevant variables in this study was 0.95.

## Measures

**Quantitative measures.** Five quantitative measures applied to research question I. The first variable was *Location of sexual abuse*. Children who were subjected to online sexual abuse only were coded as 0 and children who were subjected to both online and offline sexual abuse were coded as 1. The second variable was *Type of online act* and described the most serious type of sexual act that the child had been incited to perform. Being incited to pose sexually was coded as 0, and being incited to perform any physical act (such as masturbation or penetration, or to perform such acts on another person or an animal) was coded as 1. The third variable was *Repeated online abuse*. Due to the lack of information in the verdicts, it was not possible to create a continuous scale. Instead, this variable was also dichotomous. Children who were abused on a single occasion were coded as 0, and children who were abused on repeated



occasions were coded as 1. The last two variables were *Child gender* (0 = girl, 1 = boy) and *Child age* (continuous). The quantitative variable *Mentioned* (0 = no, 1 = yes) applied to research question V.

**Qualitative measures.** The qualitative measure applying to research question II was *online sexual act*, which included all information from the written verdict describing the sexual acts that the children had been incited to perform. The variable of main interest to the current study, applying to research questions III and IV, was *mentions of the child's psychological health*, in which all information from the written verdicts concerning the psychological health of the child was gathered in full sentences.

The written verdicts reflect what was brought up at the court hearing, and are thus summaries of the children's and other witnesses' testimonies. For instance, the information about the children's psychological health was therefore not always direct quotations from the children themselves, but summaries of what they or other witnesses had reported. This could be phrased as 'It appears from her stories that she felt very bad' or 'The plaintiff's mother has said that the plaintiff has had problems with her sleep'. Other descriptions were summaries of what was shown in the technical evidence (e.g., videos of the abuse), such as 'It is evident from the video that X is sad and afraid when she performs the acts'.

## **Data analysis**

**Quantitative data analysis.** Research questions I and V were analyzed using IBM SPSS Statistics for Windows, Version 25.0. In order to answer research question I, we conducted binary logistic regression analyses. Binary logistic regression is a linear model in which a categorical variable (e.g. Location of abuse) with two outcomes (e.g. Online vs Online and offline) is predicted by a linear combination of one or more predictor variables (e.g. Age of the child, Field, 2018). In order to answer research question V, we used descriptive statistics (in this case percentage counts).

**Qualitative data analysis.** The qualitative information regarding the online sexual acts that the children were incited to perform (research question II) were organized into different kinds of actions. The different kinds of actions (sexual posing, masturbation, penetration and including other people or animals) were summarized and presented to provide a descriptive account of the online sexual abuse.

The qualitative information regarding what was mentioned about the psychological health of the child (research questions III and IV) was divided into three groups: psychological health of the child i) before the abuse and ii) after the abuse, and iii) how the child experienced the abuse situation. The groups were analyzed separately but according to the same procedure, using thematic analysis. Thematic analysis is a method for identifying, analyzing and reporting patterns within data (Braun & Clarke, 2006, p. 79), and Braun and Clarke proposed a six-step guide to doing so. They emphasize that the analytical procedure involves a constant moving back and forth between the different steps, which include familiarization with data, generating initial codes, searching for themes, reviewing themes, defining and naming themes and producing the report. Our procedure was similar to the one proposed by Braun & Clarke (2006). First, the first author thoroughly read the material several times and then used a data-driven (inductive) approach to code the material semantically. Second, the first author systematically coded the entire dataset and generated initial codes. Third, the first author organized the initial codes into different themes. The themes were then discussed, compared to the original quotations, and named by the first and second authors. After further revision and discussion between the first and the last author, the themes were renamed. All four authors approved the final draft. After the themes had been established, the first author conducted a systematic quantification of the frequency of the different themes within the two groups (i.e. Online CSA only and Online/offline CSA) to enable frequency comparisons. All quotations were translated into English and have been slightly edited (e.g. adding commas and punctuation, but in no way

altering the original meaning) to facilitate reading, and to avoid possible identification of the children.

### **Ethical considerations**

The study was pre-registered on Open Science Framework: [osf.io/BLANK FOR REVIEW](https://osf.io/BLANK FOR REVIEW). Due to the sensitive topic of the current study, thorough ethical considerations had to be made. Written verdicts from Swedish Courts are public records. In cases of sexual abuse, all personal information (name, social security number, address, etc.) regarding the complainant is classified in the documents. However, the verdicts do contain personal information about the defendant (e.g., name, social security number). All such information, together with any other identifiable markers, was omitted during the coding process. Thus, no identifiable information can be found in the documents used in this research project. The number assigned to each child and offender in the result section are non-systematically selected and used only for administrative purposes. The reason for including the numbers in the result section is to be transparent about the fact that the quotations are derived from a number of different cases. Furthermore, all quotations have been translated and all identifiable markers have been excluded to avoid possible identification of the children. The project has been approved by the Regional Ethical Review Board in (BLANK FOR REVIEW).

## **Results**

### **Case characteristics**

To provide a background understanding of the nature of the OCSA cases analyzed in this study, we here present some descriptive characteristics. The final material involved 39 male defendants aged 16 to 69 ( $M = 35.0$   $SD = 15.8$ ) and 98 child complainants, primarily girls (86.7% girls, 12.2% boys, 1.0% no information), between 7 and 17 years old ( $M = 12.3$ ,  $SD = 1.92$ ) at the time of the (first) sexual abuse. For a more detailed description of all the cases, see Table 1.

All 98 children were subjected to OCSA. In addition, 17 of the children (17.3%) also met their defendant offline and were subjected to physical sexual abuse (76.5% [ $n = 13$ ] penetrative abuse, 23.5% [ $n = 4$ ] fondling). All 98 cases are of interest in this study (since all 98 children had been exposed to OCSA), but for clarity we divided them into two groups: children exposed to online sexual abuse only ( $n = 81$  henceforth referred to as *Online CSA only*), and children exposed to both online and offline sexual abuse ( $n = 17$ , henceforth referred to as *Online/offline CSA*). See columns two and three in Table 1 for descriptions of the two groups.

Since the online acts that the children performed varied significantly and some of the children were also subjected to offline sexual abuse, the cases could include additional charges besides exploitation of children for sexual posing (The Swedish Penal Code, Chapter 6, Paragraph 8). For instance, sexual molestation, sexual abuse of a child, rape of a child, sexual coercion, child pornography offense, purchase of sexual service, indecent sexual assault of a child, and grooming.

### **How were the age and gender of the child related to the characteristics of the abuse?**

The written verdicts yielded very little personal information about the children. Age and gender were often the only personal information available and were thus the variables used as independent variables in the following quantitative analyses. It should be noted that gender was not mentioned in one case and age was not mentioned in 19 cases. These cases were excluded from the relevant analyses (i.e. if age was not mentioned, the case was excluded from the analysis using age as the independent variable, and vice versa).

A series of binary logistic regression analyses with age and gender as the independent variables showed the following results. There was a significant association between the age of the child and the location of abuse,  $b = .64$ ,  $Wald(1) = 6.64$ ,  $p < .01$ ,  $OR = 1.90$  (95% CI: 1.17, 3.10), indicating that the likelihood of also being abused offline increased with increasing age.

A significant association between the age of the child and whether the child was abused on more than one occasion was also found,  $b = .48$ ,  $Wald(1) = 9.58$ ,  $p = .002$ ,  $OR = 1.62$  (95% CI: 1.19, 2.20). The odds ratio indicated that the older the child was at the time of the first abuse, the higher the likelihood of being subjected to repeated abuse. There was no significant association between the age of the child and the type of online act that the child was incited to perform,  $b = .22$ ,  $Wald(1) = 2.71$ ,  $p = .1$ ,  $OR = 1.24$  (95% CI: .96, 1.60). See Table 2 for full results. When using gender as a predictive variable in the aforementioned binary logistic regression analyses, none of the results turned out to be statistically significant, see Table 3.

### **What sexual acts were the children incited to perform online?**

A wide range of abusive situations were described in the verdicts under the umbrella term ‘OCSA’. The majority of the children in our study were incited to send sexualized or explicit photos or videos (nude or semi-nude, including the breasts, the genitals, or the buttocks), or to show the equivalent live in front of a webcam. More than a third were persuaded to perform sexual acts on themselves, such as masturbating or penetrating (orally, vaginally, or anally, with fingers or objects) and showing these acts via different means of electronic communication. A few children were coerced to perform sexual acts (e.g. oral sex) on another person (e.g. a younger sibling) or an animal live in front of a webcam. Most often, the perpetrator asked for unspecific pictures/videos (e.g., ‘send me a nude picture!’), but on a few occasions the perpetrator explicitly directed the child to send certain pictures/videos or perform certain acts (e.g. ‘send me a picture when your butt is red from spanking’ or ‘pull down your underwear, spread your legs and touch your vagina’). See Table 1 for frequencies.

### **How were the child’s experiences described?**

In 22.8% ( $n = 23$ ) of all cases, the children’s own experiences of the online sexual abuse were described. We divided the descriptions into two themes: i) how the children experienced the overall situation, and ii) how the children experienced the sexually abusive act.

**Experiences of the situation.** Included here are the descriptions of how the children experienced the overall situation of OCSA. We organized this theme into three subthemes: *Threatening situation*, *Feared that someone would find out*, and *Had no choice*. Each theme will be described briefly below. (See Table 4 for frequencies.)

***Threatening situation.*** In the written verdicts, it was described that many of the children perceived the situation as threatening. For some, the overall situation itself was intimidating enough to make them obey the wishes of the perpetrator: ‘She said that she did it because he asked her to, and that she was scared’ (Child 9, girl, 12 years old). For others, the perpetrator used explicit threats to incite them to perform certain acts:

From the video recording, it is obvious that the complainant perceived the situation as frightening. She states that he has been threatening her for three days and says ‘I am afraid of what you are going to make me do next time’ and ‘Basically you are raping me’ (Child 99, girl, 13 years old).

***Feared that someone would find out.*** For some children, it was described that the fear was instead related to the risk of other people discovering the sexual contact. Some of them feared that the perpetrator would tell people or start a rumor about them, while others ‘were afraid that the pictures would reach the public’ (Child 40, girl, 13 years old).

***Had no choice.*** The most common theme includes accounts that described the coercive nature of OCSA in different ways. In one case, the complainant explicitly stated in the video recording of the abuse that she ‘had no choice’ (Child 95, girl, age unknown). In most cases, however, this was based on the court’s interpretations from the video recordings, as in this example: ‘It is apparent from the films that B is forced to act according to the instructions that she receives via her headphones, and that she transfers this sense of force, as well as the instructions, to A’ (Child 96, girl 11 years old). In another case, it was described that ‘it is clear from the video that she does not act voluntarily. She shows pain and disgust in connection with several acts and begs him to let her stop’ (Child 111, girl, 14 years old).

**Experiences of the sexually abusive act.** This theme includes the descriptions of how the children experienced the sexual acts that they were incited to perform. We organized them into three subthemes: *It was physically painful*; *It was distressing* and *It was both good and bad*. Each subtheme will be described briefly. (For frequencies, see Table 4.)

*It was physically painful.* In four cases, the sexual acts that the children were incited to perform were described as physically painful. The written verdict could for instance include a summary of what could be seen in the video of the abuse: ‘The complainant says “It won’t go all the way”, “Can I use the smaller end?”, “It hurts” and “Do you want to see it in?”, while she is sobbing and making a whining sound’ (Child 104, girl, 14 years old). Another child described how she started bleeding when she penetrated herself (Child 97, girl, 13 years old).

*It was distressing.* This was the most extensive theme and was often manifested by descriptions of how the child cried in connection with performing the sexual act.

While she is [performing the sexual act] she starts to cry. She nevertheless continues the penetration, even though the crying increases and she says, “I don’t feel good”... She cries on several occasions, but still continues to do as she is told (Child 105, girl, age unknown).

It also included descriptions of internal feelings such as anxiety and disgust.

*It was both good and bad.* In contrast to the previous examples, it was mentioned that one child expressed ambivalent feelings about her experience: ‘It felt both exciting and unpleasant... At first it was a fun thing, but it became increasingly unpleasant’ (Child 44, girl, 13 years old).

### **How was the child’s psychological health described?**

In total, the children’s psychological health was mentioned in 48.0% ( $n = 47$ ) of all cases. The psychological health of the child was mentioned in 42.0% ( $n = 34$ ) of the cases of Online CSA only, compared to 76.5% ( $n = 13$ ) of the cases of Online/offline CSA. A chi-square test indicated that there was a significant association between the location of the abuse and whether the psychological health of the child was mentioned in the written verdict,  $\chi^2(1) =$

6.70,  $p < .009$ . The odds of the written verdict containing information about the child's psychological health were 4.50 times higher for victims of Online/offline CSA than for victims of Online CSA only, OR 4.50, 95% CI 1.35-14.98.

We divided the information about the child's psychological health into two groups: before the abuse (henceforth referred to as *potential vulnerability factors*) and after the abuse (henceforth referred to as *potential psychological consequences*).

**Potential vulnerability factors.** The children's psychological health prior to the abuse was mentioned in 16.3% ( $n = 16$ ) of the cases, and more often for Online/offline CSA (35.3%,  $n = 6$ ) compared to Online CSA only (12.3%,  $n = 10$ ),  $p = .03$ , Fisher's exact test. These potential vulnerability factors were organized into the following three themes using thematic analysis (Braun & Clarke, 2006): *Personal*, *Relational*, and *Behavioral*, together with six subthemes. Each theme will be described briefly below. For frequencies and comparisons between Online CSA only and Online/offline CSA, see Table 5.

***Personal.*** This theme includes the potential vulnerability factors that related to the child itself.

***Poor psychological health.*** This subtheme was the most comprehensive among the cases that mentioned psychological health pre-abuse. Psychological suffering was very briefly described in all cases, but indicated that the child was suffering psychologically before the abuse took place, such as: 'Before the contact with the accused started, she had already been in contact with the health care system due to her psychological health' (Child 40, girl, 13 years old).

***Intellectual disabilities.*** Three of the children were reported as having cognitive or intellectual impairments. One complainant did not attend a regular school due to her impairments: 'The complainant is in a class for people with special needs, she has some kind of intellectual disability' (Child 120, girl, 13 years old).



*Low self-esteem.* In some cases, the children were described as having contact with their perpetrator because they were seeking attention: ‘The accused has, in a ruthless way, used her loneliness and need for confirmation’ (Child 119, girl, 13 years old). In other cases, the children were described as having contact with their perpetrator because they suffered from low self-esteem and felt better as a result of the perpetrator’s appreciation.

***Relational.*** This theme includes the potential vulnerability factors that were associated with the child’s interpersonal relations.

*Loneliness.* Some children reportedly had no, or very few, friends. Their loneliness led them to search for someone to talk to online, and in some of these cases the perpetrator fulfilled the role of a listener: ‘She had asked her parents to be put in touch with a school counselor, but nothing happened. She needed someone to talk to. She shut herself in her room and used online chat apps’ (Child 9, girl, 12 years old).

*Stressful social environment.* The verdicts mentioned that four children described the time before the abuse as being tough in different ways. One child was bullied at school, two children went through ‘a rough period’, and a fourth child was described as having been ‘under a lot of pressure at school and involved in way too many clubs and associations in her spare time’ (Child 8, girl, 13 years old).

***Behavioral.*** This theme includes the potential vulnerability factors associated with the child’s behavior.

*Self-harming behavior.* It was reported that some children indirectly self-harmed in different ways. One child was involved in ongoing drug abuse, and another child self-harmed by initiating destructive relations with older men:

When she first came into contact with the accused, she was also in contact with several other men aged 20-30. She reached out to these men as part of a self-destructive pattern of behavior. The first conversation with the accused ended abruptly after her father found her with a cell phone. At this point, as a way of protecting her, she was not allowed to have a cell phone. Later

on, in October, she contacted all those whom she had previously had contact with, including the accused. At that time, she had left school and was hiding in her family's old house (Child 37, girl, 14 years old).

**Potential psychological consequences.** Overall, the children's psychological health post-abuse was mentioned in 29.6% ( $n = 29$ ) of all cases. Post-abuse psychological health was more frequently mentioned in Online/offline CSA (70.6%,  $n = 12$ ) compared to Online CSA only (21.0%,  $n = 17$ ),  $\chi^2(1) = 16.59$ ,  $p < .001$ , OR 9.04, 95% CI 2.80-29.18.

These potential psychological consequences were organized into the following four themes using thematic analysis: *Personal*, *Relational*, *School*, and *No problems*, together with eleven subthemes. Each theme will be described briefly below. See Table 6 for frequencies and comparisons between Online CSA only and Online/offline CSA.

***Personal.*** This theme includes the potential psychological consequences that relate to the child itself.

***Psychological suffering.*** This subtheme was the most frequent in the cases that mentioned the psychological health of the children post-abuse. Some cases were less informative: 'She has been feeling very bad about what happened' (Child 32, girl, 13 years old) or 'She has been seeing a child psychologist' (Child 7, girl, 12 years old), whereas others were more extensive:

She did not want to talk to anyone, because she was feeling so bad... After the police interview, she went to the juvenile reception to talk. Everything came back to her, she has not been able to let it go, she thinks about it every day (Child 12, girl, 13 years old).

What unites the quotations is that they all include information that demonstrates psychological suffering due to the abuse. The suffering ranged from descriptions of relatively mild suffering such as 'Afterwards he thought about what had happened and felt bad' (Child 74, boy, 13 years old) to descriptions about how the child developed psychological diagnoses. It was reported that one child 'developed a bulimic eating disorder (...) and has been seeing a

psychologist and received the diagnosis of post-traumatic stress symptoms' (Child 82, girl, 11 years old). Another child's psychological health was described as 'initially being heavily impaired with general depression and a variety of disorders (...) and she suffered traumatization as a consequence' (Child 10, girl, 14 years old).

*Self-harming and/or suicidal behavior.* It was illustrated in the verdicts that a few children developed destructive behaviors. One child self-harmed by 'tearing up wounds on her arms' (Child 8, girl 13 years old). A second child suffered suicidal thoughts, and a third reportedly 'at some point tried to commit suicide, she cut herself' (Child 40, girl, 13 years old).

*Sleeping problems.* Another way that the psychological consequences could manifest themselves was sleeping problems. This was described by quotations like 'the witness has said that the complainant has had problems with her sleep' (Child 88, girl, age unknown) or 'she still uses sleep medicine' (Child 37, girl, 14 years old).

*Internalized self-loathing.* The descriptions from some children indicated that their experiences of the abuse made them look at themselves differently. They evaluated themselves in the light of what they had been exposed to. The children could express this by saying that they felt worthless.

***Relational.*** This theme includes the potential psychological consequences that are associated with the child's interpersonal relations.

*Trust issues.* One way in which the abuse could affect interpersonal relations was by creating distrust in other people. This was evident in two of the children. One child was described as 'having problems trusting other people, especially men' (Child 82, girl, 11 years old). The other child reportedly expressed that she 'did not feel safe anywhere' (Child 119, girl, 13 years old).

*Impaired relationships.* For two children, it was mentioned that the aftermath of the abuse had affected the child's relationships with family members: 'The complainant and the

complainant's mother have a worse relationship now than before the event in question occurred' (Child 8, girl, 11 years old).

*Isolating oneself.* Two of the children tried to detach themselves from other people after the abuse. It was mentioned that one girl 'turned off her cellphone after the abuse and did not want to be contacted. She isolated herself' (Child 88, girl, age unknown).

*Fear of being alone.* In contrast, two of the children had difficulties being alone. One verdict stated that the child 'did not dare to do things on her own' (Child 8, girl, 13 years old) and the other verdict stated that the child 'could not manage to be alone so a family member accompanied her at school every day for four months, until she received a resource person at school' (Child 37, girl, 14 years old).

**School.** This theme includes the potential psychological consequences related to the child's schooling.

*Difficulties at school.* Several children were reportedly unable to attend school due to the psychological health problems they suffered after the abuse. Some children were absent from school on and off (e.g., 'only goes to school when she is able to', Child 43), whereas others had longer periods of non-attendance (e.g., 'because she is so distressed about this trial, she has taken leave of absence from school', Child 10). Other children managed to attend school but were described as having difficulties staying focused: 'All of this ruined the complainant's schooling. She would sit and cry when she was supposed to study' (Child 12, girl, 13 years old).

**No problems.** This theme includes the children for whom the verdict stated that they did not develop any psychological health problems after the abuse.

*No negative consequences.* From the descriptions in the verdict, one child was reportedly not negatively affected by the abuse. This girl reported that the sexual contact (both online and offline) was voluntary, and it was stated in the verdict that 'there is nothing to

suggest that the plaintiff was adversely affected by the sexual intercourse' (Child 86, girl, 14 years old), even though she was under the age of sexual consent.

### **Discussion**

This study aimed to further the knowledge about OCSA and how children's psychological health and experiences were described in court verdicts. The study showed that the court verdicts only mentioned the children's experiences and how the abuse had affected them in less than half of the verdicts, and often only briefly. Routinely evaluating the psychological health of the child in all cases of CSA would comply more closely with the requirements of the Convention on the Rights of the Child (Unicef, 1989), which states that every child has the right to express his or her voice in matters concerning them. It would also increase the victims' chances of receiving legal justice, as damages are based on whether the victim suffered psychological harm due to the offense. Furthermore, it was more common for the child's psychological health to be mentioned in cases of Online/offline CSA, compared to cases of Online CSA only. One possible explanation for this might be that the courts more often adduce the psychological health of the child in cases of offline CSA by default, because previous legal practice has stated that contact abuse must be considered more sexually violating than non-contact abuse (B 11734-17). Thus, children exposed to OCSA are not expected to suffer harm to the same extent, and their psychological health is therefore not considered as often. This would be problematic, as it would run the risk of overlooking the psychological suffering that victims of OCSA might experience.

Based on what was written in the verdicts, the study showed that OCSA seemed to be associated with a wide range of health-related consequences that might have serious effects on children's well-being. Many of these psychological consequences are similar to those established in the systematic review of reviews by Maniglio (2009), investigating the consequences of offline CSA. The present findings therefore indicate that OCSA is not to be

considered separately from offline CSA, but rather just one of many possible ways in which a child can be exposed to CSA.

The results show that some of the children seemed to suffer from a wide range of problems during the time before the abuse, thus indicating that there are some factors that might make a child more vulnerable to OCSA. Some of these findings are in line with previous studies. Adolescents with experiences of OCSA had poorer psychological health, lower self-esteem and more frequent risk behavior in comparison with a reference group of adolescents (Jonsson et al., 2019). Being socially isolated and having problems at home or at school are found to be risk factors for OCSA (Mitchell, Finkelhor, & Wolak, 2001; Whittle, Hamilton-Giachritsis, Beech & Collings, 2013). These studies found similar vulnerability factors among exposed children, although they differed in terms of the samples used (Jonsson et al., 2019 used a representative sample of adolescents; Mitchell et al., 2001 used a telephone survey of a random sample of young people; Whittle et al., 2013 conducted a review of several studies with different samples) as well as the type of OCSA. This indicates that these vulnerability factors might be general for all forms of OCSA – a finding that can be important for identifying particularly vulnerable risk groups.

Some children experienced the overall abuse situation as threatening in different ways, and many reportedly experienced that they had no other choice than to perform the sexual acts. Evidently, it is important to understand the power and impact that sexual perpetrators exert over their victims (Leonard, 2010), regardless of whether the abuse is conducted offline or online. Similarly, OCSA must also be understood in the context of the child's developmental level. The brain is not fully developed until around the age of 25, and during adolescence the pre-frontal cortex is still undergoing maturation (Steinberg, 2011). This part of the brain is responsible for impulse control, and adolescents have a greater inclination towards sensation-seeking and risk-taking behavior. In addition, children's naivety and less developed self-

reflection ability might complicate their capacity to set boundaries (Swedish Agency for Youth and Civil Society, 2009), making them particularly vulnerable.

The study further showed that OCSA encompasses a wide range of sexual acts. This clearly shows the complexity of this crime type and refutes the idea that online abuse is always non-physical. Previous research on CSA has concluded that penetration is one of the most severe forms of CSA, and is associated with higher levels of psychological suffering than non-penetrative abuse (Priebe, 2009). In this study, children performed the penetration themselves, yet seemed to suffer both physically and psychologically. OCSA is evidently not essentially different from more customary forms of CSA. It is only different in the sense that it is executed via the medium of the internet. Hence, the seriousness of sexual offenses that are committed online should not be trivialized (Shannon, 2008).

It is important to note regarding the age distribution that, according to Swedish legislation, the age of sexual consent is 15 years. Consequently, all sexual acts involving children under the age of 15 are illegal. For children between 15 and 17, an additional condition (whether the act is ‘destined to harm the child’s health or development’; The Swedish Penal Code) must be met for the act to be considered exploitation of children for sexual posing. This legal definition is likely to explain the dramatic difference in the number of children under 15 years of age compared to the number of children aged between 15 and 17 in this study.

Most of the children in this study were, in line with previous research (Shannon, 2008), between 10 and 14 years old. However, 1 in 10 was as young as 7-9 years old. This needs to be seen in the light of the increased access to the internet and smartphones among this age group (Ofcom, 2018), and clearly demonstrates the importance of also including younger children in preventive work. No effects of gender were found, indicating that the characteristics of OCSA do not necessarily differ between girls and boys. Although girls are over-represented

in the statistics, this finding demonstrates the importance of also considering boys as potential victims.

Some children had contact with their perpetrator over a long period of time. This long-term contact, in which the perpetrator often gains the child's trust, is referred to as grooming (e.g., McAlinden, 2006) and is likely to affect the child's experience by leading to ambivalent feelings towards the perpetrator. In contrast, a considerable proportion of the children were only in contact with their perpetrator on one single occasion and were thus exposed to strategies other than grooming (Joleby, Lunde, Landström & Jonsson, 2019). The different strategies that the children can be exposed to might be important factors for understanding the child's own feelings of guilt and shame.

### **Limitations and future research**

Since the current study is based on archival data, some limitations need to be addressed before discussing the practical implications of the current results. First, the written verdicts reflect only what was brought up at the court hearing, and thus not all available information in the case. Second, the verdicts are written by judges, and thus rely on their interpretations of all information presented in court. Their interpretations may not reflect the actual intentions of the child's or other witnesses' accounts. Hence, by relying on written secondary accounts, the study may understate or overstate the experiences and psychological health of the children exposed to OCSA. Consequently, the fact that the verdict does not mention a specific topic (e.g., the psychological health of the child) does not necessarily mean that no such information was available. Nor is it possible for us to state with certainty that the vulnerability factors and psychological consequences mentioned in the verdicts were in fact connected to the crime. What the information from the verdicts does tell us, however, is which aspects were considered important enough to be presented at the court hearing, and to be highlighted in the verdict. It



also provides objective information about the online abuse, and not only the subjective experience of the child.

Another limitation is the generalizability of the results to other groups of online victims. Our study is based on the small percentage of OCSA cases that are brought to the attention of the police, and moreover are prosecuted. Therefore, this group of children might be different from victims of similar crimes that never reach the attention of the legal system.

In the analyses using age as the independent variable, it is important to note the relatively high number of cases ( $n = 19$ ) excluded from these analyses due to missing data. While there is no reason to suspect any systematics within the cases missing, the results should be interpreted with caution.

Although the current study contributes to the limited research on CSA that is carried out online, this highly topical issue warrants further research. Some children were subjected to attempted abuse only, meaning that they showed some resilience to the solicitation by refusing to agree to the wishes of the perpetrator. For preventive measures, it is of great interest to investigate whether the difference in resistance is due to the vulnerability and/or the resilience of the child or due to different strategies employed by the perpetrator. In addition, first-hand information from the children about their experiences and psychological health would be a valuable addition to the results in the current study, as would studies on the long-term psychological consequences for victims of these crimes.

### **Conclusions and practical implications**

Our findings show that children exposed to OCSA were subjected to a wide range of sexual acts, some of which were of an extremely violating nature. They also show that the online abuse was associated with many potential psychological consequences. In sum, this indicates that OCSA should not be viewed as less sexually violating than offline CSA.

In addition, our findings show that the children were relatively invisible in the court verdicts. This was especially evident for the children exposed to OCSA only, as their psychological health was mentioned less often compared to the psychological health of children exposed to online and offline CSA, revealing a possible bias in how the courts handle these cases. The courts ought to be consistent in how they gather and evaluate data about the victim's psychological health in all cases of CSA, regardless of whether it was conducted online or offline. To increase awareness of the potential severity of OCSA, we recommend education targeting judicial and legal professionals as an important initial step. Advocacy efforts by child rights practitioners targeting legislators to amend how existing laws treat OCSA could contribute further.

As for preventive measures, school- and community-based education targeting youth should make sure to include OCSA in its curricula. Likewise, routines for action following disclosure of CSA should explicitly also include OCSA. Professionals working with children should receive training about the dynamics and impact of OCSA, in order to develop adequate support and treatment methods for victimized children. Furthermore, the study indicates that some factors might render children more vulnerable and susceptible to OCSA. This knowledge can be used to target particularly vulnerable groups with preventive actions to reduce the risk of them becoming victimized.

In conclusion, the findings from the current study add to the thus far limited knowledge about OCSA and its psychological consequences. As legislators are faced with the difficult challenge of evaluating the level of sexual violation in cases of OCSA, the results can help them to legally evaluate these crimes. This in turn might be a step forward in allowing victims of OCSA to receive redress.

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**Table 1.** Child and abuse characteristics categorized by location of abuse.

Characteristics	Location of abuse		Total <i>n</i> = 98
	Online <i>n</i> = 81	Online and offline <i>n</i> = 17	
Child's gender			
Boy	11 (13.6%)	1 (5.9%)	12 (12.3%)
Girl	69 (85.2%)	16 (94.1%)	85 (86.7%)
No information	1 (1.2%)	-	1 (1.0%)
Child's age at (onset of) abuse			
7-9 years	9 (11.1%)	-	9 (9.2%)
10-12 years	18 (22.2%)	2 (11.8%)	20 (20.4%)
13-14 years	34 (42.0%)	13 (76.5%)	47 (48.0%)
15-17 years	1 (1.2%)	2 (11.8%)	3 (3.0%)
No information	19 (23.5%)	-	19 (19.4%)
Duration of sexual abuse <sup>a</sup>			
1 day	42 (51.9%)	-	42 (42.9%)
2-7 days	8 (9.9%)	2 (11.8%)	10 (10.2%)
8-30 days	9 (11.1%)	3 (17.6%)	12 (12.2%)
31-100 days	9 (11.1%)	2 (11.8%)	11 (11.2%)
101-200 days	8 (9.9%)	4 (23.5%)	12 (12.2%)
201-364 days	3 (3.7%)	5 (29.4%)	8 (8.2%)
> 365 days	2 (2.4%)	1 (5.9%)	3 (3.1%)
Repeated sexual abuse			
No	43 (53.1%)	-	43 (43.9%)
Yes	38 (46.9%)	17 (100%)	55 (56.1%)
Type of online sexual abuse <sup>b</sup>			
Sexual posing	44 (54.3%)	12 (70.6%)	56 (57.2%)
Masturbation	9 (11.1%)	2 (11.8%)	11 (11.2%)
Penetration	23 (28.4%)	3 (17.6%)	26 (26.5%)
Involving other person or animal	5 (6.2%)	-	5 (5.1%)
Relationship with offender			
Unknown	61 (75.3%)	9 (52.9%)	70 (71.4%)
Briefly acquainted	3 (3.7%)	1 (5.9%)	4 (4.1%)
Acquainted	1 (1.2%)	7 (41.2%)	8 (8.2%)
No information	16 (19.8%)	-	16 (16.3%)

<sup>a</sup>Number of days from first occasion of sexual abuse until last occasion of sexual abuse.

<sup>b</sup>Shows the most serious type of online sexual abuse that the child has been incited to perform.



**Table 2.** Statistics from three binary logistic regression analyses with child's age as the independent variable.

Dependent variable	Child's age					
	<i>b</i>	<i>S.E.</i>	<i>p</i> -value	Lower	Odds	Upper
Location of abuse <sup>a</sup>	.64	.25	.01*	1.17	1.90	3.10
Repeated online abuse or not <sup>b</sup>	.48	.16	.002**	1.19	1.62	2.20
Type of online act <sup>c</sup>	.22	.13	.1	.96	1.24	1.60

Note: \*  $p < .05$  \*\*  $p < .01$ .

<sup>a</sup>0 = online, 1 = online and offline.  $R^2 = .13$  (Cox & Snell) .19 (Nagelkerke). Model  $\chi^2(1) = 10.55$ ,  $p = .001$ .

<sup>b</sup>0 = single occasion, 1 = repeated abuse.  $R^2 = .15$  (Cox & Snell) .20 (Nagelkerke). Model  $\chi^2(1) = 12.61$ ,  $p < .001$

<sup>c</sup>0 = posing, 1 = physical action (e.g., masturbation, penetration, involving other person or animal).  $R^2 = .04$  (Cox & Snell) .05 (Nagelkerke). Model  $\chi^2(1) = 2.94$ ,  $p = .086$ .

**Table 3.** Statistics from three binary logistic regression analyses with child's gender as the independent variable.

Dependent variable	Child's gender					
	<i>b</i>	<i>S.E.</i>	<i>p</i> -value	Lower	Odds	Upper
Location of abuse <sup>a</sup>	.94	1.08	.39	.31	2.55	21.21
Repeated online abuse or not <sup>b</sup>	-.27	.62	.67	.23	.77	2.61
Type of online act <sup>c</sup>	.48	.65	.46	.45	1.62	5.78

<sup>a</sup>0 = online, 1 = online and offline.  $R^2 = .01$  (Cox & Snell) .02 (Nagelkerke). Model  $\chi^2(1) = .94$ ,  $p = .33$ .

<sup>b</sup>0 = single occasion, 1 = repeated abuse.  $R^2 = .00$  (Cox & Snell) .00 (Nagelkerke). Model  $\chi^2(1) = .18$ ,  $p < .67$

<sup>c</sup>0 = posing, 1 = physical action (e.g., masturbation, penetration, involving other person or animal).  $R^2 = .01$  (Cox & Snell) .01 (Nagelkerke). Model  $\chi^2(1) = .57$ ,  $p = .45$ .

**Table 4.** Themes and subthemes of how the children experienced the online CSA. Percentages compared to the total number of cases where experiences of the online CSA were mentioned in the written verdicts.

Themes	Subthemes	Total <i>n</i> = 23
<i>Experiences of the situation</i>	Threatening situation	7 (30.4%)
	Feared that someone would find out	4 (17.4%)
	Had no choice	12 (52.2%)
<i>Experiences of the sexual abuse act</i>	It was physically painful	4 (17.4%)
	It was distressing	10 (43.5%)
	It was both good and bad	1 (4.3%)

*Note:* The same case can contain more than one of the themes and subthemes (i.e., one child can have more than one of the different experiences).

**Table 5.** Themes and subthemes of the potential vulnerability factors among the victims, categorized by location of abuse. Percentages compared to the total number of cases where pre-abuse psychological health was mentioned in the written verdict.

Themes	Subthemes	Location of abuse		Total <i>n</i> = 17
		Online <i>n</i> = 10	Online and offline <i>n</i> = 7	
<i>Personal</i>	Poor psychological health	6 (60.0%)	4 (57.1%)	10 (58.8%)
	Intellectual disabilities	3 (30.0%)	-	3 (17.6%)
	Low self-esteem	3 (30.0%)	2 (28.6%)	5 (29.4%)
<i>Relational</i>	Loneliness	3 (30.0%)	1 (14.3%)	4 (23.5%)
	Stressful social environment	4 (40.0%)	-	4 (23.5%)
<i>Behavioral</i>	Self-harming behavior	2 (20.0%)	2 (28.6%)	4 (23.5%)

*Note:* The same case can contain more than one of the themes and subthemes (i.e., one child can display more than one of the different vulnerabilities).

**Table 6.** Themes and subthemes of the potential psychological consequences among the victims, categorized by location of abuse. Percentages compared to the total number of cases where psychological health problems post-abuse were mentioned in the written verdict.

Themes	Subthemes	Location of abuse		Total <i>n</i> = 30
		Online <i>n</i> = 17	Online and offline <i>n</i> = 13	
<i>Personal</i>	Psychological suffering	16 (94.1%)	11 (84.6%)	27 (90.0%)
	Self-harming and/or suicidal behavior	2 (11.8%)	1 (7.7%)	3 (10.0%)
	Sleeping problems	5 (29.4%)	1 (7.7%)	6 (20.0%)
	Internalized self-loathing	2 (11.7%)	2 (15.4%)	4 (13.3%)
<i>Relational</i>	Trust issues	1 (5.9%)	1 (7.7%)	2 (6.7%)
	Impaired relationships	2 (11.8%)	-	2 (6.7%)
	Isolating oneself	2 (11.8%)	-	2 (6.7%)
	Fear of being alone	2 (11.8%)	-	2 (6.7%)
<i>School</i>	Difficulties at school	5 (29.4%)	4 (30.8%)	9 (30.0%)
<i>No problems</i>	No negative consequences	-	1 (7.7%)	1 (3.3%)

*Note:* The same case can contain more than one of the themes and subthemes (i.e., one child can suffer from more than one of the different psychological consequences).

## Supplementary material

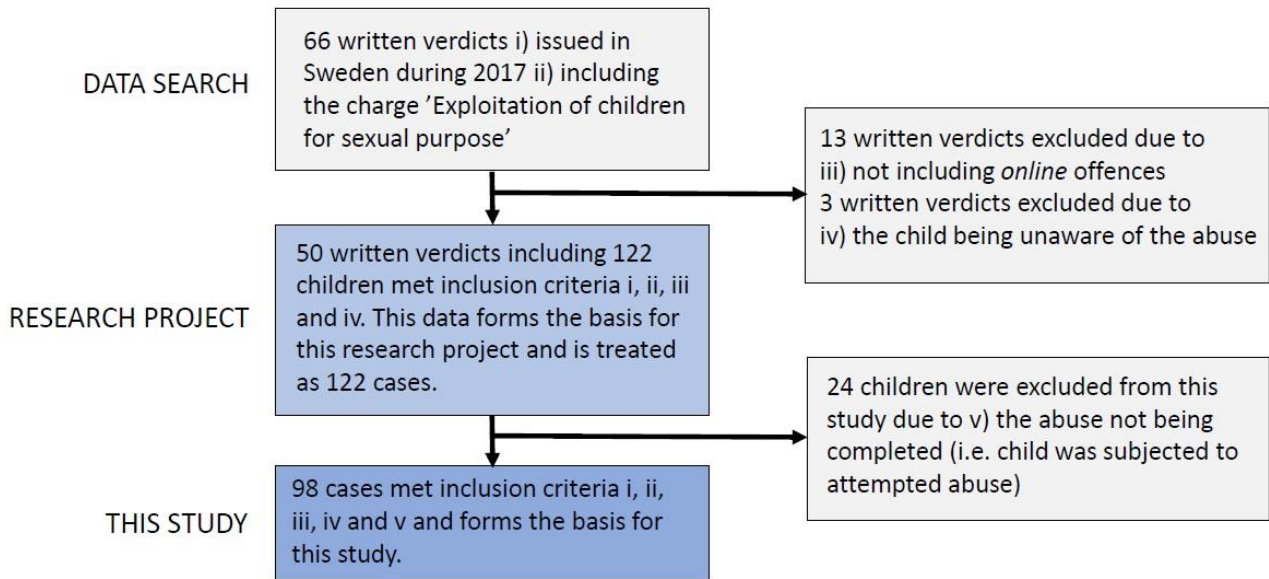


Figure 1. Flow chart showing data selection in relation to the inclusion criteria for the current study.