



# The Development of Technology and Commercial Child Sexual Abuse Online - A Literature Review

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# The Development of Technology and Commercial Child Sexual Abuse Online

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The objective of this thesis is to clarify how the development of technology affects commercial child sexual abuse online and what regulative problems arise with this. The goal is to increase general knowledge of the topic, which is not very much researched yet and in a continuous flux.

The research was carried out as a narrative literature review. The method was selected, and the objective was to pull together and make a synthesis of knowledge situated in various fields: technology, law and criminology. The focus is in the phenomena of crime instead of issues regarding offenders or victims of crime. The point of view is the First World one. As a theoretical background I introduce criminologist Martin Killias's theory of breaches and situational crime theories.

All research is supposed to be objective, but it must be accepted that in content analysis it is very much likely that the researcher's previous knowledge, interests and understanding of the subject affect how the material is filtered. This holds true in this research, too.

In the results section I come up with five main themes; the issues of anonymity, problems regarding legal questions, troubles in categorization of crime and the problem of growing numbers of sexual abuse crimes and the blurring lines.

Keywords: child sexual abuse online, child sexual abuse images online, commercial child sexual abuse, technological development, legislation of child sexual abuse

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## 1 Introduction

This essay is about children and images of children being sold for sexual gratification of the customer. These images - be they still or moving - harm the child in the image. She/he appears in images either unknowingly, or knowingly but unwillingly, or sometimes even willingly but not truly understanding the harm these images can cause to her/him. With the world functioning increasingly online, images as well as children themselves, are traded and sold over the Internet.

These images have many names. In research literature they are sometimes called child pornography, sometimes child sexual abuse images online, some call them indecent pictures of children and some commercial child sexual exploitation. I will address the terminology later on to clarify things a bit for the reader.

The key component in this essay is the rapid societal change the development of technology brings and the effect it has in the commercial child sexual abuse online. The topic covers abusive images as well as contact sexual abuse, since these two are actually hard to separate. It is also important to note that I am interested in the crime itself and on the consequences of technological development. I am not concentrating on the experiences of victims of commercial child sexual abuse or the reasons the offender has for his acts.

The context of this essay is the Western world one, but as the reader may find out, it is highly questionable if it is sensible to make this sort of definition. When I started the research process, I did not expect to find the link between the phenomenon in question and human trafficking as strong as it appears to be.

Motives for writing this essay arose when I read criminologist Martin Killias's essay *The Opening and Closing of Breaches: A Theory on Crime Waves, Law Creation and Crime Prevention* (2006). Something in Killias's argument rang a bell in my head. His argument will be explained later in this paper. During the period I was reading Killias's essay, grooming and child sexual abuse crimes online were all over the news. Connection between Killias's theory and these forms of crime inspired me.

To start this thesis, I randomly read research articles on the subject. Once I understood what is "out-there", the right search words and phrases started to form, and I was ready to do more defined searches. The focus moved more towards the development of technology than I had thought at first. I will explain the process as thoroughly as possible. At the end of the essay I offer the reader a conclusion and hopefully a few new thoughts as well.

## 2 Explaining the terminology

Children are sexually exploited for commercial purposes, but there isn't much research on this topic (Selvius et al. 2018, 63). Commercial sexual exploitation of children online is even less researched and understood. Simple and agreed terminology for the phenomenon does not in fact exist. This makes it worthwhile to spend some time on defining and explaining terms surrounding the matter in hand.

### 2.1 Prostitution, sex work or commercial sexual exploitation of children?

'Prostitution' carries an idea of transaction between a prostitute and her/his customer: prostitute provides sexual pleasure and receives money for exchange (Ennew 2008, 8).

The definition of prostitution has changed very little over time, and it is valuable to understand the roots of this term to really appreciate the oddness of this. In the year 1851 (Rey in Clarkson 1939, 296) 'prostitute' was defined as "a woman, who allows the use of her body by any man, without distinction, for a payment". The Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child pornography (2000) defines in Article 2 child prostitution "as the use of a child in sexual activities for remuneration or any other form of consideration".

There has been a decades-long debate about replacing the term 'prostitute' with the term 'sex worker'. The idea is that the term 'sex worker' implies prostitution being an employment and brings questions about working conditions and rights to a center stage, while the term 'prostitute' carries the weight of prostitution being an identity, often an inferior one. (Kempadoo 1998.) Cunningham and Kendall (2011, 29) use the term 'technology-facilitated sex worker' to describe a sex worker working online.

It is highly questionable to call any child a prostitute or a sex worker due to the stigma and power-compositions these terms carry with them. Yet these terms are widely present in literature and regulations when talking about commercial child sexual abuse. 'Commercial sexual exploitation of children' and 'commercial sexual abuse of children' are better terms to use. Meredith L Dank (2011, chapter 1) defines commercial sexual exploitation of children as "the exploitation of children under the age of 18 years who perform sexual acts in exchange for money, food, drugs or shelter".

In the context of this essay, children whose photos or moving images have been sold over the Internet for sexual purposes, or who have been forced to physical contact with offenders with the help of the Internet, will be considered victims of commercial child sexual exploitation/abuse online.

## 2.2 Child pornography, child sexual abuse images online or indecent images of children?

It is not possible to date or name the exact time when pornography was “invented”. But the history of the term in the modern sense dates as far as the 19<sup>th</sup> Century. It appeared in the Oxford English Dictionary in 1857. (Hunt 1993, 10-11). Britannica dictionary (2021) defines pornography as “representation of sexual behaviour in books, pictures, statues, motion pictures, and other media that is intended to cause sexual excitement”.

‘Pornography’ is a widely used term with the same issues as the term ‘prostitution’. Professionals have pointed out that ‘child pornography’ plays down the violent nature of the material, and the material might be compared to adult pornography (Tate, 1992; Edwards, 2000; Taylor & Quayle, 2003 in Beech et al. 2008, 218). Yet it should be noted that adult pornography can be sexual abuse as well (Horsman 2018, 111). However, child pornography is a term very much used in literature and law (Akdeniz 2008 in Quayle and Sinclair 2012, chapter 1).

‘Child sexual abuse images online’ (CSAIO) refers to offline sexual abuse of children, considered here as persons under the age of eighteen, and the abuse is then shared on the Internet (Martin 2016, 373). According to this strictest definition, ‘child sexual abuse images online’ require that they are a record of a child sexually abused offline, so the term does not cover the whole variety of sexual abuse images circulating around the Internet.

‘Indecent images of children’ (IIOC) is a term which includes still and moving images of children. These images do not necessarily contain sexual abuse material, but they may include children presented in a manner which can be interpreted sexually (Stop It Now 2021). IIOC also includes self-generated child sexual abuse content. This refers to IIOC content the child has produced himself/herself and which is consumed and distributed online in ways that are offensive and/or damaging for the subject in the image (Internet Watch Foundation 2021). These images are sometimes called ‘selfies’.

Sometimes the images we are now talking about are called ‘abusive images of children’ or ‘obscene images of children’. Henry and Powell (2016) include some less used terminology in their research: ‘online digital sexualized violence’, ‘image-based sexual exploitation’ and ‘technology-facilitated image-based abuse’. Horsman (2018) talks about ‘images depicting child sexual abuse’ (IDCSA).

To make the matter a bit more complicated, a term ‘non-photographic pornographic images of children’ (NPPIC) also exists. This refers to “fantasy visual representations of child pornography in the form of, for example, computer generated images, cartoons or drawings. The fear of harm in these images relates to the idea that these images could reinforce users’ inappropriate feelings towards children” (Ost 2010, 231). In the UK, this problem was

resolved by making the possession of these kinds of images an offence by Coroner and Justice Act in 2009 (Quayle and Ribisl 2012, chapter 1). Other terms for these images are 'pseudo-images' and 'non-real images' (Healy 1997 in Beech et al. 2008, 221).

I will mostly use the terms 'indecent images of children' or 'child sexual abuse images online'.

### 2.3 Child sex tourism, child trafficking or slavery?

When I started writing this essay, I was not prepared to discuss sex tourism and child sex trafficking. However, soon it became clear that in a global world, these issues are impossible to separate from the commercial CSAO.

'Child sex tourism' is defined as "sexual exploitation of children by people who travel from one location to another and engage in sexual acts with minors there" (End Child Prostitution, Child Pornography and Trafficking of Children for Sexual Purposes 2006 in Newman et al. 2011, 116).

Selvius et al (2018, 62) call commercial sexual exploitation of children "a distinct form of child sexual abuse, which is often lead by human traffickers or loverboys/pimps", who groom children and youth by acting as they would have romantic feelings towards the child who is about to become their victim.

In the digital world, 'trafficking' can be a misleading term. Trafficking brings about an idea of people being moved across borders. But in today's digital world trafficking can happen inside one's own country (for example, from rural areas to city areas) or there might not be actual movement at all. The main issue sometimes is not in the movement of people but people being obtained. For this reason, slavery could be a better term for this phenomenon. (Kara 2009; 2017 and Miller-Perrin and Wurtele, 2017.) Actually, The UN Trafficking Protocol (in Koops et al. 2018, 188) states that "trafficking does not require the physical crossing of international borders; it may refer to the transmission of images and videos to another country". Domestic trafficking is also included in the Protocol (Maltzahn 2005 in Koops et al. 2018, 188).

Human trafficking is an issue which concerns men, women, boys and girls. However, dire economic conditions and low social status make women and children at risk to trafficking as women and children can be used as a vendible to help poor families to survive (Shelley 2011, 139). Sex industry is one of the end locations for many women and girls trafficked each year, who end up there simply because families see no other hope for survival than trading their family members.



### 3 The Development of technology

In this paper, I look at what role the development of technology plays when it comes to child sexual abuse online. The digital and global world of today brings a whole new set of questions regarding sexual abuse and the commercialization of it. For example, how do we judge and investigate an incident where a child is forced to perform a sexual act live on webcam, while being watched by anonymous men all over the world? What happens to child sexual abuse online when virtual reality and augmented reality technologies become a part of our daily life? And what about when cryptocurrencies become common creating even more possibilities for offenders to act anonymously? Or how do we react when artificial intelligence and robotization will develop further and highly humanoid, child-like sex robots become available?

It is clear that going digital means a lot. The game-changer has been the Internet, which allows more rapid, global - and when it comes to the so-called darknet - more anonymous interaction between people. Darknet is a collective name for websites that can be accessed only through Tor web. Tor is a browser which can be downloaded to any computer. TOR does not collect the IP-address of one's computer and thus makes browsing and interacting in the Internet completely anonymous. (Haasio 2013).

Benioit Dupont (2013) provides nine disruptive socio-technical trends in his article *Cybersecurity futures: How can we regulate emergent risks*. The rise of mobile technology has been revolutionary. Already in 2012, worldwide sales of mobile Internet devices reached 850 million units, whereas desktop and laptop PCs only just sold 350 million units (Dupont 2013, 8).

It is remarkable how the move towards mobile devices has changed the ways we use the Internet and how we produce and share images. In today's world children have more freedom and technological skills than ever before to take images and share them with others. This has become an accepted part of childhood.

The development of technology has created cybercrime. Child sexual abuse online is a spinoff of this form of crime, and it manifests itself in many different ways. The Internet has transformed how we exchange information and ideas with each other via social media, chat rooms and services such as Zoom or Teams. This is revolutionary. Some of these virtual places exist to sell and exchange child sexual abuse images and indecent images of children (Quayle and Ribisl 2012, chapter 1).

Technology has profoundly changed the availability of child sexual abuse material. Before the Internet, a person wishing to consume child sexual abuse material needed to know where she/he could locate it instead of just accessing it with his/her computer. With the help of

technology sexual abuse material of children is now easily available and provides access to children globally. (Choo 2008a in Hillman et al. 2014, 688.)

Easiness of communication has also led to changes in how technology is used to aid commercial sexual abuse offline. The Internet has led to a massive growth in online prostitution (Cunningham and Kendall 2009, 2). It has also changed how human trafficking works and what the very word holds within.

The current technology has made it conventional to communicate through web camera (webcam). This has created a whole new type of commercial sexual abuse online using webcams. This means that a person can be engaged in a live sexual activity without being in the physical presence of the victim. Webcams allow real-time visual and auditory contact, but they can also be used to record sexual abuse. Capping is defined as encouraging other people to perform sexual acts while using webcam, and recording and potentially sharing the video image captured without the victim's consent. (Koops et al. 2018.) Other word for webcam is Voice-Over-Ip Technology. This technology is not new but didn't reach mainstream status until lately. (Acar 2017.)

Lesser talked about topic is gaming technologies which can be used to facilitate commercial CSA, since this technology allows players communicate with each other (Id in Farley et al. 2013-2014, 108). This technology includes consoles such as Xbox and Nintendo Switch as well as online games.

Social media platforms have made grooming an everyday life concept. Cambridge Dictionary (2021) defines grooming as "the criminal activity of becoming friends with a child in order to try to persuade the child to have a sexual relationship". Grooming has a link to commercial sexual exploitation of children online and offline. For example, there is a case where an individual in the United States was sentenced to prison, since "it was alleged that the person 'trolled social networking sites and groomed and lured a juvenile girl into his prostitution business'" (Hillman et al. 2014, 687).

It is one of the key challenges in the development of the Internet and cybercrime to understand how going online is changing sexual abuse crimes and what this means for society and legislation as well as for victims and offenders. As digital world and technology keep developing, they will offer new possibilities for offenders (Dupont 2013, 9). Partly those opportunities are created because the laws and regulations are incapable of keeping up with the pace of technological innovation. This can cause interesting situations. For example, around ten years ago there was a case of Southwest Companions online prostitution ring in the United States, where charges were dropped since "the website was not physically a brothel" and the laws written before the Internet was invented could not apply to this kind of case (Farley et al. 2013-2014, 131). The Internet and digitalization have paved the way for

puzzling examples of how innovative offenders may slip out of the reach of jurisdiction. I will treat issues more closely later in this essay.

#### 4 Theoretical background: theory of breaches

Development of technology and changes in social environment create breaches. Breaches are unforeseen opportunities for offending which go unnoticed for some time, but once discovered there is a rapid increase in offences. This usually leads to defensive actions as societies try to limit the harm. The theory of breaches can be used as a tool to explain sudden changes in crime trends, and it also helps us to understand how we as a society react to them. The breaches may go for some time unnoticed by criminals, but when there is a surge in relevant crime, it could signal that the breach has been notified by those prone to offend. Sometimes societies attempt to curb the breach by new laws and regulations even though a better option could be to anticipate the potential breaches already during the technology innovation process and develop sufficient preventive measures. (Killias 2006).

Killias's theory of breaches is important in order to understand how the development of technology and the social changes brought with it have created a way for new kinds of sexual abuse crimes.

##### 4.1 Situational and routine activity theories of crime

In his theory, Killias draws from situational theories of crime and routine activities theory.

Routine activities theory was developed by Lawrence E. Cohen and Marcus Felson in the late 1970s. According to the theory, for an act of crime to happen, three components are needed: a motivated offender, a suitable victim and a rogue space. Routine activities theory was originally developed to explain contact crimes, in which the offender has a direct contact to goods he/she is stealing or to a person she/he is violating. (Kivivuori 2013, 313-314). It is noteworthy that routine activities theory assumes that new forms of crime, or changes in crime, are related to the fact that advantageous situations and targets for crime are sufficiently available. Spaces with little supervision are called crime attractors (Kivivuori et al. 2018, 237).

Felson (in Presdee 2005, 190) has used the term everyday crime to explain how our everyday life creates a stage for people to hurt each other and break the law. This stage changes over the time in history. Kivivuori (2013, 331) uses the term a change in leisure-time routine activities to explain how leisure time is spent increasingly on computers, which creates a stage for new types of crime. We could widen Kivivuori's idea to apply in today's everyday

life, and we could note that in the past we have seen a major increase in how also the so-called productive time is spent with mobile technology at hand.

Routine activities theory has developed in interaction with situational crime prevention theories (Kivivuori et al. 2018, 237). This has also been noted by Clarke and Felson (2011, in Newburn 2017, 308), who think that a crime is not just one incident but a series of incidents, and the most effective way to reduce crime is to create a change in situations where crime happens instead of trying to motivate the offender to change.

Clarke has also argued that if in his/her life, a person constantly faces situations provoking a possibility to act as offender, he/she will keep searching for these situations, and that anyone can become an offender if he/she faces these provoking situations often enough (Newburn 2017, 310-311.)

Per-Olof Wikström has created a situational action theory. He believes that individuals have differences in their moral understanding and self-control capacity and these two constitute an element called crime propensity. Wikström attaches a person, whose crime propensity favours criminal activity, to situational theories of crime. When this kind of person interacts with a setting that supports offending, crime can happen. In Wikström's theory, rogue space is important but so is the potential offender's vision of this space and opportunity. (Kivivuori et al. 2018, 218-220.)

If we attach Killias's idea of breaches to situational and routine activity theories of crime, we are able to see the space where technology has advanced at such a pace that laws, regulations and preventive measures have failed to address new forms of crime - including child sexual abuse online.

## 5 Research questions

In this literary review I pose two research questions.

The first question is: How does the development of technology transform the commercial child sexual abuse online? This question is vast on purpose, since I start the process with the assumption that the issue is not thoroughly studied. I base this assumption on the fact that the whole phenomenon of child sexual abuse online is historically speaking a new one.

The second question I pose is: What is known about the challenges this transformation brings? This question concentrates on the effects the transformation has on the issue discussed.

These research questions evolved during the writing process. A writer who is conducting an empirical research is required to stick with a priori hypothesizing, but literature review gives a researcher more freedom. (Baumeister and Leary 1997, 314).

## 6 Research method

As a method I chose narrative literature review. I chose this method since my goal was to understand the topic widely and learn about the gaps which might need further studying.

### 6.1 Narrative literature review

A literature review is an opportunity to address large and abstract questions. Narrative literature review is particularly suitable for finding interconnection between different topics and presents a chance for reinterpretation, and if the writer is feeling ambitious, the form can also be a tool for establishing a new theory. (Baumeister and Leary 1997.) These are some reasons for narrative literature review being a good tool to approach the topic of commercialization of child sexual abuse online.

My goal is to find out what is written about the topic and to raise relevant themes.

A literature review has four stages: First form relevant research questions, then continue to select articles to review, explain the process and analyze the chosen material, and then show the results. These stages may overlap. (Ahonen et al. 2013, 294).

Selecting a method for a research is an integral part of the process. Without a method and rules that accompany it, the research would too easily become just a way for a researcher to justify his/her own prejudices. The selected method should also be in line with the theoretical background chosen. Theoretical background also determines what sort of material the researcher should look for. (Alasuutari 1999, 82-83).

With this in mind, I will now move forward to explain the criteria I used in choosing the articles for this review.

### 6.2 Search words

As I presumed that there aren't too many articles tackling precisely the issue I am researching - something that would combine commercial child sexual abuse online, the creation of law and the development of technology - I used a broad array of search words. The most useful ones were different combinations of words online, internet, child, prostitution, sexual abuse, exploitation, technology, trafficking and webcam. I did searches on Laurea Finna database

and on Google Scholar. Laurea's Finna database offers a wide access to different journals worldwide.

If there would not have been Covid-19 pandemic at the time of writing this essay, I would have spent more time researching at libraries, but this was now impossible. However, one of the articles (Henry and Powell, 2016) was suggested to me by librarians at Criminological Library, Tikkurila.

### 6.3 Selection criteria

I did various searches with different selection criteria. In my first searches I included peer reviewed English language articles between the years 2000-2020. In later searches, I included peer reviewed English language articles between 2010-2020, and the scope of the third search was in the years 2020-2021. The obvious reason for the last search was that I wanted to find articles which had the latest information, since technology develops fast and information is quickly outdated. Google Scholar does not allow search for peer reviewed articles only, so that criteria was excluded in GS.

I selected articles which were relevant with regard to technology and/or law and commercialization of child sexual abuse online and/or child sexual abuse. I screened out articles that concentrated mostly on victims, offenders, or the consequences of child sexual abuse online. This included articles that had a focus on nursing, medical care, therapeutic interventions and social work, for example. This was one of the hardest parts of the process, as there is lots of interesting information available with those stances.

Each search with different search word combinations produced thousands of articles. I learned fast that the first two, or in maximum three, pages of the database included the relevant ones, if they were to be there. I screened out by the title the ones not having a suitable perspective, in some cases I continued to read the abstract or the introduction before finding the articles unsuitable. I read few articles until the end and kept them by side before becoming to terms with the fact that their point of view was not fit for my research. After lengthy speculation, I had to do an exception with Leonard's (2010) article, since the article had some very important views on my topic even though it has a victim's perspective.

In this essay you find a table showing the articles chosen and reasons I chose them. It is important to understand that this essay draws information from different fields, so the articles had to complete each other to cover all three fields: criminology, law and technology.

The context of this essay is that of the Western world, which includes Europe, the Commonwealth countries and North America. Commercial child sexual abuse online is a global problem, but I do not consider myself qualified to research the issue in different cultural contexts than my own.

This essay concentrates on the sexual abuse of children and adolescents. I thought this to mean persons under 18-years of age as this is how a child is defined by The UN Convention on the Rights of the Child (Unicef 2017). Some of the articles, however, do cover topic more widely including adult women and men. I do not find this problematic, as for example in the case of sex work, many “younger women” are actually girls and victims of child sexual abuse, even when the articles do not draw a clear age-based line between women and girls. In fact, teenage girls between the ages of 15 and 19 are at the greatest risk at ending in sex trafficking (UNICEF 2014 in Miller-Perrin 2017, 131), and in the literature girls of this age are sometimes referred to as women.

#### 6.4 Analyzing the material

Content analysis can be divided in four phases (Lappi in Tuomi and Sarajärvi 2002, 94), and these phases are:

- 1) Decide what is interesting in your material and stick with it.
- 2) Go through your material, separate the content that is relevant for your essay.
  - A) Leave everything else out.
  - B) Collect the parts you selected together.
- 3) Form themes or categories of your collected material.
- 4) Write a summary.

The articles chosen were screened in two-part system to execute the content analysis. These screenings were not one-off events but done in many spurts. In the first part, I looked for common themes in articles regarding commercial child sexual abuse online/child sexual abuse, legislation and the development of technology and the interaction of these components.

First, I read through the articles with thought and circled everything that seemed relevant. Next, I gathered relevant sentences and paragraphs from the articles under categories: technology, sexual abuse crime and legislation. What got collected, had to include something relevant regarding my questions and be related to the title under it was collected. Here I

tried to understand what the message really was, and themes started to form. I want to note that it is difficult to explain what “relevant” means here - it is something that I thought to be relevant, but of course there is always the possibility of me being mistaken.

I came up with six themes: 1) New crime 2) New ways for old crime 3) Anonymity issue 4) Insufficient regulation 5) Cross-over of sexual abuse crimes 6) Self-generated content.

At this point I found out that themes did not work well enough. It was difficult to figure out if crime was “new” or just conducted in “a new way”, so I put these two together. Then I noticed that the themes cross-over of sexual abuse crimes and self-generated content belonged to this newly formed category - until at the end of the process I noticed having been wrong and kept the cross-over theme as a separate one. I thought hard if the question of anonymity should be under insufficient legislation. I decided against this as legislation issues and anonymity are connected but still independent. Also, I was left with plenty of material showing how CSAO is an increasing problem, so this became a theme. At the end I had five themes: 1) Growing problem 2) Anonymity issues 3) Insufficient legislation 4) New crime or new ways of an old crime and 5) Blurring lines.

In the second part, I looked out for how these themes affect commercial child sexual abuse online by uniting the relevant information from three categories (technology, law, sexual abuse crime) so that they formed syntheses. Results I mirrored with Killias’s theory of breaches.

The process had two challenges: terminology used to talk about the subject is not fixed, so I could not use simple codewords to go through the articles. It was the whole of the sentences and the context that mattered. This gave me an ethical problem, since no matter how objective I want to be, I will still be me and I am left with the understanding I have which could be flawed.

Second, it was difficult NOT to add interesting material which leaned too much towards offenders or victims instead of the crime itself.

Because of these challenges, I am well aware that the material could have been interpreted differently from what I did. It is important to note that this essay holds my understanding of these articles, and I know it can be counterargued. But this problem is present in narrative literature review. Fitzgerald and Rumrill (2005 in Ahonen et al. 2013, 298) note that crafting the description is a subjective process, and for this reason researchers may end up with different conclusions even when using the same material.



## 6.5 Selected articles

Article	Topic	Selected for...	Categories
Beech, Anthony R. Elliott, Ian A. Birgden, A. Findlater, D. The Internet and Child Sexual Offending	What is known about child sexual offending on the Internet?	A very all-round article on the topic of child sexual abuse images online.	SAC - CSAIO  Technology
McCabe, K. A. The Role of Internet Service Providers in Cases of Child Pornography and Child Prostitution	What is the role of the ISP's in the combat against CSAO?	Increases the understanding of the technology side.	CSAO  Technology
Cunningham, S. ja Kendall, T. D. Prostitution 2.0: The Changing Face of Sex Work	What questions arise when sex workers use the Internet for their business?	Extensive account on how the Internet has changed sex work.	CSA - Prostitution  Technology
Leonard, M. M. "I Did What I Was Directed to Do but He Didn't Touch Me": The Impact of Being a Victim of Internet Offending	How does sexual abuse online affect the victim?	Beautifully explains how online SA differs from contact SA.	CSAO  Technology
Farley, M., Franzblau, K. and Kennedy, A. M. Online prostitution and trafficking	How the Internet has transformed sex trafficking of women and children?	Huge work on the impact of digital on prostitution and crime related to it.	CSAO - prostitution  Law

<p>Hillman, H. Hooper, C. Choo Raymond, K.-K. Online Child Exploitation. Challenges and Future Research Directions</p>	<p>Are existing legislative and prosecution-based responses inadequate when combatting CSAO?</p>	<p>Global point of view completes Acar's (2017) article's and increases understanding of the big picture.</p>	<p>CSAO  Law</p>
<p>Henry, N. and Powell, A. Sexual Violence in the Digital Age: The Scope and Limits of Criminal Law</p>	<p>What are the limitations of criminal law in responding to technologically facilitated sexual violence (TFSV)</p>	<p>TFSV is little researched topic but has a relation to CSAO.</p>	<p>CSAO  Law</p>
<p>Acar, K. V. Organizational Aspects of Global Fight against Online Child Sexual Abuse</p>	<p>How to organize globally to combat CSAO?</p>	<p>Gives a global point of view on how different actors are organized to combat CSAO.</p>	<p>CSAO  Law</p>
<p>Acar, K. V. Webcam Child Prostitution: An Exploration of Current and Futuristic Methods of Detection</p>	<p>Webcam sexual abuse is an emerging form of CSAO. What problems does this bring for detection?</p>	<p>Rare piece on commercial child sexual abuse by using webcams.</p>	<p>CSAO  Law</p>

<p>Horsman, G. Combatting those who intentionally access images depicting child sexual abuse on the Internet: A call for a new offence in England and Wales</p>	<p>Does technological development change the offence in a way that a new offence is created?</p>	<p>Completes other articles addressing the question of how technology shapes the offence.</p>	<p>CSAO Law</p>
<p>Miller-Perrin, C. ja Wurtele, S. Sex Trafficking and The Commercial Sexual Exploitation of Children</p>	<p>How is child sex trafficking related to other forms of CSA?</p>	<p>Plenty of information on little known aspect of CSAO.</p>	<p>CSA Law</p>
<p>Koops, T. Dekker, A. Peer, B. Online sexual activity involving webcams - An overview of existing literature and implications for sexual boundary violations of children and adolescents</p>	<p>Does webcam use affect online sexual activity, psychopathological phenomena, sex work and crime and indecency?</p>	<p>A comprehensive and easy-to-read report on impacts and aspects of webcam use for sexual activity.</p>	<p>CSAO Technology</p>
<p>Selvius, K. Wijkman, Miriam D.S. Slotboom, A-M. Hendriks, J. Comparing intrafamilial child sexual abuse and commercial sexual exploitation of children. A systematic literature review on research methods and consequences</p>	<p>How does the impact of intrafamilial child sexual abuse differ from commercial sexual exploitation?</p>	<p>One of the very few articles addressing directly commercial sexual exploitation of children.</p>	<p>CSAO Technology</p>

## 7 Results

### 7.1 Child sexual abuse online is a growing problem

Not much is known about commercial child sexual abuse or child sexual abuse online. Consequently, I was not surprised that most articles did not treat the topic of commercial child sexual abuse online directly.

However, it seems that the issue is a growing problem. Acar (2017, 259) claims that the Internet and smart phones have increased the possible online threats to children. Beech et al. (2008, 226) conclude that market for child sexual abuse images online is vast in both, in audience and available material, and the move is towards the material to be more violent and to involve younger children.

The digital world has made it easier to access abusive material which before the age of the Internet took a lot of dedication and time to find and gather (Choo 2008a in Hillman 2014, 688). There are online groups for people who are sexually interested in children, and in these groups, information and strategies on how children can be groomed to submit to sexual abuse is shared (Hillman 2014, 687-688). Horsman (2018, 112) states that new sites hosting child sexual abuse content keep coming up, and in these sites CSA material is shared, traded and sold as the volume of CSA images has become “unmanageable”.

There has been a lot talk about child sexual abuse images online, less concern is shown towards other forms of sexual abuse. But technology has created diverse options for people who wish to sexually abuse children and thus might commit a crime (Acar 2017, 261). Also, the Internet has had a substantial impact on different forms of commercial child sexual abuse, forced prostitution among them (Andreani & Raviv, 2004; Surtees 2008, in Koops 2018, 188).

### 7.2 Technology brings anonymity

The dark web, private browsing sessions and live sex chats cause large scale anonymity issues.

The dark web is a key component in the commercial child sexual abuse online as paedophile groups use it to communicate in the hope of anonymity. Because of the anonymity these paedophile groups have been able to flourish and expand with surprisingly little control (Akdeniz 1999 in Beech et al. 2008, 221).

Also, the anonymity in private browsing sessions and media streaming has made it easy to consume child sexual abuse material without the fear of being caught. This has impact on detecting these crimes as forensic investigation is very difficult and sufficient evidence is

hard to gather for prosecuting the offenders. (Horsman 2018, 116-117). Also, the access to live sex chats allows a high degree of privacy for people who access them, and they can be accessed from anywhere in the world (Koops et al. 2018, 188). These different forms of sexual abuse online provide much anonymity for offenders and make the issue a global problem as jurisdictional boundaries get blurred (Farley 2014, 106-107).

### 7.3 Insufficient legislation to tackle the problem

Child sexual abuse online has brought new questions for policing and for legislation (Beech et al. 2008, 217). We could, a bit brutally, call the situation a sort of retailing revolution; online shopping has changed the ways people consume goods and services and this affects also commercial child sexual abuse (Cunningham et al. 2009, 2).

Problems with legislation start with the methods of detection, and this is linked to anonymity. Some forms of child sexual abuse, such as sexual abuse using a webcam, can be very hard to detect. There are many legal and technical limitations which make some child sexual abuse offences hard to detect while they are committed. Detecting an offence while it is actually happening would offer solid evidence of the incident. As current methods of detection are not sufficiently efficient, we mostly likely do not realize how widespread child sexual abuse online offences are. (Acar, 2017.)

Commercial child sexual abuse online is a global issue, so differences in national legislations cause a problem. Hillman et al. (2014, 693-694) take a deeper look at laws regarding sexual offences in the Commonwealth countries. For example, in Australia it is a grooming offence to use the internet to attempt to meet a child. In the UK and South-Africa, there needs to be an intention to commit sexual abuse for the case to be an offence. In New Zealand, grooming is treated as a part of a larger offence.

The US Department of Justice's 2004 estimates that 14,500 to 17,500 individuals were trafficked into the USA, and the Internet was a part of the process in many cases (McCabe 2008, 248). Effective policing is difficult because of the trans-jurisdictional nature of the Internet. Commercial child sexual abuse is no exception as it happens mostly in the Internet. (Barrett 1997; Wallace & Mangan, 1996 in McCabe 2008, 248.) It is also noteworthy to realize that commercial child sexual abuse is often lead by organized crime (Hillman 2014, 694). This sort of crime can be highly organized.

What does the term 'sexual abuse material' mean? Should it include just physical photographs and video, or also images stored on computers? How widely should we understand the term 'photograph'? These questions are not about splitting hairs; one key problem in legislations is about words. For example, in New Zealand's legislation the term 'publication' can take many forms and also mean digital material, in Australia the term

‘material’ is used in the same sense. (Hillman, 2014, 693.) Henry and Powell (2016) offer lengthy discussion on the topic, as the existing terminology used in legislation hardly does its’ job in the digital world.

Lawmaking is often a slow process that cannot keep up with the emerging new technologies. It is also unclear what kind of criminal laws are needed to rightfully capture the true scope of harms stemming from online sexual abuse. (Henry and Powell 2016.)

Private sector is linked to legislation issues. Which role should the private sector offering these tools take and what should be the legal consequences for them if their tools allow sexual abuse? Luckily many technology companies have taken actions against sharing sexually explicit images on their site. For example, a few years ago Reddit and Twitter banned posting unauthorized sexual images on their site. Service providers of online communities and social media networks should be aware of the ways their tools can be used for criminal activity and this should be addressed in their responsibilities, policies and practices. Private sector should be proactive in combatting harmful content shared on their sites. (Henry and Powell 2016.) There is a good discussion on this topic to be found in Acar’s article Organizational Aspect of the Global Fight against Online Child Sexual Abuse (2017).

#### 7.4 New crime and new problems with an old crime

Traditionally child sexual abuse has included physical contact. The Internet has changed the game in a way that child sexual abuse may happen fully digital and the only evidence of the offence is located in cyberspace (Merdian et al. 2013 in Horsman 2018, 112). Is this a new form of crime or just a contemporary manifestation of an old crime? To take another example, intentionally accessing indecent images of children online is an offence which could not have existed before the Internet. In this case the technological development has changed “the shape of an offence” (Horsman 2018, 115). But how much technology as a tool affects the core of the offense? Acar (2017, 99) claims in the case of webcam child prostitution that the chosen method of interaction to commit the offence doesn’t change “the incriminating core of the offence”. This question is also discussed by Henry and Powell (2016), and they ask if digital sexual violence are new harms requiring changes in the law or if they can be regarded as an old crime even though facilitating tools are novel.

The Internet brings whole new possibilities for offenders operating in all forms of commercial child sexual abuse. The Internet has changed how indecent images and sexual abuse images of children are produced and shared, but Internet’s impact on how children are sold and trafficked for sex is also enormous; child prostitution and child trafficking are likely to happen with the help of the Internet though this crime is not always apparent (McCabe 2008, 249-250). Nowadays prostitution happens mostly digital, or it is combination of digital and “real” world. Victims of commercial sexual abuse can be purchased online for offender’s

sexual gratification for as long as he/she wishes. Already ten years ago the vast majority of prostitution took place online. A study done in 2011 revealed that 88 % of sex buyers had bought women and children for sexual use with the help of institutions such as escort agencies and massage parlours etc. which advertised on the Internet. (Farley 2013-2014, 105). Internet has also changed ways young people enter in prostitution. Young women with limited future prospects may find online prostitution an attractive option, and sometimes prostitution is glamorized and mainstreamed in recruitment ads. (Farley 2013-2014, 102). A 2011 iPhone application advertised as follows: “SugarSugar.com is for generous men looking to spoil, and dynamic women looking for financial support with bills, or who just need some excitement in life! . . . SugarSugar.com . . . provides a staff of sugar dating experts to help you find the perfect mutually beneficial arrangement.” (Farley et al. 2013-2014, 125). Adolescents could also mistakenly slip into the world of commercial online sex if they submit to more and more sexually daring online interactions in exchange for illusive admiration and/or gifts (Mieskowski in Koops et al. 2018, 188). On the other hand, according to Cunningham et al. (2009, 15) in the world of commercial sex work, a move to online prostitution has excluded some of the very young and inexperienced sex workers who are left to remain on the street.

Webcam sexual abuse is a new form of sexual abuse which makes it possible to produce and sell live child abuse image for commercial purposes. It has ties with child sex tourism. (Acar 2017, 99.) Another new form of sexual crime is sexting. In sexting, children take and may forward indecent images of themselves without truly understanding the potential harm in their action (Hillman 2014, 688). There is also a growing attention to the phenomenon of technology-facilitated sexual violence (TFSV). TFSV means that digital technology is used as a tool to “perpetrate or extend the harm of sexual assault, extend control and abuse in domestic violence situation, or distribute sexual or intimate images of another without their consent.” (Henry and Powell 2016, 397). TFSV can be part of commercial child sexual abuse online. For example, a groomer may blackmail a child in social media when trying to force him/her to produce and distribute sexual abuse material, or a sexualized image of a someone could be shared online against subject’s consent.

### 7.5 Blurring lines

The cross-over in different forms of child sexual abuse is notable (Koops et al. 2018 and Miller-Perrin, 2017). Sometimes the lines between child sexual abuse, child sexual abuse online and the commercial activity are not definite. Also, there is a considerable cross-over between various forms of commercial CSA. For example, a person could travel to have paid sex with under-age children, record the sexual abuse and then continue to share and sell these images in the Internet. In victim’s case the overlapping of different forms of sexual abuse could happen so that a victim of child sexual abuse and/or child sexual abuse images

may turn to prostitution, for example (Cooper 2005 in Miller-Perrin 2017, 127). (Miller-Perrin 2017, 127.) Child sexual abuse images or indecent images can be used by adults to blackmail children to submit to sexual exploitation. Sometimes this is to fulfill adult's own abusive motives, or it can be a way of grooming a child for commercial contact sexual abuse (Cooper, 2005; Quayle et al. 2008; Watson & Lefever, 2005 in Miller-Perrin 2017, 134-135). This should explain why in researching commercial child sexual abuse online one must acknowledge material regarding other forms of child sexual abuse as well.

The Internet is about interaction. This affects also CSAO. Current technology has made it possible for anyone who wishes to create sexual abuse material which be of very high technical quality (Barron and Kimmel 2000 in Beech et al. 2008, 220). The line between producers and consumers of sexual abuse material is getting blurred, and one person can easily fall into both categories. Also, the boundaries between professionals and amateurs have gotten blurred in sex industry in general (Cover, 2015; Henze, 2013; Kibby & Costello, 2001; Özgun, 2015 in Koops et al. 2018, 185).

## 8 Conclusion and discussion

I raised two questions earlier on: How does the development of technology transform the commercial child sexual abuse online and what is known about the challenges this transformation brings. In this section I proceed to try to answer them jointly, and at the end there are some concluding thoughts.

### 8.1 Answers to research questions

Every technological innovation can be used for a criminal activity. I hope this essay has shown that the many manifestations of child sexual abuse crimes are not an exception. Social media, apps, online games, webcam, darknet, chat rooms - all of them are potential spaces where child sexual abuse crime can happen, commercial and non-commercial. New technology also makes it harder to detect the possible crime, since technology brings new possibilities to masquerade an illegal activity as a legal one and provides greater anonymity for offenders. Methods of detection are available, but they are insufficient, not used widely enough and there are some ethical questions that come with the global world and life. For example, the darknet is much used by offenders, but the anonymity the darknet offers is crucial for the freedom of speech for people living under authoritarian governments. Each technological innovation has positive and negative sides to it and in moderating the harms, we must find the way not to destroy what is good. The great challenge in this is how to organize forces globally to combat child sexual abuse online.



But have technological innovations created a type of new crime? At this point, the victim's point of view could be of help. Before the Internet, the victim of sexual abuse was able to identify a beginning and an end to the contact sexual abuse. But once the Internet was introduced, a constant re-victimization happens; the record of the abuse can be shown again and again. Also, during the contact sexual abuse victims most often are able to recognize, or at least see, their abuser, but in the digital context offenders become a faceless, unrecognizable mass. (Leonard 2010). Contact sexual abuse is an offence that may happen once, but current laws do not have much power over removing online content (Henry and Powell 2016, 405). This makes online sexual abuse a continuous experience.

Technology has for sure created new opportunities for crime and changed the space where crime happens. Does this constitute a new crime is a question with no straightforward answers, but answers we give to this question will influence law. Here I must let the reader to continue with his/her own thinking about the topic.

Thanks to digital technology boundaries between work and free-time, private and public, commercial and non-commercial have become subjects of constant re-negotiation in our lives. This kind of fluency has also entered the world of crime and CSA. A same person can be a producer, a consumer or even a victim of a sexual abuse crime. Roles are not as self-evident as before. Also, sexual abuse online is often a process, not one incident. One act of offence (for example a recording of a contact sexual abuse) leads to another offence (for example selling the record of the abuse) and so on. There the end of an offence get blurred, and in some cases as in the cases of self-generated indecent images, so gets the start.

Child sexual abuse images online is a very current and much discussed topic. But as this essay has shown, commercial child sexual abuse images online are linked to child sexual abuse online and offline in many ways. A child can be a victim of child sexual abuse images online, these images end up being used commercially and they can be used to coerce the child to submit to other forms of sexual abuse. Digital child sexual abuse material and indecent images contribute to the rest of the sex industry. There is a movement between prostitution, pornography and sex trafficking. (Farley et al. 2013-2014, 122.) Technology creates previously unimaginable possibilities for offenders, and the Internet is a completely new space for crime to happen.

This all brings us back to legislation. As child sexual abuse online is a global problem, solutions must be global too, or the problem won't vanish but is more likely to grow. As long as these issues regarding legislation are not solved, we are living in a breach explained by Killias (2006) in his theory of breaches.

## 8.2 Discussion

I wrote this essay during Covid-19 pandemic, and it would be dishonest not to mention it here. Though in the hindsight this pandemic might be seen just as a fleeting moment in our history, it has a relevance to the topic of this essay, because during it the humankind took an unforeseen digital leap.

Writer Herman Narula says the following in the Wired magazine (2021,149): “Online will become the third place where we do much of our socializing in 2021. As the Covid-19 pandemic has disrupted the distinction between the workplace and home space, we are starting to look beyond video calls and turning to virtual worlds to give us the same experience as our favourite gathering places”.

Narula is not talking about crime, but his words should ring a bell here.

Firstly, we cannot disregard the effect of the Covid-19 pandemic in the development of technology. The speed of the development of technology has been fast, but Covid-19 pandemic has made it even faster. When I started this essay, I was not thinking of the pandemic as it was still taking its’ first steps. It is now clear, though, that the subject cannot be ignored. The shift in the ways we use technology is huge and it will have an impact on commercial child sexual abuse online, too. The problems I have highlighted in this essay might get bigger and breaches brought on by the development of technology broader and harder to block. We must realize that technology is very much created in the world of beta, meaning that applications and services are in use before they are at their final stage. This way of working allows companies to launch new services faster and faster. How can law-making process answer to that as it is renowned for its’ stiffness?

Secondly, online is the new rogue space where crime happens. But while most of us have an experience of visiting a shopping mall or other public places, not enough people working in the field of child sexual abuse (online) or criminology in general have an experience of the rogue places of the Internet. This could threaten our understanding of current child sexual abuse issues and have a negative impact on the effectiveness of the work done with offenders, victims and preventively. If people working in the field of sexual crimes do not understand the space where crime happens, it could impend the understanding of the crime itself and of the everyday life of offenders. We have to understand how skillful offenders can be with new technologies (Farley et al. 2013-2014, 106). And we also must understand what meaning this space created by technology has for the offenders, so that we can be better at preventive and rehabilitative work. Most likely it does resemble a space with boundless opportunities to offend with no other regulation than a person’s own capacity to control oneself.

Thirdly, Narula writes about the virtual world. The VR has been the favourite trend for the technologically enthusiastic for quite a while now. It hasn't really taken off yet due to bulky, expensive and uncomfortable headsets, but once it does, it will bring whole new possibilities for offenders in commercial child sexual abuse online. Another examples of innovation which are about to go mainstream in a major way are block-chain and cryptocurrencies. They can worsen anonymity issues. These possibilities and challenges must be thought-off in advance during the process of technology innovation. If they are not, new breaches will come to existence. There has to be co-operation between different fields - law, engineering, coding, criminology and social work at least - in order to gain a deeper understanding on how the development of technology changes sexual abuse crimes. As writer Lewis Mumford elegantly explains in his book *Technics and Civilization* (1963, 325), first edition published notably already in 1934, "The power of machines does not lie in their capacity to produce goods, which quickly become consumed, nor in the machines themselves, which are quickly outdated, but in the modes of life made possible via the machine. A major importance in the development of technology is to understand how it becomes a part of our daily life".

## References

### Printed

- Ahonen, S-M. Jääskeläinen, P. Kangasniemi, M. Liikanen, E. Pietilä, A- M. & Utriainen, K. (2013). Kuvaileva kirjallisuuskatsaus: eteneminen tutkimuskysymyksestä jäsenettyyn tietoon. *Hoitotiede* 25 (2013) 4, 291-301.
- Alasuutari, P. 1999. *Laadullinen tutkimus*. 3. edition. Tampere. Vastapaino.
- Haasio, A. 2017. *Verkkorikokset*. Viro. Avain.
- Kara, S. 2009. *Sex Trafficking. Inside the Business of Modern Slavery*. New York. Columbia University Press.
- Kara, S. 2017. *Modern Slavery. A Global Perspective*. New York. Columbia University Press.
- Kempadoo, K. 1998. Introduction: Globalizing Sex Workers' Rights. In: Kempadoo, K. and Doezema, J. *Global Sex Workers. Rights, Resistance, and Redefinition*. New York and London. Routledge.
- Kivivuori, J. 2013. *Rikollisuuden syyt*. 2. edition. Vantaa. Nemo
- Kivivuori, J., Aaltonen M., Näsi, M., Suonpää, K. and Danielsson, P. 2018. *Kriminologia. Rikollisuus ja kontrolli muuttuvassa yhteiskunnassa*. 2. edition. Tallinna. Gaudeamus.
- Mumford, L. 1963. *Technics and Civilization*. New York and Burlingame. A Harbinger Book. Harcourt, Brace & World, Inc.
- Newburn, T. 2017. *Criminology*. 3. edition. Great Britain. Routledge.
- Presdee, M. 2005. 'Volume Crime' and everyday life. In Hale, C., Hayward, K., Wahidin, A. ja Wincup, E. *Criminology*. 2005. Oxford University Press.
- Shelley, L. 2011. International trafficking. An important component of transnational crime. In Okubo, S. and Shelley, L. *Human Security, Transnational Crime and Human Trafficking*. London and New York. Routledge.
- Tuomi, J. and Sarajärvi, A. 2002. *Laadullinen tutkimus ja sisällönanalyysi*. Jyväskylä. Tammi.

Electronic

Acar, K.V. 2017. Organizational Aspect of the Global Fight against Online Child Sexual Abuse. *Global Policy*, Vol.8(2), pp.259-262. Accessed 9.1.2021.

<http://dx.doi.org.nelli.laurea.fi/10.1111/1758-5899.12418>.

Acar, K.V. 2017. Webcam Child Prostitution: An Exploration of Current and Futuristic Methods of Detection. *International Journal of Cyber Criminology*. 2017. Vol. 11(1):98-109. Accessed 18.1.2021. <https://doi.org/10.5281/zenodo.495775>

Baumeister, R. F. & Leary, M. R. 1997. Writing Narrative Literature Reviews. *Review of General Psychology*, 1(3), 311-320. Accessed in

15.1.2021. <http://psychology.yale.edu/sites/default/files/baumeister-leary.pdf>

Beech, A. R., Elliot, I. A., Birgden, A. and Findlater, D. 2008. The Internet and Child Sexual Offending: A criminological view. *Aggression and Violent Behaviour*. 13:216-228. Accessed 4.12.2020. <https://doi.org/10.1016/j.avb.2008.03.007>

Britannica 2021. Accessed 13.12.2020. <https://www.britannica.com/topic/pornography>

Cambridge Dictionary. Accessed 30.1.2021.

<https://dictionary.cambridge.org/dictionary/english/grooming>

Clarkson, F. A. 1939. History of Prostitution. *Canadian Medical Association journal*, 41(3), 296. Accessed 13.12.2020. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC537482/>

Cunningham, A.S and Kendall, T. D. Prostitution 2.0: The Changing Face of Sex Work. *Journal of Urban Economics*. 2011. Accessed 24.1.2021. <https://doi.org/10.1016/j.jue.2010.12.001>

Dank, M. L. 2011. *Commercial Sexual Exploitation of Children*. El Paso. LFB Scholarly Publishing LCC. Accessed 13.12.2020.

<https://ebookcentral.proquest.com/lib/Laurea/reader.action?docID=1057798&query=>

Dupont, B. 2013. Cybersecurity Futures: How Can We Regulate Emergent Risks? *Technology Innovation Management Review*, 3(7), 6-11. Accessed 6.1.2021.

<https://doi.org/10.22215/timreview/700>

Ennew, J. 2008. DRAFT Exploitation of children in prostitution Thematic paper, World Congress III Against the Sexual Exploitation of Children and Adolescents. Brazil. Accessed 14.12.2020

[https://www.ecpat.org/wpcontent/uploads/legacy/Thematic\\_Paper\\_Prostitution\\_ENG.pdf](https://www.ecpat.org/wpcontent/uploads/legacy/Thematic_Paper_Prostitution_ENG.pdf)

- Farley, M., Franzblau, K. and Kennedy A.M. 2013-2014. Online Prostitution and Trafficking. Albany Law Review. Accessed 24.1.2021. [https://www.researchgate.net/profile/Melissa-Farley/publication/279716725\\_Online\\_Prostitution\\_and\\_Trafficking/links/5735642608ae9f741b283b89/Online-Prostitution-and-Trafficking.pdf](https://www.researchgate.net/profile/Melissa-Farley/publication/279716725_Online_Prostitution_and_Trafficking/links/5735642608ae9f741b283b89/Online-Prostitution-and-Trafficking.pdf)
- Henry, N. and Powell, A. 2016. Sexual Violence in the Digital Age: The Scope and Limits of Criminal Law. *Social & legal studies*, 25(4), 397-418. Accessed 18.1.2021. <https://doi.org/10.1177/0964663915624273>
- Hillman, H., Hooper, C., and Raymond Choo, K. 2014. Online Child Exploitation: Challenges and future research directions. *Computer Law & Security Review*. 30: 687-698. Accessed 4.12.2020. <https://doi.org/10.1016/j.clsr.2014.09.007>
- Horsman, G. 2018. Combatting those who intentionally access images depicting child sexual abuse on the internet: A call for new offence in England and Wales. *Computer Law & Security Review*. 34: 111-124. Accessed 3.1.2021. <https://doi.org/10.1016/j.clsr.2017.05.017>
- Hunt, Lynn. 1993. *The Invention of Pornography 1500-1800: Obscenity and the Origins of Modernity*. Zone Books. New York. Accessed 14.12.2020. [https://books.google.fi/books?hl=fi&lr=&id=x8ojDQAAQBAJ&oi=fnd&pg=PA5&dq=The+Invention+of+Pornography+1500-1800&ots=exYSvEMwBQ&sig=obnSj18ciq3FLjuLRszAeOVNF2c&redir\\_esc=y#v=onepage&q=The%20Invention%20of%20Pornography%201500-1800&f=false](https://books.google.fi/books?hl=fi&lr=&id=x8ojDQAAQBAJ&oi=fnd&pg=PA5&dq=The+Invention+of+Pornography+1500-1800&ots=exYSvEMwBQ&sig=obnSj18ciq3FLjuLRszAeOVNF2c&redir_esc=y#v=onepage&q=The%20Invention%20of%20Pornography%201500-1800&f=false)
- Internet Watch Foundation. 2021. Accessed 20.2.2021. <https://www.iwf.org.uk/news/'grave-threat'-children-predatory-internet-groomers-online-child-sexual-abuse-material-soars>
- Killias M. 2006. The Opening and Closing of Breaches: A Theory on Crime Waves, Law Creation and Crime Prevention. *European Journal of Criminology*. 3(1):11-31. doi:[10.1177/1477370806059079](https://doi.org/10.1177/1477370806059079)
- Koops, T., Dekker, A. and Briker, P. 2018. Online sexual activity involving webcams - An overview of existing literature and implications for sexual boundary violations of children and adolescents. *Behavioral sciences and Law*. 36:182-197. Accessed 3.2.2020. <https://doi.org/10.1002/bsl.2333>
- Leonard, M. M. 2010. "I Did What I Was Directed to Do but He Didn't Touch Me": The Impact of Being a Victim of Internet Offending. *The journal of sexual aggression*, 16(2), 249. Accessed 1.12.2020. <https://doi.org/10.1080/13552601003690526>

- Mccabe, K. A. 2008. The Role of Internet Service Providers in Cases of Child Pornography and Child Prostitution. *Social science computer review*, 26(2), 247-251. Accessed 3.2.2021. <https://doi.org/10.1177/0894439307301438>
- Martin, J. 2016. Child Sexual Abuse Images Online: Implications for Social Work Training and Practise. *The British Journal of Social Work*, Volume 46, Issue 2, 372-388. Accessed 4.12.2020. <https://doi.org/10.1093/bjsw/bcu116>
- Miller-Perrin, C. and Wurtele, S. (2017). Sex Trafficking and the Commercial Sexual Exploitation of Children. *Women & Therapy*, 40(1-2), 123. Accessed 5.2.2021. <https://doi.org/10.1080/02703149.2016.1210963>
- Newman, W. J., Holt, B. W., Rabun, J. S., Phillips, G. and Scott, C. L. 2011. Child sex tourism. Extending the borders of sexual offender legislation. *International Journal of Law and Psychiatry*. Volume 34/2. P.116-121. Accessed 4.12.2020. <https://doi.org/10.1016/j.ijlp.2011.02.005>.
- Ost, S. 2010. Criminalising fabricated images of child pornography: A matter of harm or morality? *Legal Studies*, 30(2), 230-256. Accessed 5.2.2021. <https://doi.org/10.1111/j.1748-121X.2010.00161.x>
- Quayle, E. and Sinclair, R. 2012. *An Introduction to the Problem in Quayle, E. and Ribisl, K. M. Understanding and Preventing Online Sexual Exploitation of Children*. Routledge. Accessed 4.12.2020. [https://books.google.fi/books?hl=fi&lr=&id=juLGBQAAQBAJ&oi=fnd&pg=PT10&dq=Understanding+and+Preventing+Online+Sexual+Exploitation+of+Children&ots=6N6yqKJyxF&sig=dI\\_csBKbMpumexCiMCE71pnR\\_w&redir\\_esc=y#v=onepage&q=Understanding%20and%20Preventing%20Online%2](https://books.google.fi/books?hl=fi&lr=&id=juLGBQAAQBAJ&oi=fnd&pg=PT10&dq=Understanding+and+Preventing+Online+Sexual+Exploitation+of+Children&ots=6N6yqKJyxF&sig=dI_csBKbMpumexCiMCE71pnR_w&redir_esc=y#v=onepage&q=Understanding%20and%20Preventing%20Online%2)
- Selvius, K., Wijkman, M. D., Slotboom, A. & Hendriks, J. 2018. Comparing intrafamilial child sexual abuse and commercial sexual exploitation of children: A systematic literature review on research methods and consequences. *Aggression and violent behavior*, 41, 62-73. Accessed 3.12.2020. <https://doi.org/10.1016/j.avb.2018.05.008>
- Stop It Now, 2021. Accessed 24.4.2021. <https://www.stopitnow.org.uk/concerned-about-the-behaviour-of-another-adult/online-behaviour/online-behaviour-2/>
- The Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child pornography, 2000. Accessed 3.12.2020. <https://www.ohchr.org/en/professionalinterest/pages/opscrcr.aspx>

Unicef. A Summary of the UN Convention on the rights of the child. 2017. Accessed 5.4.2021.  
<https://www.unicef.org.uk/rights-respecting-schools/wp-content/uploads/sites/4/2017/01/Summary-of-the-UNCRC.pdf>