Challenges in investigating self-generated online child sexual abuse material

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Abstract

Aim: The overall aim of this paper is to offer a greater understanding of the context of children's online sexual behaviour through exploring what are some of the main challenges the police encounter when investigating digital content of a sexual nature produced by young people, such as photographs, videos and chat messages.

Methodology: The research is primarily reviewing and analysing academic literature, policy papers, legal sources and statistical data. The main areas examined include the increasing prevalence of self-generated child sexual abuse material (CSAM), how contemporary peer-to-peer relations amongst children impact the self-production of sexual material, and how creating sexual content online for commercial reasons and the development of digital technologies add to the complexity and ambiguities of investigations.

Findings: Findings in this paper highlight that law enforcement alone will not be able to manage all the challenges that online child sexual abuse crimes imply on society and children in particular. They will need clear guidelines to differentiate between children's harmful and healthy online sexual behaviour and up-to-date knowledge on how to avoid the unnecessary victimisation of children.

Value: This paper promotes a more nuanced understanding of the complex phenomenon of children self-generating explicit content, which is often embedded within wider societal issues of peer-to-peer relations, financial deprivation and technological advancement. As a result, we will be able to better protect young people, distinguishing between adolescents' healthy and harmful online sexual behaviours, so resources can be prioritised and interventions carried out when authority is needed, avoiding the unnecessary criminalisation of children.

Introduction

Investigating online child sexual abuse (OCSA) is an increasing challenge for law enforcement as new dilemmas emerge on account of children becoming involved with digital technologies in unprecedented ways. Intervening in cyber-crimes that relate to the sexual exploitation of children has always been difficult for the police in the sense that locating and recovering evidence such as child sexual abuse material (CSAM) is often hidden on Dark Web sites managed by peer-to-peer offender networks (URL1; Davidson et al., 2016), and can be costly and time-consuming (Martellozzo, 2013); moreover, a significant proportion of online sexual offences against children are transnational in nature involving a multitude of jurisdictions and legislations (Yar & Steinmetz, 2019; Davidson et al. 2016; Martellozzo, 2013), and a plethora of victims and perpetrators (Wager et al., 2018). A factor that brings additional complexity and challenges to investigating OCSA is when minors produce and share CSAM of themselves, which potentially results in them being perceived as criminals from a legal perspective. Whether such perceptions are adequate and what perspectives can be applied to determine the criminal nature of self-producing CSAM are topics elaborated on in this essay. The overall aim of this paper is to offer a greater understanding to the context of children's online sexual behaviour through exploring what are some of the main challenges the police encounter when investigating youth-produced sexual imagery. The main areas examined include the increasing prevalence of self-generated CSAM, how contemporary peer-to-peer relations amongst children impact the self-production of sexual material, and how creating sexual content online for commercial reasons and the development of digital technologies add to the complexity and the ambiguities of investigations.

Policing online child sexual abuse

According to the European Commission's position paper, a safe, secure and trusted digital environment is a cornerstone of the European Union and Member States must be fully committed to supporting the protection, empowerment and rights of children, both through national and international efforts, in

a changing and increasing digital world. [1] One of the biggest threats to children in the online space, especially on popular social media platforms, is sexual exploitation by criminals.

According to the National Crime Agency (URL4), child sexual abuse (CSA) is *'forcing or enticing a child to take part in sexual activity, whether or not the child is aware of what is happening, including activities such as involving children in looking at, or in the production of, sexual images, watching sexual activities, encouraging children to behave in sexually inappropriate ways or grooming a child in preparation for abuse'*.

In Hungary, Section 204 of Act C of 2012 on the Criminal Code[2] regulates the offence of child pornography, according to which anyone who obtains or possesses, produces, offers, supplies or makes available, distributes, deals with or makes pornographic images of a person or persons available to the general public under the age of eighteen years, or facilitates or provides support for the committing of these acts, is punishable.

CSA can happen online, or in the physical world, or both at the same time; in either case, the consequences for children are harmful and long-lasting. Victims can experience severe mental health problems, such as anxiety, emotional distress, major depression, post-traumatic stress disorder, along with the potential development of substance abuse problems and suicidal tendencies significantly higher than found in the general population (Fisher et al., 2017).

According to Martellozzo (2013), attention should be given to the fact that non-contact online abuse is not a 'minor' problem compared with contact offences, as the negative effects can be just as devastating and traumatic, and may continue into the adulthood of the victims. It could be argued that some aspects of CSA happening in cyberspace could mean an even more permanent threat for young people's health and life-perspectives. For example, in the case of self-generated CSAM shared online, the material can stay available infinitely by offenders saving it on personal computers and re-sharing it via peer-to-peer networks, a practice identified by Europol's latest IOCTA (Internet Organised Crime Assessment) report (2021) as one of the most crucial threats online. The fact that the widely available visual representation of one's intimate body parts or sexual activities might not ever be completely erased or prevented from further use by cyber-criminals can make victims of self-generated CSAM feel ashamed and guilty, besides being blamed by

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1   A Digital Decade for children and youth: the new European strategy for a better internet for kids (BIK+).
2   Act C of 2012 on the Criminal Code.

others because of what they did; all resulting in potentially continuous re-trau-matisation and victimisation (Europol, 2020; Ringrose et al., 2021; URL6).

In order to mitigate the harm, law enforcement is responsible to discover, in-vestigate and intervene in OCSA cases rapidly and effectively, especially as it occurs to children during a critical formative time of psychological development (Martellozzo, 2013). Failure to manage OCSA cases adequately and as soon as possible risks prolonging and increasing the negative consequences. The po-lice try to direct more resources to these cases, consequently, operations in the UK became more resultants in recent years in arrests connected to OCSA, hav-ing an annual increase of 50% in 2020, signifying a total of 7,212 criminals ar-rested, and 8,329 children protected directly (URL2). Not underestimating the vast efforts and progress the police made, it is important to highlight that these numbers can appear as a drop in the ocean, and might suggest that law enforce-ment alone is not well-suited or able to tackle the challenges OCSA presents to society, and in particular to young people's wellbeing.

Self-generated sexual material

Research carried out by Ofsted (2021) with the participation of 900 children from 32 schools indicates that the prevalence of children's online sexual har-assment is dauntingly high and affect the majority of youngsters, although it is typically underestimated by professionals. The same research found that an overwhelming number of children had negative experiences that they should have been protected from; for example, 40% of boys and 80% of girls have been put under pressure to provide self-generated sexual imagery on a regular basis, and around half of the children have been made a record of a sexual nature by others without their knowledge or consent (Ofsted, 2021). These numbers are close to those in the latest global threat assessment of the WeProtect Alliance (URL7), an international multi-stakeholder agency combating OCSA, which found that in high-income English-speaking countries, including the UK, four in five girls and three in five boys experienced online sexual harm, and 22% of all respondents said their self-produced sexual material had been circulated without authorisation as a child.

As visible from the examples above, a segment of OCSA that brings ambigu-ities to police investigations is how to deal with cases involving self-produced youth sexual imagery. In the UK, similarly to most countries in the Western world, it is illegal to produce, possess or distribute indecent images/sexual de-piction of children (Bryce, Robinson, & Petherick, 2019). It means that children

who are self-taking naked or partially naked pictures, or any other imagery of themselves engaged in sexual acts are potentially facing negative legal consequences and criminalisation, regardless of whether they produced them voluntarily or as a result of coercion.

A study based on incident reports (Europol, 2020) indicates that the problem of self-generated CSAM online is a steadily growing and serious matter that is not likely to cease; moreover, it expanded unpredictably due to the COVID–19 pandemic. In 2016, 1 in 5 of the images of CSA reported in the UK were self-produced (Fisher et al. 2017), whereas, in 2020, the Internet Watch Foundation (IWF) (URL3) confirmed that cases of self-generated imagery accounted for 44% of CSAM they took action on, 68,000 cases in total, amounting to a 77% increase compared with the previous year. They also reported the harrowing trend of younger children being identified, stating that 80% of the victims of self-generated CSAM were 11–13-year-old girls depicted mostly in their bedrooms or another domestic environment (IWF, 2021).

A systematic review and meta-analysis of academic studies by Madigan and colleagues (2018) also confirmed that self-producing CSAM by teenagers grew in prevalence with time and affected children at an increasingly early age. Thorn (URL6) showed that in 2020, 17% of children aged 9–17-years-old shared self-generated CSAM online, with the highest annual upsurge observed for 9–10-years-old children, from 3% to 15%. As it is evident from these statistics, children incrementally produce CSAM, and they do it for a variety of reasons. It can be suggested that criminalising the children involved in self-generating CSAM, especially those who are not even legally able to participate in sexual activities, would not only lead to an unmanageable workload for the police, but nor be in the best interest of the children and society.

Challenges in investigating self-generated CSAM

To effectively and timely investigate OCSA cases involving self-generated CSAM and to minimise the harm induced, the police first need to manage the challenge of its extremely high prevalence. One way of approaching it is to differentiate whether a case that involves self-generating and exchanging sexual material by adolescents is part of a healthy, age-appropriate, and consensual sexual behaviour or it is a harmful practice deriving from pressure or coercion. In the first case, sharing explicit imagery willingly between peers, like young intimate partners, can be undoubtedly risky, nevertheless, it arguably falls within children's rights to privacy, connecting with others and building relationships. According

to Quayle and Karen (2015), the ability to self-produce and disseminate content is part of children's social world, in which they exercise their autonomy, individual agency, and decision-making about their sexual identity. Children are not asexual beings (May-Chahal & Kelly, 2020), and producing, possessing and exchanging intimate images online is part of their world despite the risks it can posit. In fact, recent research (URL7) demonstrated that many young people associate positive feelings, such as curiosity, excitement and happiness with the exchange of self-generated sexual material as part of their online life.

It might be argued that there is a definite need to raise awareness and educate young people about cyber-related vulnerabilities such as safety-pitfalls of platforms they use, possible hacking of their devices and the leaking of pictures; even so, their rights should be recognised and respected online as much as in the 'real' world. It implies that allocating resources to investigate self-generated CSAM cases by the police when the material is consensually produced and shared between adolescents at an appropriate psychological developmental stage[3] is not at anyone's interest. Therefore, these non-exploitative cases – if at all –, should be dealt with either by educational service providers, the local community, or the families of young people involved. Part of the solution for the challenge of the reportedly high prevalence of self-generated CSAM is to adequately differentiate between children exploring their sexuality or others exploiting them.

In many instances, the challenge to differentiate between exploration and exploitation can be difficult for police officers, many of whom were not sufficiently trained in recognising and dealing with CSA, and have potentially little knowledge of child sexual development and how it manifests in the fast-evolving digital environment (Yar & Steinmetz, 2019; Wager, Myers & Parkinson, 2021). Academics have repeatedly identified that a significant problem impacting the effectiveness of law enforcement with regard to CSA is the lack of specialist officers who understand the contexts and feel competent to communicate with and adequately support survivors (Martellozzo, 2013; Wager et al., 2021); as well as the gap in research to help them disentangling healthy intimate sexual behaviour in childhood from OCSA and provide clear guidelines (Quayle & Karen, 2015; Wagner et al. 2018; May-Chahal & Kelly, 2020). It can be argued that when child sexual material is generated or possessed for oneself,

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3   „*Child having capacity to judge: a minor who, in accordance with his or her age and intellectual and emotional development, is capable [...] of understanding the essential content of the facts and decisions affecting him or her and of seeing the likely consequences.*" Government Decree No. 149 of 1997 (IX. 10.) on Guardianship Authorities and the child protection and guardianship procedure (149/1997. (IX. 10.) Korm. rendelet a gyámhatóságokról, valamint a gyermekvédelmi és gyámügyi eljárásról).

or as a result of consensual online interactions between peers of a similar age who have no power imbalance and understand the consequences, it should not be perceived as OCSA.

Various forms of pressure in self-generated sexual material

The problem remaining is that a compelling proportion of children produce and share explicit images of themselves as a result of coercion by their underaged peers or because of financial pressure (Martellozzo et al., 2016; Quayle & Karen, 2015; Ofsted, 2021), which can lead to more complexities in investigating the offenders and their motives. Research (Davidson et al., 2016) showed that in the UK, young people who are being solicited online were solicited mostly by peers and not adults. Between peers, coercion to self-generate CSAM might happen within an otherwise consensual relationship using emotional manipulation; because boys want to meet heteronormative expectations of their friends; or because children perceive asking for and sending CSAM (like penis pictures) so commonplace they do not realise its harmful and criminal nature (Ofsted, 2021; Ringrose et al., 2021). When police have to investigate other children as perpetrators/collaborators in self-generated CSAM cases, it necessarily implies questions around the other children's intentions, emotional and intellectual maturity, and capability to understand the consequences of their inappropriate behaviour, which officers have to take into account and investigate sensitively.

Children can also participate in a less frequent type of CSAM production, not aimed for exchange between peers but for material benefits. There is research confirming that in many communities, friends and young relatives are advising other children about how to self-produce 'marketable' CSAM and make money via particular online platforms and anonymous payment systems (Gill, 2021; URL1). These OCSA cases are facilitated by emerging technologies that make investigations additionally challenging and costly, for example, because officers need specialist knowledge, tools and equipment to retrieve data from end-to-end encrypted messaging services, track cryptocurrency payments, and collect evidence of OCSA created and distributed through live-streaming platforms (URL1).

Live streaming platforms like Omegle gained immense popularity amongst children during the COVID–19 pandemic and have reportedly exposed children to pornographic content created by peers (URL5). These sites are easy to access, lack safety-by-design features such as proper age-verification, filtering and content moderation, thus contributing to the self-creation and distribution of CSAM on a daily basis. Martellozzo and Bradbury (2021) pointed out that

subscription-based social media platforms or video on demand services, such as OnlyFans, which gained enormous popularity under COVID–19, provide a space for users, including minors, to distribute self-generated content, and thus, by not implementing adequate safety systems, encourage vulnerable children to create and sell sexual content online for their own financial gain.

Investigating cases when children create CSAM for financial reasons on platforms is complicated for a number of other reasons besides evidence retrieval. For example, children's online activities, especially when they are using emerging platforms/technologies largely unknown to adults, can go unnoticed and therefore not reported by caregivers. When other young people notice it, there could also be confusion around where and how to report it, one research finding that children complained about being unable to understand and follow sites' safety procedures and report mechanisms (Davidson et al., 2016). The lack of user-friendly reporting features and safety-by-design in general might not come as a surprise if for-profit companies' interests are examined. Businesses such as Omegle and OnlyFans – like TikTok or Instagram, which have long been popular with children – thrive if more content is shared and generated on their platforms. They might attract young people promising wealth and popularity, taking a significant percentage from their generated income or through advertisements, regardless of whether the material created is inappropriate or illegal; for which they deny liability and point at insufficient regulation and users' responsibility (Meggyesfalvi, 2021). It is debated with regard to the UK's Online Safety Bill, what actors should take how much legal responsibility for policing harmful content in cyberspace, including social media companies whose current practises enable and, to some extent, amplify OCSA (Meggyesfalvi, 2021).

Undoubtedly, the police will continue to have an important role to play to protect children online, deter and investigate OCSA, including cases when children produce CSAM because of peer pressure or for economic motives. However, it can be argued that law enforcement alone will not be able to manage the challenges that OCSA crimes imply on society and children in particular. They will need clear guidelines to differentiate between children's harmful and healthy online sexual behaviour and how to avoid the unnecessary victimisation of children. The police will also need to become more proactive rather than reactive of societal and technological changes in protecting children online, and cooperate with social media businesses and industry whom have more resources, capabilities and insight into the effective regulation and policing of content online (Davidson et al., 2016). Whilst there are many challenges, tasks and room for improvement ahead of the police, they should be supported in it through a joint effort of all stakeholders, so harms are reduced, and children's online safety is eventually ensured.

Conclusions

The online world continues to provide children and young people with many positive opportunities to connect, play, learn, explore, understand and experience sexuality. However, there are also opportunities for malicious individuals and organised criminal networks to exploit the Internet's facilitating features, the technological and regulatory gaps in online safety and the difficulties for law enforcement in dealing with OCSA cases. Understanding OCSA and its various manifestations is essential for law enforcement in order to effectively identify and investigate criminal cases. To better protect young people, they need to distinguish between adolescents' healthy and harmful online sexual behaviours, so they can prioritise resources and intervene when their authority is needed, while avoiding the unnecessary criminalisation of children. Many of the challenges associated with children's increasing use of the internet, including the complex phenomenon of self-generated sexual digital content, can only be adequately addressed if they are understood in the broader context of the role of peer-to-peer online relationships in children's lives, the impact of technological developments, and the influence of isolation, loneliness and material deprivation on children.

It might be tempting to blame online sexual predators, greedy companies, incapable governments and incompetent law enforcement, educational institutions and parents for failing to protect children, or even perceiving children themselves as criminals for behaving irresponsibly in cyberspace. However, it can be concluded that to deal with the challenges posed by self-produced CSAM is difficult and complex, resource-intensive, and might lack definitely identifiable offenders. To face the challenges in police investigations, and therefore ultimately ensure children's online safety, there is a need for all stakeholders to work together to contribute to robust but realistic legislations, clear guidelines, effective training programmes, and well-allocated human and financial resources.

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