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Age Verification, Porn Tube Sites and Children's Rights

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Executive summary

This Master's Thesis studies age verification as a regulatory tool in the context of porn tube sites from a children's rights perspective. As pornography getting "normalised" in the online environment, Pornhub, a leading porn tube site, reports over 80 million traffic daily, ranking 27 in global internet engagement in 2019, according to Alexa.¹ How does age verification response to this new form of pornography as a regulatory tool developed to ensure children's online "welfare"? The lack of a right-based legal analysis on age verification in terms of porn tube sites has motivated the researcher to explore children's rights at stake with regard to porn tube sites and whether applying age verification to regulate these tube sites is children's rights compliant.

This thesis aims to contribute to the discourse on internet governance regarding children's online behaviours by providing an overview on porn tube sites and how it affects children and their rights. Whether age verification is appropriate to regulate these tube sites to safeguard children's right in this regard will be analysed. Based on the context analysis as well as the right analysis, the thesis brings out a normative framework to help develop a children's rights compliance age verification. It will discuss existing international children's rights legal framework to determine the obligations of relevant stakeholders in terms of porn tube sites, which will include states, private sectors and civil society under the normative framework proposed.

The research question of this thesis is to what extent age verification as a regulatory tool is in line with international children's rights framework. To answer this question, this thesis first analyses the basic features of porn tube sites and gives an overall description of how age verification takes effect in certain jurisdictions to lay the foundation of the following legal analysis. (Chapter Two) Then, the thesis explores the rights of children regarding accessing porn tube sites as viewers. A frequently mentioned right affected is children's right to be protected from violence, which should be the fundamental consideration when regulating porn tube sites in line with children's rights. Taking children's evolving capacity into account, sexual right of adolescents, which is entailed in the broad connotation of the right to development, information as well as the right to recreational activities is also an instrumental right regulating porn tube sites could affect. Notably, porn tube sites play a controversial role in ensuring children's right to information since whether to categorise porn tube sites and its contents as harmful information or not is subject to heated debate. Since children's sexuality is still a sensitive topic under international children's rights framework, whether porn tube sites could be regarded as sources of recreational activities is unclear. However, since sexual right is one of the fundamental human rights, the thesis argues that children should be recognised as the subject of sexual rights as adults do. In this regard, children seeking sexuality out online should be respected as they grow up and are matured enough to make decisions on matters affecting them. (Chapter Three)

Chapter Four explores the main research question and analyse the extent to which age verification complies with children's rights identified in Chapter Three regarding children as viewers on porn tube sites. First, with regard to protecting children, although age verification is developed mainly on this consideration, conflicts of interests- between protecting children and tube sites operators, people who concern about over surveillance on online activity- in practice make it rather hard to implement thoroughly and effectively. Moreover, age verification contributes little to the prevention of sexual solicitation on porn tube sites as tube sites burden no responsibility for social networks built on them and age verification is limited to access control. Secondly, as for rights relevant to children's evolving capacity, age verification fails to take into account the sexual need and right of adolescents. Most age verification methods set a sole age limit at 18 years old, with no differentiation of people under 18. The employment of age verification on porn tube sites thus blocks all possible contents and interaction

¹ Alexa, <https://www.alexa.com/siteinfo/pornhub.com>

children could have on these tube sites. Considering the best interest of the child and evolving capacity of children, a normative framework to apply age verification which differentiates children at different age in accordance with their capacity regarding online as well as sexual activities. Due to the complexity of culture and perception of sexuality based on which, the thesis only provides a suggested exemplary age limit. In this regard, age verification regulating porn tube sites could be more children's rights complaint.

The foundation of this research is the consideration of children as rights holders and States as primary duty bearers towards online regulation and its enforcement. As providers of content and services online, the company plays a fundamental role in Internet governance that it also bears certain responsibilities regarding the realisation of children's rights online. Having regard to this, Chapter Five discusses the responsibilities of relevant stakeholders under the proposed normative framework to develop age verification in terms of porn tube sites.

By way of conclusion, this thesis argues that porn tube sites have placed new challenges on ensuring children's rights online for the international community. Age verification needs to cater for differentiated needs of children at different ages, protecting children while taking children's evolving capacity into account in terms of children as viewers on porn tube sites. Moreover, the sole application of age verification as a tool to protect children under international children's rights norms is not sufficient. As such, states, companies as well as civil society in this process should take up their respective responsibilities, cooperating, to intervene effectively to safeguard children's online rights.

Overview of main findings

This thesis has two main findings. It adds new perspectives to existing knowledge of Internet governance and its interaction with children's rights when it comes to sexual matters online.

First, this thesis brings in research on international children's rights in the context of porn tube sites as a new form of online pornography. Based on international children's rights law, it reviews children's protection rights and participation rights taking into account of features of tubes sites and finds a subtler locus of safeguarding children's rights online. This analysis serves as a starting point of discussions in the following chapters on a normative framework of regulating porn tube sites with age verification in this thesis.

Second, this thesis assesses age verification from a children's rights perspective, which is original. Most of the present academic writings on the topic of internet governance overlook the rights of children which provides grounds for developing age verification on pornographic sites. This research adds depths to the analysis of developmental rights of children, especially sexual right of children to express and explore the world in a way closely related to pornography. As an integral element embedded in the developmental rights of children, children access to porn tube sites raises concern mainly about child online safety. In this regard, an effective holistic protection system is in need, whereas age verification is trying to block children's access to online sexual paradise which might generate child pornography and be made use of to more severe sexual solicitation targeted to children.

Moreover, in the normative framework, not only a multi-layered approach is adopted regarding age verification, a child-centred rights analysis is also illustrated briefly and clearly to lay the theoretical foundation of the multi-layered approach, catering to children's evolving capacity.

Key words: Age verification | children's rights | digital rights | porn tube sites | children's sexuality | internet governance

1. Introduction

1.1. Pornographic contents on social media platforms

With pornography being available at the click of the mouse, online pornography impacts the traditional transmission of pornographic contents via paper media, where pornography still have shock value and commercial value.² In this regard, exposure to pornographic materials is recognised as one of the risks children face in their online activities.³ Voices against online pornography raise the children's "right to innocence" brought from the era of traditional pornography.⁴ According to the EU Kids Online research, there are different types of exposure to sexually explicit contents, which may have different impacts on children and adolescents.⁵ Mitchell and Johnson express concerns on the correlation between early exposure to pornography of children and future problematic sexual behaviours.⁶ The concern is also raised that exposure to pornographic contents online might affect children's reproductive and psychological health⁷ and even future intimate relationship.⁸

Recently, ground-breaking online social media for pornographic contents has also brought about new issues in terms of sexual exposure for children.⁹ Pornographic "tube sites", such as Pornhub and YouPorn, operate under the same model as YouTube.¹⁰ As consumers and producers of pornographic

² R. Somaiya, Nudes Are Old News at Playboy, N.Y. TIMES (2015), (<http://www.nytimes.com/2015/10/13/business/media/nudes-are-old-news-at-playboy.html>), last visited (08-04-2019).

³ S. Livingstone & J. Mason, *Sexual rights and sexual risks among youth online: a review of existing knowledge regarding children and young people's developing sexuality in relation to new media environments*, European NGO Alliance for Child Safety Online (2015); See also S. Livingstone & P. Smith, Annual research review: harms experienced by child users of online and mobile technologies: the nature, prevalence and management of sexual and aggressive risks in the digital age. 55 *Journal of Child Psychology and Psychiatry* 6: 635-654(2014).

⁴ L. Tsiliki, D. Chronaki & K. Ólafsson, Experiences with sexual content: What we know from the research so far, EU Kids Online (2014); See also K. Albury, *Just because it's public, doesn't mean it's any of your business: Adults' and children's sexual rights in digitally mediated spaces*, *New Media & Society* 1-13 (2017).

⁵ S. Livingstone, L. Haddon & A. Görzig et al., EU Kids Online final report (2011), (<http://eprints.lse.ac.uk/39351/>), last visited (08-04-2019); L. Haddon & S. Livingstone with the EU Kids Online network, EU Kids Online: national perspectives. (2012); S. Livingstone, L. Kirwil & C. Ponte et al., In their own words: what bothers children online? (2013); G. Mascheroni & K. Ólafsson, *Net Children Go Mobile: Risks and opportunities* (2014).

⁶ K. Mitchell, D. Finkelhor & J. Wolak, the Exposure of Youth to Unwanted Sexual Material on the Internet, 34 *Youth & Society* 3: 330-358(2003); T. Johnson, *Understanding Your Child's Sexual Behavior: What's Natural and Healthy* 3rd ed. (2009).

⁷ A. Baxter, How Pornography Harms Children: The Advocate's Role, 33 *CHILD L. PRAC.* 113 (2014).

⁸ G. Dines, Growing Up With Porn: The Developmental and Societal Impact of Pornography on Children, 2 *Dignity: A Journal on Sexual Exploitation and Violence* 3 (2017); E. Taylor, Pornography as a Public Health Issue: Promoting Violence and Exploitation of Children, Youth, and Adults, 2 *Dignity: A Journal on Sexual Exploitation and Violence* 3 (2018); P. Zimbardo, G. Wilson & N. Coulombe, How Porn Is Messing with Your Manhood, *Sceptic*(2016), (https://www.skeptic.com/reading_room/how-porn-is-messing-with-your-manhood/), last visited (25-5-2019)

⁹ A. Delarue, *The Internet Is for porn*, La Cause Du Désir(2017), (<https://www.cairn.info/revue-la-cause-du-desir-2017-3-page-46.htm#>), last visited (19-5-2019)

¹⁰ K. Forrester, Making Sense of Modern Pornography (2016), (<https://www.newyorker.com/magazine/2016/09/26/making-sense-of-modern-pornography>), last visited (19-5-2019).

contents, people share their or others' private sexual experiences in all forms of media to strangers and gain thousands of followers from all over the world on these sites.¹¹ One can find original or pirated contents he or she has fantasies about which are uploaded by amateurs or commercial producers.¹² With user-generated free contents, as described by Delarue, these tube sites have drastically changed the way people view sexual practices and fantasy, "[opening] up an unprecedented erotic renaissance in human history."¹³

The nature of these sites as social media and their content-based and user-based modes of operation mean that ensuring everyone has access to these sites is essential.¹⁴ In this regard, the marketing of these tube sites usually targets to broader Internet users, regardless of their age.¹⁵ Due to the prevalence of and easy access to these tube sites, there is a possibility that children who have access to the Internet are advertised to get into these websites,¹⁶ while in many countries, pornography is categorised as age-restricted goods and is illegal if it is accessible to minors.¹⁷

1.2. Regulation and age verification

The regulation of online pornography is different from that of traditional offline pornography. As regards to pornographic materials classified as age-limited products, children are protected from them offline physically. For example, age-limited pornographic materials are only allowed to sell legally in sex shops where there is a strict age checking policy.¹⁸ However, there is no protection online that is comparable to offline regulations.¹⁹ The Internet affordance makes it difficult to prevent children from accessing these websites.²⁰ The anonymity of the Internet breaks the link between online activities and offline contexts, providing convenience for people to have private access to pornographic contents without been identified in real life.²¹

Some regulatory mechanism has been established to address the issue of children have access to online sexual contents. There are opt-in/opt-out policies and positive parental filtering to prevent youth from accessing pornography.²² Age verification introduced at website level is a typical regulation

¹¹ B. Wallace, *The Explosion of Free Online Pornography: The Geek Kings of Smut*, *The New Yorker Magazine*, (2011); P. Oosterhoff, L. Gilder & C. Mueller, *Is Porn the New Sex Education?* IDS Rapid Response Briefing 15 (2016).

¹² Id. K. Forrester; See also J. Brennan, *Microporn in the digital media age: fantasy out of context*, 5 *Porn Studies* 2: 152-155 (2018)

¹³ See note 9, *supra*, A. Delarue.

¹⁴ See note 11, *supra*, B. Wallace.

¹⁵ eNACSO, A. Nairn, J. Carr, B. Lilliu, *When Free Isn't: Business, Children and the Internet* (2016); See note 11, *supra*, P. Oosterhoff.

¹⁶ *Id.* A. Nairn.

¹⁷ *Id.*

¹⁸ K. Hinkley, *Shielding Children from Pornography by Incentivizing Private Choice*, 95 *Wash. U. L. Rev.* 981 (2018).

¹⁹ See note 15, *supra*, A. Nairn.

²⁰ See note 5, *supra*, S. Livingstone; V. Nash, J. Adler & M. Horvath et al., *Identifying the routes by which children view pornography online: implications for future policy-makers seeking to limit viewing* (2015)

²¹ See note 15, *supra*, A. Nairn; See note 11, *supra*, P. Oosterhoff.

²² See note 1, *supra*, S. Livingstone.

employed in traditional industries of age-limited products.²³ This regulatory tool has been transplanted into online environments.

In Europe, the General Data Protection Regulation (hereinafter “GDPR”) issued in 2016 responded to the problematic situation of protecting children’s personal data by setting age limit to accessing to Information Society Service.²⁴ To comply with the GDPR, many EU countries introduced age verification and many websites operating in the EU region also applied age verification tools.²⁵ Likewise, in 2017, the UK passed the Digital Economy Act which regulated that all online commercial pornographic websites accessible from the UK are required to carry age verification to protect young people online, or they will be blocked by Internet service providers (hereinafter “ISPs”) in the UK.²⁶ This regulation brought age verification under public debate again.

As a typical regulatory tool, age verification is used by service providers to conduct Internet filtering.²⁷ It is to enable offline regulation in terms of age-restricted content functional in online settings. To access certain contents, individuals must demonstrate that they are 18 or above. The way to demonstrate varies from websites to websites. In some cases, personal identification is not required.²⁸ In some other cases, personal identification by uploading ID, driving license or through testing credit card payment is required.²⁹

1.3. Age verification and children’s rights

When referring to pornographic contents on social media, at first glance, the relation between age verification and children’s rights in this process only implies the aspects of children protection. For many people, this topic is somewhat relevant to prevent potential child abuse, child exploitation and cyberbullying.³⁰ However, while the intention of employing age verification in terms of online pornography is good, whether there is a need to protect children from online pornography is still under academic debate in the light of the children as rights holders under the CRC.³¹ Raising children’s “innocence” in terms of online pornography is not enough to pull children away from these platforms in a time where the frequency and density of porn and all other kinds of information people receive every

²³ V. Nash, R. O’Connell and B. Zevenbergen et al., *Effective age verification techniques: Lessons to be learnt from the online gambling industry* (2014), (<https://www.oii.ox.ac.uk/research/projects/effective-age-verification-techniques/>), last visited (08-04-2019).

²⁴ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), art. 8.

²⁵ Ingrida Milkaite & Eva Lievens, *The Changing Patchwork of the Child’s Age of Consent for Data Processing across the EU* (2019), (<https://www.betterinternetforkids.eu/web/portal/practice/awareness/detail?articleId=3017751>), last visited (25-05-2019); In 2018, the draft Belgian Law regarding data protection recommends setting age verification by using e-ID card.

²⁶ The Digital Economy Act 2017, arts. 14, 16.

²⁷ See note 23, *supra*, V. Nash.

²⁸ *Id.*

²⁹ *Id.*; See also note 15, *supra*, A. Nairn.

³⁰ B. O’neill, *Research for CULT Committee – Child safety online: definition of the problem*, European Parliament, Policy Department for Structural and Cohesion Policies, Brussel (2018); See note 5, *supra*, S. Livingstone.

³¹ See note 6, *supra*, S. Livingstone.

day is much higher than those in the past.³² Freedom of expression is extended to its largest extent, children's right to participate is also paid more attention than it has ever been, with children benefiting from the anonymity and collapsed contexts of the online environment.³³ Sexual rights of children have also been discussed, while recently prevailing attitudes towards children exposure to online pornography are still negative.³⁴

Moreover, for people who agree that children's exposure to pornography on the Internet is harmful, some of which also express concern that the use of age verification as an avenue of regulation might not serve the purpose of protecting children.³⁵ Livingstone and others notice the potential infringement of employing age verification of both parental rights and children's rights to participation in this process.³⁶ Questions also raised about how to ensure the protection of data, overly rigorous age verification can be counter to the protection of personal data, children's data in particular.³⁷

In addition, a more practical issue is raised by the civil society about the difficulty of enforcement of age verification in practice. Different operators have different age verification systems.³⁸ Its potential impact on content providers, traditional ISPs as well as mobile appliance providers also postpones the implementation of online pornography regulation.³⁹ There is a backlash in the UK society against the "age verification" regulation. In addition, a new form of moral panic that age verification might threaten freedom of expression and privacy rights is under its formation.⁴⁰ It indicates the need to strike a balance in this process between securing civil rights of the public and protecting children's rights.

³² S. Livingstone, J. Carr & J. Byrne, *One in Three: Internet Governance and Children's Rights*, Global Commission on Internet Governance Paper Series No.22 (2015).

³³ *Id.*, S. Livingstone; *See also* d. boyd, *It's complicated: the social lives of networked teens* (2014).

³⁴ *See* note 6, *supra*, K. Albury; *See* note 5, *supra*, S. Livingstone; *See* note 11, *supra*, P. Oosterhoff.

³⁵ *See* note 20, *supra*, V. Nash; *See* note 15, *supra*, A. Nairn.

³⁶ S. Livingstone & A. Third, *Children and young people's rights in the digital age: An emerging agenda*, 19 *New Media & Society* 5: 657–670 (2017); *See also* B. Zaman & M. Nouwen, *Parental controls: advice for parents, researchers and industry* (2016); J. Randel & A. Sánchez, *Parenting in the Digital Age of Pornography*, Huffington Post: the blog (2016), (<https://perma.cc/RHE2-RTE8>) last visited (08-04-2019).

³⁷ Department for media and sports, *Child Safety Online: Age Verification for Pornography Consultation Response* (2016), (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/534965/20160705_AVConsultationResponseFINAL_2_.pdf), last visited (01-02-2019); *See also* Open Rights Group, *Age Verification Guidance November 2018 Response to the draft guidance from the BBFC laid before Parliament*, (https://www.openrightsgroup.org/assets/files/pdfs/reports/ORG_Response_to_BBFC_Post_Consultation_Guidance.pdf), last visited (25-05-2019): "The data handled by age verification systems is sensitive personal data as effective age verification services must directly identify users in order to accurately verify age. However, data collected in terms of accessing pornographic materials may implicate 'person's sex life or sexual orientation' (the GDPR) which can cause great loss if the data is leaked."

³⁸ *See* note 20, *supra*, V. Nash.

³⁹ *Id.*; *See also* A. Przybylski & V. Nash, *Internet Filtering and Adolescent Exposure to Online Sexual Material*, 21 *Cyberpsychology, Behavior, and Social Networking* 7(2018); *See also* note 20, *supra*, V. Nash.

⁴⁰ J. Herrman, *How the U.K. Won't Keep Porn Away From Teens*, the *New York Times* (2019), (<https://www.nytimes.com/2019/05/03/style/britain-age-porn-law.html>), last visited (25-05-2019); J. Waterson, *UK online pornography age block triggers privacy fears* (2019), (<https://www.theguardian.com/culture/2019/mar/16/uk-online-porn-age-verification-launch>), last visited (25-05-2019); A. Fedorova, *How the UK porn block will hurt more people than it's meant to help* (2019), (<https://www.dazeddigital.com/science-tech/article/43834/1/uk-porn-block-age-verification-law-privacy-performers-creators>), last visited (26-05-2019): "...it has the potential to change not only the way we access, create, or sell

It is thus crucial to look closer at the dynamics between age verification as a tool of online pornography regulation and children's rights under relevant international standards. The situation is even more complicated when it comes to pornographic contents intertwining with social media. Social media platforms largely influence children in the digital environment, acting as the platforms for children to exercise their rights enshrined in the CRC as rights holders.⁴¹ At the same time, these platforms burden crucial responsibilities to protect children from potential harm together with States.⁴² Porn tube sites play a binary role as both pornographic website and social media platform. However, no legal study from a children's rights perspective on the impact of age verification have on children in terms of porn tube sites has been found, so this thesis decides to bring in a child-centred legal analysis.

1.4. Aim of the research

The CRC Committee is preparing a coming General Comment on children's rights in relation to the digital environment.⁴³ By studying age verification as an online regulatory tool from a children's rights perspective, the thesis attempts to raise awareness about children's rights issues behind regulatory tools in the digital environment. The specific analysis of age verification in relation to children's rights violations aims to provide a more critical perspective of viewing online regulatory measures and its effect on children's rights, especially in the controversial contexts of online pornography. In this regard, it is expected that the thesis is used as a source of information for the public to take into account the asymmetry of online and offline environments when making decisions online. Moreover, the analysis of the state and private sector as third party's responsibilities is out of the expectation that it can bring about more discussion on addressing the tension among states and third party as well as the potential therein in securing children's rights in the digital environment.

1.5. Research question

This thesis focuses on children's exposure to porn tube sites where children are intended to be viewers on tube sites instead of active performers. Unlike sexting where children are main players in producing images and videos perceived to be child pornography, issues concerning child pornography and related children's rights standards concerning sexual exploitation of children fall largely outside the scope of this thesis. In light of the obligations of states and third parties, namely companies and civil societies towards children, the main question to be answered is to what extent age verification as a regulatory tool is in compliance with international children's rights legal framework in the event of children access to porn tube sites as viewers. Four sub-questions are raised to better answer the research question:

- (a) What are the new features porn tube sites have that distinguish them from traditional commercial pornographic websites regarding children's rights?
- (b) What are the relevant children's rights according to the CRC affected by regulating children's

explicit material in the UK, but the very framework of privacy and freedom of speech in the online space"; Girl on the Net, Age verification won't block porn, but it will spell the end of ethical porn, The Guardian (2019), (<https://www.theguardian.com/commentisfree/2019/apr/18/age-verification-block-porn-ethical-sites-sex>), last visited (25-5-2019): "these costly and illogical checks will kill off small producers and leave only mainstream sites."

⁴¹ See note 33, *supra*, d. boyd.

⁴² See note 32, *supra*, S. Linvingstone.

⁴³ OHCHR, Committee on the rights of the child, (<https://www.ohchr.org/EN/HRBodies/CRC/Pages/GCChildrensRightsRelationDigitalEnvironment.aspx>) last visited (08-04-2019)

- access to porn tube sites as viewers?
- (c) How should the divergent interests at stake be balanced to come to a children's rights compliant age verification to regulate children's access to porn tube sites?
 - (d) What are the responsibilities of relevant stakeholders other than children to safeguard children's rights in this context?

1.6. Methodology

This thesis is going to analyse the desirability of age verification from a children's rights perspective in regulating porn tube sites by conducting desk review on relevant international legal standards and norms, relevant academic literature as well as grey literature such as NGO reports and research reports. The CRC and the CRC Committee's General Comments will be the primary source of research on the international legal framework. In addition, the Optional Protocol of the CRC, ICCPR and ICESCR will also be referred in the discussion of children's civil rights and other human rights affected by age verification regarding accessing porn tube sites as complementary instruments to interpret the CRC. Regional legislation will be touched upon to some extent in the discussion of national practices and relevant obligations in terms of age-verification.

The literature review part examines online pornography regulation, porn tube sites and age verification by reviewing academic literature, research reports, NGOs reports, UN documents, country and region-specific reports. News as well as industry reports will be touched upon as porn tube sites is a research topic at the front edge that relevant source is relatively limited.

1.7. Outline

Chapter Two of this thesis will discuss the phenomenon of porn tube sites to answer the first sub-question. Age verification as a typical regulatory tool regarding age-restricted products will also be introduced in this chapter. Chapter Three will focus on the existing international children's rights standards around age verification when it comes to children as viewers on porn tube sites to answer the second sub-question to explore to what extent age verification is required from a children's rights perspective. Chapter Four will then focus on answering the third sub-question. This chapter will unfold a subtle analysis of the conflict of interests among children, parents and the broader public regarding employing age verification on porn tube sites. The conflict contributes to the failure to comply with international children's rights to protect children despite the existence of child pornography prevention system on these tube sites. The sole and isolated age limit set by age verification also fails to take account of children's evolving capacity discussed in Chapter Three, namely sexual rights in this context. A preliminarily normative framework is thus developed in this Chapter as a suggestive framework to build a children's rights compliant age verification regulating children's access to porn tube sites as viewers. In Chapter five, to answer the fourth sub-question, specific responsibilities of States and third parties in this context will be discussed to elaborate on the normative framework brought out in Chapter Four to develop children's rights standards compliant age verification pragmatically. Chapter Six will conclude with a chart illustrating the layout of stakeholders responsibilities discussed in Chapter Four and Chapter Five under the children's rights framework set out in Chapter Three.

2. Age verification and porn tube sites

2.1. Developing age verification as a regulatory tool

Age verification and identification check are generally employed offline to business which is age sensitive, gambling and age-restricted goods like alcohol and cigarette. When it comes to the online environment, age verification has long been widely applied in the gambling industry in many jurisdictions.⁴⁴ Similarly, people buying age-restricted goods online sometimes will also be asked about their age and identity. Age verification as an offline regulatory tool is rendered to be effective for online regulation of age-restricted goods and services.⁴⁵ The anonymity of all users on the Internet makes it difficult to identify children in this process.⁴⁶ Due to anonymity, children tend not to be treated online in a way in accordance with their age and maturity.⁴⁷ Instead, their online identity is more easily to be defined by their behaviours, namely the sites they go to, remarks and comments they post, groups and chat they are in.⁴⁸ However, the boundary between minor and major is hard to be defined by solely analysing people's online behaviour.⁴⁹ In this regard, age verification seems like a reasonable and feasible method to be employed by providers of age-restricted content to filter minors trying to get into their sites. While from the perspective of online governance as well as children welfare, age verification measures are usually under criticism for its ineffectiveness released by some quantitative research conducted in different jurisdictions.⁵⁰ Moreover, it is easy to render age verification as online censorship disguised by protecting children.⁵¹ Xu and others also pointed out age verification as a regulatory tool will trigger opposition as it is related to online identity assurance backed by a confidential database of all citizens.⁵² Notably, Sparrow stressed the synergy between age verification and other regulatory measures regarding protecting children from risks in the event of any age-restricted goods or services.⁵³

2.2. The regulatory framework of online pornography and age verification method in specific jurisdictions

⁴⁴ www.goldmedia.com/uploads/media/Press_Release_Goldmedia_study_Betting_Gambling_01.pdf: In Germany, strict age verification is applied to regarding both online gambling.

⁴⁵ R. Brownsword, The shaping of our online worlds: getting the regulatory environment right. *International Journal of Law and Technology* 20(4) (2012)

⁴⁶ See note 20, *supra* V. Nash.

⁴⁷ See note 32, *supra* S. Livingstone.

⁴⁸ d. boyd, *It's complicated: the social lives of networked teens* (2014).

⁴⁹ S. van der Hof, *I Agree or Do I...?*, A rights-based analysis of the law on children's consent in the digital world, *Wisconsin Journal of International Law* (2017)

⁵⁰ A. Przybylski & V. Nash, *Internet Filtering and Adolescent Exposure to Online Sexual Material*, 21 *Cyberpsychology, Behavior, and Social Networking* 7 (2018); *Effective age verification*

⁵¹ *Effective age verification*; Department for media and sports, *Child Safety Online: Age Verification for Pornography Consultation Response* (2016), (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/534965/20160705_AVConsultationResponseFINAL_2_.pdf) available at (01-02-2019).

⁵² Y. Xu, *Regulation on pornography and purification of society* (2009); See note 20, *supra* V. Nash.

⁵³ M. Sparrow, *Can Internet Gambling be effectively regulated? Managing the risks*(2008)

Setting pornography as age-limited products stems from the perspective of viewing children as the object of protection.⁵⁴ Generally in Europe, pornographic contents are subject to express regulation to make sure its dissemination will not reach to children.⁵⁵ However, the regulation system in each jurisdiction can vary from each other, so does the enforcement of these regulations in practice. In Germany, where gambling, as well as age-restricted goods like pornography, have a big market, formal age-verification solutions supplemented by age classification are requested to be employed by providers in terms of online pornography.⁵⁶ This regulation is regarded as the extension of German strict offline regulation system on pornography.⁵⁷ As for the UK, its “new” online regulation in the form of age verification against pornographic sites in its jurisdiction has been under continuous opposition since its debut in Digital Economy Act in 2017. At the time of this writing, the government has confirmed that this age verification system will become mandatory on 15 July 2019.⁵⁸

In Asia, access to pornography is also subject to child protection related regulations.⁵⁹ It is found that Hong Kong has a relatively substantive framework applying age verification as online regulation towards pornography which turns out to be ineffective in practice. The vague regulation and weak enforcement of the regulation constitute the backdrop of ineffective age verification. Effective since 1987, the Control of Obscene and Indecent Articles Ordinance is the first regulation in Hong Kong which restricts the distribution of pornographic contents.⁶⁰ According to the Articles, the Tribunal of the Ordinance will decide whether pornographic contents should be classified as indecent for children under the Ordinance.⁶¹ The main enforcement agency of the Ordinance is the office for Film, Newspaper and Article Administration, assisted by Hong Kong police. Since the first round of the review of the Ordinance in 2008, the regulation regarding the online environment has long been the focal topic of discussion between the government and the public about the Ordinance. During the second round of the Review in 2012, the government proposed to develop age verification to regulate websites have certain contents categorised as indecent. This proposal received negative responses from the public as well as the information industry.⁶² In 2014, the public raised a concern about rampant online erotic literature. Contents with sexually explicit description of degrading sexual relationship or sexual violence are very popular among social networking sites and are accessible by anyone with a click.⁶³ Although according to the Ordinance, regulatees who are in breach of the

⁵⁴ K. Robinson, *Innocence, knowledge and the construction of childhood, The contradictory nature of sexuality and censorship in children’s contemporary lives* (2013)

⁵⁵ S. Livingstone, L. Haddon & A. Görzig et al., *Risks and safety on the internet: the perspective of European children: full findings and policy implications from the EU Kids Online survey of 9-16 year olds and their parents in 25 countries*, EU Kids Online(2011).

⁵⁶ FSM (<https://www.fsm.de/en/online-youth-protection>), last visited (22-06-2019)

⁵⁷ See note 20, *supra*, V. Nash.

⁵⁸ The Guardian, UK age-verification system for porn delayed by six months, (<https://www.theguardian.com/technology/2019/jun/20/uks-porn-age-verification-system-to-be-delayed-indefinitely>), last visited(11-06-2019)

⁵⁹ Cf. Taiwan and Thailand.

⁶⁰ <https://www.coiao.gov.hk/en/faq.html>

⁶¹ the Control of Obscene and Indecent Articles Ordinance (1987), art. 8.

⁶² Report on Submissions Received in the Second Round of Public Consultation on the Review of the Control of Obscene and Indecent Articles Ordinance, 2013; Review of the Control of Obscene and Indecent Articles Ordinance (COIAO) Second Round Public Consultation, 2012.

⁶³ The issue of online literature, Oriental Daily(2014), (https://orientaldaily.on.cc/cnt/news/20140422/mobile/odn-20140422-0422_00176_097.html), last visited(17-06-2019)(in Chinese)

Ordinance, failing to employ age-gating warning or other similar measures will subject to punishment, it is rarely applied to online service as well as content providers.⁶⁴ Instead, age verification in this light is requested by the Office to employ after investigation of some of the related websites, based on the report it has received. However, the monitoring process of the Office will not be set out unless there are reports from the public about the incompliance of the Ordinance. As a result, during 2009-2014, only fourteen websites were asked to develop age verification methods on their websites. It is also noticed that all age verification methods employed relied on the assertion of the users of their age without any further check methods used.⁶⁵

2.3. Features of porn tube sites

As the most popular pornographic sites of new age, porn tube sites are changing the way people view pornography, and the way people view pornographic sites. The features of the porn tube sites as subjects of age verification will be introduced in this section. The video uploading and sharing model of YouTube is mimicked for the porn industry, and the 'sex-tube' site is born. Tube sites complicate traditional porn sites with its application of open resource technology and construction of the social network, bringing pornographic contents and related sexually commercial activities closer to minors. With average daily traffic of 92 million in 2018, Pornhub is now the biggest pornographic site.⁶⁶ In that regard, Pornhub will be exemplary porn tube sites referred to in this thesis, and in all relevant discussion, the characteristics of tube sites will refer to those of Pornhub.

2.3.1. Tube and free contents

As the database of porn, "tube sites" provide service like tubes build access for users to vast pornographic contents. One of the revolutionary features of tube sites is that tube sites provide pornographic contents for free, since tube sites are meant to be service provider instead of content provider, like YouTube, to shrine from potential copyright infringement accuse. Free contents attract millions of hits from users who have never consumed porn in the past subscription era.⁶⁷ According to relevant industry news and reports, Pornhub and other MindGeek-owned platforms gain profits mainly from advertising and subscription.⁶⁸ Advertising on social media and search engine is regulated that most of them block paid posts which will lead to pornographic content. In this regard, popular tube sites with most viewers become the place to go put adverts on subscription-based site and sites providing sex-related service.⁶⁹ As a result, one can find almost everything they want that is related to sex on these porn tube sites.

At the same time, algorithms are applied to these sites, with which tube sites costume contents to feed their users. The application of algorithm based on personal profiles such as age, gender, place of living and viewing history make costumed contents more attracting to users that they tend to spend more time on these sites.

⁶⁴ See note 63, *supra*.

⁶⁵ *Id.*

⁶⁶ Pornhub Insight blog, 2018 year in review, (<https://www.pornhub.com/insights/2018-year-in-review#traffic%20time>), last visited (11-06-2019)

⁶⁷ B. Wallace, The Geek-Kings of Smut (<https://longform.org/posts/the-geek-kings-of-smut>), last visited(11-06-2019); See also B. Arroyo, From flow to float: moving through porn tube sites, *Porn Studies* 3: 308–10 (2016)

⁶⁸ How big is the porn industry? (https://medium.com/@Strange_bt_True/how-big-is-the-porn-industry-fbc1ac78091b), last visited(22-06-2019)

⁶⁹ *Id.*

2.3.2. Amateurs

The prevalence of the culture of sharing online and the affordability of audio-video recording facilities have changed not only the way people network, but also the way people view their private or even sexual life.⁷⁰ In this context, the answer to the question that by whom porn is made, and how and to whom porn is distributed is drastically different from that in the past. Many contents on tube sites are produced and uploaded by individuals, which are called “amateurs”. As amateur pornography goes viral, PornHub launched a “Model payment programme” as one of the projects which enable individuals to become content generators on Pornhub in various ways, getting verified as “models” and paid for porn contents they are in by Pornhub.⁷¹

2.3.3. Social media

Just like YouTube, tube sites which have users who register and actively interact with each other are also part of the social media. They provide people with platforms to make connections, building up networks.⁷² Users on these sites post videos on their profiles and get subscribers and favourites for high-quality contents. They comment under videos or images or respond to comments made by others. Much like Facebook and Twitter, users can also send out requests on tube sites to make friends in their field. According to the statistics generated by Insight blog, in 2018, every minute there is 20 new comments under videos, 133 messages sent, and 167 friends request accepted on Pornhub.⁷³

2.4. Concluding remarks

The advent of porn tube sites has drastically changed the way people view pornography. Tube sites like Pornhub have provided people seeking sexual relationship online, both children and adults with the online community. However, the regulatory framework of online pornography, in general, has done little to protect children in terms of these new features of tube sites. Age verification as a traditional regulatory tool developed offline is now being employed online in some jurisdictions with an attempt to prevent children’s access to pornographic sites as their contents are deemed inappropriate for children. The following chapter will discuss the relevant legal standards regarding children’s rights in this context to assess the proportionality of age verification in terms of porn tubes sites.

3. Children’s rights framework

3.1. Introduction

The features of porn tube sites in Chapter Two have changed the implication of relevant children’s rights in terms of online pornography. This chapter will unfold how these new features of porn tube sites place new challenges for safeguarding children’s rights under international children’s rights

⁷⁰ B. Ruberg, Doing it for free: digital labour and the fantasy of amateur online pornography, 3 Porn Studies 2 (2016)

⁷¹ Pornhub Model Payment Program, (<https://www.pornhub.com/partners/mpp>), last visited(22-06-2019); C. Silver, Pornhub’s Model Program Has Paid Out Millions, Defining A New Type Of Influencer, (<https://www.forbes.com/sites/curtissilver/2018/11/20/pornhubs-model-program-has-paid-out-millions-defining-a-new-type-of-influencer/#245ea303ed6f>), last visited(15-06-2019).

⁷² Pornhub Insight blog, 2018 year in review, (<https://www.pornhub.com/insights/2018-year-in-review#traffic%20time>), last visited (11-06-2019)

⁷³ *Id.*

framework during regulating children's access to porn tube sites as viewers. Relevant rights include the right to be protected from all forms of violence (3.2), the right to access to information (3.3.1), and sexual rights (3.3.2). Among these rights, children's right to sexuality is not recognised in express provision in children's rights realm. In this regard, this thesis will discuss relevant sexual rights of children in the event of accessing porn tube sites under the right to information as well as right to recreational activities. Moreover, sexual rights will be the primary concern of the following discussion in Chapter Four about the age of sexual consent when setting the threshold of age to be applied to age verification.

In addition, the conflict between protecting elements and empowering elements of these rights will be the key focus of the analysis in this chapter. An Oxford Internet Institute research project regarding effective age verification has confirmed that "the level of regulation developed with regard to age-restricted products or services is expected to be proportionate to the level of risks involved".⁷⁴ This conflict requires policymakers to strike for a balance between these two aspects of children when it comes to developing regulatory measures to restrict children's access to porn tube sites. This chapter attempts to lay the foundation for the following discussion on age verification as a regulatory tool in Chapter Four by answering the question that to what extent online technologies related to porn tube sites challenge the order of childhood. In other words, to what extent children are in need of protection in terms of sex tube sites from a children's rights perspective?

Discussion in this chapter will mainly focus on the side of children as viewers on porn tubes sites, as stated in Chapter One. However, in this chapter, the hypothetical risk of children has been transformed to performers of pornographic contents will also be touched upon when discussing their right to be protected from potential harms when exposed to porn tube sites.

3.2. Right to be free from violence

The CRC Committee makes clear in Optional Protocol on the Sale of Children, Child Prostitution and Child Pornography (OPSC) as well as relevant General Comments⁷⁵ the right of children to be protected from violence, regulating that children should be protected from all forms of child exploitation, abuse and assault.⁷⁶ Specifically, this includes any sexual activities which could be mentally traumatic for the child.⁷⁷

3.2.1. Children's unwilling exposure

Notably, according to the CRC Committee, information is one of the sources of violence ascribed in article 19 of the CRC.⁷⁸ Children are regarded as recipients of information in situations which information can be the source of violence:

"(i) As recipients of information, children may be exposed to actually or potentially harmful advertisements, spam, sponsorship, personal information and content

⁷⁴ See note 20, *supra*, V. Nash.

⁷⁵ General Comment No. 13, GC No. 4, GC No.20

⁷⁶ UN General Assembly, The Convention on the Rights of the Child, UN Doc A/RES/44/25(1989), arts. 19, 34-36; UN General Assembly, Optional Protocol to the Convention on the Rights of the Child on the sale of children, child prostitution and child pornography, UN Doc. A/RES/54/263 (2000), arts. 1-3.

⁷⁷ UN Committee on the Rights of the Child, General comment No. 13 The right of the child to freedom from all forms of violence, UN Doc. CRC/C/GC/13(2011), para. 25.

⁷⁸ *Id.*, para. 31; See note 76, *supra*, art. 19.

which is aggressive, violent, hateful, biased, racist, pornographic, unwelcome and/or misleading;⁷⁹

The harmful information children receive online can be categorised as a type of violence. *Inter alia*, pornographic contents are listed by the CRC Committee as harmful information.⁸⁰ However, such attitudes towards harmful information are not the same as those towards offline mental violence by the Committee. From the text of General Comment no. 13, it can be implicated that the important role information technology plays in children's access to information has been noticed whereas the attitude of the CRC Committee towards potential online risks for children is still sceptical and negative. In this light, the scope of violence children should be protected from online is extended to "information children received which is potentially harmful to them". This perception provides a normative foundation for regulation against online pornography as it falls under the scope of "harmful information".

While academics, as well as the public, has long criticised children's unwilling exposure to sexually explicit contents,⁸¹ the situation of children in general is even more age-ignored on porn tube sites, where all kinds of porn can be accessed freely without any registration or subscription requirement. There are hashtags, making it easier to find without any age-gating measures employed.⁸² Ethic porn and other hardcore pornography can also be accessed on these tube sites, especially those pirated from Asian countries, in which adolescents sometimes are involved. Having regard to the standards set up by the CRC Committee, closer attention on young children's exposure to porn tube sites should be subject to regulation as they could be regarded as harmful information violent for them.

3.2.2. Protect children from sexual exploitation and abuse

Apart from the need of protecting young children from exposure to pornographic contents on porn tube sites, there are two potential ways of porn tube sites affecting children under the age of 18 years old, and therefore constitute violence under the CRC: 1) Encouragement of creation of amateur porn videos and 2) networks of porn.

There is a possibility that easy access to sexual videos of others on tube sites can lead to reckless decisions made by adolescents to take part in the production of pornographic contents themselves. Apart from the proactive participation of adolescents in becoming amateurs out of their innovative attitude towards intimate relationship, children can also be directed to participate because of financial needs.⁸³ Since amateur videos have become an important part of products provided on tube sites, these sites have incentive strategies to encourage the creation of amateur porn videos or images. Usually, popular amateurs' video can receive millions of hits, which can bring considerable profit to these producers as well as tube sites they cooperate with. The strategies used by tube sites to boost the supply of pornographic contents on their platform is to some extent like Enjo Kosai in Japan, in which adolescents get involved in sex industry stemmed from a very developed and accepted sex industry where adolescents involved.⁸⁴ The self-promotional culture created by social media also

⁷⁹ See note 78, *supra*.

⁸⁰ *Id.*

⁸¹ K. Mitchell, D. Finkelhor & J. Wolak, the Exposure of Youth to Unwanted Sexual Material on the Internet, 34 *Youth & Society* 3: 330-358(2003).

⁸² On PornHub, under regulation and terms, it is stated that people under age of 18 is not allowed to register.

⁸³ J.C.M. Li, Adolescent Compensated Dating in Hong Kong: Choice, Script, and Dynamics, 59 *International Journal of Offender Therapy and Comparative Criminology* 597 (2015).

⁸⁴ Report of the Special Rapporteur on the sale of children, child prostitution and child pornography on her visit to

means that producing sexually explicated contents on tube sites has a possibility for people to gain sensational attention in their online community, just like on Facebook or Instagram.⁸⁵ This attention is exactly what networked public, including teenagers longing for.⁸⁶ Besides, there are also cases where amateur videos have been proved to the result of drugging, sexual assault and revenge porn.

Although Pornhub is required by relevant authorities to work on the prevention of such crimes on their platform, it is still a warning for what could happen on these tube sites and also what if children are involved in these incidents. By involving in porn tube sites as amateurs transferring from viewers, children are subject to child pornography under relevant children's rights legal standards in the way of producing pornography. Definitions of child pornography under the OPSC or other instruments leave no space for exceptions, even if it is self-made child pornography or it is out of the will of the child.⁸⁷ At the same time, getting paid with a commission as a minor amateur could also lead to the commitment of child sexual or economic exploitation, according to CRC, OPSC and ILO Convention no 182 on the Elimination of the worst forms of child labour.⁸⁸ Moreover, it could also fall within the scope of "solicitation of children for sexual purposes" defined by the Lanzarote Convention.⁸⁹

Another concern of children's safety on tube sites is the existence of networks of porn. As the social media for porn, one can easily find anything relevant to pornography and sexual service on sex tube sites. Children, as users of these sites, can easily build up relationships with others through public comment as well as private chat. In this regard, even if there is strict screening mechanism for amateur uploading pornographic videos established by tube sites, children can get in touch with people for sexual purposes, which is circumvented from relevant regulations in place. In this regard, comment area and private messaging on tube sites have provided potential predators looking for vulnerable minors an ideal place to contact vulnerable while sexually curious adolescents.⁹⁰ Children who are in touch with these people thus are under the risks of being subject to sexual exploitation or abuse.⁹¹ Moreover, some tube sites also to have links with prostitution, which is part of the traditional business model of online pornography. They pick up a user's geolocation information when he or she enters into the sites and offer customised commercial sexual services based on his or her viewing preferences. The way pornography industry operates thus put children to become a consumer as well as a potential performer of pornography.

Children involved in sexual communities or sexual activities described above are under the risks of having their right to be protected from all forms of sexual exploitation and abuse violated. According to

Japan, UN.Doc. A/HRC/31/58/Add.1, 8 §27-28 (2016)

⁸⁵ See also How young women are suckered into making "amateur" porn, (<https://boingboing.net/2015/05/29/how-young-women-are-suckered-i.html>), last visited (01-07-2019):

⁸⁶ d. boyd, It's complicated.

⁸⁷ See note 76, *supra*, OPSC, art. 2(c).

⁸⁸ See note 76, *supra*, OPSC, art. 3[j(a)] and CRC art. 34(a)(b); ILO Convention No. 182. Convention concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour (Entry into force: 19 Nov 2000).

⁸⁹ The Lanzarote Convention (2007), art. 23.

⁹⁰ M. Wells & K. Mitchell, How do high-risk youth use the Internet? Characteristics and implications for prevention, *Child Maltreatment* 13:227–234 (2008).

⁹¹ S.E. Baumgartner, Adolescent sexual risk behavior on the internet, Faculty of Social and Behavioural Sciences (FMG)(2013); UNICEF, Handbook on the Optional Protocol on the Sale of Children, Child Prostitution and Child Pornography (2009).

the CRC, states should prevent “the inducement or coercion of a child to engage in any unlawful sexual activity”.⁹² Their right to life could also be under risks as offline contact could lead to sexual exploitation, abuse, human trafficking or even life-threatening activities. In this regard, children should be protected from child pornography, sexual exploitation or abuse as they participate in the online sexual community built intentionally by porn tube sites.

3.3. Children in their adolescence

People usually do not doubt about the necessity of protecting young children from pornographic sites, which is backed by numerous academic research in different fields.⁹³ The CRC Committee also requires special protection on young children on the Internet as they are “especially at risk if they are exposed to inappropriate or offensive material”.⁹⁴ However, as stated in relevant researches on children’s exposure to harmful contents, children who proactively search for porn tube sites are mostly adolescents.⁹⁵ From the international children’s rights perspective, one of the features of the CRC is that children are regarded as rights holders instead of objects of rights.⁹⁶ In light of this, it is recognised that children have a cluster of rights conducive of exercising their rights as adults do.⁹⁷ The CRC Committee further emphasises that the measures taken to “ensure the rights of adolescents are significantly different from those taken for younger children”.⁹⁸ As children grow up with their capacity evolving, the CRC Committee emphasis on the shift of attitudes States should take from negatively “problem-focused” intervention to positively capacity-building approaches for adolescents to develop in experiments.⁹⁹ With regard to protecting children from violence, the evolving capacity of adolescents should be taken into account when developing protection programmes.¹⁰⁰ For this aspect, Article 5 of the CRC about evolving capacities is combined with general principles including, children’s right to development, children’s rights to be heard as well as children’s best interest principle by the CRC Committee in General Comments as well as Concluding Observations regarding specific states.¹⁰¹

3.3.1. Children and sexual rights

⁹² See note 76, *supra*, CRC, art. 34 (a).

⁹³ See note 2, *supra*, S. Livingstone; J. De Haan Maximising opportunities and minimising risks for children online, S. Livingstone & L. Haddon (Eds.), Kids Online 187–198 (2009).

⁹⁴ UN Committee on the Rights of the Child, General comment No. 7 (2005): Implementing child rights in early childhood, UN Doc. CRC/C/GC/7/Rev.1 (2006), para. 35.

⁹⁵ *Id.*

⁹⁶ K. Hanson, Schools of Thought in Children’s Rights, Children’s Rights Unit, University Institute Kurt Bosch 1-19 (2008).

⁹⁷ J. Tobin, Understanding Children’s Rights: A Vision beyond Vulnerability, Nordic Journal of International Law 84: 155-182 (2015).

⁹⁸ UN Committee on the Rights of the Child, General comment No. 20 on the implementation of the rights of the child during adolescence, UN Doc. CRC/C/GC/20(2016) para. 1; See also UN Committee on the Rights of the Child, General comment No. 4: Adolescent health and development in the context of the Convention on the Rights of the Child, UN Doc. CRC/GC/2003/4 (2003) para. 1.

⁹⁹ *Id.*, GC no. 20, para. 15.

¹⁰⁰ *Id.*, GC No. 4, para. 9.

¹⁰¹ Cf. GC No. 20 para. 5; UN Committee on the Rights of the Child, General Comment No. 12, The right of the child to be heard, UN Doc. CRC/C/GC/12(2009), para. 13; See also note 97, *supra*. J. Tobin.

Under the CRC Framework, sexuality is usually raised in situations where there is sexually related violence and exploitation that children should be protected from. Recognising adolescents' right to sexuality is not expressed in the CRC. Instead, the CRC Committee recognised the sexuality of adolescents by stressing the importance of "changing cultural or other taboo about adolescents' sexuality" in improving adolescents sexual and reproductive health.¹⁰² Moreover, the focus of the Committee is on promoting safe sexual relationship for adolescents. In this regard, there are responsibilities for parents and caregivers to provide appropriate guidance and advise to adolescents on safe sexual relationship. States have complementary responsibilities in this process under Article 27 paragraph 3 to mitigate negative effect environments could have on children with regard to decisions on getting into sexual relationships.¹⁰³

The underlying consideration of this situation of sexuality under the children's rights legal framework is the dominant conception of sexual innocence of children. Sexual innocence of children has long been accepted, which can be demonstrated through the expression of provisions in the legislation system in many jurisdictions as well as international instruments, where pornography is deemed to be inappropriate materials for children and for their wellbeing to maintain their intact innocence, producing, transmitting and distributing pornographic contents is illegal and subject to different level of punishments.¹⁰⁴ As one of the features of children being "human becoming" instead of "human being", the innocence of childhood derives from their ongoing mental and physical development, even though most children in their 14 years of age or so have reached puberty.¹⁰⁵ In this regard, sexual activeness is never something suitable for children, as their sexual expression easily break their image of innocence in the eyes of policymakers, school staffs and parents.¹⁰⁶ Innocence is embedded in our culture that sexuality in childhood is suppressed to the extent that sexting between teens can be considered as the production of children's pornography. Likewise, governments are trying to keep children away from pornography, given that the harm exposure can do to their holistic development. The most common underlying consideration is that children are incapable of making rational decisions independently and exposure to pornography equals exposure to online predators.¹⁰⁷

Importantly, like sexting, access to pornography cannot merely be generalised as a problem that should keep children away completely to prevent any possible harms. Unmarried, sexually active adolescents still face stigma in many developing countries. "The subordination of the rights of young people...can limit access to information...services and the capacity to act."¹⁰⁸ Normally, children are interested in developing sexuality, and to legitimate their right to sexuality under the abovementioned international children's rights legal framework is of fundamental importance during their passage to adulthood. In light of this, children's exploring behaviours in terms of sexual materials online should not be rejected arbitrarily. Instead, a critical approach should be adopted.¹⁰⁹

¹⁰² See note 98, *supra*, GC no.4, para. 30.

¹⁰³ *Id*, para. 34.

¹⁰⁴ See note 53, *supra*, K. Robinson; E. Merghati-Khoei, N. Abolghasemi & T. Smith, "Children are Sexually Innocent": Iranian Parents' Understanding of Children's Sexuality, *Arch Sex Behav* 43:587–595 (2014).

¹⁰⁵ K. Walsh, *The Sexual Rights of Children and the Age of Consent*, 2nd Global Conference on Good Sex, *Bad Sex: Sex Law, Crime and Ethics* 9 (2010)

¹⁰⁶ *Id*.

¹⁰⁷ Calvert, *Sex, Cell Phones, Privacy and the First Amendment: When Children become Child Pornographers and the Lolita Effect Undermines the Law*, *CommLaw Conspectus* 1: 13 (2009).

¹⁰⁸ UNFPA, *State of the World Population:2012* (2012); UNFPA, *Adolescent Sexual and Reproductive Health Programs in Humanitarian Settings: An In-depth Look at Family Planning Services* (2012)

¹⁰⁹ J. Ringrose, R. Gill, *A Qualitative Study of Children, Young People and 'Sexting': A Report Prepared for the*

Pornography has been criticised for its degrading contents and prejudiced description of an intimate relationship, which have negative effects on people's attitudes towards social as well as intimate relationships.¹¹⁰ Forgoing analysis on impact tube sites have on which contribute to the creation of more violent and hardcore pornography also implicates that some contents on these tube sites are not appropriate for adolescents' normal sexual need.¹¹¹ In this regard, these hardcore contents are the real source of potential adverse effect pornography could have on children's physical, mental and social development, which is far beyond the conception of children's right to sexuality.¹¹² As pointed out by the CRC Committee, states in this regard take measures to identify and address these risks on adolescents' online exploration of sexuality while respecting adolescents' rights and supporting families' direction and guidance on them.¹¹³ In this light, UNESCO's Guidelines on sexuality education pointed out the crucial role good quality sex education plays in counteract the negative effect pornography could have on children.¹¹⁴

The discussion about children's sexual rights has been increased during recent years. As described by Ringrose, the sexualisation of our culture provided the backdrop for children to explore and present themselves to the world, against which they inevitably encounter sexual contents created by themselves or others and sometimes interact with others sexually out of curiosity.¹¹⁵ Although the sexual right of human being has not explicitly been recognised under human rights legal framework for a long time, the notion of the right to sexuality is scattered and can be found in different human right instruments.¹¹⁶ As children are recognised as rights holders in the CRC, children should enjoy the same rights as adults do, which include the sexuality right. While sexting is more about whether children have control of their own body, which is entailed in the right to sexuality, having access to pornographic contents is more about the freedom to have access to information relevant to sexuality, the right to enjoy sexual leisure under the right to play and leisure umbrellaed under the right to development.¹¹⁷

3.3.2. Right to information as a fundamental right to exercise civil rights

The CRC Committee in its General Comment No. 4 and No.20 on adolescence stresses the importance of sexual and reproductive health for adolescents' development, promoting that children must be provided with all the necessary information and service to grow up and "enable them to deal positively and responsibly with their sexuality".¹¹⁸ Adolescents are also more likely to engage in risky

NSPCC. London: National Society for the Prevention of Cruelty to Children (2012)

¹¹⁰ R. Collins, S. Martino & R. Shawrand, Influence of New Media on Adolescent Sexual Health: Evidence and Opportunities: Working Paper (2011), (<http://aspe.hhs.gov/hsp/11/AdolescentSexualActivity/NewMediaLitRev/>)

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ See note 98, *supra*, GC no.4, paras. 16, 34.

¹¹⁴ UN Educational, Scientific and Cultural Organisation (UNESCO), International Guidelines on Sexuality Education: An evidence informed approach to effective sex, relationships and HIV/STI education, June 2009

¹¹⁵ See note 109, *supra*, J. Ringrose et al.

¹¹⁶ IPPF, Sexual rights: an IPPF declaration Pocket guide, (https://www.ippf.org/sites/default/files/ippf_sexual_rights_declaration_pocket_guide.pdf)

¹¹⁷ See note 93, *supra*, S. Livingstone.

¹¹⁸ See note 98, *supra*, GC no. 4, para. 15; United Nations, Report of the Fourth World Conference on Women, UN. Doc. A/CONF.177/20/Rev.1, 111 §267 (1995); United Nations, Report of the International Conference on

behaviours as they seek out to explore the world proactively and show independence.¹¹⁹ Moreover, General Comment no.4 points out the significance of the right to information as one of the fundamental civil rights to ensure adolescents' rights to health and development. Inter alia, ensuring adolescents have appropriate access to information regarding any measures taken by States to address issues that threaten the rights of adolescents is of crucial importance.¹²⁰ From this perspective, necessary protection and guidance in the process of exploration should be provided by caregivers with states' assistance.¹²¹ More and more children nowadays are exposed to the Internet at an early age and increasingly rely on the Internet for realising their basic needs and rights.¹²² This need for access to information regarding sexuality and reproductive health has also evolved as new conceptions emerging in the online context.

Although in an offline context, pornography is regulated as age-restricted products and providers are obliged to make sure it only accessible to adults, when it comes to the online context, the age gate of pornographic contents is not as hard as it is offline.¹²³ This situation is different from other traditional age-restricted services like gambling, where age verification and check is enforced effectively both offline and online in many jurisdictions.¹²⁴ Carr has pointed out the dilemma in a discussion regarding online risk behaviour, proposing that certain services or goods are harmful to minors. Regulations in this field should be developed to prevent children when it comes to the online environment.¹²⁵ The thesis argues that this is justifiable in the sense that digital technology has changed the environment we live in. Meanwhile, it is necessary to re-evaluate the pros and cons of specific issues before applying offline regulations online. More specifically, the way people receive and create information is drastically different from that of the past.¹²⁶ Developments in the range of commercial content and services are available online now in the technological devices and platforms being used.¹²⁷ The trend towards networked use of the Internet by children "means that the most basic assumptions about the nature and extent of risk may now be outdated".¹²⁸

Notably, the implication of the right to information has been extended in the era of information explosion. Internet is an important channel where children receive knowledge regarding sexuality and reproductive health, especially in areas where access to sexual and reproductive health education and service for adolescents is insufficient or even restricted.¹²⁹ To some extent, pornographic websites have contributed to this process. Porn tube sites make porn affordable to these adolescents.

Population and Development, UN. Doc. A/CONF.171/13, 44 §7.3 (1994)

¹¹⁹ See note 98, *supra*, GC no.4.

¹²⁰ See note 98, *supra*, GC no.4 para. 33.

¹²¹ *Id.*

¹²² See note 32, *supra*, S. Livingstone.

¹²³ See note 20, *supra*, V. Nash.

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ S. Livingstone & J. Mason, Sexual rights and sexual risks among youth online: a review of existing knowledge regarding children and young people's developing sexuality in relation to new media environments. European NGO Alliance for Child Safety Online(2015)

¹²⁷ See note 55, *supra*, S. Livingstone et al.

¹²⁸ G. Alisdair, Adolescents, Sexting and Human Rights, *Human Rights Law Review*13:4 (2013).

¹²⁹ H. Robinson, 'Difficult citizenship': The precarious relationships between childhood, sexuality and access to knowledge, 15 *Sexualities*,3-4: 257–276(2012)

Consequently, they have gradually become the hub for not only leisure for adults but also online sexual and reproductive health information platforms for children, who are conscious of their sexuality and also have obtained basic level of digital literacy.¹³⁰ Although voices are criticizing that porn brings harmful effect to children as a source of sex education,¹³¹ it is found that where sex education is absent and porn is an important source of sex education for curious adolescents who are eager for knowledge on their body their teachers never talk about.¹³²

3.3.3. Protect children from information injurious to their well-being

Although ensuring children's right to access to information is essential to children's all-rounded development, pornography as a source of information is subject to criticism from academics in different fields. According to Article 17 of the CRC, states are obliged to protect children from information injurious to their well-being, while promoting their access to information from vast and varied sources.¹³³ When it comes to porn tube sites, features tube sites have could bring out new challenges for states to decide on whether information on tube sites is injurious to children's well-being.¹³⁴ In this light, this thesis notices that children's access to porn tube sites as viewers could be related to two aspects of concerns regarding repercussions of material on these sites have on children's "social, spiritual well-being and physical, mental health": (1) harmful hardcore contents and (2) negative attitudes towards gender and sexuality.

More and more hardcore content

Porn consumers tend to regard inappropriate or ethical contents more normal than they really are. The algorithm technology applied in porn industry makes this situation even worse.¹³⁵ Porn that was once intense, increasing audiences start to accept it and some of them are even craving for it.¹³⁶ At the same time, free contents provided by tube sites push traditional porn producer to create extreme works with higher quality to attract consumers whose appetite are growing after watching hundreds and thousands of free porn. In this context, children get into these tube sites are likely to encounter the same contents as they did years ago. The contents are extreme rather than be harmful.

Gender and sexuality stereotype

Consuming porn is also found to have potential effects on the attitudes about sex and relationships. The imbalance of power between male and female displayed in most porn has to do with this negative impact. Porn has been criticized for long because of reinforcing gender and sexuality stereotype. This is also the case when it comes to tube sites. It has been found by researches that porn consumers are more likely to express attitudes supporting sexual aggression.¹³⁷ As mentioned above, more and more

¹³⁰ Is porn the new sex education? Institute of Development Studies (2016), (<https://www.ids.ac.uk/publications/is-porn-the-new-sex-education/>), last visited (11-05-2019); A. Crawshaw, W. Glaser, A. Pacey, The use of pornographic materials by adolescent male cancer patients when banking sperm in the UK: legal and ethical dilemmas, *Hum Fertil* 10(3):159-63 (2007)

¹³¹ See note 104, *supra*.

¹³² *Id.*

¹³³ See note 76, *supra*, CRC arts. 13(2)(b), 17(e).

¹³⁴ See note 32, S. Livingstone et al.

¹³⁵ See note 9, *supra*.

¹³⁶ M. Weinberg, J. Williams & S. Kleiner et al., Pornography, normalization and empowerment. *Archives of Sexual Behavior*, 39 (6):1389-1401(2010).

¹³⁷ M. Doring, The Internet's impact on sexuality: A critical review of 15 years of research, *Computers in Human Behavior*, 25(5):1089-1101 (2009); G. Hald, M. Malamuth & C. Yuen, Pornography and Attitudes Supporting

fierce competition in porn industry owing to the proliferation of tube sites is forcing the production of porn which has more violent, more unethical contents. In this regard, there is a risk that children might be exposed to pornographic contents that are more hardcore, darker than they have ever been.

3.3.4. Right to engage in recreational activities

As enshrined in Article 30 of the CRC, taking part in recreational activities is a fundamental right of children for their all-rounded development.¹³⁸ According to the CRC Committee, recreation is an “umbrella term” which entails a broad range of activities.¹³⁹ At the same time, there are limitations for this right to play. Recreational activities should be age-appropriate for children who engage in.¹⁴⁰ In this regard, the CRC Committee further reiterates the evolving capacity of children that for adolescents, the scope of recreation is extended to the extent that it should not be restricted arbitrarily by caregivers or states even if it is risk-taking.¹⁴¹ The only standard of their right to recreation is that recreation should be progressively conducive to full-rounded development. For adolescents, pornographic contents are perceived as entertaining products, which is reaffirmed in several qualitative and quantitative research on the positive influence of pornography on different groups of young people and their relevant experiences, such as university students, patients.¹⁴² In most parts of the developing world, the initiation of sexual relations is increasingly occurring outside of marriage for adolescents.¹⁴³ Studies conducted in global North about adolescent’s exposure to pornography online also found that pornographic contents online or offline are frequently used by teenagers to sexual arousal or to masturbate.¹⁴⁴ At the same time, some access is out of curiosity.¹⁴⁵ Pornographic contents online could also be part of the interpersonal relationship of adolescents as peer influence play an important role in promoting children’s seeking these contents online.¹⁴⁶

3.4. Concluding remarks

This chapter has described the international legal standards in relation to children’s access to porn tube sites. Children are entitled to a set of rights aimed at ensuring their holistic development.

Violence Against Women: Revisiting the Relationship in Nonexperimental Studies. *Aggression and Behavior* 36, 1: 14–20 (2010)

¹³⁸ See note 76, *supra*, art. 31(1).

¹³⁹ UN Committee on the Rights of the Child, General comment No. 17 on the right of the child to rest, leisure, play, recreational activities, cultural life and the arts, UN Doc. CRC/C/GC/17 (2013) para. 14

¹⁴⁰ See note 138, *supra*.

¹⁴¹ See note 139, *supra*.

¹⁴² M. Kanuga & W. Rosenfeld, Adolescent sexuality and the internet: the good, the bad, and the URL, 14 *Journal of Pediatric and Adolescent Gynecology* 2:117-124 (2004); J. Peter & P. Valkenburg, Adolescents and Pornography: A Review of 20 Years of Research, *The Journal of Sex Research* (2016); G. Wallmyr, C. Welin, Young People, Pornography, And Sexuality: Sources And Attitudes, 22 *Journal of School Nursing* 5: 290-295 (2005)

¹⁴³ McQuetion, Silverman and Glassman, 2012; UNFPA, State of the World Population:2012 (2012);

¹⁴⁴ See note 134, *supra*. J. Peter & P. Valkenburg, Adolescents and Pornography: A Review of 20 Years of Research, *The Journal of Sex Research* (2016); W. Driemeyer, E. Janssen & J. Wiltfang et al., Masturbation Experiences of Swedish Senior High School Students: Gender Differences and Similarities, *The Journal of Sex Research*, 54:4-5, 631-641 (2017); M. Lim, P. Agius & E. Carrotte et al., Young Australians’ use of pornography and associations with sexual risk behaviours, 41 *Australian and New Zealand Journal of Public Health* 4 (2017).

¹⁴⁵ *Id.* J. Peter.

¹⁴⁶ *Id.*

Protecting children from all forms of violence, especially sexual abuse and exploitation in this process must be guaranteed, taking into account the CRC together with other relevant legal instruments. The conflict between protecting elements and empowering elements of these rights in terms of children in their adolescence is the key focus of this chapter. By analysing the features of porn tube sites under the international children's rights legal framework, the thesis argues that there is need to protect children from potential risks of sexual abuse and exploitation on porn tube sites in general. *Inter alia*, young children should be protected from pornographic contents for they are in a crucial status of development and are not educated with appropriate sexual and reproductive health knowledge. Considering adolescents' right to explore their sexuality, although not recognised explicitly by the CRC, it suggests a critical attitude towards the impact pornographic contents on these tube sites have on children prior to developing regulation to restrict or prevent access. However, the divergent cultures and attitudes towards adolescents and sexuality implicate an inharmonious attitude on respecting adolescents' sexuality as part of their full-rounded development.

4. The compliance of age verification with International children's rights legal framework

4.1. Introduction

As introduced in Chapter Two, age verification turns out to be poorly enforced in many jurisdictions in preventing children's access to online pornography.¹⁴⁷ However, the discussion on international legal standards in Chapter Three revealed the need to protect children from potential violence, sexual abuse and exploitation in terms of porn tube sites. At the same time, children's evolving capacity should be taken account of by regulators, to ensure children's right to access information and to engage in recreational activities. This chapter aims to answer the question to what extent age verification as a regulatory tool fulfils the requirement brought out in Chapter Three to safeguard children's rights regarding their access to porn tube sites as viewers.

The thesis argues that age verification is not compliant with international children's rights legal framework as it is not able to safeguard children's right to be protected from violence nor ensure children's right to access information and right to engage in recreational activities as required by their evolving capacity. Discussion on moral panic laying the foundation for age verification illustrates the conflict between children's real need and distracting perception of their situation (4.2). Besides, the conflict between protecting children and ensuring the enjoyment of civil rights, in general, contributes to the backlash in society against implementing age verification on porn tube sites (4.3). These two conflicts of interests contribute to the ineffectiveness of age verification in practice and thus unable to safeguard children's right to be protected from violence and harmful information on porn tube sites. Discussion on the age of sexual consent in section 4.4. reveals the lack of consideration of children's different needs at different stages of their development. It also paves the way for preliminary insights on the possibility of setting different thresholds of age when developing age verification, to contribute to the normative framework on children's right compliant age verification (4.5). By figuring out a proper approach to balance protecting children and empowering children, discussion on stakeholders' responsibility under international children's rights framework for a better protection strategy in the context of porn tube sites will make more sense.

4.2. Moral panic

¹⁴⁷ See note 20, *supra*, V. Nash.

Danah boyd has pointed out that moral panic, which parents tend to have against new and rapidly evolving technology they are not familiar with, underlies protective attitudes towards children online.¹⁴⁸ The advent of social media in the early 2000s had brought about discussions on online safety surrounding children access to platforms like Myspace and Facebook.¹⁴⁹ In this regard, a response from the authority to ensure children's rights could result in overly rigorous regulations which do not serve the aim of protecting children but infringe the fundamental rights of others instead.¹⁵⁰ For example, it is questionable that whether criminalising children involved in sexting for producing child pornography increases the protection of children instead of adopting targeted policies on children who are most vulnerable to or have been traumatised from sexting.¹⁵¹ When it comes to pornography online, in which porn tube sites are the main players, the moral panic surrounding children centres not only on the application of new technologies like algorithm on these tube sites, but also the sexuality entails in all kinds of activities related to it.¹⁵² However, the sexual innocence of childhood has been challenged, putting under scepticism. Time and studies have provided evidence that pornography exposure is not always associated with risky sexual behaviours.¹⁵³ However, it is rather easy for age verification as a corresponding regulatory tool to base on prevailing and long-existing moral panic instead of harmful outcome backed by empirical evidence.¹⁵⁴ As policymakers have limited knowledge and information regarding porn tube sites and its influence on children, fear of potential harm could thus obscure the real risks some or certain groups of children do face.¹⁵⁵ As pointed out by boyd, development of risky relationship online is correlated with offline problems, for example, problematic family environment and mental situation.¹⁵⁶ In this regard, adopting measures addressing risky behaviours children have makes more sense than just adopting age verification which is based on and reinforces moral panic. According to the CRC Committee, when it comes to implementing children's rights in practice through adopting regulatory measures, viewing the subject of regulation from the perspective of children is essential to ensure "[duty bearers'] actions on behalf of children [is] more sensitive to the implementation of children's rights".¹⁵⁷ In this light, the participation of children in the process of information-gathering, as well as decision-making, could also be a solution to mitigate the repercussion moral panic has on protecting children from online violence and harmful information.

4.3. Protecting children vs civil rights of the public

The recent submissions from the UNICEF to the CRC Committee brought out one of the main concerns of the public regarding online protection measures taken by the States on how to balance

¹⁴⁸ See note 33, *supra*, danah boyd,

¹⁴⁹ *Id.*

¹⁵⁰ S. van der Hof & B. Koops, *Adolescents and Cybercrime - Navigating between freedom and control*, Policy & Internet (2011)

¹⁵¹ *Id.*

¹⁵² See note 33, *supra*, d. boyd.

¹⁵³ M. Thérèse Luder, I. Pittet & A. Berchtold, *Associations Between Online Pornography and Sexual Behavior Among Adolescents: Myth or Reality?* 40 *Archives of Sexual Behavior* 5:1027–1035(2011)

¹⁵⁴ *Id.*

¹⁵⁵ d. boyd, *Social Network Sites as Networked Publics: Affordances, Dynamics, and Implications*, *Networked Self: Identity, Community, and Culture on Social Network Sites* 39-58(2010)

¹⁵⁶ See note 153, *supra*.

¹⁵⁷ UN Committee on the Rights of the Child, *General Comment No. 5 on general measures of implementation of the Convention on the Rights of the Child*. UN Doc. CRC/GC/2003/5 d(2003), para. 12.

protection of children and civil rights of the public.¹⁵⁸ It pointed out, apart from condemning disruption on access to and dissemination of information to an extent which threatens fundamental human rights, private sectors should ensure any surveillance and censorship aimed to serve the protection of children do not cause the abuse of human rights.¹⁵⁹ Although age verification does not touch upon speech censorship in this light, the panic about age verification stems from similar concern about civil rights in general.

As described by Livingstone, panic among the public against age verification has emanated from the fear of governments making use of child welfare online with speech control as the aim.¹⁶⁰ This fear entails two different aspects of impact implementing age verification at a universal level could have on human rights in general, namely: 1) reconstructing internet environment as well as 2) leak of privacy.

Anonymity is one of the fundamental features of networked online society. Individuals can decide whether or not to break this status of anonymity totally on their own behalves. Anonymity in online society promotes the creation of contexts different from those of offline and enables extended freedom online. However, at the same time, anonymity causes problems for online regulation on responsibility attribution. Who is responsible for particular conduct online?¹⁶¹ To address this issue in terms of protecting children, age verification is introduced to identify the target group of protection online. However, there is no doubt on the importance of anonymity in the online context, especially when it comes to online activities like accessing and watching porn online. The prevalence of blackmail threatening to spread one's history of viewing adult sites online reflects this serious concern of Internet users on privacy regarding access to online porn further. As most age verification measures are based on individual identification, accessing porn tube sites with one's age verified will lead to the break of one's status of anonymity. Considering the 2015 Ashley Madison hack,¹⁶² leak of users' personal information from these porn tube sites is not something beyond one's imagination. In this regard, employing age verification on porn tube sites could be disastrous for people who want to hide their sexual preference in online context from offline context.

4.4. Age of sexual consent

The age of consent is the age below which a person is considered to be incompetent to consent to sexual activities, even if they agree.¹⁶³ After teens reach the age of consent, their sexual activity is not typically criminal conduct as their commitment to the consensual sexual activities are deemed to be valid. In most jurisdictions, the age of sexual consent is between 14-16.¹⁶⁴ There are different views regarding the purpose of setting the age of consent. Historically, setting the

¹⁵⁸ UNICEF East Asia and the Pacific Regional Office, Draft Concept note on the CRC General Comment on Child Rights in the Digital Environment, (2019), (<https://www.ohchr.org/EN/HRBodies/CRC/Pages/GCChildrensRightsRelationDigitalEnvironment.aspx>), last visited(22-06-2019).

¹⁵⁹ Human Rights Council resolution 32/13; Special Rapporteur's 2017 report to the UN Human Rights Council.

¹⁶⁰ See note 32, *supra*, S. Livingstone.

¹⁶¹ See note 32, *supra*, S. Livingstone.

¹⁶² P. Anand, Hundreds of email addresses in Ashley Madison data dump are in big banks' domains. MarketWatch (2015), (www.marketwatch.com/story/these-bankers-used-their-work-emails-on-ashley-madison-2015–08-19?siteid=rss&rss=1), last visited(25-06-2019)

¹⁶³ The Lanzarote Convention, arts. 18(1)(a), 23.

¹⁶⁴ R. Danielle, & G. Hawkes, The problem with protection: Or, why we need to move towards recognition and the sexual agency of children, 29 Continuum 3: 389-400 (2009)

age of sexual consent is concerned with sexual violence towards girls which was covered by debates over the nature of childhood. It also rooted in campaigns against prostitution and child marriage, calling for child welfare as well as gender equality.¹⁶⁵ In the context of children's sexuality, these underlying consideration of the age of sexual consent is challenged as it contradicts with provisions in criminal law about child pornography which ascribe protection of all children below the age of 18 even in terms of their self-made pornography, which is the case of teen sexting.¹⁶⁶ The incompatibility of provisions and legal interpretation, as well as ambiguous attitudes in law towards children's sexuality in the new digital era, could undermine and even hinge the development and exploration of children's sexuality.¹⁶⁷

While considerations of consent in terms of sexual activities of adolescents including access to pornographic sites and the contents they have cannot be accounted for by law, this thesis argues that age of sexual consent should be considered as a possible age threshold when developing age verification on porn tube sites to reach harmoniousness of law. Just as pointed out by Haynes in terms of criminalising sexting, to set age threshold of accessing pornographic tube sites is subject to scepticism that it goes counter to the law with independent legislation defining children's sexuality and ability to make well-concerned decisions regarding their bodies.¹⁶⁸

Although the age of sexual consent is not legally recognised as the foundation of children's sexuality,¹⁶⁹ the potential harms accessing to porn tubes sites have has been proved which could thus engender worries of parents and legislators. A similar situation could be found in Article 23 of the Lanzarote Convention, where solicitation of children above the age of sexual consent set in their jurisdictions for sexual purpose does not necessarily amount to a crime.¹⁷⁰ In this regard, there is a possibility that children above the age of sexual consent in the jurisdiction he or she is accessing from can consent to enter porn tube sites and have access to sexually explicit materials on them. Adolescents' maturity levels regarding sexuality and their abilities to consider the consequences of their actions as adults do could be bases for distinctions. The age of consent in this regard could represent the legislative judgment that children are mature enough to appreciate the potential consequences of their access to porn tube sites, including sexual solicitation, grooming, and potential sexual exploitation, abuse and STIs as a result.

At the same time, setting the age of sexual consent as the threshold of age when developing age verification on these porn tube sites could be impractical. The key concern is the difficulty in identifying children between a certain age and 18. As current technical solutions regarding identifying minors from adults accessing age-restricted products are mainly in the gambling industry, where there is no specific age threshold under 18. With strong regulatory regime has developed for years, online

¹⁶⁵ V. Bullough, Age of Consent, *Journal of Psychology & Human Sexuality*, 16:2-3, 25-42, (2005)

¹⁶⁶ K. Sutherland, From Jailbird to Jailbait: Age of Consent Law and the Construction of Teenage Sexualities, 9 *William & Mary Journal of Women and the Law* 3(2003)

¹⁶⁷ See note 128, *supra*, G. Alisdair.

¹⁶⁸ A. M. Haynes, The Age of Consent: When is Sexting No Longer Speech Integral to Criminal Conduct, 97 *Cornell Law Review* 2: 369-404(2012)

¹⁶⁹ K. Albury and K. Crawford, Sexting, consent and young people's ethics: Beyond Megan's Story

¹⁷⁰ The Lanzarote Convention, art. 23; See also ECPAT International, Terminology Guidelines for the Protection of Children from Sexual Exploitation and Sexual Abuse (2016), (https://blackboard.leidenuniv.nl/bbcswebdav/pid-4575925-dt-content-rid-6355866_1/courses/icr-cpccr-1819LAW/Terminology-guidelines_396922-E.pdf), last visited (07-07-2019).

gambling is effectively preventing almost all minors' access to their sites.¹⁷¹ In this regard, considering the proliferating strategy built regulating online pornography, especially porn tube sites, it could be rather difficult technically for tube sites to identify minors under the "new" age threshold which is lower than 18 according to the analysis above. Given the difficulty in implementing age verification online discussed in Chapter 2, it is crucial to think deeper when setting the age threshold for age verification.

4.5. Towards a children's rights compliant age verification system

Age verification is developed to serve the aim to protect children from accessing porn tube sites. However, it is rather hard to enforce in practice, making it ineffective in this light and thus not in line with children's rights legal framework. *Inter alia*, moral panic as the basis of regulation and conflict of interests between protecting children and maintaining the anonymity of the public online contribute to poor enforcement. Moreover, the lack of systematic protective measures with regard to risks on social networks also leads to non-compliant age verification. As to children's evolving capacity, age verification fails to take account of the sexual need and right of adolescents to access information appropriate for their age. The single age threshold for access to porn tube sites blocks all contents & interaction children of all ages could have on tube sites, without respecting different needs of children at different ages.

CRC in its Article 3 sets out the principle that the "best interests of the child should be a primary consideration in all actions concerning children."¹⁷² In this light, having regard to the research question of this thesis and the discussion of ineffectiveness of age verification regarding protecting children in terms of porn tube sites in Chapter 2 and 4, the thesis suggests a normative framework to employ age verification on porn tube sites in a way it complies with international children's rights legal standards. (Table 1) There are three fundamental considerations: 1) protecting young children from exposure to sexually explicit materials on porn tube sites 2) respecting adolescents' right to explore their sexuality which entails their right to development, right to information and right to recreational activities; and 3) protecting children who access to porn tube sites from all forms of violence, especially sexual abuse, exploitation as well as cyberbullying, etc. Having regard to these right-based considerations, the thesis argues that age verification in compliance with children's rights should be based on an age classification system. With classification, the access to pornographic contents on tube sites is able to be regulated to within certain groups of people. In this regard, the employment of age verification blocks the access to pornographic contents of certain groups of children who are vulnerable in a targeted way. Children below a certain age are deemed to be too young to have access to porn tube sites and thus will be prevented from access with age verification. Children who reach a certain age can have access to porn tube sites but are not allowed to register for accounts and send messages or receive friend requests on them. Hardcore or pornography with heavy violent contents should not be made available to people who do not purchase to be primer members. To register as a member, one needs to have his or her age verified with adequate identification provided. One is not allowed to purchase primer member unless registered as an adult. In the process illustrated in Figure 1, the need for children at different ages regarding exposure to pornographic contents could be served through applying different levels of age verification.

Chapter 5 will put this normative framework under the responsibilities relevant stakeholders have to have an idea on the stakeholders' compliance with international children's rights legal framework as

¹⁷¹ M.K. Sparrow, Can Internet Gambling be effectively regulated? Managing the risks (2008)

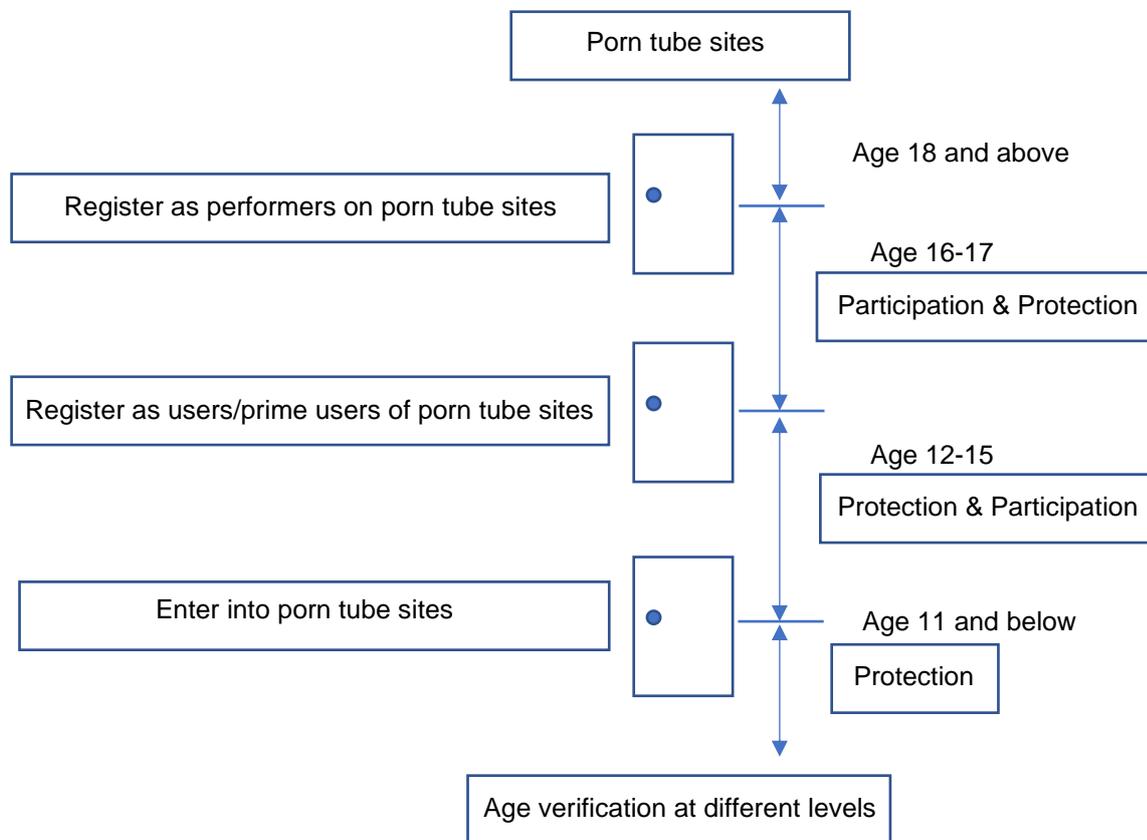
¹⁷² See note 95, *supra*, para. 13; Committee on the Rights of the Child, General comment No. 14 on the right of the child to have his or her best interests taken as a primary consideration (art. 3, para. 1), UN Doc. CRC/C/GC/14 (2013), para. 10.

well as a detailed idea about the enforcement of this normative framework put forwarded in the present chapter.

Table 1 Normative framework

Age group of children	Children age 0-11	Children aged 12-15	Children aged 16-17
Rights of children in relation to access to porn tube sites	Protection rights	Protection & participation rights	Participation & Protection rights
Children's developmental stage in relation to sexual matters online	Young children are in an important phase of development of their physical, mental health, motional security, cultural and personal identity	Children have reached puberty but not matured enough to deal with sexual matters and risky social networking online	Children reached puberty, well-educated with SRHR knowledge and are matured enough to deal with sexual risks online
Features of children's experiences on porn tube sites	Unwilling exposure; occasional positive exploration	Positive exploration; while need to be protected from potential exploitation and abuse through the social network built on porn tube sites	Pornography is a normal part of their life; still are under the risk of being subject to exploitation, abuse, through both social networking and performing in sex videos
AV as a regulatory tool should	Prevent their access	Prevent them from access to social networks on porn tube sites and hardcore pornography	Prevent them from preforming in pornography on porn tube sites

Figure 1 Different levels of age verification system



5. Stakeholder's responsibility

5.1. Introduction

Under the children's rights framework, there are no specific norms and guidance regarding children's rights in the digital environment, as the General Comment is still under its formation. As of 19th June 2019, the Committee has released all submissions from states as well as civil society as responses to the Committee's concept note for the new General Comment which will give substantive guidance on children's rights in the future digital age.¹⁷³ This chapter takes into account these submissions and builds on the legal standards discussed in Chapter Three and practical issues identified in Chapter Four, attempting to explore the responsibilities of relevant stakeholders other than children to safeguard children's rights regarding porn tube sites.

5.2. Identify stakeholders

Regulation on porn tube sites is captured under the heading of Internet governance. In this process, not only regulation takes effect at the policy level of cyberspace, many other actors also play different but essential roles in shaping the digital environment in which the Internet users are.¹⁷⁴ Actors at different levels interact and make decisions for a "collective issue" which is out of and vis a vis "leads to the creation or confirmation of social standards".¹⁷⁵ Nye describes this relationship as a "regime complex".¹⁷⁶ As pointed out by Lessig, social norms, law, market, code as architecture are the four forces regulating in the context of Internet governance.¹⁷⁷ Internet governance is thus a system with shared principles and norms involving governments, private sectors, civil society as well as individuals.¹⁷⁸

Under the international children's rights framework, there are duty bearers regarding children's rights. According to Article 5 and 18 of the CRC, parents bear the primary responsibility, while states are imposed responsibility to support parents in taking up their responsibilities to provide children with guidance on exercising their rights enshrined in the CRC.¹⁷⁹ However, in this process, states are the

¹⁷³ OHCHR, Committee on the rights of the child, (<https://www.ohchr.org/EN/HRBodies/CRC/Pages/GCChildrensRightsRelationDigitalEnvironment.aspx>), last visited (24-06-2019)

¹⁷⁴ B.W. Schermer & A.R. Lodder, Internet governance: an introduction, Handbook on ICT Law (Recht en Computer, Deventer: Kluwer): 1-23 (2014)

¹⁷⁵ M. Hufty, Investigating Policy Processes: The Governance Analytical Framework (GAF), Research for Sustainable Development: Foundations, Experiences and Perspectives 403-424 (2013)

¹⁷⁶ Nye argues that Internet governance consists of multiple actors who are complexly interlinked in an ecosystem or "regime complex": "While there is no single regime for the governance of cyberspace, there is a set of loosely coupled norms and institutions that ranks somewhere between an integrated institution that imposes regulation through hierarchical rules, and highly fragmented practices and institutions with no identifiable core and non-existent linkages."

¹⁷⁷ L. Lessig, The law of the horse: What Cyberlaw Might Teach, Harvard Law Review (1999).

¹⁷⁸ J. Kurbalija, An Introduction to Internet Governance (2012).

¹⁷⁹ See note 32, *supra*, S. Livingstone: "In terms of responsibility for children, the UNCRC (and common sense) accords parents the primary responsibility (Article 18 and 3), but states are required to support parents both by managing the wider environment of risks and opportunities in which they bring up their children and by intervening when necessary (for example, when parents are absent or unable) (Article 4)."; CRC arts. 5, 18.

de facto bearers of these duties as they are burdened with legally binding obligations from the CRC they have ratified and the CRC Committee is in place to monitor their compliance.¹⁸⁰

In addition, the private sector is also duty bearer under the CRC and other human rights instruments like ICESCR.¹⁸¹ When it comes to online child protection, recommendations have been made by the CRC Committee to states regarding the adoption of legislation on the obligations of service providers as well as content providers.¹⁸² In this regard, although not the direct bearer of duty, the private sector is subject to states' regulations which are in line with these human rights instruments.¹⁸³ As states are responsible for their compliance, private sector thus should take up its corresponding responsibilities. Besides, soft laws including UN Guiding principles on business and human rights, ILO Tripartite Declaration of Principles concerning multinational enterprises and social policy and Children's Rights and Business Principles also require active compliance with human rights standards of these companies.¹⁸⁴

As Livingstone has noticed in her articles about internet governance and children's rights, to ensure children's enjoyment of rights under the CRC in the digital environment in which they grow up, this "multi-stakeholder approach" face particular and new challenges.¹⁸⁵ How states and companies should interact with each other to comply with the normative framework raised in Chapter 4 in the controversial context of children's exposure to sexually explicit materials will be discussed in this chapter.

5.3. Responsibility of states

Article 4 of the CRC stipulates that States have obligations to ensure appropriate legal and administrative measures that enable the realisation of the rights of the child.¹⁸⁶ Since there are no specific obligations of states regarding children's rights in the digital environment, discussion on state responsibility will be built on in Chapter Three, looking into obligations states have with regard to legal standards analysed earlier in this chapter. As for the responsibility of states to assist parents or caregiver of children, it is usually the case in situations where children lack adequate parenting required by the CRC in its Article 5, 18, 27(2).¹⁸⁷ States are also obliged to ensure companies' operation is in line with international children's rights legal framework, which will discuss further in the next subsection. According to Article 4 and relevant General Comments, necessary international

¹⁸⁰ J. Doek, *The Human Rights of Children: an Introduction*, in T. Liefaard & U. Kikelly (eds), *International Human Rights of Children* (2018).

¹⁸¹ See, for example, Committee on Economic, Social and Cultural Rights, General Comments No. 21 on the right of everyone to take part in cultural life, E/C.12/GC/21(2009), para. 74.

¹⁸² See, for example, United Nations Committee on the Rights of the Child, Consideration of Reports submitted by States Parties under the OPSC, Concluding Observations on Turkey, CRC/C/OPSC/TUR/CO/1, 9 June 2006, paras. 17-19; on Viet Nam, *op. cit.*, paras. 10-11; on Costa Rica, *op. cit.*, paras. 14-15; on Sudan, *op. cit.*, paras. 23-24; on France, *op. cit.*, paras. 16-17; and on Chile, paras. 22-23.

¹⁸³ Committee on the Rights of the Child, General comment No. 16 on State obligations regarding the impact of the business sector on children's rights, UN Doc. CRC/C/GC/16 (2013).

¹⁸⁴ *The Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework* (2011)

¹⁸⁵ See note 32, *supra*, S. Livingstone.

¹⁸⁶ See note 75, *supra*, art. 4.

¹⁸⁷ See note 75, *supra*, arts. 5, 18, 27(2).

cooperation is instrumental for states to ensure the realisation of children's rights at both national and international level.¹⁸⁸

5.3.1. Holistic system

With regard to regulation to protect children online, the Committee in General Comments No.13 outline specific obligations of states under the general framework of implementation ascribed in the GC No. 5.¹⁸⁹ It makes clear that “policies, programmes, monitoring and oversight systems employed to online context” is part of the “integrated, cohesive, interdisciplinary and coordinated” system to ensure children's protection from violence. This protection system should be appropriate with “a broad range of measures cutting across all sectors of government and effective to prevent all forms of violence under the Article 19”.¹⁹⁰ Intervention listed in Article 19, paragraph 3 should be incorporated in this process.

According to the CRC Committee, the general attitude towards programmes isolated from government policy and infrastructures is that they will have limited effects while with more resources allocated.¹⁹¹ States should find ways to integrate programme aiming at protecting children from the potential harm porn tube sites could bring into existing online child protection system. A further step should be the interaction between online and offline child protection system.

As for social measures, they can be initiated or implemented by both State and civil society under the responsibility of the State.¹⁹² States should provide assistance and appropriate collaboration which “reflect the governmental commitment to fulfilling child protection rights”¹⁹³ in this process. This aspect of state responsibility lays the foundation for both regulating and cooperating with third parties in, ICT industry, for example, to ensure the protection of children from the potential harm of porn tube sites.

States, as the direct duty bearers under the international children's rights framework, should be held accountable for other stakeholders regarding protect children from porn tube sites.¹⁹⁴ In this regard, programmes serving to raise awareness campaigns which involve and target different stakeholders at different levels working on children's issues are fundamental. Specifically, states should provide education programmes in the context of information technologies to all stakeholders to enable more informed decisions made regarding children's online activities.¹⁹⁵ Besides, while there is the responsibility for parents and caregivers to provide appropriate guidance and advise to adolescents on safe sexual relationships, states have complementary responsibilities under Article 27 paragraph 3 to mitigate negative effect environments could have on children when it comes to making decisions on getting into sexual relationships.

¹⁸⁸ See note 155, *supra*; See note 75, *supra*, paras. 7, 76.

¹⁸⁹ See note 157, *supra*.

¹⁹⁰ See note 75, *supra*, GC no. 13, para. 7.

¹⁹¹ See note 159, *supra*.

¹⁹² See note 75, *supra*, GC no. 13, para. 43.

¹⁹³ *Id.*

¹⁹⁴ General comment No. 16 on State obligations regarding the impact of the business sector on children's rights, UN Doc. CRC/C/GC/16 (2013), para. 9.

¹⁹⁵ See note 75, *supra*, GC no. 13, para. 63.

As porn tube sites provide users with social networking platform apart from database of pornographic contents, sexual communities which stretches across porn tube sites and comprehensive social media platforms like Instagram and Snapchat are born. Forgoing discussion on the existence of online sexual community and how it could push children under risks of being sexually exploited or abused while circumventing intended regulation on tube sites calls for the application of the holistic system. A scheme which could monitor and response to imperative cross-platform cases of child abuse and exploitation should be developed apart from applying age verification.

5.3.2. Accountability

Under the framework of the multi-stakeholder approach in child protection system, the Committee requires defining the roles and responsibilities of stakeholders in this process, which includes those of inter-agency committees. In this light, the accountability in the process of ensuring children's rights by enforcing states legislative as well as administrative measures can be identified with a view to better monitor and oversight the implementation.¹⁹⁶

The backlash in the UK against age verification imposed on online pornography sites is partly out of the concern from the public that the British Board of Film Classification (BBFC) as the authority who has power in monitoring age verification.¹⁹⁷ Since BBFC is not experienced in age verification at all, the power of technical monitoring will shift to private companies, which could bring pornography industry drastic changes in market share and even reinforce monopoly in this industry led by MindGeek.¹⁹⁸

5.3.3. Participation of children

Child participation is essential in developing, monitoring and evaluation of the measures taken by states.¹⁹⁹ The CRC Committee noticed that child protection interventions are possible to disempower children.²⁰⁰ In this regard, positive measures that are conducive to their all-rounded development, for example, the participation of children in this process should be ensured with scrutiny. Programmes focusing on strengthening children's capacities to address violence should also be supported.²⁰¹ States should consider children's views and give due weight to their opinions in establishing regulatory measures like age verification as a mandatory step. Moreover, children should have opportunities to have their voices regarding the porn tube sites as well as corresponding age verification measures been heard to ensure policies do not intervene in their appropriate participation in the transmission of information. To ensure children's participation in affairs regarding pornography might be deemed to be revolutionary. However, the situation of pornography nowadays is quite different from that of the time when child protection is out of child welfare instead of child's rights.²⁰² Involving in the production and

¹⁹⁶ See note 75, *supra*.

¹⁹⁷ Department for media and sports, Child Safety Online: Age Verification for Pornography Consultation Response (2016), (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/534965/20160705_AVConsultationResponseFINAL_2_.pdf) available at (01-02-2019).

¹⁹⁸ See note 40, *supra*, J. Herrman,

¹⁹⁹ See note 75, *supra*, GC no. 13, para. 7; See also See note 89, *supra*, para.118.

²⁰⁰ *Id.*

²⁰¹ See note 164, *supra*.

²⁰² See note 96, *supra*, K. Hanson.

transmission of information means children are representing themselves and bring out the image of children and childhood to the public in their own way.²⁰³

Notably, as states are obliged to develop a mechanism to ensure children's participation in the process of protecting children online, Article 12 of the CRC should be a key consideration. Under the overarching principle set out in Article 12, when it comes to hearing children, due weight "in accordance with their age and maturity" is required to be given to children's views when designing and implementing online regulation affecting children. The CRC Committee makes it clear that in this process age alone is not enough to determine the significance of the view of the child. It is without any doubts that children's capabilities of understanding and forming a view are influenced by the information as well as experience the child has in the online environment.²⁰⁴

In this regard, states are obliged to provide children with assistance and opportunities to express their views about their online experience and corresponding regulations. According to the CRC Committee, age-appropriate and accessible information and empowerment on self-protection and specific risks and how to deal with them should be provided to children.²⁰⁵ When it comes to regulating porn tube sites to protect children online, states should engage children, especially adolescents and groups of children who are most affected in this process in discussions about the consumption of the material online and promotion of sexual and reproductive health.²⁰⁶

5.4. Responsibility of companies

5.4.1. Relationship between States and third parties

As the outsourcing of State functions is apparent in the online context,²⁰⁷ implementing child protection legislations requires the cooperation of the government and the relevant business sectors. Under the CRC, states should take measures to ensure the compliance of websites' operation with CRC. Responsibilities of websites run by multinational companies towards children are under the general "protect, respect and fulfil" framework.²⁰⁸ Due diligence applies to companies to identify, prevent, mitigate and account for negative human rights impact their websites have on children.²⁰⁹ Since

²⁰³ See note 75, *supra*, GC no. 13, para. 43.

²⁰⁴ See note 101, *supra*, GC no. 12, para. 29.

²⁰⁵ See note 164, *supra*.

²⁰⁶ L. Ybarra & J. Mitchell, "Sexting" and its relation to sexual activity and sexual risk behavior in a national survey of adolescents, 55 the Society for Adolescent Medicine 6: 757–764(2014).

²⁰⁷ See note 194, *supra*, para. 1; See also note 32, *supra*, S. Livingstone.

²⁰⁸ The responsibility of corporation towards human rights in general is set out in the UN Guiding principles on business and human rights and ILO Tripartite Declaration of Principles concerning multinational enterprises and social policy. As for children's rights, CRC committee reiterates state obligations regarding the impact of the business sector on children's rights in its General Comments No. 16. Children's Rights and Business Principles provide rights standard for businesses to take up with in protecting children's rights in business activities. The COP Guidelines for Industry issued by UNICEF and ITU specifies the responsibility technology industry has in protecting children online: "Businesses must put protecting children at the heart of their work, paying special attention to protecting the privacy of young users' personal data, preserving their right to freedom of expression, and putting systems in place to address violations of children's rights when they occur. Where domestic laws have not yet caught up with international law, business has an opportunity – and the responsibility – to bring their business practices in line with those standards."

²⁰⁹ The Guiding Principles on Business and Human Rights: Implementing the United Nations

companies' responsibilities are applicable when "the impacts are directly linked to their operations, even if they have not contributed to those impacts",²¹⁰ tube sites and its operating company are responsible for certain cases of violence or abuse against children making use of the social media function they have developed on their websites.

Backed by evidence of the past years, parents on the Internet tend to lack the awareness as well as competence to protect children online, let alone to guide their online behaviours.²¹¹ At the same time, the transnational and evolving nature of the online environment and technology makes it difficult to enforce the law in practice for states. There is also a lack of harmoniousness in internet governance at present.²¹² Considering the obligations and challenges mentioned above, UNICEF and other national stakeholders have taken actions to provide companies with assistance to take up crucial responsibilities in ensuring children's rights regarding porn tube sites.²¹³

As pointed out by UNICEF, it is challenging for companies to comply with the CRC as well as the Children's Rights and Business Principles in all aspect of their operations affecting children. Moreover, the two aspects of children's rights- protection as well as provision- require that to protect children's rights online, companies have to strike a careful balance between children's right to protection and their right to access to information, freedom of expression and right to development. Therefore, measures taken to protect children online should be "targeted and are not unduly restrictive" for children.²¹⁴

5.4.2. Porn tube sites

There is no age verification developed on PornHub regarding all users access to it from the jurisdiction where it is not prohibited to access to sexually explicit contents to date. Instead, requirements about age are only mentioned in term of service by saying that "any person under 18 or the applicable age of majority [in the jurisdiction he or she is accessing from] is not permitted to submit personal information or use the [w]ebsite".²¹⁵ In this regard, PornHub does not take any measures to prevent minors' access to its websites. The adoption of an approach which ensures the largest extent of freedom of users is one of the reasons why PornHub is welcomed all over the world. However, this freedom leaves considerable space for children to make use. In addition, no identification is required on PornHub to access any contents except for Model Payment program. Performer under this program needs to provide a scan of ID in order to be eligible for payments.²¹⁶

"Protect, Respect and Remedy" Framework (2011); ILO Tripartite Declaration of Principles concerning multinational enterprises and social policy.

²¹⁰ The Guiding Principles on Business and Human Rights: Implementing the United Nations

"Protect, Respect and Remedy" Framework (2011), para. 19

²¹¹ See note 32, *supra*, S. Livingstone; See note 12, *supra*.

²¹² See note 20, *supra*, V. Nash; See also note 150, *supra*.

²¹³ UNICEF, Guidelines for Industry on Child Online Protection, 2015, (https://www.unicef.org/csr/files/COP_Guidelines_English.pdf) last visited (24-06-2019)

²¹⁴ *Id.*

²¹⁵ PornHub, Ability to Accept Terms of Service, <https://www.pornhub.com/information#terms>

²¹⁶ PornHub, What type of IDs are accepted, <https://help.pornhub.com/hc/en-us/articles/227125927-What-type-of-IDs-are-accepted->

The national regulatory system in this regard should be held responsible. The monitoring and enforcement system should be effective regarding pornographic sites in contexts where provisions are prohibiting the provision of pornography to children below a certain age.²¹⁷ The difficult situation for companies to comply with regulation asking for age verification online is similar to that to comply with any other regulations offline, in which the cost of compliance will be the primary consideration, in most situations it is a barrier of compliance.²¹⁸ The cost includes the potential dropped market share as a result of employing age verification, and the financial cost of installing age verification technology as well as following update and maintenance cost. Besides, the forced shut down by the authority as punishment following any cases in which successful access from minor is caught by the enforcement or supervisor could be a drastic disaster for any start-up porn tube sites. As mentioned at the beginning of this chapter, implementing regulation online is against the backdrop of a whole complicatedly physical as well as virtual system involving actors at different levels.²¹⁹ In this regard, regulation asking for effective age verification will lead to the development of tube sites which are of small scale, with servers based overseas and hard to be detected and monitored by enforcement as a result.²²⁰ The complicated Internet governance thus calls for an evolving approach adopted by relevant regulating actors which allows effective and reasonable response regarding regulatees' incapability, or even unwillingness.

In jurisdictions where it is up to companies to comply with their due diligence under the international legal framework voluntarily, porn tube sites and their operating company should keep in mind these business principles and the forming consensus of companies taking up social responsibilities. Considering the positive effect good public image could have on a company's income, tech giants including social media giants tend to place keeping a positive public image on the agenda. In this light, compliance with business principles as one step forward in complying international human rights norms should be advised by states to these game-changers. Sustainable development with care for children's welfare as well as rights should be promoted to be one of their primary considerations in decision-making, while freedom of speech will be the everlasting rationale for porn tube sites.²²¹

The non-binding nature of these international business principles regarding human rights somehow limits their influence on regulating porn tube sites. In this regard, the phenomenon of underage minor access to porn tube sites is now de facto unregulated in practice with ineffective age verification.

5.4.3. Age verification provider

In cases where age asserted by the user will undergo verification process, checks on age will be carried out by age verification providers using certain programmes connected to the national database of personal information, which is usually controlled by governments. This is somewhat similar to the identification verification system, which has long been developed in the industry since the advent of open-source community initiative. An example of this could be identity verification check banks have employed. In this regard, personal information acquired by financial organisations is promised by them to be used only in occasions listed in their terms of service. In some jurisdictions, the government will also cooperate with the banking sector on identity management.²²² In this regard, identity verification is

²¹⁷ See note 20, *supra*, V. Nash; See note 23, *supra*, V. Nash

²¹⁸ See note 49, *supra*, J. Herrman.

²¹⁹ See note 150, *supra*.

²²⁰ See note 20, *supra*, V. Nash.

²²¹ See note 180, *supra*, UNICEF.

²²² See note 20, *supra*, V. Nash.

limited in certain areas like banking and the information it gathers is under strict management. As for age verification, in the UK, the providers of age verification are not governmental agencies, but private companies. Although BBFC is designated by the Digital Economy Act in the area of ensuring the correct process of data, it is only responsible in terms of age verification to monitor the efficiency of age verification methods used by websites, which are provided by private providers.²²³ Given the loophole in this Act regarding personal information as well as the lack of experience of BBFC on monitoring age verification, concerns about personal information emerge. Little trust has been built between the public and start-ups operating age verification for porn tube sites on which they spend their private and intimate time. Without any notification on the security of their data, it is apparent sceptical when they are asked to fill in their detailed information directly connecting them with their real life.

5.5. Concluding remarks

The states' obligation to implement the CRC must not be seen from child welfare perspectives; rather, a children's rights perspective to allow the fulfilment of children's rights.²²⁴ According to the CRC, states should protect children from all forms of violence without undermining the enjoyment of other rights enshrined in the CRC. All society has to meet the needs of children in this regard.²²⁵ Problematic implementation of the CRC regarding online child protection contribute to ineffective age verification in practice. The thesis in this chapter adopted a new perspective towards Internet governance, which is children's rights centred, to analyse responsibilities of states and different companies to ensure the realisation and implementation of the CRC rights and provisions on addressing children's access to porn tube sites. As holders of their rights, children enjoy their rights in accordance with their evolving capacity. A children's rights compliant age verification employed to porn tube sites should take account of children's evolving capacity. Responsibilities of different actors are interdependent, with clear lines of accountability.²²⁶ In this process, safeguarding children's rights will be the core concern. Children's best interests should prevail in terms of conflict of interests between children and others. States in this process should be the intermediary and allocate resources strategically to alleviate conflicts by taking legislative, administrative and other measures. The thesis identifies responsibilities of porn tube sites and age verification providers to a children's rights compliant age verification. A holistic protection system respecting children's evolving capacity and child participation is suggested to implement the normative framework bought out in Chapter Five.

²²³ See note 49, *supra*, J. Herrman

²²⁴ See note 80, *supra*, J. Tobin.

²²⁵ See note 155, *supra*, GC no.5, para. 56

²²⁶ See note 75, *supra*, paras. 9, 55.

6. Conclusion

There are always divergent views on what kind of online activities should fall under the information rights of children and what kind of experience should trigger protective measures, especially in the context of sexual matters.²²⁷ This thesis has explored the children's rights in this regard when it comes to children access to porn tube sites as viewers. The answer to the research question of this thesis, "to what extent age verification as a regulatory tool is in compliance with international children's rights legal framework in the event of children access to porn tube sites as viewers" is illustrated in Chapter 3. From a children's rights perspective, this thesis holds that there is tension between children's protection rights and their evolving capacity when regulating porn tube sites. The features of porn tube sites even aggravate this tension further, with their free contents, vast daily traffic and unique community culture.

This thesis pursued to contribute to the critical debate around children's rights online and corresponding internet governance. By shedding light on specific implications children's access to porn tube sites as viewers have on children's rights, the thesis adopted a children's rights-based approach towards age verification as an online regulatory tool affecting children.

The first two chapters served to set up the backdrop for discussion to help better understand the relevance of porn tube sites with children's rights. These two chapters introduced the present regulatory framework of online pornographic sites and the new challenges put forward by features of porn tube sites. They illustrated an overview of potential issues regarding adopting age verification as a regulatory tool to safeguard the rights of children who access tube sites as viewers. These potential issues were elaborated in Chapter Three and Four. Chapter Three and Chapter Four set an international children's rights legal framework and further enable a holistic legal analysis around children's access to porn tubes sites as viewers. These two chapters answered the research question raised, namely the extent to which age verification is in line with international children's rights framework. Chapter Four analysed the compliance based on legal framework brought out in Chapter Three and found that age verification although is developed to serve the aim to protect children, is not in line with international children's rights framework. It analysed the challenges to build a children's rights compliant age verification in practice, which include the repercussion of moral panic, conflict of interest between protecting children and protecting civil rights of the public. The sole application of age verification could also be problematic that protecting young children from harmful information and potential sexual solicitation online needs a comprehensive solution. At the same time, the threshold of age at 18 years old to apply age verification could undermine children's online exploration as their capacity evolves. In this regard, current age verification as a regulatory tool to prevent children's from accessing porn tube sites neglects children's sexual rights, which are entailed in their rights to information, recreational activities and development. A children's rights compliant age verification which balances protection and participation rights of children in a proper way that ensure children's participation online while adequately protect them is in need.

In this regard, the thesis brought about a normative framework towards children's rights compliant age verification regulating porn tube sites which provides age verification at different levels of contact of children with porn tube sites and take into account children's needs at different ages. Responsibilities of relevant stakeholders under the normative framework is further illustrated in Chapter Five. While states bear primary responsibilities in this regard, the private sector is also crucial actor which includes

²²⁷ See note 100, *supra*, G. Alisdair

porn tube sites themselves and age verification providers. This normative framework is presented in Table 2 which presents the children's rights framework and corresponding stakeholders' responsibilities.

Table 2 children's rights compliant age verification

	Children age 0-11	Children aged 12-15	Children aged 16-17
Rights of children in relation to access to porn tube sites	Protection rights	Protection & participation rights	Participation & Protection rights
Features of children's experiences on porn tube sites	Unwilling exposure; occasional positive exploration	Positive exploration; while need to be protected from potential exploitation and abuse through the social network built on porn tube sites	Pornography is a normal part of their life; still are under the risk of being subject to exploitation, abuse, through both social networking and performing in sex videos
AV as a regulatory tool should	Prevent their access	Prevent them from access to social networks on porn tube sites and hardcore pornography	Prevent them from performing in pornography on porn tube sites
Apply age verification when	Children enter porn tube sites	Children register as users/prime users of porn tube sites	Children register as performers on porn tube sites
Responsibility of states	<ul style="list-style-type: none"> Review present age limitation with children, parents as well as relevant actors in both public and private sectors Establish expressly regulation on regulating age-restricted products online with transparent accountability allocation Promote the establishment of a code of conduct in protecting children online Monitor the market of age verification products Monitor the enforcement of age verification with periodic reports Establish the holistic child protection system taking into account the features of porn tube sites 		
Responsibility of the private sector	<ul style="list-style-type: none"> Porn tube sites should identify children regarding different levels of services it provides Establish self-regulatory measures alongside the application of age verification Embrace blood-edge technologies to verify age like digiID and OpenID Ensure that terms of service expressly indicate its child protection policy in a child-friendly way and properly inform its users about personal information Promote cross-platform cooperation to conduct age verification 		

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