



# Users of Online Child Sexual Abuse Material

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## Abstract

Online communities on darknet contribute to sexual violence against children. They provide offender access to Child Sexual Abuse Material and to a group of peers that supports criminal activities. This article sheds light on online child sexual abusers and their justifications for Child Sexual Abuse (CSA). It describes different offender profiles and motivations for CSA, followed by a section on policing these offences. The article then lays out psychological models, such as cognitive distortions, that are used to understand pedophiles' behavior. The discussion is complemented by direct citations from a darknet community of CSA offenders, showing that these models are not just theoretical considerations. The last part of the article concentrates on online communities of CSA offenders. It describes different types of members of such communities and explains how the communities support individual offenders and how they provide learning models that facilitate criminal behavior. The article concludes with a short reflection of its findings, including novel insights for investigators of these crimes and proposed venues for further research.

**Keywords** Child Sexual Abuse · Child Sexual Abuse Material · Online communities · Dark web darknet · Cognitive distortions

## Users of Online Child Sexual Abuse Material

The cyber space is a mediator and enabler of all kinds of sexual violence against children (Durkin and Bryant 1995; Owens et al. 2016). According to routine activity theory, it offers not only an easy access to suitable child victims for a motivated offender but also an unchecked environment to perform Child Sexual Abuse (CSA) offences (Babchishin et al. 2015; Fortin et al. 2018; INTERPOL 2020). As the Interpol points out, the COVID-19 pandemic contributed to these enabling structures. Regarding the victims, lockdowns increased the amount of unsupervised time, which children spent online under the radar of their guardians, who otherwise might have noticed signs of abuse (Europol 2020a; INTERPOL 2020). The offenders also had more time to spend online. In the beginning of the pandemic, Europol reported a significant increase in

European peer-to-peer sharing networks for Child Sexual Abuse Material (CSAM) (Europol 2020a).

The creation and maintenance of online communities are of central importance for understanding CSAM-related crimes and offending in the cyber space. Darknet offers fertile grounds for offenders to contact their peers and upload, download, or trade CSAM. The Tor Browser (TOR) is the most used application to access darknet, and it bases on a network of thousands of servers that reroute the user's IP address, hence making it impossible to identify its origin (Gannon et al. 2023).

According to criminal justice statistics, 1–3% of CSA offenders are female, and the rest are male (Weinsheimer et al. 2017). Moreover, approximately every fifth girl and 1 in 13 boys experience sexual violence before the age of 18 (Stoltenborgh et al. 2011). Despite overgeneralization, this article refers to the offenders with male pronouns and to victims with female pronouns.

Several studies show that the vast majority of all online offenders have contact with their peers (Beech et al. 2008; Merdian, et al., 2013; Shelton et al. 2016) and that access to the community of like-minded facilitates deviant behavior (Krone 2004). On the one hand, the “normalization”

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of sexual violence gives the perpetrator a sense that his behavior is more common than it actually is (de Young 1988). Thus, online interaction with peers may facilitate—logistically, emotionally, and socially—CSA offending. On the other hand, online communities may substitute physical relationships as CSA offenders sometimes exercise age plays with each other (Quinn and Forsyth 2013; Merdian et al. 2013a, b; Carr 2007).

This article aims at addressing the question of how darknet online communities of child sexual abusers enable sexual violence against children. By so doing, it sheds light into the recent scholarly research on online CSA and the writings of the offenders.

This article starts with a description of different offender profiles and motivations for CSA, followed by a section on policing these offences. The article then lays out psychological models, such as cognitive distortions, that are used to understand pedophiles' behavior. The discussion is complemented by direct citations from a darknet community of CSA offenders, showing that the models are not just theoretical considerations. The last part of the article concentrates on online communities of CSA offenders. It describes different types of members of such communities and explains how the communities support individual offenders and how they provide learning models that facilitate their criminal behavior. The article concludes with a short reflection of its findings and venues for further research.

## Child Sexual Abusers Online

### Profiles of Online Child Sexual Abuse Material Offenders

Pedophilia is a mental health diagnosis and as such defined as persistent and intense sexual attraction to prepubescent children. The attraction may lead to sexual urges and physical abuse of children, but also to mere fantasies (American Psychiatric Association, 2013). The focus of this article is on persons who commit online offences. Not all of them are pedophiles but may offend amongst others for financial profit or out of curiosity for CSAM contents (Beech et al. 2008; Sheldon 2011; Young 2008). Therefore, the article refers to them as CSA or CSAM offenders.

CSAM documents sexually abusive acts to a child (ECPAT International 2016). In over 140 countries, simple possession of CSAM is a criminal act, but the adequacy of domestic legislations for criminalization of further online CSA offences varies significantly from country to country, posing obstacles for policing these crimes (International

Centre for Missing & Exploited Children, 2018). Online CSA covers all sexually exploitative acts “carried out against a child that have, at some stage, a connection to the online environment” (ECPAT International 2016). These include (i) manipulating or threatening child to perform sexual acts in front of a webcam; (ii) grooming; and (iii) distribution, dissemination, importing, exporting, offering, selling, possession of, or knowingly obtaining access to CSAM (ECPAT International 2016; Europol 2020b). Since these offences are frequently global by nature, international cooperation is a fruitful way to advance their policing.

Research on the demographics of CSAM offenders suggests that an average online offender could be a single Caucasian male, who has attended college, had issues with substance abuse, and has mental health problems (Bourke and Hernandez 2009; Webb et al. 2007). Up to 20% have experienced some sort of sexual abuse as children and have been convicted for a sexual crime (see amongst others Elliott et al. 2009, 2013; Long et al. 2012; McCarthy 2010; McManus et al. 2015; Owens et al. 2016; Seto et al. 2006; Shelton et al. 2016; Wolak et al. 2003; Young 2008).

The motivations for CSAM use could roughly be organized into satisfaction of sexual attraction to children and into emotional purposes in the sense that CSAM allows the escape from negative feelings, such as loneliness, depression, anxiety, sexual frustration, or boredom (Babchishin et al. 2018; Merdian, et al., 2013; Morgan and Lambie 2019). The online era has also brought new motivations into picture, such as using CSAM out of curiosity or for collecting different types of grotesque materials (Hartman et al. 1984; Jenkins 2001; Krone 2004; Soldino et al. 2020).

Several studies distinct between online and offline CSA offenders (or non-contact and contact offenders) where the former ones commit their crimes purely in the cyber space and latter ones physically abuse children (Babchishin et al. 2018, 2015; Henshaw et al. 2017; McManus et al. 2016; Elliott et al. 2009; Seto 2013). Internet indeed provides a gateway to groom children for contact sexual violence (McCarthy 2010). It has been found that contact offenders have more online contacts with their peers and maintain larger collections of CSAM than online offenders (McManus et al. 2015; Owens et al. 2016). Accordingly, the distinction between online and offline abusers is rather insignificant (Broome et al. 2018; Owens et al. 2016; Shelton et al. 2016).

Wilson and Jones suggest that internet offers a space for pseudo-reality, where fantasies meet CSA through the use and production of CSAM (Wilson and Jones 2008; Merdian et al., 2018; Merdian et al. 2013a, b). CSAM may reinforce fantasies and by so doing incite offenders to produce corresponding real-life materials or experiences (Bartels et al. 2019; Wilson and Jones 2008). Thus, fantasies may facilitate

the planning of an offence or generate sexual sensations that lower self-control and by so doing smooth the way to physical CSA (Babchishin et al. 2018; Sheldon 2011; Sheldon and Howitt 2007).

### Differences Between Online and Offline Child Sexual Abuse Offenders

A simplified way of making the distinction between contact- and fantasy-driven CSA offenders is to observe the environment and the result of their criminal activities. Contact offenders victimize children by exercising physical sexual violence against them (Broome et al. 2018), while for fantasy offenders, the online environment is central for offending (DeHart et al. 2017). By illegally using CSAM, fantasy users re-victimize children who have already been victimized by contact abusers (Seto 2013). However, since the online environment is an integral part of nearly all CSA cases, strict distinction between contact- and fantasy-driven offenders is rather outdated, as Broome et al. (2018; Powell and Henry 2017) point out. Thus, instead, it is useful to observe the intentions behind the online actions: is the groomer interested in meeting the child in person, or does he want her to perform sexual acts in front of a webcam?

Distant live streaming of CSA is a novel offence and differs from other online CSA crimes in two ways: It is financially motivated and has both virtual and physical elements (Cubitt et al. 2021). The facilitators of live streaming sessions are often the child's family members and who commit sexual violence in front of a webcam for financial benefit. The customers, in turn, order virtual sessions and, e.g., specific acts of sexual violence to be conducted on the child victim without being physically present (ECPAT International 2020; Europol 2020b). The child victim and her molesters are often based in the poor developing countries, such as the Philippines, but the problem persists also in Europe (Europol 2020b).

Distant live streaming of CSA is particularly challenging to police. When the streaming ends, the material is gone unless the offender has captured it for his own use or for the purpose of "capping," that is editing, circulating, or trading it (International Centre for Missing & Exploited Children, 2018). However, police cooperation between the Philippines and Australia shows that it is not impossible to get hold of the offenders. In 2018, the Philippines provided Australia with a list of 118 arrested CSA offenders, and Australia matched transactions of 299 Australian-based persons to these offenders. Eventually, 256 persons were found to have sent payments for live streaming facilitators in the Philippines (Brown et al. 2020; Cubitt et al. 2021).

In addition to live streaming, Europol has recently reported signs of emerging commercialization of CSAM in both clear web and darknet. This is a new turn, since the

material has traditionally been available for free (Europol 2020b). Although the crime scene in the darknet evolves, the takedown of a CSAM forum called "Boystown" is an example of successful policing. Here, too, the arrest of four active offenders behind the forum was a result of international police cooperation. The investigations were initiated by Germany, coordinated by the Europol, and implemented in cooperation with The Netherlands, Sweden, Australia, USA, and Canada (Bundeskriminalamt 2021; Europol 2021). This case shows that despite the technical impediments posed by the darknet, successful investigations of these forums are possible (Gannon et al. 2023).

## Justifications for Sexual Violence Against Children

### The Concept of Cognitive Distortions

Cognitive distortions are used to understand CSA offenders' behavior (Abel et al. 1984). These cognitions help to rationalize and justify illegal and deviant actions, because they are based on distorted accounts about the victims, the world, and the offender himself (Ward and Siegert 2002). Moreover, they serve the purpose of freeing one from "anxiety, guilt and loss of self-esteem that would usually result from an individual committing behaviors contrary to the norms of his society" (Abel et al. 1989, p. 137). As such, cognitive distortions seek to explain why a very narrow group of people can sexually abuse children (Howitt and Sheldon 2007).

Much of the research on cognitive distortions bases on Ward and Keenan's argument that cognitive distortions are a result of implicit theories. For understanding the complexities of the world, a child creates causal theories, which help her to make sense of her surroundings through predictions about future events and others' behavior (Ward and Keenan 1999). Thus, human beings construct the world mentally, and it "is this construction that guides their actions and interpretations of others' actions" (Ward 2000, p. 498). This is the window of opportunity for the formation of cognitive distortions, which may appear if the person misinterprets the basic concepts of the underlying the society.

### Cognitive Distortions, Implicit Theories, and Neutralizing Accounts of CSA Offenders

Implicit theories of CSA offenders mostly circle around their victims. To provide understanding to the psychology and avenues of offending, this article cites chat discussions of anonymous offenders active in a darknet forum. The forum has been taken down by a LEA operation, and collection of the data did not include any illegal actions, such as viewing CSAM or participating in the chat discussions. According

to the concept on implicit theories, child sexual abusers frequently assume that *children are sexual beings*, leading to the idea that children in fact initiate and enjoy sex (Szumski et al. 2018).

Attraction is present from birth and there have been plenty of studies to confirm this fact. Hence if you need a boy then there are boys that will need you.

Second, a belief of one's own *superiority* justifies sexual violence against children (Ward and Keenan 1999).

I think that humans just have this very unfortunate tendency for self-destruction and denial of their own nature, which historically had led to many disasters, such as - Christianity (and all other abrahamic religions of course), and in modern age it's more of a mindset for cattle aka 99% of the population, hate breeding for obvious natural phenomena such as boy-lovers, or "paedophiles" as they would brand us.

Third, the idea of a *dangerous world* and that other people seek to dominate the offender permits his own domination. In such world, children may be perceived as the only ones to be trusted (Bartels & Merdian 2016).

The DSM [Diagnostic and Statistical Manual of Mental Disorders] is a political document masquerading as scientific/medical document. Why do you trust that tyrannical document above your own instinct?

Fourth, the surrounding environment may also be thought of being *uncontrollable*. In such case, the offender might perceive himself as a victim of the child Ciardha and Ward 2013).

If your pleasure is in and out of love, it CANNOT be wrong. And only you TRULY know if this is so. [...] If they love you back enough to be willing and desirous of sharing this pleasure with you, then, again, how on this God's green earth can that EVER be wrong?

The last implicit theory considers caused *harm* to the victim. On the one hand, caused harm can be belittled by comparing it to arguably more harmful sexual violence. On the other hand, sexual intercourse is arguably beneficial for children and does not cause harm (Ward 2000).

if you want to hurt a kid then yes you are sick. if you want to love a kid then you are not sick.

We are here to defend, protect, care for and raise our beloved boys. They are not here simply to be our throw away sex toys. The gifts of love and sex are freely given in love, and enrich both. Bond both. Why distort that?

If the reality contradicts with these implicit theories, it commonly leads to the offenders' reinterpretation or

rejection of their argumentation (Ward and Keenan 1999). To summarize, online offenders commonly perceive children as sexual objects and by so doing justify their actions as not being abusive (Howitt and Sheldon 2007).

In their seminal work, Abel et al. (1989) argue that cognitive distortions are central for being able to sexually abuse children and for avoiding feelings of guilt. More recently, Howitt and Sheldon suggest that cognitive distortions are not necessarily distortions, but rather "cognitions conducive to offending." Thus, their origins may not lie in the need to justify criminal acts, but in distorted childhood experiences (Howitt and Sheldon 2007; Sheldon 2011). Hence, the argument of children being sexual beings may derive from the offender having been sexually abused as a child, in which case online CSA would be the result of traumatic childhood experiences (Babchishin et al. 2011, 2015).

Steel et al. (2020) identify three mechanisms of cognitive distortions that appear at different stages of offending. First, long-term distortions, such as childhood experience of being sexually abused, originate from the history of the offender and facilitate offending by normalizing sexual violence against children (for childhood abuse and sexual offending, see Seto and Lalumière 2010). Second, short-term distortions appear shortly before the offence, for instance, when the offender, in the state of arousal, thinks that sexual abuse of children would be acceptable (Ariely and Loewenstein 2006). Third, post hoc cognitions, such as classical minimizations, serve as rationalizations and justifications for offences (Ward and Keenan 1999). Recent studies find that online offenders often perceive the cyber space and child victims as fictive (Paquette and Cortoni 2020; Soldino et al. 2020).

While cognitive distortions explain why some individuals sexually violate children, the concept of neutralizing accounts concentrates on explicit justifications for CSA offending (Durkin & Bryant 1999). While neutralization "precedes the act and hence allows it to happen by supplanting moral constraints" (Hamlin 1988; Sykes and Matza 1957), accounts are linguistic means to explain questionable acts and their consequences. Scott and Lyman identify two types of accounts, namely justifications and excuses. With justifications, the perpetrator admits his responsibility but denies that his act is reprehensible. With excuses, he admits the inappropriateness of his act but refuses to take responsibility for it (Scott and Lyman 1968). Thus, neutralizations and justifications allow the perpetrator to feel better about himself and about his deeds, to mentally escape responsibility, and repeat criminal behavior (O'Halloran and Quayle 2010).

Durkin and Bryant were among the first ones to analyze neutralizing accounts of CSA offenders in an online setting (Durkin and Bryant 1995, 1999). They found that CSA offenders condemn their condemners by arguing that the



society unjustly riots against them and restricts the rights of children for love and sexuality (Sykes and Matza 1957).

Most people just think it's wrong, they can't tell you exactly why they believe things such as "kids aren't sexual" "kids don't know what they want" "kids aren't ready," they just do. Only the people interested in having sex with kids or the very very very rare open minded adult who actually cares about pedophiles' rights bother to question those views.

Offenders also deny causing injury or harm to children, which may lead to the argument that children actually benefit from sex (O'Halloran and Quayle 2010).

We're not responsible for the fact that (little) children, and even baby's, can get horny and have orgasms; that's just nature. What we can do is to give them the most beautiful things in life they deserve; love, attraction and let them enjoy their sexuality like it is supposed to be!

According to the concept of appeals to loyalties, pedophiles perceive themselves as the emancipators of children's right to sexuality (de Young 1988).

In attempts to "protect" children from "predators," advocates seem also to have managed to convolute and suppress child sexuality as well as inhibit enjoyable physical activities between adults and children. In the course of this moral and ideological process, children's sexual privacy has been excessively invaded by these modern moralists.

Lastly, pedophiles may bask in the reflective glory of "great peers" and by so doing justify their criminal acts (Durkin and Bryant 1999).

Interesting how in ancient Greece Man/Boy love was not only considered normal but was seen as a beautiful thing. If anything age of consent laws show that modern western so-call "civilized" society is actually more regressive on sexuality while ancient cultures were more progressive.

Recent studies find that members of online communities alleviate their negative self-image (O'Halloran and Quayle 2010) by referring to themselves as "child lovers." Correspondingly, it is maintained that there are only "consensual romantic relationships" between adults and children (Paquette and Cortoni 2020).

I think the only way boylovers can fight back is to have a BL writer and Hollywood producer make a movie like *Call Me By Your Name* to make a really heart-felt movie about an adult and young boy that would speak to the general public and show it in a

good light and change the way people think about man/boy love.

To conclude, law enforcement officers can expect the offenders to rationalize CSA with cognitive distortions and minimize their crimes with neutralizing accounts. It is useful to keep in mind that the above-described cognitive distortions explain why some individuals end up abusing children and neutralizing accounts concentrate on their justifications for offending. Moreover, these concepts are helpful to understand why certain kinds of arguments surface in the online discussions of CSA offenders.

## Online Community of CSAM Users

### History of CSAM Offenders

In the 1980s, Belanger et al. (1984) introduced the idea of syndicated child exploitation rings. Surprisingly or not, in addition to their main purpose of CSA, such rings correspond to an extent with how child sexual abusers are organized in the darknet today. Similar to the Tor Browser's logic of circuits (torproject.org 2022), the rings laundered both CSAM and payments for it from country to country and continent to continent to minimize the possibility of being caught by the law enforcement (Belanger et al. 1984). Moreover, the collectors had a strong need to socialize with their peers, for social bonding and for expressing their attraction to children. Lastly, they had clear mechanisms and rules for including and excluding members of the network based on, for example, the number of shared pictures (Belanger et al. 1984).

### Members of CSAM Offenders' Online Communities

Empirical research on the members of CSAM online communities is scarce. Much of it bases on O'Connell's categorization of different roles within online groups into (i) coordinators of the activities, (ii) reviewers of pedophilia-related outlets, (iii) generators of postings, (iv) enthusiasts of CSA, and (v) posters and traders of CSAM. Moreover, passive users and active opponents generate large groups (O'Connell 2000, 2001; see also Krone 2004), whereby opponents may rather fuel than hinder the activities of the groups, as facing a common enemy nurtures cohesion (O'Connell 2001).

Users of darknet forums share one distinctive characteristic, namely distrustfulness. While these forums operate with similar logic to mainstream online social networks—users maintain profiles, communicate with each other, and share contents—their underlying aim is often to support criminal activities (van der Bruggen and Blokland 2021b; Macdonald and Frank 2017; Motoyama et al. 2011). Communities

of child abusers have similar proceedings of establishing trust between the users: after joining a group, new members must complete assignments to become “newbies” of the group. They then proceed into established users and further (Gannon et al. 2023; Motoyama et al. 2011). Integration presupposes the adaptation of virtual rules for the purpose of protecting the members and their criminal activities (O’Halloran and Quayle 2010). The rules are articulated by coordinators of the groups, who also advise newcomers. These actors “play a central role in the deviant process, although it may not always be clear whether they are committing an offence” (O’Connell 2001).

The status of the users is the result of their activities: the more (rare) material one shares and the more he communicates with others, the higher is his standing (van der Bruggen and Blokland 2020). Since collecting is characteristic for the online culture of CSAM users, they may withhold parts of their collections, or be attempted to produce new material, to enhance their standing within the community (Carr 2007; Merdian, et al., 2013).

### Subculture as a Safe Place for CSA Offenders

Instead of a community, Jenkins prefers to call the online society of CSA offenders a subculture, because its deviant members share a vast amount of special knowledge and differentiate themselves from the mainstream through a shared interest: CSA (Jenkins 2001). He argues that in addition to shared values and language, hierarchies and especially “respect” paid for high-ranked users are characteristic for subcultures (Jenkins 2001; see also Prichard et al. 2011; Holt et al. 2010). CSA offenders find a mental escape from real-life marginalization in their subculture.

As a group, we are the most despised group in the world. We know what hate does and how it effects us, yet there are those here that would do the same to other members of this community. The boylove community knows no race, religion, national origin, or gender.

The subculture feeds the individual with never-ending amount of information and media, which stimulates socialization (O’Halloran and Quayle 2010). Moreover, Holt et al. (2010) argue that a normative order, consisting of rules, norms, and practices for behavior, aids members of the subculture to justify and realize emotional and sexual relationships with children.

Marginalization from the mainstream and the following urge to defend deviance fuel the subculture in many ways. For instance, condemnation of CSA by the society aids to justify normative perimeters of the subculture, such as CSA being in fact in the interest of children or the need of making a distinction between “child lovers” and “child molesters” (Durkin and Bryant 1999; O’Halloran and Quayle 2010).

They were saying all pedos are monsters and should be killed. Is that true? It can’t be. I’m not hurting anyone. I just want to see kids happy. It’s not my fault I find kids sexually attracted. It just happened. There are two groups of pedos. One who hurt people, and one who don’t.

Moreover, online forums provide a safe place to discuss sexual interests, such as the interest in children of specific ages or the sharing of experiences of physical sexual violence against children (van der Bruggen and Blokland 2021a).

For me it’s 9-13, which makes me 30% pedophile and 70% hebephile. Do I care? Not really. I just use one word: Boylover. Fuck the rest ;) Don’t fall into these terms. It can’t be logical, putting something as complex as loving a boy into a simple term of some kind of -philia, it’s just way more than that.

Lastly, the members of a subculture share a worry about their online and offline security as well as legal actions against them, and, accordingly, they advise each other on how to enhance anonymity and how to approach children in real life (Holt et al. 2010).

I don’t talk to cops. They can enjoy silent me while they take whatever the warrant calls for. Good luck, it’s all encrypted.

### Communities as Places to Learn Crimes

Social learning theory has been used for decades to understand how criminal behavior emerges (Akers et al. 1979). The underlying assumption is that social behavior develops from direct conditioning (positive or negative consequences of a certain conduct) and imitation of others’ behavior (Bandura 1989). Social learning elaborates how, in addition to normative learning and “cultural” impacts, several learning processes (direct and indirect differential reinforcement, imitations, and differential association) together with non-cultural constraints (such as normative socialization to the surrounding environment’s code of conduct) create and maintain criminal behavior (Akers 1996).

According to Akers, the most influential reinforcers of criminal behavior are peer networks, family, and other social groups. Criminal behavior emerges in interaction with, and from imitation of, a peer group, which favors, justifies, and over time reinforces continuous deviance from social norms (Akers 1996; Akers et al. 1979; Jensen and Akers 2007). This process is called differential association. Such “non-normative processes” can enable criminal behavior despite the underlying values of the surrounding society (Jensen and Akers 2007).

Virtual peers can play as much role in the learning process as face-to-face peers (Miller and Morris 2016). CSA forums function as reinforcers of differential association theory by providing advice for committing crimes and serving as platforms to rationalize criminal behavior (D'Ovidio et al. 2009). Hence, they create criminogenic environments where one can learn criminal conduct anonymously (Westlake et al. 2017).

Fortin et al. (2018) offer another angle to the learning process by describing a path of socialization within CSA forums. After exploring the opportunities of the forums, the offender starts to establish social connections, if he wishes to gain access to more deviant, specific, or exclusive material (Westlake et al. 2017). Socialization succeeds through adopting the community's standards of behavior and through communication, such as using different keywords and virtual spaces. The offender engages more and more with the virtual community, and his real-world presence decreases. In some cases, the cyber space is not enough, and the offender decides to seek physical contact with children (Fortin et al. 2018).

While socialization has been subjected to few studies on online pedophile networks (van der Bruggen and Blokland 2020, 2021b), the social nature of the darknet has not been considered systematically (Roberts & Hunt 2012). The social disorganization theory has been used to highlight the importance of the surrounding community's organization on (offline) crime rates. A disorganized society is unable to hold onto its basic common rights and to maintain social control. The result is an increased rate of criminal victimization (Bursik 1988). It is not farfetched to use the social disorganization theory to explain how darknet enables CSA offending. The anonymity frees one from social control, and the absence of the surrounding society's supervision offers an opportunity to commit criminal activities (Monk et al. 2018).

## Conclusions

This article sought to offer insight into the functioning logic and dynamics of online CSAM communities and their contribution to sexual violence against children. To do so, it combined scholarly explanations for CSA offending with justifications of CSA offenders for their behavior. The overall argument is that online CSA communities in the darknet advance sexual violence against children in three ways.

First, the social hierarchy of CSA communities and the desire of their members to proceed into their "inner circles" increase the engagement with other offenders, as social participation is the precondition for "promotions" within many communities (van der Bruggen and Blokland 2020). The system also feeds the production and use of CSAM,

because its sharing is another way to enhance one's status (Carr 2007; Merdian, et al., 2013). Because the functioning logic of online CSA communities encourage both interaction between perpetrators and sexual violence against children, it is useful to chart potential offenders' activities and status in the forums during investigations, as this may shed light on the extent and nature of offending.

Second, the communities offer a space to socialize with child abusing peers, which often is impossible in the real life due to the fear of being caught by the law enforcement. As the citations from the online forums elaborate, contact with other offenders easily creates a sense that CSA is in fact far more common than it is (de Young 1988). It is, moreover, important to emphasize that the above citations from a CSA forum are not sporadic but reiterate frequently across forums. Accordingly, when interviewing offenders, it is helpful to keep in mind that they are likely to use specific cognitive distortions (Howitt & Sheldon 2007) and neutralizations (O'Halloran and Quayle 2010) to justify their offending.

Third, darknet communities of child sexual abusers are literally on the dark side of our social system, because being under the radar of social control through anonymity is the key for their existence (Monk et al. 2018). On the one hand, individual perpetrators seek and find advice on how to remain anonymous, but also on how to "safely" proceed into physical sexual violence against children. On the other hand, the nature of the cyber space also easily leads to the impression that online CSA happens in a pseudo-reality where actual victims do not exist (Bartels et al. 2019; Wilson and Jones 2008).

One of the most important questions at the societal level is victim identification. It is central for the victims' recovery and should therefore be priority for investigations that deal with CSAM offending. Although there are several initiatives that address CSAM offending, such as National Center for Missing & Exploited Children (NCMEC), INHOPE, and Project Arachnid, a game changer would be to politically impose "obligations on online service providers, such as social media platforms, to prevent, detect and report sexual violence against children on their platforms and to remove footage of sexual violence against children" (Justice Initiative 2023). The most realistic avenue to address this is within the framework of the new proposed EU legislation to prevent and combat online child sexual abuse.

In addition to social media platforms particularly problematic targets for investigations are companies or individuals that provide cloud-based peer-to-peer platforms enabling the exchange of CSAM. These platforms do not monitor or record activities, thus making the exchange of CSAM untraceable and unsearchable. CSAM offenders escape prosecution, because on the one hand they are often based in another country than the servers they use and on the other hand the administrators of

these servers often refuse to respond to law enforcement agencies' search warrants. Many do not monitor their traffic or report apparent CSAM to law enforcement or initiatives such as the NCMEC, who work in cooperation with law enforcement.

For scholars, darknet offers a plethora of data to study CSAM offending forums and deviances of CSA offenders. For instance, investigators of CSA offences would benefit of systematic scholarly research on the risk behavior of offenders: what types of different offending pathways can be identified, do specific interactions with other offenders predict offending, and can we use this information to create solutions that ease the daily work of law enforcement?

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## Declarations

**Ethical Approval** This article does not contain any studies with human participants or animals performed by any of the authors.

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