



Offender strategies for engaging children in online sexual activity[☆]

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ABSTRACT

Background: Following technological developments, there has been increasing interest in online offenders' use of digital communication technology to sexually groom and abuse children. However, research has thus far primarily explored offenders' interactions with decoys instead of actual children, and initial evidence indicates that conversations with actual children may include more overt persuasion and extortion than conversations with decoys.

Objective: This study aims to describe online offenders' interactions with actual children when inciting them to engage in online sexual activity.

Participants and setting: Swedish court judgements including 50 offenders (aged 16–69, *median* = 28.9) and 122 child victims (aged 7–17, *median* = 13.0) were analyzed.

Methods: By using an explorative mixed-methods approach, we thematically analyzed what strategies the children were exposed to, and looked for patterns between the strategy used and the characteristics of the abuse, victim, or offender.

Results: We identified two types of strategies that the children were exposed to: pressure (threats, bribes, or nagging, $N = 56$), and sweet-talk (flattery, acting as a friend, or expressing love, $N = 25$). Overall, the offenders who used pressure were younger and targeted older children than the offenders who used sweet-talk.

Conclusions: This study expands the existing knowledge about the variety of manipulative strategies used by online offenders and adds support to the initial literature showing substantially more pressure and coercion in online offenders' interactions with actual children. The study also identifies some patterns between the strategy used and the age of the offender and victim that warrant further investigation in future studies.

1. Introduction

Since the beginning of this century, there has been increasing interest in online offenders' use of digital communication technology to sexually groom children. This body of research has demonstrated online offender's motives, strategies, and modes of manipulation

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Table 1

Overview of previous research studies investigating online offenders' communicative patterns. Summary focusing on aim, sample and key findings.

Study	Aim	Sample	Key findings ^a
Balfe et al., 2015	<i>Review:</i> Offenders' use of identity protection tactics and technologies.	Peer reviewed literature between 2000 and 2011 N = 40	A surprisingly large number of offenders do not use any technologies to disguise their identities.
Barber and Bettez, 2020	Identify behavioral patterns of adult solicitor behavior.	Chat logs (decoys – PJ) ^b N = 90	Identified five categories of behavior: control, grooming, predation, and offending. Minimal use of force.
Bergen et al., 2014	Explore prevalence of identity deception and secrecy and its relationship to outcome of sexual interactions online.	Questionnaire (adults self-reporting online sexual interactions with children/adolescents) N = 136 ^c	34% used identity deception. Deception increased likelihood of receiving a sexual picture, cybersex, or sexual contact offline.
Black et al., 2015	Consider similarities and differences in online grooming vs. offline grooming.	Chat logs (Decoys – PJ) N = 44	Some grooming strategies are the same, but order and timing of stages appear to be different.
Briggs et al., 2011	Explore and describe chat room sex offenders.	Chat logs + archival data from convicted offenders (90% decoys – police officers) N = 51	Identified two sub-groups: contact-driven and fantasy-driven.
Broome et al., 2018	<i>Systematic review:</i> Investigate whether there is an empirical basis for the distinction between contact-driven and fantasy-driven offenders.	Research literature (decoys in 16 studies) N = 22	The distinction between fantasy-driven and contact-driven is ambiguous. (Both engage in online behaviors that provide them with sexual gratification.)
Broome et al., 2020	Explore the psycholinguistic and deceptive properties of online grooming, from the perspective of front-line specialists.	Focus group interviews (prison staff + police officers) N = 7 + 7 Chat logs (decoys – PJ) N = 65	No deception needed. Offenders use language that denotes affiliation with a positive emotional tone. Communicative focus on developing interpersonal relationship.
Chiang & Grant, 2017	Identify common rhetorical moves in online grooming.	Chat logs (decoys – PJ) N = 7	Identified 14 rhetorical moves. Building rapport was the most frequent move, followed by maintaining/escalating sexual content.
Chiang & Grant, 2018	Explore rhetorical moves and numerous presented personas.	Chat logs (children) N = 20 (case study: one offender, 20 victims)	Identified 19 rhetorical moves, including overt persuasion and extortion. Offender adopted two personas: sexual pursuer/aggressor and friend/boyfriend.
De Santisteban et al., 2018	Explore the online grooming process and the perspective of the offenders.	In-depth interviews (convicted offenders of online grooming + sexual abuse offline) N = 12	Offenders study the child's environment and vulnerabilities and adapt strategy.
DeHart et al., 2017	Identify key elements and propose a typology of online solicitation offenders.	Chat logs, e-mail threads and social network posts (decoys – undercover officers) N = 200	Typology: cybersex-only offenders, schedulers, cybersex/schedulers, and buyers.
Egan et al., 2011	Explore language used by offenders.	Chat logs (decoys – PJ) N = 20	Eight recurrent themes: implicit/explicit content, online solicitation, fixated discourse, use of colloquialisms, conscience, acknowledgement of illegal/immoral behavior, minimizing risk of detection, and preparing to meet offline.
Gámez-Guadix, Almendros, et al., 2018	Test theoretical model of relationship between persuasion strategies and online grooming.	Questionnaire (adolescent victims of grooming) N = 196	Deception and bribery associated with sexual solicitation. Involvement associated with sexual interactions.
Gámez-Guadix, De Santisteban, et al., 2018	Develop a questionnaire to assess online sexual solicitation and interactions of minors.	Questionnaire (validation sample of adolescents) N = 2731	Developed ten-item questionnaire.
Greene-Colozzi et al., 2020	Retrospective exploration of internet behaviors, experience of online sexual solicitation or online grooming.	Survey (college students) N = 1133	25% conversed with adult strangers as minors. Of these, 8% recalled that the adult behaved aggressively, 17% acted moody, 17% manipulative, and 9% angry.
Gupta et al., 2012	Analyze chat conversations to understand and gain insight into online grooming practices.	Chat logs (decoys – PJ) N = 502	Relationship forming is the most dominant stage (40% of conversation), followed by sexual stage (24%).
Ioannou et al., 2018	Compare online and offline grooming characteristics.	Chat logs (decoys – PJ) N = 76 (Compared to court transcripts of 25 offline offenders)	Majority of characteristics consistent across online and offline grooming. Online grooming: more questions about virginity and victim's family, more compliments, and alluding to sex.
Kloess et al., 2014	<i>Nonsystematic review:</i> Overview of the current knowledge and understanding of sexual grooming and exploitation of children via the internet.	Research literature	Overall, the internet offers opportunities to meet various motivations, ranging from sexual exploration to problematic expression and grooming to facilitate engagement in deviant sexual activities. There is a lack of research investigating

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Table 1 (continued)

Study	Aim	Sample	Key findings ^a
Kloess et al., 2017	Examine modus operandi.	Chat logs (children) N = 29 (five offenders, 29 victims)	truly representative data in the form of transcripts of online interactions between an offender and an actual victim. Interactions were of a highly sexual nature. Offenders used a range of manipulative strategies (including direct, non-compromising, and pressuring strategies).
Kloess et al., 2019	Describe offense processes.	Chat logs (children) N = 29 (five offenders, 29 victims)	Different approach strategies: direct vs indirect. Three offenders did not use grooming.
Kopecký, 2017	Build a model of online extortion of children.	Questionnaire (children) N = 1374 victims of blackmailing ^d . Case analysis (reported to an online advisory center) N = 25	Very similar techniques used to blackmail: focus on gaining confidence, luring out intimate material, and subsequent blackmailing. Blackmailing typically accomplished by threats to tell parents or friends on social networks.
Lorenzo-Dus et al., 2016	Propose model for online grooming.	Chat logs (decoys – PJ) N = 24	Online grooming comprises three phases: access, approach, and entrapment. The entrapment phase entails a series of partly overlapping processes and strategies, the ultimate aim of which is to lure victims into different forms of sexual behavior.
Lorenzo-Dus & Izura, 2017	Examine offenders' use of compliments to build trust.	Chat logs (decoys – PJ) N = 68	Compliments about appearance (both sexual and non-sexual) and personality were the most common. Faster groomers – more comments about sexual appearance.
Malesky, 2007	Examine how online offenders select their victims.	Questionnaire (convicted offenders) N = 30	Three-fourths monitored chat room dialogue and almost one-half reviewed online profiles.
Marcum, 2007	Understand the nature of online solicitations of minors for sex.	Chat logs (decoys – PJ) N = 3	All offenders used manipulation to lure their victims, and were blunt about their sexual intentions.
O'Connell, 2003	Create a typology of online grooming practices.	Chat room dialogues (decoy – the researcher) 50 h in chat rooms	Friendship-forming stage, relationship-forming stage, risk assessment stage, exclusivity stage, and sexual stage. Some individuals used aggressive phrases.
Quayle et al., 2014	Generate an exploratory model of how offenders rapidly acquire skills to select and engage children.	Interviews (convicted offenders) N = 14	The internet was used to create a private space for sexual behavior, an aid for fantasy, and for some a precursor to offline abuse. The internet provided access to many young children.
Quayle & Newman, 2016	Explore offender and victim characteristics as well as how they interacted.	Case reports (reported to cybertip.ca) N = 264	Requests for sexual pictures dominated the reports. Threats were reported in almost one-fourth of the cases. Majority of offenders did not request an offline meeting.
Schneevogt et al., 2018	Investigate whether more coercive and forceful moves are absent in interactions with decoys.	Chat logs (decoys – PJ) N = 622	Overly persuasive language was rare (found ten examples) and no extortion occurred.
Seymour-Smith & Kloess, 2021	Explore how victims attempt to resist offenders' threats, and how offenders manage such resistance.	Chat logs (children) N = 5 (one offender, five male victims)	Making deals (centered on exchange of images/videos) was the key social action to entrap victims: constructing deals as 'equitable', breaches in the formulation of deals, maintaining control and escalation to threats, and a loss of bargaining power.
Shannon, 2008	Describe cases of internet-related sexual offenses.	Police data (in which offender and victim communicated online) N = 315	Relationship-building was only evident in a minimal way. Most common in online-only contact: sexual conversations, attempting or actually persuading victim to pose nude or seminude, offender exposing via webcam. 16% of online-only contact involved blackmail.
Tener et al., 2015	Present a typology of online offenders.	Interviews (law enforcement) N = 75	A typology defining four types of offenders was identified: the expert, the cynical, the affection-focused, and the sex-focused.
van Gijn-Grosvenor & Lamb, 2016	Investigate behavioral differences in online grooming of girls vs. boys.	Chat logs (decoys – PJ) N = 101	Grooming girls: more rapport, less sexually explicit, more indirect, and careful approach of sexual topics.
van Gijn-Grosvenor & Lamb, 2021	Categorize online offenders based on their behavioral grooming patterns.	Chat logs (decoys – PJ) N = 101	Cluster of offenders: intimacy-seeking groomers, dedicated, hyper-sexual groomers, social groomers, and opportunistic-asocial groomers.

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Table 1 (continued)

Study	Aim	Sample	Key findings ^a
Whittle et al., 2013	Non-systematic review: Online grooming.	Research literature	A variety of techniques to manipulate young people (e.g., flattery, bribes, and threats). Internet offenders, victims, and the dynamics between the two are often unique and varied.
Whittle et al., 2014	Investigate victims' perspectives of online grooming.	Interviews (adolescent victims of online grooming) N = 8	Grooming themes: manipulation, deception, regular/intense contact, secrecy, sexualization, kindness and flattery, erratic temperament and nastiness, and simultaneous grooming of those close to the victim.
Williams et al., 2013	Establish offender tactics used within the initial hour of grooming.	Chat logs (decoys – PJ) N = 8	Themes: rapport-building, sexual content, and assessment.
Winters et al., 2017	Provide information about offender characteristics, victim characteristics, and dynamics of the conversation.	Chat logs (decoys – PJ) N = 100	Sexual intentions clear early in the conversations (89% in first conversation, 98% within two days). Length of contact varied from one day to nearly a year.
Wolak et al., 2004	Describe characteristics of victimization.	Interviews (law enforcement) N = 129	No deceit and clear sexual intent in most cases. Half of the victims described being in love/having close relationship with the offender. Most met offline and had sex several times.
Wolak & Finkelhor, 2013	Compare crimes between online-initiated offenses and those who knew the victim offline.	Interviews (law enforcement) N = 143 + 139 (online initiated + knew victim offline)	When online sexual communication is involved, their crimes are highly similar to statutory rape by offenders whom victims know in-person. Deceit in a minority of cases.
Wolak et al., 2017	Investigate whether incidents occurring to minors (< 18) are more or less serious than those experienced by adults (18–25).	Questionnaire (victims of sextortion – the majority knew or had a relationship with the offender) N = 1385	Perpetrators against minors (vs. adults) were more likely to pressure victims into producing initial sexual images, demand additional images, threaten victims for >6 months, and urge victims to harm themselves.

^a Key results of relevance for this study.

^b PJ – Perverted Justice. Online database containing 622 freely accessible cases of offender-decoy interactions.

^c Data on sexual interactions with adults are excluded from this table.

^d Total sample N = 21,453 (i.e., n = 16,856 did not report any experience of blackmailing, n = 3223 missing data).

well (e.g., Beech et al., 2008; Black et al., 2015; Briggs et al., 2011; Ioannou et al., 2018; Malesky, 2007; Marcum, 2007; O'Connell, 2003; Williams et al., 2013). However, most studies have investigated interactions between offenders and decoys (i.e., adults posing as children). In recent years, there has been growing critique that interactions with decoys lack the dynamics that a child would provide in such conversations, and concern that data from decoys cannot thus be viewed as an imitation of what happens in naturally occurring interactions with actual children (Briggs et al., 2011; Chiang & Grant, 2018; Kloess et al., 2014; Kloess et al., 2019; Schneevogt, Chiang, and Grant, 2018; Seymour-Smith & Kloess, 2021). The most used source of offender interactions is the Perverted Justice (PJ) database (perverted-justice.com). PJ is a foundation that uses adult volunteers posing as children online with the goal of forwarding information to the police to enable an arrest. The PJ database includes 622 freely accessible cases of offender-decoy interactions, which have been used in at least 19 scientific studies (resulting in each interaction having been analyzed several times over). Since decoys aim to obtain as much incriminating information as possible, they respond openly to sexual solicitations (Briggs et al., 2011), appear compliant (Broome et al., 2018), and might be more likely to continue within an uncomfortable conversation (Williams et al., 2013) compared to a child. This could in turn affect the strategy used by the offender, as he or she would not encounter any resistance or rejection. In support of this argumentation, an analysis of all 622 PJ cases by Schneevogt et al. (2018) showed that overtly persuasive language was rare in the texts (occurring in less than 2% of the cases), and that no extortion occurred. By contrast, more coercive and forceful strategies have been identified in studies on interactions between offenders and actual children. In a case study by Chiang and Grant (2018), the interactions between one offender and 20 child victims were analyzed. They observed nineteen rhetorical moves employed by the offender. Most moves were similar to those found in decoy data, but two moves were previously unidentified: overt persuasion (pushing victims into some sort of compliance) and extortion (directly coercive moves, typically involving threats). Chiang and Grant (2018) argue that these moves occur (at least in part) as a result of victims displaying a degree of resistance to the offenders' sexual advances. Accordingly, Seymour-Smith and Kloess (2021) demonstrated in their analysis of chat logs between one offender and five child victims how the offender escalated his threats following victims' resistance to and non-compliance with requests. Quayle and Newman (2016) identified threats in 24% of the 166 cases of children receiving requests to send sexual images as reported to a public Canadian cyber tip site. Moreover, Kloess et al. (2019) analyzed transcripts from five offenders interacting with 29 child victims. The most commonly used strategies were indirect and included compliments, flattery, and affection, as well as persistence and manipulation. These strategies correspond well to the grooming practices demonstrated in research on decoys (e.g., Lorenzo-Dus & Izura, 2017; Whittle et al., 2013). Some offenders, however, displayed no features of grooming, instead using a direct approach including aggressive, persistent, non-compromising, and pressuring strategies in order to achieve compliance from the child (Kloess et al., 2019). Threats (Whittle et al., 2013) and coercion (O'Connell, 2003) have also been reported in decoy data, but only to a limited extent. Force

has been described as being used minimally (Barber & Bettez, 2020) and overtly persuasive language has been described as rare (Schneevogt et al., 2018). Initial research on interactions with actual children thus confirms many of the findings from interactions with decoys, but also highlights some important ways that interactions with actual children differ. To understand how a child can be incited to engage in sexual activities that they are too young to consent to, may only have a vague understanding of, or that may be against their will (Joleby et al., 2021), we must understand what strategies they are exposed to. At present, there is a scarcity of studies exploring real world, naturally occurring interactions between online offenders and children. In the present study, we aim to address this gap by examining a large sample of legal cases involving actual children.

1.1. What we know about online offenders' interactions with decoys and children

Before describing the current study in more detail, we will provide an overview of the current state of knowledge (see Table 1). While being conscious of the limitations of decoy data, we must also acknowledge its value seeing that it does investigate online offenders' genuine attempts to sexually abuse children. Comprehensive research on offenders' interactions with decoys has shown that online offenders, much like offline offenders, use grooming (Craven et al., 2006; O'Connell, 2003). Most characteristics of grooming are consistent across the online and offline milieu, as online offenders use rapport-building to form a relationship (Chiang & Grant, 2017; Gupta et al., 2012; Williams et al., 2013), use flattery and compliments (Lorenzo-Dus & Izura, 2017), and introduce sexual topics to the conversations (Chiang & Grant, 2017; Gupta et al., 2012). However, the order and timing of the different grooming stages appear to be different (Black et al., 2015). Online grooming is described as a non-linear process (Barber & Bettez, 2020; Gupta et al., 2012; O'Connell, 2003) in which several stages occur simultaneously, speeding up the process compared to offline grooming. O'Connell (2003), who was among the first to describe online grooming practices, described that the sexual stage was entered gently, after a sense of trust and 'love' had been created. By contrast, later research has shown that sexual intentions are often clear early in the conversation (Winters et al., 2017). Early initiation of sexual topics is also reported in interactions with actual children (Tener et al., 2015), and some interactions are described as lacking elements of grooming altogether (Kloess et al., 2019). When it comes to online contact, interactions with decoys have identified different offender motivations. Some aim to arrange an offline meeting to sexually abuse what they believe to be a child (Lorenzo-Dus et al., 2016; Winters et al., 2017), while others aim to use the online contact for cybersex and masturbation (DeHart et al., 2017). In a well-cited study by Briggs et al. (2011), these sub-groups were labelled contact-driven and fantasy-driven offenders. However, a systematic review failed to find an empirical basis for this division as the distinctions between the two sub-groups were ambiguous, given that both groups engage in online behavior that provides them with sexual gratification (Broome et al., 2018). Research on actual children has shown that online offenders can receive this sexual gratification by inciting or coercing children into taking part in sexualized conversations, sending pictures or videos, or engaging in mutual sexual activities via webcam (Chiang & Grant, 2018; Kopecký, 2017). These sexual activities can be of a severe nature, including the child penetrating himself or herself with fingers or objects, sometimes causing pain and bleeding, or forcing the child to perform sexual acts on siblings and pets (Joleby et al., 2021; Kloess et al., 2017). Law enforcement with experience of working with cases of online abuse has described the relationship between offender and victim as either reciprocal, in which the victim willingly cooperates with the offender, or unilateral, in which the victim is forced or manipulated (Tener et al., 2015). Emerging evidence also indicates that children who are incited to engage in online sexual activities with an adult risk similar psychological consequences to child victims of offline sexual abuse (Hamilton-Giachritsis et al., 2020; Joleby et al., 2021; Jonsson et al., 2019).

In sum, the severity of the sexual abuse that children can be subjected to online, together with the indications that decoy interactions lack the coercion and pressure that may be present in naturally occurring conversations, adds to the importance of investigating the dynamic of online offenders' interactions with actual children. In this study, we will use a mixed-methods approach to examine what strategies children are exposed to when online offenders try to engage them in online sexual activity (qualitative analysis) and will examine whether the strategy used is related to characteristics of the abuse, the offender, or the victim (explorative quantitative analysis). Due to the explorative and descriptive approach of this study, we do not have any hypotheses.

2. Method

2.1. Data collection

This study is based on 50 Swedish court judgements including 50 offenders who have incited (or tried to incite) 122 children to engage in online sexual activity. In these judgements, the court states its reasons for the ruling and includes relevant information that formed the basis for the judicial decision (Swedish Code of Judicial Procedure). Such information often includes 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 study includes all cases from all Swedish courts that met the following inclusion criteria: 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 was used as an inclusion criterion is a non-contact offense in which the offender induces a child to 'pose sexually' (the Swedish Penal Code). In cases where a child shows himself or herself nude or semi-nude or engages in sexual activity and displays this in a photo, in a video, or via a webcam, this counts as sexual posing. Depending on the type of sexual activity that the child is incited to engage in, additional classifications (such as sexual abuse, sexual molestation, rape, etc.) can be used together with sexual posing. The data was collected via the Karnov legal database. The first

author and a research assistant (RA) searched the database applying criteria I and II. This procedure was carried out twice to ensure that no relevant cases were missed. This search resulted in 99 hits, with a first screening identifying that 66 of the court judgements met criteria I and II. The first author and the RA thoroughly read the selected 66 court judgements against criteria III and IV, and excluded thirteen judgements due to a lack of any online crime, and three judgements due to the children being unaware of the abuse (due to sleeping or young age). In addition, we searched for subsequent Court of Appeal or Supreme Court verdicts pertaining to the cases. Sixteen of the judgements were tried in a Court of Appeal (none in the Supreme Court), and these judgements were added to the material (judgements from the District Court and the Court of Appeal were combined, and instances were thereafter treated as one entity). In Sweden, appealed cases are generally based on the exact same material as in the district courts (the appellate court watches video recordings from the district court's trial, and it is rare that new information is presented). In sum, the search resulted in 50 court judgements matching all four criteria, and the data set represents all cases of exploitation of children for sexual posing conducted online in Sweden during a one-year period. The court judgements included 50 defendants targeting a total of 122 children, and we treated this as 122 cases, because the interaction between an offender and a child is often unique and varied (Whittle et al., 2013), and we were interested in learning what strategies each child was exposed to. The court judgements varied greatly in terms of length (from 6 to 250 pages, $M = 36$ pages) and level of detail.

To create a joint dataset of the 122 cases, we extracted all relevant data from each court judgement using a coding manual. The coding manual was based on a set of variables used by Ernberg et al. (2018), investigating court cases of CSA among preschoolers (e.g., abuse characteristics, defendant characteristics, legal outcome, etc.). The coding manual was expanded with variables specified for online child sexual abuse (e.g., online platform used, offline meeting) and for the specific purpose of this study (e.g. description of offender-victim interaction). Some variables were dichotomous (yes/no), some were categorical, and others were string (including long text extracts). To further develop the coding manual, 16 non-systematically selected court judgements from years prior to 2017 were coded by the first author and the RA. This process was solely a step in creating the coding manual, and the data was not included in the final dataset. By using this data-driven method, old variables were redefined, and new variables were added. After this process, the coding manual had reached saturation, and included variables that captured all relevant information in the court judgements. For transparency, a part of this dataset has been used in a previous study (Joleby et al., 2021) investigating the psychological consequences for the victims.

To ensure that all relevant information was extracted from the court judgements, we calculated the level of coder agreement in the final dataset by the first author and the RA separately coding 20% of the cases (selected using a random generator) and comparing the coding documents. The inter-rater reliability for the variables used in this study showed excellent agreement (Cohen's kappa $M = 0.948$, range = 0.769 to 1.0; Intra-class correlation coefficient 0.957, 95% CI = 0.903 to 0.981, $F(24,24) = 23.425$, $p < .001$). The final dataset was used in the analyses.

2.2. Design and analysis

We used an embedded mixed-methods design (Creswell & Clark, 2017), which is a type of design in which two types of data are collected on the same occasion, analyzed separately and answering different research questions. In this study, the themes identified in the qualitative analyses were used as independent variables in the quantitative analyses. Collecting both quantitative and qualitative data helped us gain a broader picture and understanding than would have been obtained by either type of data separately (Gorard, 2010).

2.2.1. Qualitative analysis

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 who extracted the 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 agreed on a final draft. All four authors approved the final draft.

2.2.2. Quantitative analysis

Using the two main themes derived from the thematic analysis as independent variables, we used R (R Core Team, 2020) for explorative visual inspection and percentage counts to look for differences in the distributions between the two strategies. The variables used as dependent variables are *abuse place* (dichotomous: online only or online and offline), *sexual act online* (categorical: attempted abuse, posing, masturbation, penetration, including other person, or including animal), *duration of sexual abuse* (continuous: number of days between first and last occasion of sexual abuse), *age* (continuous: age at the time of the (first) abuse), and *gender*

(dichotomous: male or female).

2.3. Ethical considerations

The Regional Ethical Review Authority in Gothenburg, Sweden, has approved the project. Court judgements from Swedish courts are public records. Nevertheless, all personal information or other identifiable markers (such as name, address, or personal identification number) were omitted during the coding procedure. Consequently, no identifiable information can be found in the documents of this research project. All quotations were translated into English and have been slightly edited to facilitate reading, and to avoid possible identification of the children.

2.4. Initial place of contact

In 56 of the 122 cases (45.9%), the court judgement described where the first contact between the offender and the child took place (The conversation was occasionally moved elsewhere after initial contact, to enable unmonitored conversations and the possibility to

Table 2
Summary of offender, victim, and abuse characteristics.

		Mean	Median	SD
Offender characteristics (<i>N</i> = 50)				
Gender				
Male	100%			
Female	0%			
Age ^a	16–69	34.0	28.9	15.3
No. of online victims ^b	1–26	4.6	1	4.5
Conviction				
Acquitted ^c	8.0%			
Prison	36.0%			
Probation	26.0%			
Suspended sentence	14.0%			
Fine	8.0%			
Youth service	8.0%			
Criminal record ^d				
No	40.0%			
Yes, SO	20.0%			
Yes, NSO	6.0%			
Yes, SO & NSO	6.0%			
No info	28.0%			
Victim characteristics (<i>N</i> = 122)				
Gender				
Male	12.6%			
Female	87.4%			
Age ^a	7–17	12.35	13.0	1.93
Abuse characteristics ^e (<i>N</i> = 122)				
Type of online abuse				
Attempted ^f	19.7%			
Sexual posing ^g	45.9%			
Masturbation	9.0%			
Penetration ^h	21.3%			
Involving others ⁱ	4.1%			
Offline abuse ^j				
Yes	15.6%			
No	84.4%			

^a Age at the time of the (first) sexual abuse.

^b Fifteen offenders had additional offline complainants (offline sexual abuse) in the current court case that are not included in this study (due to no offense being committed online).

^c In the cases where the defendant was acquitted, there was technical evidence of the abuse (photos, videos, and/or chatlogs). The reasons for acquitting were due to the high evidentiary requirements (for instance not being able to prove beyond reasonable doubt that the defendant knew that the child was below the age of sexual consent, thus having criminal intent). Since the courts had technical evidence of the abuse and the contact, the cases were included in our study.

^d Previous criminal record. SO = sexual offense (e.g., rape, rape of a child, sexual molestation, possession of child pornography, or sexual coercion), NO = non-sexual offense (e.g., unlawful threat, unlawful coercion, or traffic offense), SO & NSO = both.

^e Shows the most severe type of online sexual activity that the child was incited to engage in.

^f Defendant asking for explicit pictures but the child refusing.

^g Nude or semi-nude, including the breasts, the genitals, or the buttocks via photo/video/live on webcam.

^h Oral, vaginal, or anal, with fingers or objects.

ⁱ Perform sexual acts (e.g., oral sex) on another person (e.g., a younger sibling) or an animal live in front of a webcam.

^j If in addition to the online abuse the offender also sexually abused the child offline (*n* = 14 penetrative abuse, *n* = 5 fondling).

share images or video chat). Thirty-eight children came into contact with their offender through a social media platform (e.g., Instagram, Facebook, or Kik, or sometimes platforms evidently directed at younger children, such as Momio), six through an online chat randomizing strangers to talk to each other (e.g., Omegle), five through a similar, but more sexually suggestive, online chat platform (e.g., getnaughty, hotornot, or sugardaters), four through an online game, and three 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 judgement 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. In eight of the cases where the offender lied about being younger, the court document specified the number of years deducted from the real age ($m = 21.38$, $median = 13.50$, $SD = 16.94$, claiming to be between the ages of 12–18), but the remaining 17 cases provided no such information. For more characteristics of the cases, see Table 2.

3. Results

3.1. Qualitative analysis: Strategies for engaging children in online sexual activity

In 81 of the 122 cases (66.4%), the court judgement included some kind of description of the contact between the offender and the child. This information included the court's summaries of the contact, quotations from interviews and interrogations, or transcripts of chat logs. 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. The descriptions were not limited to the initial contact between the child and the offender but could be derived from any time during their contact.

The thematic 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, as are the sub-themes within each main theme. For frequencies, see Table 3. Please note that there was an overlap in five of the cases (where the child was subjected to both strategies), and that the descriptions in five cases were uncategorized.

3.1.1. Pressure

This theme contains the offender strategies that include *pressure* to perform the desired online sexual activities, with 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 threat was to 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 informing the child's parents about previous sexual contact they 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 punish her by disseminating naked pictures of her. He regularly reminded her that he intended to publish photos of her on Instagram if she did not participate. He demanded more pictures of the complainant, and these eventually became increasingly explicit in nature. [...] He did send nude pictures of the complainant, who was twelve years old, to more than 20 other people, and started an Instagram account in the complainant's name and uploaded pictures of her. (Offender 35, male aged 16; child 70, girl aged 12.)

By using blackmail, the offender could coerce the child into engaging in progressively more severe acts than what they initially agreed on. Once the offender had gotten hold of any compromising information, the child was entangled in a situation that was difficult

Table 3

Themes and subthemes of the strategies offenders used when inciting children to engage in online sexual activity.

Themes	Subthemes	No. of children exposed to each theme ^b	No. of children exposed to each sub-theme ^c
Pressure	Using threats	56	38
	Using bribes		14
	Repeatedly nagging		9
Sweet-talk	Using flattery	25	14
	Acting as a friend		8
	Expressing love		6
Uncategorized ^a		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 the child.

^a 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 pussy'" or "not threat or coercion").

^b Five children were subjected to both pressure and sweet-talk.

^c A child could be subjected to more than one of the sub-themes.

to get out of. “The offender requested the complainant to send images of herself. She took three pictures posing in her underwear. /.../ The offender then demanded pictures that were more extreme, and threatened to otherwise upload the images he had already received.” (Offender 35, male aged 17; child 71, girl aged 13.) For these threats to be successful, the child had to have performed a 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, male aged 39; children 92–117, girls aged 11–15.) Some offenders amplified their threats by emphasizing 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, male aged 23; child 82, girl aged 11.) One offender forced the victim to use violence against herself by using language signaling force and power: “The defendant forced the complainant to slap herself and insulted her by using derogatory slurs such as ‘whore’ and ‘slut’.” (Offender 27, male aged 27; Child 40, girl aged 13.)

The second sub-theme comprises 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 these examples: “He would receive ‘skins (in-game purchases) and such stuff’ if he took off his clothes and masturbated on Skype.” (Offender 37, male aged 24; child 76, boy aged 12); “The defendant wanted to have sex with the complainant, and she went along with it because she wanted money and cigarettes, but also because it was a part of her self-harming behavior.” (Offender 14, male aged 28; child 17, girl aged 13). The offender could specify the payment for a specific act: “She has been incited, for an offer of SEK 200 [approximately USD 20], to take semi-nude/nude pictures of herself and send the pictures to the defendant.” (Offender 12, male aged 32; child 15, girl aged 17.) Alternatively, the bribe could work indirectly by building up to a feeling of indebtedness, as 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, male aged 23; child 74, boy aged 13.)

The third sub-theme refers to how some offenders *repeatedly nagged* the child to do certain things or send certain pictures. In some documents, the offender was described as having used frequent and repeated nagging. In the following example, the offender and the victim met in a Facebook group for people who were looking to meet new friends. However, the offender used this opportunity to find children to victimize: “They talked and got to know each other, and then requests were sent to see the complainant in underwear or swimwear, and there was a lot of systematic nagging.” (Offender 18, male aged 32; child 26, girl aged 13.) Even if the child managed to refuse to comply with the offender’s wishes at the beginning, the nagging could eventually push the child into engaging in the behavior that the offender wanted.

“He asked for pictures that were more undressed, and even nude. She does not know why she sent the pictures, but felt obliged to do so, even though she knew it was wrong. The defendant described which types of pictures he wanted her to send. If he was not satisfied with the pictures she sent, he instructed her how to retake them.” (Offender 25, male aged 51; child 37, girl aged 14.)

In addition, the digital communication enabled the offenders to have intense contact with the child, sometimes using several different accounts on multiple social media networks, or through text messages or phone calls after finding the child’s phone number online.

3.1.2. Sweet-talk

This theme contains offender strategies that used sweet-talk to manipulate children into engaging in online sexual activity and is divided into the following three sub-themes: *using flattery*, *acting as a friend*, and *expressing love*.

The first sub-theme describes how offenders *used flattery* to manipulate the child and to achieve increased sexualization within the relationship. There was not much variation within this theme, and it was often simply described in the court judgements how the offender showed appreciation toward the child or gave compliments. Many of the compliments targeted the child’s appearance and body but could also include elements of affection: “He wrote to her that she was good-looking, has a nice body and that he likes her.” (Offender 32, male aged 35; child 54, girl aged 13); “I want to be with you. [...] I would like to be together with you in secret, so that only you and I know. [...] You are so hot, what a nice picture of you.” (Offender 18, male aged 32; child 27, girl aged 12).

The second sub-theme refers to the way in which an offender manipulated the child by *acting as a friend*. The conversations were initially on a sociable level and the offender took on the role of someone the child could talk to and confide in. It could start as a normal friendship, and the contact between the offender and the child sometimes lasted for a long time (months and even years).

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. They started chatting. Both she and the defendant were into horses. Initially the defendant claimed to be 16 years old, but then he claimed something else. Eventually he started asking for nude pictures of her. (Offender 8, male aged 22; child 8, girl aged 13.)

By acting 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, male aged 51; child 37, girl aged 14.)

The third sub-theme include strategies whereby the offender *expressed love* toward 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, male aged 32; child 26, girl aged 13.) 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 many 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, male aged 63; child 4, girl aged 13.)

In a few cases, the court explicitly pointed out that the child had perceived the sexual contact as voluntary: “It is the district court’s view that both parties perceived it as being a love affair. There has been no element of coercion against the complainant.” (Offender 24, male aged 17; child 35, girl aged 13.) By enmeshing the child in a perceived love affair, the offender could induce the child to engage in sexual activity:

“They wrote to each other several times a day, about everything. He said that he loved her because he wanted to show that he supported her. [...] The method used by the defendant to persuade the complainant to pose has been persuasion. He has tied her to him and made her trust him in an elaborate way. He has then ruthlessly used this trust in him for his own pleasure.” (Offender 49, male aged 46; child 119, girl aged 13.)

Similarly, the love and affection expressed by the offender could be conditional and thereby put pressure on the child: “He tried to incite her to involve a dog in the sexual acts, and when the complainant did not want to perform the sexual acts with the dog the defendant has said that he loves her if she does it and called her darling.” (Offender 32, male aged 35; child 58, girl aged 12.) In this case, the offender and child were only in contact on this one occasion, but the offender still used language indicating a romantic involvement.

3.1.3. Overlap of the themes

From the documents, it was clear that five children were subjected to both strategies, which means that in these cases the offender alternately used pressure and sweet-talk on the same victim (this was done by four offenders).

“They were in contact online for about two years and the complainant felt that the defendant was also a friend, a person to talk to. [...] The defendant tried to get the complainant to do more things that he did not want to. Every time they had a fight, the defendant said that it was the complainant's fault and threatened to tell other people what had happened on cam.” (Offender 37, male aged 23; child 74, boy aged 13.)

It should be noted that it is probable that more offenders than just these four used an overlap of strategies. It is likely that many of the offenders who used pressuring strategies also engaged in some of the sweet-talk strategies (for instance introduced pressure first after having established some type of relationship or dependency with the child), but that this was not mentioned in the documents.

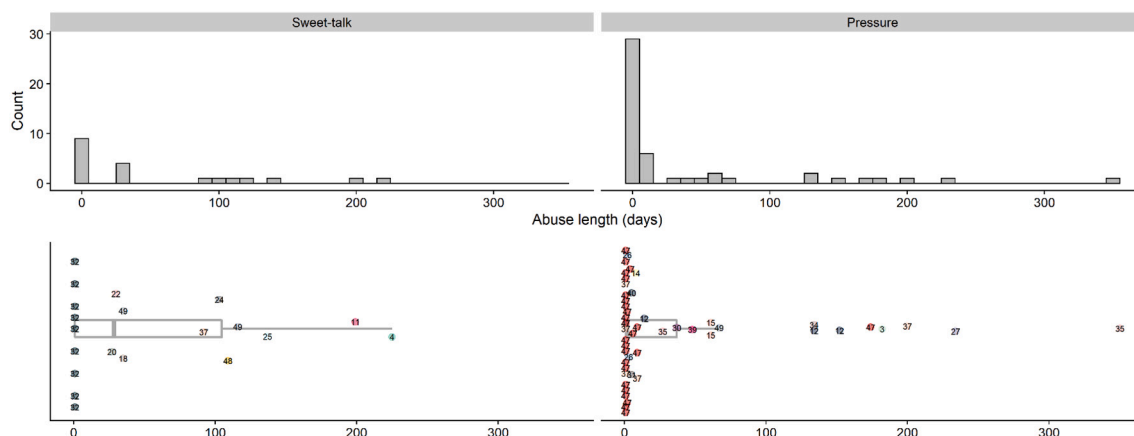


Fig. 1. Number of days between the first and the last occasion of sexual abuse, divided up by strategy. The color-coded numbers display the ID of the offender behind each child victim. Note: Two cases of pressure (679 days and 1461 days) have been removed to avoid excessive length of the x-axis.

The use of pressure is more likely to affect the legal decision and is therefore more likely to be reported. For a further discussion on this, see Limitations and future research.

3.2. Quantitative analysis: Patterns between the strategy and characteristics of the abuse, the victim, and the offender

The total sample include 50 offenders targeting 122 children, but many cases lack information about the strategy the offender used against the victim/s. The majority of all offenders ($n = 34$) had a single victim, but a few had many victims (2, 3, 4, 5, 7, 19 and 26 victims). Due to a lot of missing data regarding the used strategy, it is not possible to draw conclusions about whether or not offenders in general stick to one strategy or adapt the strategy to different victims. From our data it was however possible to discern that five offenders used different strategies on different victims. On the contrary, the offender with 26 victims exclusively used pressure. This indicate that some offenders seem to adapt their strategy following the responses of the child, whereas others (especially those targeting large groups of victims) may have developed a clear *modus operandi*.

3.2.1. 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 Fig. 1). It was roughly as common for offenders to use pressure to abuse a child on one occasion only (43.2%) as it was for offenders to use sweet-talk (45.0%). There was also a large overlap between the two strategies when it came to abusing the child for a longer period (pressure *range* = 1–1461 days, sweet-talk *range* = 1–225 days), but the three longest interactions included pressure. It was somewhat less common for children subjected to pressuring strategies to meet their offender offline (9.9%), compared to the children subjected to sweet-talk 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 Fig. 2.

3.2.2. 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 generally older ($m = 13.2$, $SD = 1.4$, *range* = 10–17 years) than the children subjected to sweet-talk strategies ($m = 11.5$, $SD = 2.1$, *range* = 8–14 years) – see Fig. 3. Remarkably, a large proportion of the children were thirteen years old at the time of the first abuse (pressure 44.7%, sweet-talk 25.0%, full sample 36.4%). It was somewhat more common for boys to be subjected to pressure (80.0% of the boys in the sample where strategy was mentioned was subjected to pressure, compared to 70.5% of the girls). However, it should be noted that this statistic is based on a sample of only 10 boys (the sample of girls was 61).

3.2.3. Patterns between strategy and offender characteristics

In these descriptive statistics, the five offenders who used both strategies were excluded. Overall, the offenders who used pressure were younger ($m = 27.0$, $SD = 14.6$) than the offenders who used sweet-talk ($m = 48.3$, $SD = 16.2$) – see Fig. 4.

4. Discussion

This study confirms many of the findings from previous research investigating online offenders' communicative strategies, but also

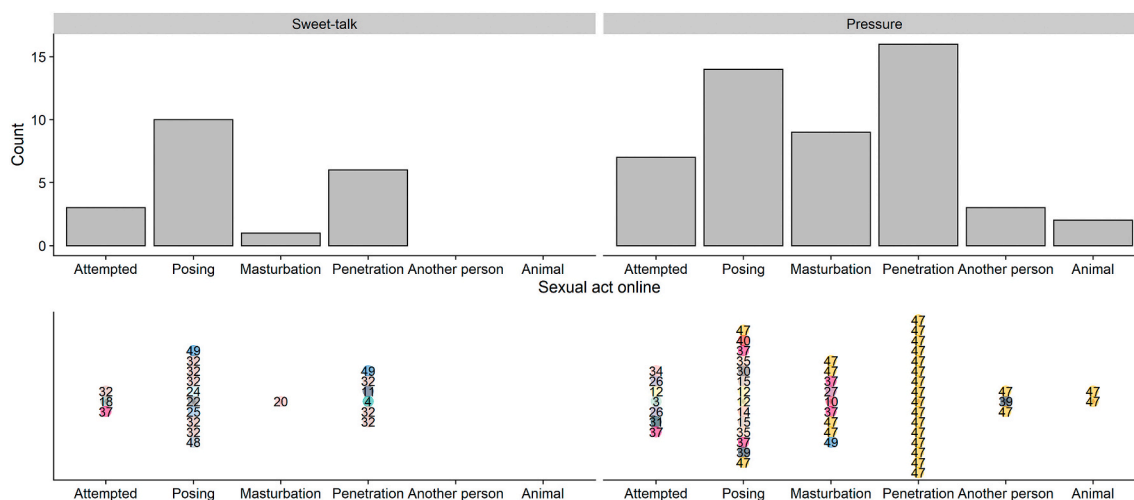
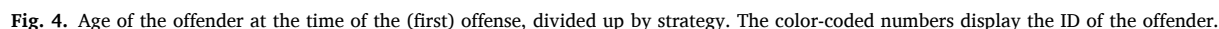
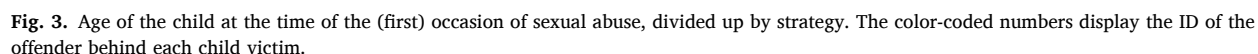


Fig. 2. The most serious kind of sexual act that the child was incited to perform online, divided up by strategy. The color-coded numbers display the ID of the offender behind each child victim.



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children. Possibly, the use of high initial threat can be explained as a sifting strategy to identify the most gullible victims and avoid wasting time on victims that are less likely to comply. By using a scattergun approach (Broome et al., 2018) and sending messages to hundreds of different children at the same time (FBI, 2015; Ulricehamn tidning, 2017), the offender can await the most gullible to take the bait. This strategy would build on the same argument as described by Herley (2012) regarding the way Nigerian scammers reduce the false positives (individuals that are attacked but yield nothing). Nigerian letters are an infamous phenomenon for most people, which means that it should be unwise for a scammer to say that they are from Nigeria. In opposite, scammers present themselves as Nigerian in the first contact in order to dissuade all but the likeliest prospects. In sum, using pressure could be either a response to being rejected or an initial solicitation strategy for some offenders. This finding highlights the great variety of strategies employed by online offenders and illustrates that the interaction between online offenders and their victims extends beyond grooming.

In this study, the pressuring strategy was the most common. However, it should be mentioned that there is a potential bias in the data (e.g., cases that are reported to the police may include more pressure than cases in general, and pressure is more likely to be mentioned in the documents), which prevents us from drawing any conclusions about the prevalence of pressure compared to sweet-talk. The study does however show that pressure is one of the strategies that online offenders use when inciting children to engage in online sexual activity, and that it seems to be more common than previously reported in the literature.

The sweet-talk strategy echoes many of the results from previous research on decoys, showing that online offenders can use compliments, flattery, love and affection, or general conversations when communicating with children (Kloess et al., 2017; Lorenzo-Dus & Izura, 2017; Whittle et al., 2013). Online offenders' interactions have typically been denoted as online grooming (Chiang & Grant, 2017; O'Connell, 2003; Whittle et al., 2013), and grooming itself is described as a slow process in which the offender gains the child's compliance and prepares the child for abuse (Craven et al., 2006). In line with previous research (Winters et al., 2017), some offenders in our study invested a lot of time and effort in building a relationship with the child. However, almost half of the offenders who engaged in sweet-talk were only in contact with the child on a single occasion. This demonstrates that some strategies that are generally part of grooming (flattery, expressing love, and acting as a friend) can be utilized even in short one-time contacts.

Kloess et al. (2019) investigated five offenders' interactions with 29 actual children and distinguished between direct and indirect approaches. Those who employed an indirect approach used compliments, flattery, and gentle pressure through disappointment and sadness, and prepared the child by grooming. Offenders who took a direct approach used more forceful strategies such as threats, blackmail, and insults, and did not prepare the child, instead using immediate initiation of sexual activity. While these findings have many similarities with the results of this study, we identified a large overlap between the strategies. Pressure could be employed either during the initial contact or after a relationship had been established. Likewise, sweet-talk could be part of building a relationship, or could be employed in one-time contacts. Similar to the overlap between fantasy-driven and contact-driven offenders, showing that both groups engage in online sexual gratification (Broome et al., 2018), all offenders in this study tried to engage in online sexual activity while only a few arranged an offline meeting with the child. This provides an insight into the varied nature of offender interactions and indicates that it is difficult to find clear-cut distinctions between the strategies they employ. This study also shows that the relationship between offender and victim can be described as either reciprocal or unilateral (Tener et al., 2015).

The explorative quantitative analyses identified some interesting patterns. The age differences between offenders and victims in interactions characterized by pressure were much smaller than the age differences between offenders and victims in interactions characterized by sweet-talk. One possible explanation is that offenders who used pressure were motivated to exert sexual power over their victims and chose teenagers as they are easier targets than peers, as opposed to having a sexual interest in children. By contrast, offenders who used sweet-talk as a way to build a romantic relationship with young children could be expressing a deviant sexual interest in children. This is only speculation, as further investigation using a study with a different methodology would be needed in order to shed light on the underlying explanations for this pattern.

In sum, the results add to the literature identifying a range of manipulative strategies used by online offenders. Increased awareness that online grooming is not the only threat is important in order to inform current approaches to policing and prevention. This is especially true in light of the relationship identified between the strategy used against the child and the type of sexual abuse that the child was exposed to (pressure was used in the most violating cases, and offline abuse was slightly more common following sweet-talk). The finding that a disproportionately large proportion of the children were thirteen years old indicates that this age group might be particularly vulnerable to online sexual abuse, possibly due to sexual development at this age. These insights are essential when it comes to detecting and criminalizing adults' sexual interactions with children online, as well as when developing preventive measures to teach children about online child sexual abuse.

4.1. Limitations and future research

The present study analyzed court judgements from cases in which offenders had incited children to engage in online sexual activity. While data on naturally occurring interactions with children is one of the strengths of this study, this data also entails some limitations that need to be addressed. First, court judgements only reflect what was brought up during the court hearing and subsequently deemed relevant enough to be included in the court judgement. Consequently, a lot of information about the case is not included, leading to a possible bias in the reported data. This bias is likely to be expressed as an underreporting of certain offender behaviors, and this is of relevance for the current study. It can be assumed that a judge is more likely to include an offender's use of pressure in the court judgement 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 (sweet-talk). What this means for our data is that there is a possible underreporting of sweet-talk strategies, whereas the volume of pressuring strategies reported is probably reasonably accurate.

Second, the study is based on the small percentage of cases of online child sexual abuse 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, resulting in a bias in the data. The findings from this study might thus not be generalizable to all interactions between offenders and children.

For ethical reasons, it is difficult to access data from online offenders' interactions with actual children, and there is currently a lack of studies analyzing such transcripts. In order to drive the research field forward, future studies should do their utmost to access such material, as it would provide invaluable information about the dynamics that children bring to the conversations.

4.2. Conclusions

Our study supports the claim that online offenders use more pressure, coercion, and persuasive language in their interactions with actual children than in their interactions with decoys (Chiang & Grant, 2018; Schneevogt et al., 2018; Seymour-Smith & Kloess, 2021). Consequently, this indicates that pressure may be more common than previously assumed, as the majority of the research within this field builds on decoy data. This study provided detailed descriptions of how offenders could use threats, bribes, and nagging in order to incite children to engage in online sexual activity, and that these strategies could be related in part to the sexual acts that the children performed. In addition, this study identified a sweet-talk strategy in which offenders use flattery, friendship, or love to manipulate children into participation, confirming many previous findings on online grooming, albeit not always characterized by long-term contact. Expanding knowledge about the variety of strategies offenders use and highlighting the importance of not taking too uniform a view of sexual abuse conducted online may have implications for how we can understand, detect, and prevent these crimes.

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References

- Balfe, M., Gallagher, B., Masson, H., Balfe, S., Brugha, R., & Hackett, S. (2015). Internet child sex offenders' concerns about online security and their use of identity protection technologies: A review. *Child Abuse Review*, 24(6), 427–439.
- Barber, C. S., & Bettez, S. C. (2020). Exposing patterns of adult solicitor behaviour: Towards a theory of control within the cybersexual abuse of youth. *European Journal of Information Systems*, 1–32. <https://doi.org/10.1080/0960085X.2020.1816146>
- Beech, A. R., Elliott, I. A., Birgden, A., & Findlater, D. (2008). The internet and child sexual offending: A criminological review. *Aggression and Violent Behavior*, 13(3), 216–228.
- Bergen, E., Davidson, J., Schulz, A., Schuhmann, P., Johansson, A., Santtila, P., & Jern, P. (2014). The effects of using identity deception and suggesting secrecy on the outcomes of adult-adult and adult-child or -adolescent online sexual interactions. *Victims & Offenders*, 9(3), 276–298. <https://doi.org/10.1080/15564886.2013.873750>
- Black, P. J., Wollis, M., Woodworth, M., & Hancock, J. T. (2015). A linguistic analysis of grooming strategies of online child sex offenders: Implications for our understanding of predatory sexual behavior in an increasingly computer-mediated world. *Child Abuse & Neglect*, 44, 140–149. <https://doi.org/10.1016/j.chiabu.2014.12.004>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp0630a>
- Briggs, P., Simon, W. T., & Simonsen, S. (2011). An exploratory study of internet-initiated sexual offenses and the chat room sex offender: Has the internet enabled a new typology of sex offender? *Sexual Abuse*, 23(1), 72–91. <https://doi.org/10.1177/1079063210384275>
- Broome, L. J., Izura, C., & Davies, J. (2020). A psycho-linguistic profile of online grooming conversations: A comparative study of prison and police staff considerations. *Child Abuse & Neglect*, 109, Article 104647.
- Broome, L. J., Izura, C., & Lorenzo-Dus, N. (2018). A systematic review of fantasy driven vs. contact driven internet-initiated sexual offences: Discrete or overlapping typologies? *Child Abuse & Neglect*, 79, 434–444.
- Chiang, E., & Grant, T. (2017). Online grooming: moves and strategies. 4(1) pp. 103–141.
- Chiang, E., & Grant, T. (2018). Deceptive identity performance: Offender moves and multiple identities in online child abuse conversations. *Applied Linguistics*, 1, 25.
- Craven, S., Brown, S., & Gilchrist, E. (2006). Sexual grooming of children: Review of literature and theoretical considerations. *Journal of Sexual Aggression*, 12(3), 287–299. <https://doi.org/10.1080/13552600601069414>
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage Publications.
- De Santisteban, P., Del Hoyo, J., Alcázar-Córcoles, M.Á., & Gámez-Guadix, M. (2018). Progression, maintenance, and feedback of online child sexual grooming: A qualitative analysis of online predators. *Child Abuse & Neglect*, 80, 203–215.
- DeHart, D., Dwyer, G., Seto, M. C., Moran, R., Letourneau, E., & Schwarz-Watts, D. (2017). Internet sexual solicitation of children: A proposed typology of offenders based on their chats, e-mails, and social network posts. *Journal of Sexual Aggression*, 23(1), 77–89.
- Egan, V., Hoskinson, J., & Shewan, D. (2011). Perverted justice: A content analysis of the language used by offenders detected attempting to solicit children for sex. *Antisocial behavior: Causes, correlations and treatments*, 20(3), 273297.
- Ernberg, E., Magnusson, M., Landström, S., & Tidefors, I. (2018). Court evaluations of young children's testimony in child sexual abuse cases. *Legal and Criminological Psychology*. <https://doi.org/10.1111/lcrp.12124>
- FBI. (2015, July 7). *Special agent discusses sextortion case*. FBI. Retrieved 2020-01-18 from <https://www.fbi.gov/video-repository/newsspecial-agent-discusses-sextortion-case/view>
- Gámez-Guadix, M., Almendros, C., Calvete, E., & De Santisteban, P. (2018). Persuasion strategies and sexual solicitations and interactions in online sexual grooming of adolescents: Modeling direct and indirect pathways. *Journal of Adolescence*, 63, 11–18.
- Gámez-Guadix, M., De Santisteban, P., & Alcazar, M.Á. J. S. A. (2018). The construction and psychometric properties of the questionnaire for online sexual solicitation and interaction of minors with adults. 30(8) pp. 975–991.
- Gorard, S. (2010). Research design, as independent of method. In A. Tashakkori, & C. Teddlie (Eds.), *Sage handbook of mixed methods in social and behavioral research* (2nd ed., pp. 237–252). Thousand Oaks, CA: Sage (ca 15 s. ISBN-13: 978-1412972666).
- Greene-Colozzi, E. A., Winters, G. M., Blasko, B., & Jeglic, E. L. (2020). Experiences and perceptions of online sexual solicitation and grooming of minors: A retrospective report. *Journal of Child Sexual Abuse*, 1–19.
- Gupta, A., Kumaraguru, P., & Sureka, A. (2012). *Characterizing pedophile conversations on the internet using online grooming*.

- Hamilton-Giachritsis, C., Hanson, E., Whittle, H., Alves-Costa, F., & Beech, A. (2020). Technology assisted child sexual abuse in the UK: Young people's views on the impact of online sexual abuse. *Children and Youth Services Review*, 119, Article 105451.
- Herley, C. (2012, June). Why do nigerian scammers say they are from Nigeria?. In *WEIS*.
- Ioannou, M., Synnott, J., Reynolds, A., & Pearson, J. (2018). A comparison of online and offline grooming characteristics: An application of the victim roles model. *Computers in Human Behavior*, 85, 291–297. <https://doi.org/10.1016/j.chb.2018.04.011>
- Joleby, M., Landström, S., Lunde, C., & Jonsson, L. S. (2021). Experiences and psychological health among children exposed to online child sexual abuse – A mixed methods study of court verdicts. In *Psychology, Crime & Law* (pp. 1–23). <https://doi.org/10.1080/1068316X.2020.1781120>
- Jonsson, L. S., Fredlund, C., Priebe, G., Wadsby, M., & Svedin, C. G. (2019). Online sexual abuse of adolescents by a perpetrator met online: A cross-sectional study. *Child and Adolescent Psychiatry and Mental Health*, 13(1), 1–10.
- Kloess, J. A., Beech, A. R., & Harkins, L. (2014). Online child sexual exploitation: Prevalence, process, and offender characteristics. *Trauma, Violence, & Abuse*, 15(2), 126–139.
- Kloess, J. A., Hamilton-Giachritsis, C. E., & Beech, A. R. (2019). Offense processes of online sexual grooming and abuse of children via internet communication platforms. *Sexual Abuse*, 31(1), 73–96.
- Kloess, J. A., Seymour-Smith, S., Hamilton-Giachritsis, C. E., Long, M. L., Shipley, D., & Beech, A. R. (2017). A qualitative analysis of offenders' modus operandi in sexually exploitative interactions with children online. *Sexual Abuse*, 29(6), 563–591.
- Kopecký, K. (2017). Online blackmail of Czech children focused on so-called "sextortion" (analysis of culprit and victim behaviors). *Telematics and Informatics*, 34(1), 11–19. <https://doi.org/10.1016/j.tele.2016.04.004>
- Lorenzo-Dus, N., & Izura, C. (2017). "Cause ur special": Understanding trust and complimenting behaviour in online grooming discourse. *Journal of Pragmatics*, 112, 68–82.
- Lorenzo-Dus, N., Izura, C., & Pérez-Tattam, R. (2016). Understanding grooming discourse in computer-mediated environments. *Discourse, Context & Media*, 12, 40–50.
- Malesky, L. A. (2007). Predatory online behavior: Modus operandi of convicted sex offenders in identifying potential victims and contacting minors over the internet. *Journal of Child Sexual Abuse*, 16(2), 23–32.
- Marcum, C. D. (2007). Interpreting the intentions of internet predators: An examination of online predatory behavior. *Journal of Child Sexual Abuse*, 16(4), 99–114.
- O'Connell, R. (2003). *A typology of child cyberexploitation and online grooming practices*. Preston: University of Central Lancashire.
- Quayle, E., Allegro, S., Hutton, L., Sheath, M., & Löf, L. (2014). Rapid skill acquisition and online sexual grooming of children. *Computers in Human Behavior*, 39, 368–375. <https://doi.org/10.1016/j.chb.2014.07.005>
- Quayle, E., & Newman, E. (2016). An exploratory study of public reports to investigate patterns and themes of requests for sexual images of minors online. *Crime Science*, 5(1), 2.
- R Core Team. (2020). R: A language and environment for statistical computing. In *R Foundation for Statistical Computing*. Vienna: Austria. URL <https://www.R-project.org/>.
- Schneevogt, D., Chiang, E., & Grant, T. (2018). Do perverted justice chat logs contain examples of overt persuasion and sexual extortion? A research note responding to Chiang and Grant (2017, 2018). *Language and Law/Linguagem e Direito*, 5(1), 97–102.
- Seymour-Smith, S., & Kloess, J. A. (2021). A discursive analysis of compliance, resistance and escalation to threats in sexually exploitative interactions between offenders and male children. *British Journal of Social Psychology*.
- Shannon, D. (2008). Online sexual grooming in Sweden—online and offline sex offences against children as described in Swedish police data. *Journal of Scandinavian Studies in Criminology and Crime Prevention*, 9(2), 160–180. <https://doi.org/10.1080/14043850802450120>
- Swedish code of judicial procedure, chapter 30, paragraph 5.
- Swedish penal code, chapter 6, paragraph 8.
- Tener, D., Wolak, J., & Finkelhor, D. (2015). A typology of offenders who use online communications to commit sex crimes against minors. *Journal of Aggression, Maltreatment & Trauma*, 24(3), 319–337.
- Ulricehamn Tidning. (2017, October 30). Dömde nätpedofilen tvingas byta anstalt [convicted internet offender is forced to change institution]. Ulricehamn Tidning. Retrieved from <http://www.ut.se/ulricehamn/domde-natpedofilen-byter-anstalt-2/>.
- van Gijn-Grosvenor, E. L., & Lamb, M. E. (2016). Behavioural differences between online sexual groomers approaching boys and girls. *Journal of Child Sexual Abuse*, 25(5), 577–596.
- van Gijn-Grosvenor, E. L., & Lamb, M. E. (2021). *Online groomer typology scheme* (pp. 1–15). Psychology, Crime & Law.
- Whittle, H., Hamilton-Giachritsis, C., Beech, A., & Collings, G. (2013). A review of online grooming: Characteristics and concerns. *Aggression and Violent Behavior*, 18(1), 62–70.
- Whittle, H. C., Hamilton-Giachritsis, C. E., & Beech, A. R. (2014). "Under his spell": Victims' perspectives of being groomed online. *Social Sciences*, 3(3), 404–426. <https://doi.org/10.3390/socsci3030404>
- Williams, R., Elliott, I. A., & Beech, A. R. (2013). Identifying sexual grooming themes used by internet sex offenders. *Deviant Behavior*, 34(2), 135–152. <https://doi.org/10.1080/01639625.2012.707550>
- Winters, G. M., Kaylor, L. E., & Jeglic, E. L. (2017). Sexual offenders contacting children online: An examination of transcripts of sexual grooming. *Journal of Sexual Aggression*, 23(1), 62–76.
- Wolak, J., & Finkelhor, D. (2013). Are crimes by online predators different from crimes by sex offenders who know youth in-person? *Journal of Adolescent Health*, 53(6), 736–741.
- Wolak, J., Finkelhor, D., & Mitchell, K. (2004). Internet-initiated sex crimes against minors: Implications for prevention based on findings from a national study. *Journal of Adolescent Health*, 35(5) (424. e411–424. e420).
- Wolak, J., Finkelhor, D., Walsh, W., & Treitman, L. (2017). Sextortion of minors: Characteristics and dynamics. *Journal of Adolescent Health*, 62(1), 72–79. <https://doi.org/10.1016/j.jadohealth.2017.08.014>