SCRENS, TEENS, AND PORN SCENES: LEGISLATIVE APPROACHES TO PROTECTING YOUTH FROM EXPOSURE TO PORNOGRAPHY

by Byrin Romney*

ABSTRACT

Internet access is an essential part of daily life for most children. Due to the lack of online protections, American children have unrestricted access to the most extensive and extreme adult video library in history. Consequently, children are being exposed to pornography at unprecedented rates.

A child’s first exposure to pornographic material is generally around 11 years old. Some seek it intentionally while others stumble upon it by accident. Adolescents are more susceptible to pornography because of the significant physical, emotional, cognitive, and sexual changes associated with adolescent development. Accordingly, adolescents are increasingly struggling with compulsive behaviors related to internet pornography and cybersex. Existing neuroscience literature suggests that early exposure to pornography negatively impacts adolescent brain development.

Most of today’s pornography does not reflect consensual, loving, healthy relationships. Instead, pornography teaches dominance, aggression, disrespect, and objectification. The most current research shows that many children want to repeat the acts they see in pornography. Consequently, the most comprehensive literature reviews find that pornography use is strongly correlated with sexual aggression in boys and sexual victimization in girls. Notably, a 2019 study among tenth graders in the United States revealed that boys exposed to violent pornography were two to three times more likely to commit sexual violence against a dating partner.

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Several countries are attempting to address this issue by requiring pornographic websites to verify the age of each user. Germany was one of the early pioneers in protecting children online, using age verification since the early 2000s. The United Kingdom recently emerged as a new leader in child online protection with The Digital Economy Act of 2017. This Act required age verification for all commercial pornography accessible from the United Kingdom. Though the United Kingdom recently abandoned the Digital Economy Act in favor of the Online Harms regime, the Digital Economy Act served as a model for Poland and Australia who are now developing their own age-verification regimes.

The United States enacted the Communications Decency Act (CDA) of 1996 and the Child Online Protection Act (COPA) of 1998 to protect children from online pornography. Both failed judicial scrutiny under the United States Constitution’s free speech protections. However, children are immersed in today’s digital environment more deeply than ever previously imagined, and internet filters have proved mostly ineffective.

Now, lawmakers must come together and explore innovative solutions that will protect youth from today’s toxic internet pornography. A majority of Americans are in favor of making it more difficult to access internet pornography. The technology available for age verification has made significant advancements enhancing privacy, security, and anonymity. Given the changes in the digital environment and available technologies, age verification may now be a viable solution under judicial strict scrutiny. Alternatively, age verification may be viable under other legal doctrines such as the secondary-effects doctrine.

I strongly recommend that the United States take action to: (1) promote education regarding pornography’s harm to children; (2) support the digital-identity industry; (3) draft new legislation that requires robust age verification for commercial pornography; (4) call for greater child-protection measures on social-media platforms, such as a content-rating system; (5) encourage internet-service providers to provide more comprehensive internet-filtering services; and (6) consider state, federal, and international resolutions identifying pornography as a significant public-health issue.
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INTRODUCTION

Kanye West recently opened up about his exposure to pornography as a child.1 He stated, “Playboy was my gateway into full-on pornography addiction. My dad had a Playboy left out at age five and it’s affected almost every choice I made for the rest of my life.” This narrative is far too common, and its frequency is only increasing in our internet-age society. American children have unrestricted access to the largest and most extreme adult video library in the history of the world.3 “Today it is easier for a child to consume harsh content on the internet than to buy an ice cream at the local kiosk[.]”4 Now is the time for lawmakers to come together and explore innovative solutions to this rising epidemic. A series of 2012 and 2013 surveys from the Public Religion Research Institute (PRRI) reported that 67% of Democrats, 75% of Republicans, and 57% of college-age millennials favor making it more difficult to access internet pornography.5 Since 2016, many states have introduced legislative resolutions declaring pornography a public-health issue.6 America is starting to realize that children’s easy access to pornography is a serious issue.

2. Id.
3. Cf. infra note 23 (discussing the general accessibility to violent and extreme pornography).
4. See Ananya Bhattacharya, Israel is Considering a Measure to Force People Who Watch Porn Online to Ask for Permission, QUARTZ (Nov. 2, 2016), https://qz.com/824969/israel-is-considering-a-measure-to-force-people-who-watch-porn-to-publicly-ask-for-it/ (quoting Israeli politician Shuli Moalem-Refaeli emphasizing the ease at which pornographic material is accessible to children online).
With the advent of child sexual-abuse material (CSAM) legislation in the United States, some legal protections are in place to stop the pornography industry from exploiting children as actors. However, now the pornography industry is exploiting children as consumers. The main obstacle to protecting American children online is creating legislation that will survive judicial scrutiny under the United States Constitution’s free speech protections.

This Article is divided into four major parts: a problem statement, a comparative analysis, a constitutional roadmap, and an American hypothesis. Part I, the problem statement, assesses the harms that pornography exposure causes in children and adults. Part II, the comparative analysis, previews and compares the legislative efforts of various countries on this issue. Part III, the constitutional roadmap, discusses the history of internet content regulation in the United States and explores what types of youth online-protection systems may be plausible under American constitutional law. Finally, Part IV, an American hypothesis, concludes by detailing my recommendations for protecting American youth online.


7. See 18 U.S.C § 2256 (defining a minor and child pornography); 18 U.S.C § 2251 (referencing the statute that protects children from the production of sexual media when an individual influences them to perform pornographic acts, or assists in transporting a minor for pornographic purposes); 18 U.S.C § 2252 (referencing the statute used to prevent activities that involve the exploitation of children); 18 U.S.C § 2252A (referencing the statute that holds an individual liable for media that contains a child engaging in explicit sexual conduct); 18 U.S.C § 2260 (explaining that individuals outside of the U.S. are prohibited from coercing a child to produce sexual media of themselves).

I. PROBLEM STATEMENT

Children and adolescents represent a substantial portion of internet users. Forty-five percent of teenagers use the internet “almost constantly” while another 44% go online several times a day. Three and four-year olds spend about eight hours per week online. Tweens report nearly five hours of screen use per day, not including school or homework. For teens, the number jumps to nearly seven and a half hours of screen use per day. This abundant internet access brings great value to children, but it also provides unprecedented access to adult content.

Even with modern filtering services, American youths’ exposure to pornographic content online is almost inevitable. The average age of first exposure to pornographic material is commonly reported as eleven years old, though the statistic varies depending on the study. In a single month, 13% of children aged 6–14 in the United Kingdom visited an adult website. It should be noted that many internet and mobile phone providers in the United Kingdom automatically filter internet services. Therefore, in a country without those protections, these figures may be even more drastic. Surveying 1,142 youth, the British Board of Film Classification (BBFC)
found that 51% of 11–13-year-olds and 66% of 14–15-year-olds had seen pornography.\textsuperscript{18}

Further, a survey conducted by the National Society for the Prevention of Cruelty to Children (NSPCC) found that 10% of seventh graders (12–13-year-olds) feared they were addicted to pornography.\textsuperscript{19} This fact alone seems capable of demonstrating the harm that pornography poses to children’s sexual and psychological development. Surveys also support that somewhere between 60% and 71% of minors first see pornographic material by accident.\textsuperscript{20}

In the physical world, the law requires merchants to check for age appropriate identification when selling pornographic magazines, showing R-rated movies, or allowing patrons to enter a strip club or sex shop.\textsuperscript{21} Other laws permit municipalities to consolidate adult entertainment establishments, and their advertising, to designated areas of the community.\textsuperscript{22} All of these traditional barriers attempt to protect children from sexually explicit material. However, in the online world, children have unfettered access to unlimited amounts of extreme and violent pornography.\textsuperscript{23}


\textsuperscript{21} See generally 18 U.S.C. § 1470 (creating an age-verification requirement by imposing criminal liability on those who transfer obscene material to minors).

\textsuperscript{22} See, e.g., Renton v. Playtime Theatres, 475 U.S. 41, 51–55 (1986) (holding local ordinances restricting the location of adult theatres to rectify the secondary effects of pornography in the community as constitutional).

\textsuperscript{23} For example, Pornhub, a popular pornographic website with 42 billion visits in 2019, reportedly had 6.83 million videos uploaded to its website that same year. 2019 Year in Review, PORNUH (Dec. 11, 2019), [hereinafter PORNUH, 2019 Review], https://www.pornhub.com/insights/2019-year-in-review. A 2010 study, which sampled over 300 scenes from the top-rated and best-selling pornographic films, found that 88.2% contained physical aggression and 41.1% contained nonnormative sex acts. Ana J. Bridges et al., Aggression and Sexual Behavior in Best-Selling Pornography Videos: A Content Analysis Update, 16 VIOLENCE AGAINST WOMEN 1065, 1075 (2010) [hereinafter Bridges, Study of Aggression in Best-Selling Porn Videos].
Measures of the size of the global pornography industry are uncertain, though it is clearly a multibillion-dollar industry.\textsuperscript{24} A tube site called “Pornhub” is one of the world’s largest pornographic websites.\textsuperscript{25} Pornhub, and many other popular pornography sites, are tube sites.\textsuperscript{26} Like YouTube, these sites provide amateur and professional filmmakers a platform to upload their content for website users to view. Some of the content is free with advertisements intermingled. There is also more content available with a paid subscription.\textsuperscript{27} MindGeek, a Canadian company, owns Pornhub and several other pornographic websites.\textsuperscript{28}

Each year, Pornhub publishes a “Year in Review” report.\textsuperscript{29} Their 2019 Year in Review revealed some shocking statistics, especially when compared to prior years.\textsuperscript{30} In 2019 alone, Pornhub had 42 billion visits to its site, an increase of 8.5 billion compared to the prior year.\textsuperscript{31} Also in 2019, 1.36 million hours (169 years) of new content were uploaded to the site.\textsuperscript{32} In 2018, Pornhub transferred 4,403 petabytes of data—which is more bandwidth than the entire internet consumed just sixteen years earlier in 2002.\textsuperscript{33} By comparison, in 2019 Pornhub transferred an astonishing 6,597 petabytes of data, a near 50% increase from 2018.\textsuperscript{34} This Pornhub report only represents a portion of the industry. Other massive pornography sites, and a conglomerate of smaller sites, significantly increase these numbers.

\textsuperscript{25} PORNHUB, 2019 Review, supra note 23.
\textsuperscript{26} Jess Joho, The Best Alternatives to Pornhub and Xvideos, MASHABLE (Mar. 8, 2020), https://mashable.com/article/pornhub-alternatives-free-porn-paid-porn/ (explaining that free porn sites are often known as tube sites).
\textsuperscript{27} See generally, Saikat Pyne, This is How Porn Sites Make Money, BUS. INSIDER (Aug. 27, 2019), https://www.businessinsider.in/this-is-how-porn-sites-make-money/articleshow/48385361.cms (explaining that porn sites make their money primarily from paid subscriptions).
\textsuperscript{29} See PORNHUB, 2019 Review, supra note 23 (noting that this is Pornhub’s “7th annual year in review”).
\textsuperscript{30} Id.
\textsuperscript{32} PORNHUB, 2019 Review, supra note 23.
\textsuperscript{33} PORNHUB, 2018 Review, supra note 31.
\textsuperscript{34} Compare PORNHUB, 2019 Review, supra note 23 (reporting 6,597 petabytes of data transferred in 2019), with PORNHUB, 2018 Review, supra note 31 (reporting 4,403 petabytes of data transferred in 2018).
The size of the pornography industry is monstrous, and it continues to grow extremely rapidly. The top 20 countries, including the United States, represent 79% of daily traffic on Pornhub.\(^{35}\) Japan, the United Kingdom, and Canada are also significant contributors.\(^{36}\) Pornhub also reported an increasing percentage of female viewers, now 32% of worldwide visitors.\(^{37}\) Roughly 84% of visitors are accessing the site from a smartphone or tablet.\(^{38}\)

These statistics clearly show that pornography is more accessible than ever before. Children, by accident or curiosity, are commonly exposed to this harmful material because they frequent the same digital spaces as adults.\(^{39}\) The facts become concerning when one also understands that a minor’s consumption of pornography is highly associated with psychological, social, emotional, neurobiological, and sexual harms. The materials that follow discuss the harms associated with pornography use by minors and by adults. It is not intended to be a comprehensive review of the field, but a brief summary of some of the most generalized and pervasive findings.

Recently, several scholars set out to review the empirical research published in peer-reviewed journals regarding adolescents’ use of pornography. It is worth noting that ethical restrictions prevent researchers from creating a control group and a test group where children are exposed to pornography.\(^{40}\) Therefore, surveys are the primary mechanism for studying these issues. These limitations make establishing causation difficult. The literature reviews serve as the basis of the following Parts because they concisely, objectively, and systematically present the empirical findings over the past 25 years. The largest review analyzes a total of 75 studies, 66 quantitative and nine qualitative, from 1995–2015.\(^{41}\) Forty-one of those studies were published between 2010 and 2014.\(^{42}\) The studies come from all over the world, including North America, Europe, Asia, Africa, and Australia.\(^{43}\)

\(^{35}\) PORNHUB, 2019 Review, supra note 23.
^{36}\) Id.
^{37}\) Id.
^{38}\) Id.
^{40}\) Id. at 509.
^{41}\) Id. at 512–13.
^{42}\) Id. at 513.
^{43}\) Id.
Finally, pornography has both primary and secondary effects on children. The following harms are divided into these two categories to aid the forthcoming legal analysis. Though the law has not created a specific definition to differentiate between primary and secondary effects, it has given numerous examples of secondary effects from which a definition can be inferred. In a basic sense, primary effects are those that are internalized, fully contained within the individual and do not directly affect others. Secondary effects are those that have more external impacts, like harming others or harming society generally.

A. Primary Effects on Children

Adolescents are more susceptible to sexually explicit material because of the significant “physical, emotional, cognitive, social, spiritual, and sexual” changes associated with adolescent development. The existing research consistently links adolescents’ pornography use to their sexual attitudes. Adolescents that use pornography more frequently report “higher levels of permissive sexual attitudes, sexual pre-occupation, and earlier sexual experimentation . . . ” The research also reports a strong relationship between pornography use and less progressive, more gender-stereotypical sexual beliefs. Many of these sexist beliefs are inaccurate

44. *See infra* Parts I.A–B (detailing that primary effects encompass sexual attitudes while secondary effects are behaviors that might harm others or have negative repercussions for society).
45. *See, e.g.*, Renton v. Playtime Theatres, 475 U.S. 41, 59–60 n.4 (1986) (Brennan, J., dissenting) (citing findings from the Renton City Council stating the “[l]ocation of adult entertainment land uses in proximity to residential uses, churches, parks and other public facilities, and schools, may lead to increased levels of criminal activities, including prostitution, rape, incest and assaults in the vicinity of such adult entertainment land uses.”); Young v. Am. Mini Theatres, 427 U.S. 50, 54–55, 71–73 (1976) (indicating that a secondary effect of adult theaters was the influx of crime, prostitution, and a decrease in property value); City of Erie v. Pap's A.M., 529 U.S. 277, 291 (2000) (acknowledging the secondary effects of the presence of adult entertainment establishments on public health, safety, and welfare of the community); City of L.A. v. Alameda Books, 535 U.S. 425, 434 (2002) (noting that the “secondary effects” of adult theatres on the surrounding community included “crime rates, property values, and the quality of the city’s neighborhoods.”).
49. Peter et al., supra note 39, at 523.
50. Owens et al., supra note 48, at 116.
51. Peter et al., supra note 39, at 523.
and harmful because they tend to accept a narrative of male dominance and female submission, a power imbalance in sexual relationships, and that women exist as sex objects for men’s sexual pleasure.\textsuperscript{52} This leads youth to develop unrealistic sexual values and beliefs.\textsuperscript{53} Some studies also link negative sexual self-concept to pornography use. “Girls report feeling physically inferior to the women they view in pornographic material, while boys fear they may not be as virile or able to perform as the men in these media.”\textsuperscript{54} Further, adolescents who use pornography are more likely to have depressive symptoms and less emotional bonding to caregivers such as their parents.\textsuperscript{55}

\textbf{B. Secondary Effects on Children}

Pornography’s effect on an individual’s behavior is most likely considered a secondary effect when such behavior harms others or has negative repercussions for society.\textsuperscript{56} Anti-social behavior is a common secondary effect reported in the literature.\textsuperscript{57} Youth who are exposed to pornography report “lower degrees of social integration, increases in conduct problems, [and] higher levels of delinquent behavior.\ldots\textsuperscript{58} Adolescents’ pornography use is also related to the early occurrence of sexual intercourse, more experience with casual sex behavior,\textsuperscript{59} and riskier sex practices.\textsuperscript{60} Additional studies found that adolescents who consume pornography are also more likely to engage in prostitution.\textsuperscript{61}

Another troubling secondary effect is sexual aggression. One of the most robust studies showed that 39\% of 13- and 14-year-olds and 21\% of 11- and 12-year-olds wanted to repeat the acts they saw in pornography.\textsuperscript{62} A

\begin{itemize}
\item \textsuperscript{52} Zachary D. Bloom et al., \textit{Male Adolescents and Contemporary Pornography: Implications for Marriage and Family Counselors,} 23 FAM. J.: COUNSELING & THERAPY FOR COUPLES & FAM. 82, 85 (2014).
\item \textsuperscript{53} Owens et al., supra note 48, at 116.
\item \textsuperscript{54} Id.
\item \textsuperscript{55} Id.\textsuperscript{56} See supra note 47 and accompanying text.
\item \textsuperscript{57} Bloom et al., supra note 52, at 82, 84; Owens et al., supra note 48, at 99, 116.
\item \textsuperscript{58} Owens et al., supra note 48, at 116.
\item \textsuperscript{59} Peter et al., supra note 39, at 523.
\item \textsuperscript{60} Id. at 522.
\item \textsuperscript{61} Bloom et al., supra note 52, at 84.
\item \textsuperscript{62} ELENA MARTELLOZZO ET AL., “\ldots I WASN’T SURE IT WAS NORMAL TO WATCH IT \ldots\textquotedblright;: A QUANTITATIVE AND QUALITATIVE EXAMINATION OF THE IMPACT OF ONLINE PORNography ON THE VALUES, ATTITUDES, BELIEFS AND BEHAVIORS OF CHILDREN AND YOUNG PEOPLE 10 (2016), https://www.mdx.ac.uk/__data/assets/pdf_file/0021/223266/MDX-NSPCC-OCC-pornography-report.pdf.
\end{itemize}
United States study found that, among “urban-residing, economically disadvantaged, primarily Black and Hispanic youth” aged 16 and 17, “[m]ore than half (51%) had been asked to watch pornography together by a dating or sexual partner, and 44% had been asked to do something sexual that a partner saw in pornography.” This is disconcerting because the NSPCC survey also reports that about 75% of children do not feel that pornography helps them understand safe sex and 64% do not feel that pornography helps them understand consent. Further, other studies show that as much as 88% of pornography’s most popular scenes contain physical aggression. Therefore, it is no surprise that pornography use is strongly correlated with sexual aggression in boys and sexual victimization in girls. The largest of the literature reviews states the following:

By and large, the studies . . . tended to show that adolescents’ pornography use was related to . . . a higher likelihood to engage in sexual aggression as well as to experience it, notably among female adolescents. . . . The relation between pornography use and sexual aggression was stronger for boys, while that between pornography use and sexual victimization was demonstrated mainly for girls.

The second largest literature review came to a similar conclusion. Longitudinal studies found that pornography use is associated with both in-person and online sexual harassment and sexual assault by adolescent boys. Cross-sectional studies also found that female adolescents who viewed pornographic materials are more likely to become victims of sexual violence. A 2011 study of college-aged young men, found that about 20% of the young men had seen rape pornography. The young men that viewed this type of pornography “reported a greater likelihood of committing rape and/or sexual assault, a greater acceptance of rape myths (e.g., that women invited the rape), and a decreased likelihood of intervening in a sexual

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64. MARTELLOZZO ET AL., supra note 62, at 55.
66. Peter et al., supra note 39, at 523.
68. Peter et al., supra note 39, at 522.
69. Id.
70. Bloom et al., supra note 52, at 85.
assault than those who did not view pornography in the previous year.” A
2019 study conducted among 1,694 tenth graders in the United States
revealed that “[males] exposed to violent pornography were over two times
as likely to experience physical and sexual [teen dating violence] TDV
victimization [compared to] their male counterparts[,]” and “over 3 times as
likely to perpetrate sexual TDV.” While “[females] exposed to violent
pornography were over 1.5 times as likely to perpetrate physical and
threatening TDV” compared to their non-exposed counterparts.

This acceptance of sexual violence manifests itself through the increase
in child-on-child sexual assault. Heidi Olson, a Sexual Assault Nurse
Examiner working at a hospital that sees one of the highest volumes of
sexual assault victims in the United States, reported that “in 2016, 2017,
and . . . 2018, our biggest age range of people committing sexual assaults
are children ages 11-15 years old.” She further states that “[p]ornography
is often a driving factor, and sometimes the only factor that influenced a
child to act out in a sexually harmful way.” Further, another study found
that young sexual abusers themselves felt that help with management of
their pornography use could have helped them to not develop sexually
harmful behaviors. “The access that young people are having to
pornography, as well as our collective ‘turning a blind eye,’ is akin to a
kind of cultural grooming of children.”

The research overwhelmingly supports the assertion that pornography
normalizes sexual violence. As adolescents witness pornified sexual
behavior, their conduct begins to reflect an acceptance of these sexually
violent themes and many of them desire to replicate these acts. Exposure to
pornography creates “increased aggressive sexual behaviors by males (e.g.,
forcing a sexual act or sexually harassing) and passive sexual behaviors

71. Id.
74. Id.
76. Id. (quoting Gemma McKibbin, PhD Candidate at University of Melbourne, lead author of the study).
(i.e., unwanted sexual acts) by females (e.g., being sexually harassed or forced to engage in a sexual act).

Another significant secondary effect pornography has on children is that it encourages them to create, send, and share CSAM. Sexting is the sending of sexually explicit images and recordings of oneself to another, usually via messaging platforms. Surveys show that among 13- to 19-year-olds, 19% to 38% have sent sexual images and 31% to 49% have received a sexual image. There is a correlation between exposure to pornography and sexting. Sexting appears to be a normalized part of the adolescent community. Such “is a derivative of childhood exposure to pornography, as more children desire to ‘try-out’ or emulate what they see in the videos or images.” Under federal law, CSAM or child pornography is defined as follows:

[А]ny visual depiction, including any photograph, film, video, picture, or computer or computer-generated image or picture, whether made or produced by electronic, mechanical, or other means, of sexually explicit conduct, where—
(A) the production of such visual depiction involves the use of a minor engaging in sexually explicit conduct;
(B) such visual depiction is a digital image, computer image, or computer-generated image that is, or is indistinguishable from, that of a minor engaging in sexually explicit conduct; or

77. Bloom et al., supra note 52, at 85.
78. Davia B. Steinberg et al., Onset Trajectories of Sexting and Other Sexual Behaviors Across High School: A Longitudinal Growth Mixture Modeling Approach, 48 ARCHIVES SEXUAL BEHAV. 2321, 2322 (2019) [hereinafter Steinberg, Onset Trajectories of Sexting].
79. See SONIA LIVINGSTONE ET AL., UKCCIS EVIDENCE GROUP, CHILDREN’S ONLINE ACTIVITIES, RISKS AND SAFETY: A LITERATURE REVIEW BY THE UKCCIS EVIDENCE GROUP 35 (2017), https://www.gov.uk/government/publications/childrens-online-activities-risks-and-safety-a-literature-review-by-the-ukccis-evidence-group (using a sample of 724 minors ages 14–17, to show that 38% of minors in this age range have sent sexual images to their romantic partner during their relationship); see also Steinberg, Onset Trajectories of Sexting, supra note 78, at 2325 (finding that 37% of tenth grade students have sexted); Amanda Lenhart, Teens and Sexting, PEW RSCH. CTR., 1, 2 (Dec. 15, 2009), https://www.pewinternet.org/2009/12/15/teens-and-sexting/ (finding that “15% of cell-owning teens ages 12–17 say they have received a sexually suggestive nude or nearly nude image of someone they know via text messages on their cell phone.”).
81. Id.
Much of what adolescents produce by sexting satisfies this definition. Consequently, those who create it (the sender), possess it (the receiver), and any distributors (those who share the images or videos) may be subject to harsh criminal penalties.\textsuperscript{83} Such was the case in \textit{Clark v. Roccanova} in the Eastern District of Kentucky in 2011,\textsuperscript{84} and several other courts across the country. Though some criticize the use of CSAM statutes to prosecute youth sexting “as haphazard, out-dated, draconian, nonsensical, foolish, outrageous, [or] unjust,”\textsuperscript{85} it is nevertheless a legitimate secondary effect that is connected to children’s exposure to pornography.

Another secondary effect associated with sexting is revenge porn, which is “the nonconsensual release of intimate images . . . .”\textsuperscript{86} Generally, revenge pornography occurs when an individual who has received a sext posts it to the internet as revenge after a relationship has terminated.\textsuperscript{87} This practice is criminalized in some states,\textsuperscript{88} and is another secondary effect of pornography on children.

Other secondary effects of children’s exposure to pornography could include increased opportunities for grooming. Women and Men Against

\textsuperscript{82} 18 U.S.C. § 2256(8).

\textsuperscript{83} See 18 U.S.C. § 2251 (outlining the punishment for any person that participates, has knowledge, or has reason to know of the transfer of a child for the production of pornographic media in interstate or foreign commerce); id. § 2252 (discussing punishable activities that involve the sexual exploitation of children); id. § 2252A (explaining that producing media that depicts a child engaging in explicit sexual conduct is illegal); id. § 2256 (defining what it means to produce); id. § 2260 (punishing an individual outside of the country who attempts to coerce a child into performing sexual conduct).

\textsuperscript{84} Clark v. Roccanova, 772 F.Supp. 2d 844, 847 (E.D. Ky. 2011).


\textsuperscript{88} See, e.g., OR. REV. STAT. § 163.472(1)(a)-(d) (2019) (prohibiting the dissemination of an intimate image for the purpose of harassing, humiliating, or injuring another person).
Child Abuse (WMACA) suggests that exposing children to pornography increases opportunities for grooming children for sexual purposes by “creating sexual awareness at an age when they are not emotionally equipped to have such awareness . . .”

C. Primary Effects on Adults

Pornography also has primary and secondary effects on adults. One primary effect comes from the field of neuroscience, which explores the effect of pornography on the adult human brain. There are significant neurobiological differences between adults and children. Considering adolescents’ particular sensitivity to sexually explicit materials, the neurobiological consequences of viewing pornography may be even more significant for minors than for adults. Analogous harms, though well-reasoned, are currently speculative due to the ethical limitations in exposing children to pornography. The following research invites investigation into the neurological effect of pornography on the brains of children and teens.

The brain’s reward center (limbic system) uses three different pleasure systems. One of these systems excites, motivates, creates desire, and is often measured as wanting or craving. This system is primarily fueled by dopamine. The other system produces feelings of satisfaction and is often measured as liking. This system is fueled by endorphins. Another associated system helps the brain learn from the reward-behavior cycle.

Internet pornography is highly addictive. Neuroscientists classify Internet Pornography Addiction (IPA) as a non-substance-related addictive

91. Id. at 11 (discussing the effects of exposure to sexually explicit material in adolescents compared to adults).
93. Id. at 648.
94. Id. at 656.
95. Id. at 646.
96. Id. at 648.
97. Id. at 646-47.
disorder. Functional Magnetic Resonance Imaging (fMRI) maps measure brain activity. Studies using this technology find that pornography stimulates the same brain activity as seen in drug addicts and alcoholics. “[E]xcessive pornography consumption can be connected to already known neurobiological mechanisms underlying the development of substance-related addictions.”

The continued release of dopamine into the reward system when an individual compulsively and chronically watches Internet pornography stimulates neuroplastic changes that reinforce the experience. These neuroplastic changes build brain maps for sexual excitement. Previously established brain maps for “natural” sexuality cannot compare to the newly developed and continuously reinforced maps generated by continued compulsive watching of Internet pornography, and thus the addicted individual progresses to more explicit and graphic Internet pornography in order to maintain the higher level of excitement.

In addition, the presence of DeltaFosB in the reward center symbolizes the onset of addiction. “[Delta]FosB “may function as a sustained ‘molecular switch’ that helps initiate and then maintain crucial aspects of the addicted state.” Similar to drugs of abuse, pornography elevates DeltaFosB levels in the reward system.


100. See Love et al., supra note 98, at 408 (showing that subjects who frequently view pornography have trouble becoming aroused with real partners); Simone Kühn et al., Brain Structure and Functional Connectivity Associated with Pornography Consumption: The Brain on Porn, 71 JAMA PSYCHIATRY 827, 828–29 (2014), https://jamanetwork.com/journals/jamapsychiatry/fullarticle/1874574.


102. Love et al., supra note 98, at 407.


105. Love et al., supra note 98, at 406–07.
These findings provide strong evidence that pornography is addictive because it hijacks the brain’s natural systems and processes. Some even suggest that sexual addictions are more difficult to overcome than drug addictions.\textsuperscript{106} If pornography is addictive to adults, imagine what it may be doing to the brains of children and adolescents who have a heightened sensitivity to sexually explicit material.\textsuperscript{107} There is a growing body of research showing that adolescents are increasingly struggling with “compulsive behaviors related to Internet pornography and cybersex.”\textsuperscript{108} A review of the existing literature presents the following working-model summary.

[Adolescent] exposure to sexually explicit material . . . would lead to a more pronounced curtailment of the prefrontal cortex and enhanced activation of the basal ganglia in the adolescent. This condition, therefore, would compromise executive function, which includes inhibition and self-control, and enhances impulsivity. Because the adolescent’s brain is still developing, it is more conducive to neuroplasticity. The prefrontal cortex going “off-line,” so to speak, drives the subtle rewiring that favors subcortical development. If the neuroplasticity imbalance continues over time, this may result in a relatively weakened cortical circuit in favor of a more dominant subcortical circuit, which could predispose the adolescent to continued self-gratification and impulsivity.\textsuperscript{109}

The research suggests that pornography use by minors causes severe neurobiological harms that are similar to those observed in adults.

Additional studies link pornography consumption by adults to other primary effects such as erectile dysfunction\textsuperscript{110} and less satisfaction in partnered sex.\textsuperscript{111} These findings may also be analogized as potential primary effects on children and adolescents.

\begin{footnotes}
\item[106] Donald L. Hilton Jr., He Restoreth My Soul, 64–65 (rev. ed. 2010).
\item[107] See Brown et al., supra note 90, at 12 (suggesting based on current literature, without a definitive conclusion, that the adolescent brain may be more sensitive to sexually explicit material).
\item[108] Owens et al., supra note 48, at 100.
\item[109] Brown et al., supra note 90.
\item[110] Love et al., supra note 98, at 408.
\end{footnotes}
D. Secondary Effect on Adults

A major secondary effect of pornography use among adults is sexual aggression. A meta-analysis of 22 studies from seven different countries revealed that “on the average, individuals who consume pornography more frequently are more likely to hold attitudes conducive to sexual aggression and engage in actual acts of sexual aggression than individuals who do not consume pornography or who consume pornography less frequently.”¹¹²

Pornography use is further linked to additional secondary effects in adults such as crime,¹¹³ prostitution,¹¹⁴ marital dissatisfaction,¹¹⁵ extramarital sex,¹¹⁶ and higher likelihood of divorce.¹¹⁷ Pornography also fuels the human trafficking industry by “contributing to the demand for more traditional forms of sex trafficking and creating another route to profit for traffickers who enslave victims for the production of pornographic media.”¹¹⁸


¹¹³. See Renton v. Playtime Theatres, 475 U.S. 41, 48 (1986) (finding that “[t]he ordinance by its terms is designed to prevent crime, protect the city’s retail trade, maintain property values, and generally ‘protect[ ] and preserv[e] the quality of [the city’s] neighborhoods, commercial districts, and the quality of urban life;’ not to suppress the expression of unpopular views.”); see generally Young v. American Mini Theatres, 427 U.S. 50, 71 (1976) (holding that a “city’s interest in attempting to preserve the quality of urban life is one that must be accorded high respect.”); Northend Cinema v. Seattle, 90 Wn.2d 709, 719 (1978) (holding “[t]he record is replete with testimony regarding the [secondary] effects of adult movie theater locations on residential neighborhoods. The evidence is more than adequate to support the finding below that the goal of the ordinance is to preserve the character and quality of residential life in the City.”)

¹¹⁴. See generally supra note 45; Paul J. Wright, U.S. Males and Pornography, 1973–2010: Consumption, Predictors, Correlates, 50 J. SEX RES., 60, 60 (2013) [hereinafter Wright, U.S. Males and Pornography], https://www.ncbi.nlm.nih.gov/pubmed/22126160 (outlining that “pornography consumption was associated with having more positive attitudes toward teenage sex, adult premarital sex, and extramarital sex.”).

¹¹⁵. See Cameron C. Brown et al., A Common-Fate Analysis of Pornography Acceptance, Use, and Sexual Satisfaction Among Heterosexual Married Couples, 46 ARCHIVES SEXUAL BEHAV., 575, 576, 578 (2017) (discussing how pornography use may be negatively associated with marital satisfaction).

¹¹⁶. See Wright, U.S. Males and Pornography, supra note 114.

¹¹⁷. See generally Samuel Perry et al., Till Porn Do Us Part? A Longitudinal Examination of Porn Use and Divorce, 55 J. SEX RES. 284, 292 (2017) (discussing the intersection of pornography and divorce).

The majority of the literature focuses on heterosexual relationships and provides little insight into the implications of pornography use among sexual minorities. Therefore, the research suffers from a heteronormative bias. The research also suffers from a negativity bias because it primarily focuses on the risks and dangers of pornography use rather than on opportunities and potential positive implications.

Sexual-minority adolescents generally have less access to appropriate sex-education materials than heterosexual adolescents. Public schools frequently omit sexual health topics that focus on LGBT sex, filtering systems over-block sex-education materials for sexual minorities, and parents may be less comfortable discussing these types of sexual relationships. Consequently, sexual-minority adolescents are driven to online pornography for information about sexual health and relationships more frequently than heterosexual adolescents.

The internet provides opportunities for adolescents to “explore and clarify their desires in ways not otherwise available in their physical community.” Sexual minorities use pornography “primarily for sexual development, . . . learning . . . the mechanics of same-gender sex, and to negotiate one’s sexual identity.” For example, one sexual minority—men who have sex with men (MSM), report that pornography “plays an educational role, . . . increases MSM’s comfort with their sexuality,

Trafficicking.pdf (analyzing the exploitation of women and children involving, among other factors, pornography and the “expansion of the international sex trade”).

119. Peter et al., supra note 39, at 527.
120. Id.
121. Id.
123. See Andrew K. Przybylski et al., Internet Filtering and Adolescent Exposure to Online Sexual Material, 21 CYBERPSYCHOLOGY, BEHAV. & SOC. NETWORKING 405, 406 (2018).
125. See Andrew Gilden, Punishing Sexual Fantasy, 58 WM. & MARY L. REV. 419, 474 (2016) (explaining that internet and pornographic websites serve as a catalyst for LGBT youth to identify their desires and support their coming out process).
126. Arrington-Sanders et al., supra note 122, at 597.
and... sets expectations about sexual behaviors...”

127 Though working through nonnormative sexual desires can be extremely isolating, the Internet can provide opportunities for adolescents to develop communities within which to find support.128 These benefits are particularly evident for sexual minorities but may extend to the heterosexual community as well.

Regardless of sexual orientation, these studies open up a broader discussion regarding whether contemporary pornography should be accepted as appropriate for the sex education of minors. Indeed, many adolescents are already using pornography to learn more about sex.129 The studies that report potential values of pornography also report that pornography normalizes unsafe sex practices for sexual minorities.130 The same is true for heterosexual adolescents.131 Both heterosexual and sexual-minority youth who use pornography are more likely to engage in risky, unsafe sexual practices, such as unprotected anal or vaginal sex.132 This is just one of many unsafe sex practices that are becoming normalized through adolescent pornography use.

In addition, surveys find that 53% of boys and 39% of girls believed that the pornography they saw was realistic and an accurate depiction of sex and sexuality.133 Heterosexual and sexual minority adolescents are receiving information about sex from pornography. Many of these youths, consciously or not, accept that information as a valid source of sex


128. Gilden, supra note 125 (emphasizing that chat rooms, blogs, and discussion forums create a platform for youth to find support).


131. Paul J. Wright et al., Consumption of Pornography, Perceived Peer Norms, and Condomless Sex, 31 J. HEALTH COMM’C’N 954, 954-57 (2016) (finding that “higher levels of pornography consumption were associated with an increased probability of condomless sex” in the study of 310 college students a majority of whom (96.45%) were heterosexual); see Paul J. Wright et al., Condom Use, Pornography Consumption, and Perceptions of Pornography as Sexual Information in a Sample of Adult U.S Males, 24 J. HEALTH COMM’C’N 693, 694-95, 697 (2019) [hereinafter Wright et al., Condom Use] (finding that, in a sample of male adults and adolescences, “pornography is a predictor of condomless sex only when men perceive pornography as a source of sexual information”).

132. See generally Wright et al., Condom Use, supra note 131, at 693-97 (finding that males, regardless of age or sexual preference, engage in riskier sexual behaviors if they view pornography for sexual information); see also Nelson, Use of Sexually Explicit Media by Sexual Minority Males, supra note 130, at 2351 (discussing exposure to sexually explicit online media by adolescent sexual minority males and the subsequent risks in real-life sexual behavior).

133. MARTELLOZZO ET AL., supra note 62, at 36–37.
education and replicate the behaviors that have been modeled for them.\footnote{134}{Bloom et al., supra note 52, at 85.}

Because pornography includes unsafe sex practices, the result is that adolescents then participate in unsafe sexual conduct that causes physical harm to themselves and others. Therefore, pornography should not be used as sex education for adolescents. Even those that support and participate in the adult film industry agree that the content produced should not serve as a means of educating American youth.\footnote{135}{Id.; see also Id. This is Life with Lisa Ling, Porn Ed, Season 6 Episode 1 CNN, https://www.youtube.com/watch?v=UqoCg98rs18&list=ELCvtdWGSz8PLk3_15ooMR8w (last visited Dec. 18, 2019). Journalist Lisa Ling speaks with Cindy Gallop, the founder of the adult website “Make Love Not Porn”, who acknowledges that pornography should not be responsible for teaching sex education to youth. Id. Ms. Ling also interviews adult entertainer Tasha Reign who explains that pornography is supposed to be entertainment and should not be used to teach about sex. Id. Ms. Reign through her classroom lectures, and Ms. Gallop through her website which tries to dispel myths around sex and advocates for consensual relationships, something they both agree is not often addressed in the commercial adult entertainment industry. Id.}

Instead, parents, teachers, legislators, and advocates should come together to create safe and appropriate sex-education materials with a particular emphasis on providing access to sexual-minority youth.

II. A COMPARATIVE ANALYSIS OF LEGISLATIVE EFFORTS

Several countries have implemented, or are designing, legal frameworks that aim to prevent youth exposure to internet pornography. The following provides a comparison and analysis of some of these frameworks.

A. The United Kingdom

The United Kingdom is at the heart of some of the most recent developments in this type of regulation. In 2013, the United Kingdom’s government negotiated with mobile phone companies and internet-service providers to implement a new filtering system.\footnote{136}{THE RT HON. DAVID CAMERON, The Internet and Pornography: Prime Minister Calls for Action, GOVERN. (Jul. 22, 2013), https://www.gov.uk/government/speeches/the-internet-and-pornography-prime-minister-calls-for-action.}

These filters are voluntary codes of practice rather than a product of legislative acts or resolutions.\footnote{137}{See S. AFR. L. Reform Comm’N, supra note 89, at 88–89 (explaining the limits of the voluntary agreement).}

All mobile-phone operators similarly agreed to automatically apply adult-content filters to mobile phones.\footnote{138}{CAMERON, supra note 136.} A user can deactivate the mobile phone

134. Bloom et al., supra note 52, at 85.
135. Id.; see also Id. This is Life with Lisa Ling, Porn Ed, Season 6 Episode 1 CNN, https://www.youtube.com/watch?v=UqoCg98rs18&list=ELCvtdWGSz8PLk3_15ooMR8w (last visited Dec. 18, 2019). Journalist Lisa Ling speaks with Cindy Gallop, the founder of the adult website “Make Love Not Porn”, who acknowledges that pornography should not be responsible for teaching sex education to youth. Id. Ms. Ling also interviews adult entertainer Tasha Reign who explains that pornography is supposed to be entertainment and should not be used to teach about sex. Id. Ms. Reign through her classroom lectures, and Ms. Gallop through her website which tries to dispel myths around sex and advocates for consensual relationships, something they both agree is not often addressed in the commercial adult entertainment industry. Id.
137. See S. AFR. L. Reform Comm’N, supra note 89, at 88–89 (explaining the limits of the voluntary agreement).
138. CAMERON, supra note 136.
filter by proving their age. In addition, the companies that provide 90% of public WiFi agreed to apply family-friendly filters across public WiFi networks wherever children are likely to be present. These family-friendly public WiFi networks are marked by the following logo.

Further, the internet-service providers supplying nine out of ten homes in the United Kingdom agreed to apply default family-friendly filtering setting to all new accounts. These filters can only be changed by an adult account holder. These same companies agreed to present all existing customers “with an unavoidable decision about whether” to apply network-level filtering or not. However, the companies took very different approaches in presenting that choice to existing customers. Most notably, Sky Broadband, owned by Comcast, used a “default-on” system such “that if a customer did not make a choice the filters turned on automatically.” The other companies did not use this method. Subsequently, Sky Broadband saw the greatest take-up rates of 30–40% among its customer base while the other companies’ take-up rates ranged between 6% and 14%.

139. Id.
140. Id.
142. CAMERON, supra note 136.
143. Id.
144. Id.
147. Id.
The Digital Economy Act (DEA) was passed by both houses of Parliament and received Royal Assent in 2017. Part 3 of the DEA pertains to online pornography. Part 3 § 14(1) states:

A person contravenes this subsection if the person makes pornographic material available on the internet to persons in the United Kingdom on a commercial basis other than in a way that secures that, at any given time, the material is not normally accessible by persons under the age of 18.

The scope of the statute thus extends to providers who (1) make pornography available to people in the United Kingdom over the internet, and (2) do so on a commercial basis. If these two elements are satisfied, the provider must ensure that minors do not normally have access to the material.

DEA Part 3 § 15 gives a definition of the term pornographic material that relies on the rating system of the British Board of Film Classification (BBFC). In comparison to the United States rating system, the Motion Picture Association (MPA), the BBFC’s system provides a greater range of ratings. The MPA uses “PG-13” or “R” ratings while equivalent films in the United Kingdom may receive “12/12A,” “15,” or “18,” ratings. In effect, the BBFC’s 18 rating is reserved for a subset of R-rated movies that are only suitable for adults. As an example, Avengers: End Game is rated PG-13 in the United States and 12/12A in the United Kingdom; A Star is Born is rated R in the United States, but 15 in the United Kingdom; and

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148. Digital Economy Act 2017, c. 30 (Eng.) (recording the date the legislation was enacted in the intro).
150. Id. § 15.
152. Compare The MPA Rating System, supra note 151 (requiring that films with a PG-13 rating only be viewed by persons 13 years or older and those with an R rating only be viewed by persons 17 years or older without supervision of a parent or guardian), with BBFC, Classification, supra note 151, at 1, 22, 24, 26 (explaining that films with ratings of 12/12A, 15, or 18 may be viewed respectively by persons 12 years or older, 15 years or older, and 18 years or older).
Fifty Shades of Grey is rated R in the United States and 18 in the United Kingdom. Sex works can receive either an 18 or R18 classification. Films with an R18 rating can only be shown to adults in specially licensed cinemas or licensed adult shops.

Under DEA Part 3 § 15, R18 content is always considered pornography. However, content rated 18 is considered pornography only “if it is reasonable to assume from its nature (i) that it was produced solely or principally for the purposes of sexual arousal, and (ii) that any classification certificate issued in respect of a video work including it would be an 18 certificate . . . .” DEA Part 3 required the appointment of a regulator to oversee implementation and maintenance of the laws. In part because of the legislation’s reliance on BBFC classifications, the BBFC was designated as the age-verification regulator under the DEA in 2018.

Further, pornography is made available on a “commercial basis” if: (1) “access to that pornographic material is available only upon payment[,]” or (2) “the pornographic material is made available free of charge and the person who makes it available receives (or reasonably expects to receive) a payment, reward or other benefit in connection with making it available on the internet.” The regulations further provide an exception to the second option if “it is reasonable for the age-verification regulator to assume that pornographic material makes up less than one-third of the content of the material made available . . . .” However, the exception does not apply where the website, application, platform, or other means of accessing the internet is marketed as providing pornographic material to people in the United Kingdom.

?ref_=tt_stry_pg#certification (last visited Nov. 28, 2020).
156. BBFC, Classification, supra note 151, at 1, 26, 28.
157. Id. at 1, 28.
159. Id. § 15(1)(e).
160. Id. Part 16 §§ 1, 2.
163. Id. ¶ 4.
164. Id. ¶ 5.
Under this regime, age-verification controls constitute the primary way of ensuring commercial pornography is not normally accessible by persons under the age of 18. These controls require a user to prove he or she is an adult. Many privacy concerns are implicated by a system that requires the giving of personal details and identifying information directly to a commercial pornography provider.

In response, many companies developed innovative systems to verify a user’s age, but not their identity. A company called Yoti developed an app that allows users to create a verified digital identity. Users can upload their official identity documents like driver’s licenses, passports, birth certificates, etc. Once a document is verified, the data is encrypted and securely stored. Then, the verified element of one’s identity can be segmented and individually shared with appropriate services. Yoti is used for purchasing adult products in retail stores, entering adult entertainment establishments, and even for building trust among users on dating apps and other platforms that encourage users to meet in person. In the context of adult websites, a user seeking access could share whether or not he or she is over the age of 18, as a single element of their verified digital identity, while maintaining complete anonymity as to the remainder of their identity.

More traditional forms of age verification (AV) involve giving personal information to an AV system that checks the information against other databases to ensure the person is an adult. If the user is deemed 18-

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165. See Matt Burgess, This is How Age Verification Will Work Under the UK’s Porn Law, WIRED (Jun. 20, 2020), https://www.wired.co.uk/article/uk-porn-age-verification (explaining that when a user tries to access pornographic websites, they will have to verify that they are old enough to view the content).

166. See id. (describing how the BBFC is allowing providers to use a variety of age-verification tools such as AgeChecked, AgePass, 1Account, Yoti, and ProveMyAge).

167. Id.

168. Id.

169. See Our Approach to Security and Privacy, YOTI (Dec. 13, 2019), https://www.yoti.com/blog/our-approach-to-security-and-privacy/ (emphasizing that Yoti stores data separately and turns it into unreadable data only accessible by an individual’s phone, subject to the access code created by the user).

170. See id. (explaining how Yoti keeps personal data secure and accessible at the discretion of the user).


172. See, e.g., Our Approach to Security and Privacy, supra note 169 (illustrating specifically how Yoti’s security team cross-references various databases).
years-old or older, an anonymous user code is generated and provides access to the site.\textsuperscript{173}

There are also several options for those who do not have, or do not wish to share, identity documents. A low-tech, innovative option is to purchase a hard copy Age Verification Card\textsuperscript{174} (nicknamed a “porn pass”) from a local store where the cashier will check the user’s ID.\textsuperscript{175} Another method of verification could come from online payment processors.\textsuperscript{176} Notably, Yoti also developed a system called AgeScan which estimates a person’s age using a biometric scan of a user’s face.\textsuperscript{177} The age-estimation technology is currently accurate within approximately two years for younger ages and approximately three years for older ages and is rapidly improving.\textsuperscript{178} To maintain privacy and anonymity, the scans are not retained.\textsuperscript{179} One can also raise the age threshold for this AV method from 18 to 25, for example, to ensure that any inaccuracies will still prevent access to minors.

To ensure AV systems maintain high standards of privacy and data security, the BBFC created a “voluntary, non-statutory certification scheme” in partnership with a cybersecurity organization, NCC Group.\textsuperscript{180} To receive certification, AV providers must meet high standards for data privacy.\textsuperscript{181} For example, certified AV systems were not allowed to share additional user data with pornographic websites.\textsuperscript{182} AV providers must also

\begin{itemize}
\item \textsuperscript{173} See generally, \textit{id.} (explaining the steps Yoti takes to ensure an anonymous key is generated and protected).
\item \textsuperscript{176} \textit{What is AgePass?}, AVSECURE [hereinafter AVSECURE, \textit{What is AgePass}], https://agepass.com (last visited Nov. 28, 2020) (outlining how AgePass offers multiple age verification methods).
\item \textsuperscript{178} See \textit{id.} at 22, 24 (inferring overall accuracy from age-group breakdown in Mean Absolute Error (MAE) chart).
\item \textsuperscript{179} \textit{id.} at 4.
\item \textsuperscript{180} Dep’t. For Digit., Culture, Media, & Sport and Margot James, \textit{Age-Verification for Online Pornography to Begin in July}, GOV.UK (Apr. 17, 2019), [hereinafter BBFC, \textit{Age-Verification Program for Online Pornography}], https://www.gov.uk/government/news/age-verification-for-online-pornography-to-begin-in-july.
\item \textsuperscript{181} \textit{id.}
\item \textsuperscript{182} \textit{id.}
\end{itemize}
submit their technologies to a penetration test “to find security vulnerabilities that an attacker could exploit.”\footnote{Margaret Rouse, Pen Test (Penetration Testing), TECHTARGET https://searchsecurity.techtarget.com/definition/penetration-testing (last visited Nov. 28, 2020).} Upon meeting these robust standards, and others,\footnote{Age-verification Certificate Standard, BRIT. BD. OF FILM CLASSIFICATION 1, 5 (Apr. 2019), [hereinafter BBFC, Age-Verification Standard] https://www.gov.uk/government/news/age-verification-for-online-pornography-to-begin-in-july.} the BBFC provides the AV provider with an Age Verification Certificate (AVC) for that AV solution. This certification is signaled by the symbol below:\footnote{BBFC, Age-Verification Program for Online Pornography, supra note 180.}

Yoti’s AV system is the first to attain a Certificate of Compliance under the BBFC’s AVC.\footnote{About ProveMyAge, PROVE MY AGE, https://www.provemyage.com (last visited Nov. 28, 2020); Age Verification, YOTI.COM, https://www.yoti.com/business/age-verification/ (last visited Nov. 28, 2020) [hereinafter YOTI, Age Verification].} Several other systems are undergoing assessment. Other AV systems include AgeID\footnote{Zak Nye, MindGeek: The Not-So-Secret Tech Giant of Montréal, BULL & BEAR (Nov. 17, 2019), http://bullandbearmcgill.com/mindeek-the-not-so-secret-tech-giant-of-montreal/.} by MindGeek and AgePass\footnote{YOTI, Age Verification, supra note 186.} by AVSecure. It is worth noting that MindGeek also owns Pornhub and a large group of other pornographic websites.\footnote{See generally Digital Economy Act 2017, Part 3 § 19 (Eng.), https://www.legislation.gov.uk/dkpga/2017/30/part/3/enacted?view=plain (explaining the scope of enforcement for contravening section 14 or failing to provide information pursuant to section 18).} In addition, Yoti was prepared to offer its AV service for free to adult websites.\footnote{Id. § 16(6).} Doing so would increase the number of people using their platform and thus increase other revenues for offline AV services.

In addition, the legislation provides several enforcement mechanisms that the BBFC could employ to ensure that companies comply with the regulation.\footnote{Id. § 16(6).} There are also processes for providing websites notice and appealing BBFC decisions.\footnote{Id. § 16(6).} However, when websites refuse to comply, the regulator can (1) issue financial penalties up to £250,000 or 5% of...
“qualifying turnover,” whichever is greater,193 (2) require internet service providers (ISPs) to block a website or application,194 and (3) issue notices to payment service providers (PSPs) and ancillary service providers (ASPs),195 specifying that a site is not complying with the age-verification requirements. 196 Though option (3) does not require payment and ancillary service providers to withdraw services, such a notice is expected to have a “named and shamed” effect.197 In addition, while the legislation allowed for financial penalties, that enforcement power was not designated to the BBFC.198

Though experts agree that a regulatory scheme like DEA Part 3 is a step in the right direction, the same experts disagree about its effectiveness.199 One primary concern is that the regulation only applies to commercial pornography.200 Most notably, this excludes social-media platforms and some video-sharing platforms, like YouTube. Though data supports that children are using hardcore porn sites, studies also support that social media and video-sharing platforms are significant mediums through which children are first exposed to pornographic material.201

193. Id. § 20.
194. Id. § 23.
Therefore, a regulatory scheme like DEA Part 3 may be less effective in preventing first exposure and more effective in preventing repetitive use of hardcore materials.

Further, circumvention of the technology is a major concern. The United Kingdom does not control the entire world’s internet. Therefore, the regulation only applies to internet users whose IP address reports that they are accessing the internet in the United Kingdom. Virtual private networks (VPNs) are relatively easy to set up and often encouraged for privacy and security.\(^\text{202}\) However, a VPN allows any user to select an IP address from another country which makes it appear as though the internet is being accessed from that country.\(^\text{203}\) Consequently, VPNs could circumvent the regulation allowing access without age verification. Therefore, the regulation may be more effective for younger children and less effective for older, tech-savvy teens. However, BBFC research showed that few children are aware of circumvention methods.\(^\text{204}\)

Lastly, any regulation must weigh its benefits against its costs. The United Kingdom’s government estimated that the total net-present-value cost of implementing this regulation was £72,300,000.\(^\text{205}\) This figure takes into account the long-term financial impact of the legislation on government and on businesses.\(^\text{206}\)

In April of 2019, the United Kingdom’s government published an Online Harms White Paper (White Paper).\(^\text{207}\) The White Paper outlines an expansive new regulatory regime that attempts to deal with all harms of internet content and activity, including children’s access to pornography. It states that the current, fragmented regulatory environment is insufficient.\(^\text{208}\) Subsequently, in October of 2019, the United Kingdom decided not to
implement DEA Part 3. Instead, the objectives will be delivered through the proposed Online Harms Regime (OHR). Notably, a group of AV providers that are part of the Age Verification Provider Association (AVPA) recently brought suit seeking judicial review of the United Kingdom’s decision to not implement the laws that were passed by Parliament. If the suit turns out favorably, the United Kingdom’s government could be forced to implement DEA Part 3. On July 16, 2020, the AVPA won the “first round” of the legal action against the government, and a judge ruled that the AVPA has “an arguable case that the Culture Secretary exceeded her powers by deciding not to implement” DEA Part 3. In addition, the issue was again argued in the House of Lords on July 20, 2020.

However, the government’s priority is in developing the new OHR, which if successfully operationalized, will be the most comprehensive internet content-regulation system of any Western democracy. The OHR seeks to develop “rules and norms” for the internet by placing all platforms under a “statutory duty of care” to keep users safe. Companies would


211. See John Carr, Movement on Age Verification?, DESIDERATA, https://johncarr.blog/2020/01/19/movement-on-age-verification/ (last visited Nov. 28, 2020) (discussing the trade association’s push for judicial review of the Government’s decision not to implement Part 3 of the Digital Economy Act); Mike Wright, Tech Companies Launch Legal Action to Force Government to bring in Under 18s Porn Ban, THE TELEGRAPH (Jan. 16, 2020), https://www.telegraph.co.uk/news/2020/01/16/tech-companies-launch-legal-action-force-government-bring-18s/ (describing four age-verification companies’ motives for bringing a suit against the Culture Secretary for scraping the age-verification requirement for pornography websites, which was passed by Parliament).


215. DEF’T FOR CULTURE, WHITE PAPER, supra note 207, at 6–7.
have to produce annual transparency reports outlining the prevalence of harms on their platforms.\textsuperscript{216} After which, any platform with content or activity that is harmful to users must make reasonable efforts to mitigate the associated harms.\textsuperscript{217} In codes of practice, a regulator, responsible for implementation and enforcement, would set out how to satisfy the duty of care for each category of harm.\textsuperscript{218} Companies can fulfill their duties in ways not set out in the codes if they show that their approach will provide the same level, or a greater level, of protection.\textsuperscript{219} Notably, platforms are not liable for a piece of user-generated “illegal content until they have knowledge of its existence, [or if their technology has identified such content,] and have failed to remove it from their services in good time.”\textsuperscript{220} The White Paper also promotes responsible digital design seeking to make platforms safe for children from the platform’s inception.\textsuperscript{221}

The White Paper proposes that the OHR “apply to companies that allow users to share or discover user-generated content or interact with each other online” including, but not limited to, “social[-]media platforms, file[-]hosting sites, public[-]discussion forums, messaging services and search engines.”\textsuperscript{222} The OHR would also only apply to companies that provide services to users in the United Kingdom.\textsuperscript{223} Interestingly, if the regime applied exclusively to platforms where users interact, it may be the case that a commercial pornography producer that only provides content and does not provide user-to-user interaction, may be beyond the scope of the regime.

The White Paper identifies 24 online harms that already exist, one of which is “children accessing pornography.”\textsuperscript{224} It also leaves room for new and additional harms to fall within the scope of the OHR.\textsuperscript{225} The OHR regulator could have the power to (1) “disrupt the business activities of a non-compliant company”; (2) “impose liability on individual members of senior management”; and (3) “block non-compliant services.”\textsuperscript{226} In terms of children accessing pornography, the OHR codes of practice are likely to include guidance on age verification, content warnings, filtering and

\begin{thebibliography}{9}
\bibitem{216} Id. at 7.
\bibitem{217} Id.
\bibitem{218} Id.
\bibitem{219} Id.
\bibitem{220} Id. at 9.
\bibitem{221} Id. at 11.
\bibitem{222} Id. at 8.
\bibitem{223} Id. at 3.
\bibitem{224} Id. at 31.
\bibitem{225} Id. at 7.
\bibitem{226} Id. at 9.
\end{thebibliography}
blocking inappropriate content, child-specific account settings, terms of service, systems to report inappropriate content, systems to appeal the removal of content, and steps companies should take to ensure harms are rapidly dealt with. The codes of practice on age verification may incorporate elements of DEA Part 3.

Though many respect the United Kingdom’s ambitions and recognize the need for a systematic solution, the White Paper is heavily criticized due to its overbreadth.227 Industry players and other experts support measures that suppress illegal content, such as CSAM and terrorist content, but efforts to tackle harmful but legal content are much more controversial.228 While larger companies like Google and Facebook could afford the cost of these regulations, smaller, developing platforms may be unable to enter the market due to the insurmountable costs of compliance. Some are also concerned that implementation of the OHR will “depopulate the internet of most of its content . . .”229

Finally, the United Kingdom recently published the Age-Appropriate Design Code (AADC) which seeks to “translate General Data Protection Regulation (GDPR) requirements into design standards for online services.”230 Though this regulation is based on data protection rather than content regulation, it could play a significant role in protecting children online. The AADC applies to any Information Society Service (ISS) likely to be accessed by children.231 This includes most “apps, programs, websites, games or community environments, and connected toys or devices . . .”232 It is not limited to services directed at children. Compliance with the AADC works as presumptive evidence of compliance with GDPR.233 Noncompliance with the AADC can prompt regulatory action by the Information Commissioner’s Office (ICO) and substantial fines.


228. Id. at 1.


232. Id. at 5.

233. Id. at 5–6.
The AADC sets forth 16 standards that an ISS must follow in making their services age-appropriate. One such standard is “age-appropriate application.” If an ISS is likely to be accessed by children it must apply the AADC to all users unless the ISS can identify which users are children and which are adults. If the ISS can differentiate between adult and child users, it need only apply the AADC to users that are children. The economic value of data collection may incentivize ISSs to use age verification to identify whether their users are adults or children.

In addition, under “policies and community standards,” the AADC encourages ISSs to follow their own policies and community standards. If the terms of service state that children of a certain age cannot use an ISS, then the ISS should have a system to ensure children of the relevant age do not access the service.

The AADC further suggests that default settings be calibrated to child safety. Depending upon an ISS’s assessment of risk, AV may be appropriate prior to a user manipulating these settings. In addition, if an ISS uses algorithms for suggesting content to children, and such content is inappropriate, the ISS may be liable even if the content suggested is user-generated content (UGC).

B. Germany

Germany uses a system of “regulated self-regulation,” which is self-regulation tailored to a particular legal framework. The state generates “the legal framework and the corresponding structures” while certified self-regulatory organizations act independently and influence their members. The state can use the regulatory framework and controls to “prevent undesirable developments.” The system was first enacted in 2003 with

234. Id. at 3.
235. Id.
236. Id. at 22.
237. Id. at 39.
238. Id. at 42.
240. See Freiwillige Selbstkontrolle Multimedia-Diensteanbieter [The German Association for Voluntary Self-Regulation Multimedia Service Providers], Compliance, FSM, [hereinafter FSM’s Compliance Web Page], https://www.fsm.de/en/compliance (last visited Nov. 28, 2020) (laying out six areas that the FSM can help member organizations comply with the German youth-media protection law (JMSv)).
241. Id.
the Interstate Treaty on the Protection of Minors in the Media (JMStV).242
Subsequently, the government established a regulatory body called The
Commission for the Protection of Minors in the Media (KJM).243

The KJM has the power to (1) issue injunctions or sanctions against
noncompliant providers, and (2) certify self-regulatory bodies.244 The
certification can be revoked if a self-regulatory body is not complying
with the legal framework set forth in the JMStV.245 In 2005, the KJM certified
The Voluntary Self-Regulation of Multimedia Service Providers (FSM) as a
self-regulatory body for telemedia services including the internet.246 The
FSM creates voluntary codes of conduct for various parts of the online
world.247 So long as the FSM is acting within the scope of its discretionary
powers, when telemedia providers comply with the FSM’s requirements,
the KJM is not allowed to impose sanctions on the provider.248 This is
known as “legal privilege” and acts as a buffer between the state authorities
and the FSM’s member companies. The result is a form of self-regulation that is regulated by the possibility of state intervention. The JMStV supplements German criminal law. Under StGB §§ 184 through 184(d), pornographic material may only be disseminated online “if technical or other measures . . . ensure that the pornographic content is not accessible to persons under 18 years of age.” This is typically done through age verification. Violation is a crime punishable by up to one year in prison or by a fine.

The JMStV further breaks down online content into three categories. The first category is illegal content. This includes pornography containing violence, bestiality, or sex with a minor. This content can be completely blocked and removed. The second category is content that is legal for adults but illegal for minors. This includes legal pornography. As the criminal statute above explains, this type of content can only be made available online if the provider ensures that it is not accessible to minors. Providers generally satisfy this requirement by using an age-verification system. These systems must meet certain standards as set forth by the KJM and several are formally approved. Notably, the German age-verification systems must (1) identify the individual and (2) verify the individual’s age at each individual usage. Conversely, in the


252. StGB, supra note 251, § 184(1).

253. JMStV, supra note 242, at Art. 4.

254. Id. § 1 sentences 5, 10.

255. Id. § 2.

256. Id. § 2 sentence 1.

257. StGB, supra note 251, § 184(d), para. 1, sentence 2.

258. Age verification systems ensure that only “age-tested” individuals access the content. Altersverifikationssysteme [Age Verification Systems], KOMMISSION FÜR JUGENDMEDIENSCHUTZ [KJM] [COMMISSION FOR YOUTH MEDIA PROTECTION], https://www.kjm-online.de/aufsicht/technischer-jugendmedienschutz/unzulaessige-angebote/altersverifikationssysteme/ (last visited Nov. 28, 2020).

259. Id.

United Kingdom, identity authentication is not a prerequisite to age verification and users can enable a particular device without requiring repetitive verification each time adult content is accessed.\textsuperscript{261}

The third category of content under the JMStV is content that impairs the development of minors.\textsuperscript{262} Providers of this type of content must “ensure that children or adolescents of the relevant age groups do not normally see or hear such content.”\textsuperscript{263} This responsibility can be satisfied in a variety of ways, but it is most commonly satisfied by integrating \textit{technical age labels} into the website as an age-de.xml data file.\textsuperscript{264} These labels are then read by a \textit{youth protection program}, which is essentially a government-backed filter that parents can activate.\textsuperscript{265} This filter also works for content that is not labeled but may be less accurate.\textsuperscript{266} Each content provider must evaluate their own content to determine whether a technical age label or age-verification system is needed.\textsuperscript{267} The FSM has developed an age-classification system to help providers determine appropriate age labels, and a step-by-step system to help providers imbed the age label into their website.\textsuperscript{268}

In addition, under the JMStV, “[c]ommercial providers of generally accessible telemedia that includes content that impairs development” must appoint a \textit{youth protection officer} to act as a point of contact for users of the company’s online content.\textsuperscript{269}

Generally, the burden of compliance is on the content provider. Enforcement was easier in a Web 1.0 environment where those providing


\textsuperscript{262} See JMStV, supra note 242, at Art. 5.

\textsuperscript{263} Id.


\textsuperscript{265} Id.

\textsuperscript{266} See How the Jusprog Parental Control Works, JUSPROG, https://www.jugendschutzprogramm.de/en/overview/ (last visited Nov. 28, 2020) (explaining that after a child reaches the age of 12, the software’s efficacy will diminish because the software will not impede access to unknown websites).

\textsuperscript{267} See Label Generator, JUSPROG, https://www.jugendschutzprogramm.de/en/site-operators/ (last visited Nov. 28, 2020) (highlighting that Europe requires all web providers to adhere to a youth-protection label but leaves providers discretion regarding which software to use).

\textsuperscript{268} Freiwillige Selbstkontrolle Multimedi-Diensteanbieter [The German Association for Voluntary Self-Regulation Multimedia Service Providers], All the Tools for Your Age Label, FSM, https://www.altersklassifizierung.de/en (last visited Nov. 28, 2020).

\textsuperscript{269} FSM’s Compliance Web Page, supra note 238.
access to a website were also usually the website’s content provider.\textsuperscript{270} However, in today’s Web 2.0 environment, many websites and applications provide access to a platform where the majority of the content comes from its users.\textsuperscript{271} Therefore, when a content provider on a Web 2.0 platform is anonymous or located in another country, sanctions and injunctions from the German government may be unenforceable or ineffective. In these situations, the burden of compliance shifts to the access provider where such is “technically possible and reasonable.”\textsuperscript{272} Therefore, providers of Web 2.0 services “bear a substantial risk of liability for user-generated content.”\textsuperscript{273} Web 2.0 platforms with the singular purpose of providing pornography, such as Pornhub, must use an age-verification system.\textsuperscript{274} However, the application of the laws to multipurpose platforms, such as Facebook, is much less clear.

In response, Germany passed the Network Enforcement Act (NetzDG) which came into effect in January of 2018.\textsuperscript{275} This law requires social-media platforms (SNPs)\textsuperscript{276} with more than two million users in Germany to have a complaint mechanism whereby individuals and other officials can report suspected illegal content.\textsuperscript{277} SNPs must remove “manifestly unlawful” content within 24 hours and must respond to all other complaints within seven days.\textsuperscript{278} SNPs must also submit reports about the handling of these complaints.\textsuperscript{279} The law was developed to primarily deal with cyber-bullying.\textsuperscript{280} Critics fear that the law will cause SNPs to over-block reported user content to avoid the penalties associated with noncompliance.\textsuperscript{281} However, reports from July 2018 showed that “[o]ver 70 percent of complaints did not result in removal of the content in question because the companies found that the content did not violate their Community

\begin{itemize}
\item \textsuperscript{270} Thorsten Ricke, \textit{Regulated Self-Regulation: The German Approach to Youth Protection on the Internet}, 4 J. MEDIA L. 237, 248 (2012).
\item \textsuperscript{271} Id.
\item \textsuperscript{272} Id. at 243.
\item \textsuperscript{273} Id.
\item \textsuperscript{274} See id. at 37 (providing whom the interstate treaty has general jurisdiction over).
\item \textsuperscript{275} Netz durchsetzungsgesetz [NetzDG] [Network Enforcement Act], Sep. 1, 2017, BUNDESGESETZBLATT JAHRGANG TEIL 1 [BGBl. I] at 3352, art. 1, § 1—2, no.1 (Ger.) [hereinafter NetzDG] https://germanlawarchive.iuscomp.org/?p=1245.
\item \textsuperscript{276} The NetzDG refers to social-media platforms as social-networking platforms (SNPs).
\item \textsuperscript{277} Id.
\item \textsuperscript{278} Id. at 3353, § 3, no. 2.2.
\item \textsuperscript{279} Id. at 3352, § 2, no. 1.
\item \textsuperscript{280} Id. at 3352, § 1, no. 3.
Guidelines or the [NetzDG].” Notably, this mechanism only deals with illegal content on the platform, and not content that the JMStV may consider illegal for minors or harmful for development.

Finally, in late 2019, Federal Family Minister Franziska Giffey submitted a “juvenile media protection” bill. The bill requires platforms with more than one million users to take “technical precautionary measures” to ensure child safety on the internet. Among other things, the bill seeks to protect youth from inappropriate sexual content and reportedly focuses on default child-friendly settings and age labeling for applications.

C. Australia

Australia uses a co-regulatory system which is similar to the German regulated self-regulation system. Compared to the German regime, the Australian regime gives more power to the government regulatory body and less power to the self-regulatory body. Under the Australian regime, Government and industry cooperatively develop the regulatory framework together. The Communications Alliance (CA), the Australian self-regulatory body for the internet industry, develops voluntary industry codes which may be registered with the government regulatory bodies. The CA also opens a channel of communication between its members and policy makers.

282. Id.
287. Id.
members. Members of the CA include Apple, Amazon Web Services, Google Australia, and many smaller industry players.

The primary content-regulation function of this regime comes from the “Online Content Scheme” (OCS) as set forth in Schedules 5 and 7 of the 1992 Broadcasting Services Act (BSA). The BSA was amended in 1999 to apply to online content. The OCS lays out a user-driven, complaint-based mechanism to protect children from illegal or harmful content online. Both government and industry have created analogous processes to hear these user complaints. Therefore, enforcement of the OCS relies on both government and industry. Internet users that are aware of inappropriate content can file a complaint with an industry party or with the government regulatory body. For the government, the “eSafety Commissioner” hears these complaints.

Upon assessment, if the content is deemed “prohibited or potentially prohibited” the eSafety Commissioner can take action. The determination of whether content is prohibited or potentially prohibited relies on Australia’s film-classification guidelines under the National Classification Act.


292. Id. at 1, 8.

293. Id. at 9.


296. ESAFETY COMM’r, Legislative Functions, supra note 295.
Scheme (NCS).\textsuperscript{297} Content classified as RC (refused classification)\textsuperscript{298} or X 18+ is prohibited.\textsuperscript{299} Content classified as R 18+ is prohibited unless it uses a restricted-access system.\textsuperscript{300} Content that is provided on a commercial basis, classified as MA 15+, and “does not consist of text and/or one or more still visual images” is prohibited unless it uses a restricted-access system.\textsuperscript{301} Content classified as MA 15+ and “provided by a mobile premium service” is prohibited unless it uses a restricted-access system.\textsuperscript{302} A restricted-access system may include age verification.\textsuperscript{303} Potentially prohibited content is that which has not received an official classification under the NCS “but if it were to be classified, there is a substantial likelihood that the content would be prohibited content.”\textsuperscript{304} These classifications are represented schematically below: 305


\textsuperscript{298} Mullaly, supra note 288, at 102. Refused classification means “material that goes beyond what is permitted in the classification categories.” Id.


\textsuperscript{300} Mullaly, supra note 288, at 102.


\textsuperscript{302} Id.

\textsuperscript{303} Id. (stating the eSafety Commissioner has authority to declare the status of an access control system as “restricted”).

\textsuperscript{304} Id.

\textsuperscript{305} ESAFETY COMM’R, What We Can Investigate, supra note 299.
If the non-compliant content is hosted in Australia, the eSafety Commissioner will order its removal. If the non-compliant content is hosted outside of Australia, the eSafety Commissioner will add the website to a “blacklist.” This blacklist can then be employed by optional internet-filtering systems that have received industry accreditation under the Family Friendly Filters program. Sanctions and criminal penalties are also possible for serious offenses.

<table>
<thead>
<tr>
<th>Classification category</th>
<th>Is content subject to a Restricted Access System?</th>
<th>Classified by the Classification Board</th>
<th>Assessed by the eSafety Commissioner</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC</td>
<td>N/A</td>
<td>Prohibited</td>
<td>Potentially prohibited</td>
</tr>
<tr>
<td>X 18+</td>
<td>N/A</td>
<td>Prohibited</td>
<td>Potentially prohibited</td>
</tr>
<tr>
<td>R 18+</td>
<td>Yes</td>
<td>Not prohibited</td>
<td>Not potentially prohibited</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>Prohibited</td>
<td>Potentially prohibited</td>
</tr>
<tr>
<td>MA 15+</td>
<td>No</td>
<td>Prohibited</td>
<td>Potentially prohibited</td>
</tr>
<tr>
<td>- Not comprised of text and/or still images</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Provided on payment of a fee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Provided for a profit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Provided by a mobile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA 15+ (all other)</td>
<td>N/A</td>
<td>Not prohibited</td>
<td>Not potentially prohibited</td>
</tr>
</tbody>
</table>


308. *Family Friendly Filters, COMM’NS ALL.* https://www.commsalliance.com.au/Activities/ispifff (last visited Nov. 28, 2020); see *Taming the Technology, Esafty Comm’R*; https://www.esafety.gov.au/parents/skills-advice/taming-technology (last visited Nov. 28, 2020) (noting the various parental-control options on a wide array of devices and platforms, including those accredited by the Family Friendly Filters scheme); *Esafty Comm’R, FAQ on Reporting, supra* note 307 (describing how Cyber Report is used to notify “providers of optional filtering or parental-control products” of “offensive and illegal content URLs”); *Family Friendly Filter, Enex Testlab,*
In addition, under industry codes, mobile carriers may only provide restricted content on a mobile device if the end user requests access and “the [m]obile [c]arrier has taken reasonable steps to ascertain” that the end user is an adult.\(^{310}\) The CA also requires “commercial content providers and certain mobile content services [to] assess some content” before it is uploaded by a user.\(^{311}\) This is often referred to as an “upload filter.”\(^{312}\) Illegal or harmful content may be taken down, blocked, or restricted by a restricted-access system. Additionally, the eSafety “Commissioner has a reserve power to make an industry standard if there are no industry codes or if an industry code is deficient.”\(^{313}\)

The regulatory regime is generally regarded as effective for content hosted in Australia.\(^{314}\) However, regulating overseas content is much more challenging. With the modern internet facilitating global communication, the OCS may no longer be fit for its purpose.\(^{315}\) A recent statutory review described the OCS as “fragmented,” “uncoordinated,” and “insufficient.”\(^{316}\) The same review advocates for a comprehensive overhaul and new legislation that: (1) is “technology and device neutral”; (2) “require[s] industry to build online safety into its design arrangements”; (3) moves toward more black letter law and less industry self-regulation; (4) is more proactive rather than reactive; (5) places a greater burden on industry to “patrol, detect, remove and deter the posting of and access to illegal and harmful content”; (6) helps industry to “enforce their own safety policies and [behavioral] standards”; and (7) requires industry parties to “report annually to the eSafety Commissioner on their activities . . . .”\(^{317}\)

Interestingly, the Enhancing Online Safety Act of 2015 establishes a two-tiered scheme for the removal of cyberbullying material targeted at a


\(^{310}\) DEP’T OF TRANSP. AND COMM’NS, Online Content Regulation, supra note 306.

\(^{311}\) INDUSTRY CODES OF PRACTICE FOR INTERNET AND MOBILE CONTENT, supra note 294, at 17.

\(^{312}\) BRIGGS, supra note 291.


\(^{315}\) BRIGGS, supra note 291, at 11.

\(^{316}\) See id. (discussing how take-down notices in Australia are becoming less effective due to the increase of illegal material hosted offshore).

\(^{317}\) Id. at 2 (cleaned up).

\(^{317}\) Id. at 2, 42.
child on social media. Tier 2 services, such as Facebook, Instagram, and YouTube, “may be subject to legally binding notices and civil penalties for not complying with requests from the Commissioner.” This proposal would enable the government to use facial-recognition technology in certain circumstances. The government is considering proposals that would require online pornography sites to use facial-recognition technology to confirm that users are adults. This system is calibrated to verify identity; however, it is more invasive than the age-estimating biometrics scan used by Yoti in the United Kingdom.

In February 2020, the Australian House of Representatives Standing Committee on Social Policy and Legal Affairs completed a lengthy inquiry into age-verification for online pornography and online wagering called “Protecting the age of innocence.” The comprehensive report strongly

320. ESafety Comm’r, Working with Social Media, supra note 319.
324. Id.
recommends “that age verification should be pursued as a measure to limit children and young people’s exposure to online pornography[.]” and urges “the eSafety Commissioner [to] lead the development of a roadmap for the implementation of age verification . . . “ With the United Kingdom’s swift and unexpected change of direction, Australia will likely take the lead in the development and implementation of age-verification protections. The report builds upon the foundation set forth in the United Kingdom’s prior Digital Economy Act. Consequently, other nations exploring similar protections should first look to this report as a basis for building future regimes.

D. New Zealand

New Zealand also uses age verification for some adult content online. “Restricted” material is that which has received a R18 classification by the Office of Film and Literature Classification (OFLC). Restricted material can be made available online but must use age-verification protections. Failure to secure the restricted work can result in “three months imprisonment or a fine not exceeding $10,000.” Unlike the Australian regime, this system has no provisions for “potentially” restricted works, or works that contain adult content but have not been classified by the OFLC. Therefore, unclassified pornographic works on the internet may not be subject to the regime. New Zealand also has a system for internet users to anonymously report illegal content, which is more egregious than restricted, but legal, content.

326. Id. at 70.
327. Id. at 71.
328. See id. at 16 (noting how the report was guided by the United Kingdom’s Digital Economy Act).
329. Objectionable and Restricted Material, DEPT’T OF INTERNAL AFFS., Objectionable and Restricted Material, http://www.dia.govt.nz/Censorship-Objectionable-and-Restricted-Material (last visited Nov. 28, 2020); see Films, Videos, and Publications Classification Act 1993, pt 1 s 2; pt 2 s 10(1)–(2)(a), (b); pt 3 s 23(2)(c)(i); pt 6 s 77(1)(a) (detailing the responsibilities of OFLC).
330. See DEPT’T OF INTERNAL AFFS., Objectionable and Restricted Material, supra note 329 (restricting R18 online material to people who can prove they are of age).
331. Id.; see Films, Videos, and Publications Classification Act 1993, pt 8 s 126(1)(a)–(2)(a) (defining the penalty for statutory violations).
Though not specifically designed to shield children from internet pornography, New Zealand’s Harmful Digital Communications Act (HDCA) of 2015, builds an interesting system for handling complaints about internet content. The HDCA combats online harms like “cyber bullying, [online] harassment and revenge porn” by outlining ten principles for digital communications. An individual receiving digital communications in violation of these principles may file a complaint with Netsafe, an approved, independent non-profit agency. If Netsafe cannot resolve the complaint, those harmed can apply to the District Court for fines and a range of court orders against the author or host of the communication. In addition, safe harbor is available for online content hosts that “have a complaints mechanism...open to users and Netsafe...” The HDCA encompasses “harm to both children and adults” and applies to “communications sent by email, mobile phones and posted on websites and social media sites.” Interestingly, one of the communications principles is that “[a] digital communication should not be indecent or obscene” and “harm” is defined as “serious emotional distress.”

E. South Africa

Prior to 2018, it was illegal to distribute adult content online in South Africa unless the distributor held “a [license] to conduct the business of an adult premises.” Distributors of adult content must take reasonable steps to prevent minors from accessing the content. Failure to do so is a

337. BRIGGS, supra note 291, at 18 (discussing NetSafe’s lack of take-down power and availability of District Courts to request online content be removed).
338. Id. at 17.
339. Id. at 18.
340. Harmful Digital Communications Act, supra note 335, at s 4, 6.
342. Film and Publications Amendment Act 3 of 2009 §§ 1(e), 24B(d), https://www.gov.za/sites/default/files/gcis_document/201409/a32009.pdf (amending the Film and
statutory violation. However, the law only governs pornographic content originating from sites hosted in South Africa. The Films and Publications Amendment of 2015 (the Amendment), signed into law in September of 2019, tries to modernize the regulatory arena for internet pornography and user-generated content.

Firstly, the Amendment purports to “[decriminalize] the online distribution of adult content on all platforms including digital platforms.” It allows a registered distributor to distribute X18 films online if, among other things: (1) the Film and Publication Board (FPB) has “granted an exemption to the distributor”; (2) “[t]he distributor can ensure . . . that children will not be able to access the film”; and (3) “[t]he distributor keeps [a record] of all instances where access was granted to a user [with the user’s] name, address and verifiable age . . . .” The record must be kept for one year from the date accessed. Though the Amendment allows more users to publish adult content, it does not decriminalize all online distribution of adult content because a violation of this section is punishable by a fine up to R750,000 or five years imprisonment, or both.

Secondly, the Amendment contains a clear prohibition on the distribution of film, both online and offline, unless it is properly classified and displays the required label. This requirement is often referred to as a “pre-publication classification” and applies to all film distributed on the internet. To “distribute” includes “to stream content through the internet,
social media or other electronic mediums . . .” 352 Film is defined as “any sequence of visual images . . . capable of being seen as a moving picture . . ..” 353 This includes any work intended for exhibition through any medium, including the internet. 354 These definitions are incredibly broad and likely extend pre-publication classification requirements to user-generated Facebook and YouTube videos. 355 Notably, the Amendment also creates a co-regulatory system allowing the FPB to delegate film classification to certified self-regulatory bodies. 356 It also provides a process whereby foreign film-classification bodies can become certified. 357 Though these provisions expand the speed and capacity at which works can be classified, the amount of content subject to classification may still be impractical. 358 In addition, the Amendment creates a mechanism whereby content that may potentially be prohibited can be reported to the FPB. 359

The South African Law Commission also recently published a lengthy discussion paper regarding pornography and children. 360 The paper recommends that the government develop legislation that criminalizes all acts of exposing children to pornography, including through advertisement. 361 The paper also recommends “that all devices (new and second hand) be issued or returned to a default setting that blocks inappropriate content, with an opt-in possibility depending on proof of age of the buyer/user as being 18 and older." 362 Under this regime, it would be a criminal offense to: (1) provide a child with any device capable of accessing the internet “without ensuring that the default setting blocks access to . . . pornography”; or (2) to “[u]ninstall[] the default setting blocking access to pornography without valid identification proving that the requester is a user over the age of 18.” 363

352. Amendment Act of 2019, supra note 350, § 1(d).
353. Id. § 1(h).
354. Id.
357. Id. ¶ 27.
358. Cf. Kevin Hoole, Mr. President, Please Don’t Sign the Film and Publications Bill, MICHALSONS (Mar. 21, 2019), https://www.michalsons.com/blog/mr-president-please-dont-sign/37894 (demonstrating the broad range of distributors captured under pre-publication classification).
360. See generally S. AFR. L. REFORM COMM’N, supra note 89, at 9–10 (explaining the scope and background of the paper).
361. Id. at 114.
362. Id. at xx.
F. Poland

Poland is currently drafting age-verification legislation for internet pornography. Though the only draft of the legislation is in Polish, several news articles are reporting about the developments in English. The Polish Prime Minister, Mateusz Morawiecki, became interested in age-verification protections after seeing a report by a non-governmental organization called “Your Cause Association” (YCA). The Ministry of Digital Affairs and the Family Council have established a working group and are currently revising the draft legislation prepared by YCA. The draft legislation is heavily influenced by prior efforts from the United Kingdom.

A computer-generated translation of the bill aids some preliminary, though uncertain, analysis. The bill explicitly requires age verification. It appears that the law would apply to all pornographic websites and

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365. Poland Looks Set to Begin Age Verification for Adult Websites, AGEGO, (Dec. 30, 2019), https://www.agego.com/poland-looks-set-to-begin-age-verification-for-adult-websites/ (discussing Poland’s prime ministers intent to “legislate an all-encompassing program to prevent children from accessing pornography online” by requiring websites “to check the age of Internet users.”); see also Adam Polanowski, Verification of Age to Access Pornographic Content, IN PRINCIPLE, (Dec. 16, 2020), http://www.codozasady.pl/en/verification-of-age-to-access-pornographic-content/ (explaining that Poland’s bill in its current form would allow telecommunications operators to block pornographic websites that do not implement an age verification mechanism).


368. POLANDIN, Poland’s Plans to Limit Pornography Access by Minors, supra note 366.

369. Since the draft bill was in Polish, Google translate was relied on exclusively to translate it to English. Additionally, a representative of YCA preformed a cursory review of the translation and affirmed its accuracy. See YCA’S WORKING DRAFT OF POLISH AGE VERIFICATION LEGISLATION, supra note 364.

370. Id. Art. 3 § 1.
platforms accessible from Poland. There does not seem to be any limitation to commercial pornography. There is a system for reporting noncompliant websites to a public registry. Some effort to give notice should be made before a service is reported and adopted to the registry. There appears to be an ISP-blocking power and a PSP-withdrawal power that may be mandatory. However, it is unclear whether there is an ASP-withdrawal power. It may also be the case that the act calls for more than one regulator to fulfill the monitoring, inspecting, and control or enforcement functions. Websites that are on the Registry and then implement age verification may apply to be taken off of the Registry.

In addition, the bill seems to go a step further than the DEA in regulating age-verification providers. It states that the age-verification tools are only sufficient if they are not easily circumvented and provide appropriate data and privacy protection for consumers. Further regulation will provide more detail as to how age-verification providers should comply. The government aimed to have a final bill adopted by the first half of 2020. However, due to delays caused by the Coronavirus pandemic, it looks more likely that a final bill will be adopted by the end of 2020.

G. France

In a 2019 UNESCO speech, French President Emmanuel Macron announced his intention to protect children from exposure to pornography. Subsequently, in January 2020, tech companies, internet-service providers, and the adult movies industry signed a voluntary charter, pledging to help ensure minors do not have access to pornographic

371. Id. Art. 2 § 6.
372. Id. Art. 8 § 1.
373. See id. Art. 7 § 3 (explaining that co-controllers should attempt to give notice to the provider of a noncompliant domain).
374. Id. Art. 8 § 7.
375. See id. Art. 5–6 (noting the various roles of the council under the bill, and various tasks of co-regulators).
376. Id. Art. 10 § 5.
377. Id. Art. 3 §§ 2–3.
378. See AGEGo, Poland Looks Set to Begin Age Verification for Adult Websites, supra note 364 (reporting Poland’s prime minister’s plans to adopt a law preventing children from accessing pornography).
content.\footnote{380} In addition, age-verification controls were unanimously approved by the French Parliament on June 9, 2020.\footnote{381}

Under existing law, Article 227-24 of the French penal code, it is a crime, “punish[able] by three years’ imprisonment and a fine of €75,000,” to “manufacture, transport, [or] distribut[e]” pornography if “the message may be seen or perceived by a minor.”\footnote{382} The new age-verification amendment adds that when a service is in violation of Article 227-24, a designated official will notify the service of the violation and give them fifteen days to take corrective measures to prevent access by minors.\footnote{383} If the service is noncompliant after the fifteen-day period, the designated official can petition the court for an order blocking all access to the service and/or blocking the service from search engines.\footnote{384} President Macron also threatened to mandate default-on internet filters if the industry does not create better solutions to protect children online.\footnote{385}

\subsection*{H. Canada}

As the home of MindGeek, Canada is a particularly important country to consider. In 2017, the Canadian House of Commons Standing Committee on Health compiled a report seeking to better understand the effects of minors’ ease of access to violent and degrading pornography online.\footnote{386} Though the report briefly considered age-verification measures, it did not recommend implementing new age-verification legislation to protect children from online pornography.\footnote{387}
However, on September 30, 2020, Senator Julie Miville-Dechêne tabled a private members’ bill called the Protecting Young Persons from Exposure to Pornography Act (“S-203”), which would require pornographic websites to use age-verification protections to keep children off of their platforms. S-203 makes it an offense for individuals or corporations to make sexually explicit material available on the internet for commercial purposes to persons younger than 18 years old. A second or subsequent offense committed by an individual is punishable by up to $20,000 or six-months imprisonment while a second or subsequent offense committed by a corporation is punishable by up to $500,000. Notably, if a corporation commits an offense, its directors and officers may be held personally liable.

S-203 also provides that the use of a “prescribed age-verification method” is an appropriate defense. The Governor in Council is authorized to provide further regulation specifying adequate age-verification protections.

In addition, if the Minister of Public Safety and Emergency Preparedness (the “Minister”) has reasonable grounds to believe that an offense has occurred, the Minister may issue a notice to any internet-service provider (ISP) requiring the ISP to take action “to prevent sexually explicit material from being made available to young persons on the Internet.”

I. Other Countries

Other countries considering some form of age verification for internet pornography include Spain, Ireland, and Sweden. In addition, Korea uses age verification for adult-themed searches on search engines.

389. Id. § 7(1).
390. Id. §§ 4(a)(ii), 4(b).
391. Id. § 5.
392. Id. § 7(1).
393. Id. § 11.
394. Id. at ii, § 9(1).
395. More Countries Plan Age Verification to Access Adult Sites, AGEGo (Jun. 13, 2009), https://www.agego.com/more-countries-plan-age-verification-to-access-adult-sites/ (reporting the Prime Minister of Spain’s goal is to “implement a new strict age verification system for adult websites”).
396. Id. (reporting the Ireland Department of Communications sought consultations in preparation for the development of legislation with age verification for content online).
III. THE CONSTITUTIONAL ROADMAP

A. The American Regime

Congress has had some success in legislating for child protection on the internet. In 2000, Congress enacted the Children’s Internet Protection Act (CIPA), which requires libraries and public K-12 schools to use internet-filtering services to protect children from harmful online content in order to receive certain federal funding and special discounts. This was upheld as constitutional. Though this provides some protection while on school or library devices and potentially on school or library WiFi, the advent of the smartphone enables near effortless circumvention of these protections.

In 2002, Congress passed the Dot Kids Implementation and Efficiency Act (DotKids). This created a second-level domain exclusively for children that is limited to content suitable for minors. The high cost of internet-domain registration, the inability to link to .com or .org sites, and costly, mandatory content reviews made DotKids an ineffective solution.

In 2003, Congress enacted the Truth in Domain Names Act, which makes it a crime, punishable by fine or imprisonment, to use a misleading internet domain name to lure a minor into viewing content “that is harmful to minors . . . .” This Act effectively shut down thousands of sites that deceptively led unsuspecting children to pornographic websites with

397. Id. (reporting Sweden is “investigating age verification laws”).
402. Id. (explaining that the purpose of the statute is to impede children from viewing inappropriate material available online and to promote positive material).
404. See 18 U.S.C. § 2252B (regulating misleading domain names on the internet intended to trick minors into viewing pornographic media).
domain names like “TELTUBBIES.COM” or “BOBTHEBIUDDER.COM.”

In the United States, 47 U.S.C. § 230 relieves internet platforms from liability for user-generated content. This allows social-media sites and tube sites to thrive because the platforms have no statutory duty to moderate user-generated content even when it may be illegal or harmful. However, Congress enacted the Fight Online Sex Trafficking Act/Stop Enabling Sex Traffickers Act (FOSTA/SESTA) in 2018, which amends § 230. It provides that internet platforms can be liable for third-party content if such content promotes or facilitates human trafficking or prostitution. Notably, this amendment shut down sites like Backpage and portions of more popular sites like Craigslist, Reddit, and Twitter.

In addition, the Child Online Privacy Protection Act (COPPA) of 1998, as amended in 2013, limits platforms’ use of data collected from children. The Federal Trade Commission (FTC) recently settled a lawsuit against YouTube for COPPA violations. The settlement includes a $170-million fine and an injunction against YouTube’s collection and use of children’s data. The injunction instructs YouTube “to develop, implement, and maintain a system for [their] Channel Owners to designate whether their Content on the YouTube Service is directed to Children.” In response, YouTube contacted all of its content creators across the globe.

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406. 47 U.S.C. § 230 (explaining that U.S. policy promotes a free market of ideas on the Internet; therefore, internet providers must only inform customers of parental-control software that will assist in limiting a child’s access to content deemed inappropriate by parents).
408. See id. at 1253–54 (emphasizing that foreign and domestic acts committed by a provider to encourage or assist “the prostitution of another person” or “[five] or more persons” is punishable by up to 25 years in prison).
412. Id. at 13.
413. Id. at 10.
and instructed them to designate their channels as (1) directed to children; (2) not directed to children; or (3) a hybrid. Channel owners can also make these designations for each video. In this context the term children refers to minors under the age of thirteen. The COPPA data restrictions will only apply to videos directed to children. Channel owners that fail to designate their content could be subject to penalties from the FTC.

Though this system is aimed to protect children’s data rather than protect children from adult content, it may provide an effective model whereby social media, video sharing, and other platforms can separate content into categories that are appropriate for children and categories that are not.

B. Unconstitutional Internet Content Regulation of the Past

In the United States, “sexual expression which is indecent but not obscene is protected under the First Amendment” to the United States Constitution. Much of what pornographers produce falls within this category. Content-based regulations of protected speech are subject to a judicial test known as “strict scrutiny.” Most attempts to regulate the adult industry are content-based; and, therefore subject to strict scrutiny.

Under judicial strict scrutiny, the government bears the burden of proving that (1) the government objective is “compelling” and (2) the means used to accomplish that objective are “narrowly tailored” to that end. Less restrictive alternatives and under- or over-inclusivity are fatal to this test because it indicates a failure in narrow tailoring.

The United States Supreme Court applied the strict-scrutiny standard to two prior legislative acts aimed at protecting children from internet pornography. Both acts failed the narrow-tailoring prong of the test.

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414. YouTube Creators, Important Update for All Creators: Complying with COPPA, [hereinafter YouTube’s Video Notice to All Creators on COPPA Compliance] https://youtu.be/-JzXiSkOKKw.
415. Id. at 02:05–02:18.
416. 16 C.F.R. § 312.2 (2016).
417. YouTube’s Video Notice to All Creators on COPPA Compliance, supra note 413, at 04:25–05:25, 06:00–06:05.
420. Vivid Ent. V. Fielding, 774 F.3d 566, 578 (9th Cir. 2014).
1996, Congress enacted the Communications Decency Act (CDA), which (1) “prohibit[ed] the knowing transmission of obscene or indecent messages to any recipient under 18 years of age” and (2) “prohibit[ed] the knowing sending or displaying of patently offensive messages in a manner that is available to a person under 18 years of age.” The CDA also provided affirmative defenses for those who (1) “take good faith, reasonable, effective, and appropriate actions to restrict access by minors to the prohibited communications” or (2) “restrict access to covered material by requiring certain designated forms of age proof, such as a verified credit card or an adult identification number or code.” Violation of these sections was punishable by a fine, two years imprisonment, or both.

In Reno v. ACLU (Reno), the Court held that these provisions were unconstitutional because the statutes: (1) provided no exception for indecent works that had some “socially redeeming value”; (2) were “not limited to commercial transactions”; (3) were overbroad because it suppressed constitutionally protected speech; (4) were unconstitutionally vague; (5) chilled protected speech through criminal charges and vagueness; (6) “does not allow parents to consent to their children’s use of restricted materials”; (7) unduly burdened adults access to and production of the material; and (8) the available affirmative defenses were unable to save the statutes because the defenses were “not economically feasible for most noncommercial speakers . . . .”

Congress took the Court’s decision into consideration and subsequently passed the Child Online Protection Act (COPA) in 1998. Congress successfully resolved concerns one and two above by limiting COPA to commercial transactions and providing an exception for works with socially redeeming value.

424. See Reno, 521 U.S. at 879 (“[I]n the light of the absence of any detailed findings by the Congress, or even hearings addressing the special problems of the [Communications Decency Act], we are persuaded that the CDA is not narrowly tailored . . . .”); Ashcroft, 542 U.S. at 660 (“The Government has failed, at this point, to rebut the plaintiffs’ contention that there are plausible, less restrictive alternatives to the statute.”).

425. Reno, 521 U.S. at 859 (citing the Communication Decency Act, 47 U.S.C. § 223(a) (1996)).


427. Id. at 859 (quoting § 223(a)(2) of the Communication Decency Act of 1996) (internal quotations omitted).

428. Id. at 870–74, 845, 879; 1 UNITED STATES SUPREME COURT CASES AND COMMENTS P 5A.05(v)(A) (2019).

redeeming value. However, the ACLU immediately sought an injunction and the legislation never came into effect because it failed the narrow-tailoring prong of strict scrutiny. COPA imposes a fine and six months in prison against those who, “for commercial purposes,” posts content to the internet “that is harmful to minors.” Like the CDA, it also provided an affirmative defense for those who restrict access to prohibited materials by “reasonable measures that are feasible under available technology.” COPA legal battles took ten years to resolve. In 2004, the Supreme Court held, in Ashcroft v. ACLU (Ashcroft), that COPA was likely to fail strict scrutiny because the government failed to rebut that filtering software, enabled by parents, was potentially a less restrictive, equally effective alternative. Therefore, the Supreme Court upheld an injunction against COPA and remanded the case for further proceedings.

In the subsequent 2008 case, Ashcroft v. Mukasey (Mukasey), the United States Court of Appeals for the Third Circuit held that COPA failed strict scrutiny because (1) third-party filters, enabled by parents, were an available, equally effective, less-restrictive alternative; (2) the definitions used in COPA were unconstitutionally vague; and (3) COPA was overbroad because it suppressed a large amount of protected speech. This precedent is not binding on the Supreme Court though it would certainly be persuasive. The Attorney General defending COPA applied to the Supreme Court for review, but such review was not granted.

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430. See 47 U.S.C. § 213(b) (1998) (noting the Act is inapplicable to those “engaged in the provision of a telecommunications service; . . . the business of providing an Internet access service; . . . the business of providing an Internet information location tool . . . .”).
432. Ashcroft, 542 U.S. at 661.
433. Id. at 662.
436. Id.
437. ACLU v. Mukasey, 534 F.3d 181, 184, 203, 205–06 (3d Cir. 2008) (holding the language in the statute was vague, overbroad, and not narrowly tailored—further, holding filters to be more effective and less restrictive because they do not criticize a specific category of speech).
C. What Could Another American Effort to Protect Children Online Entail?

All of this research leads to the question: What type of legislation could the United States bring forward to provide more protection to our children online? The internet is an essential part of modern childhood and children deserve to be safe from inappropriate and harmful content on the internet. As a nation, we apply this ideal in the physical world and even in broadcast media, but we fail to apply this ideal on the internet. In this Subpart, I attempt to identify the most compelling legal doctrines and the most important structural adaptions that may aid legislators in attempting to create an online child-protection framework in the future.

1. Narrow Tailoring

As stated above, indecent sexual expression that is not obscene is protected by the First Amendment. Therefore, content-based regulations of this category of speech must pass judicial strict scrutiny. Both Reno and Ashcroft held that protecting children from exposure to harmful material on the internet is a compelling government interest. Thus, prong one of strict scrutiny would be satisfied in any future attempt. The primary failure of the prior regimes was in narrowly tailoring the means to meet that end. The United Kingdom’s DEA Part 3 is the most narrowly tailored age-verification regime enacted and should serve as the basis of a future regime in the United States.

The prior courts found that a substantial portion of adult speech would be suppressed because either (1) producers of the material could not bear the cost of AV technology, or (2) a significant portion of viewers would be unable to appropriately verify their age. However, modern age

440. See supra notes 419–22 and accompanying text (outlining the legal test for strict scrutiny).
442. See Reno, 521 U.S. at 856–57 (citing Renton City Council’s finding 107 which states “[e]ven if credit card verification or adult password verification were implemented, the Government presented no testimony as to how such systems could ensure that the user of the password or credit card is in fact over 18”); Ashcroft, 542 U.S. at 665 (summarizing the district court’s conclusion “that the statute was likely to burden some speech that is protected for adults . . . .”); ACLU v. Mukasey, 534 F.3d 181, 197 (3d Cir. 2008) (concluding that the rules regarding the use of payment cards for age verification are worthless because of the general knowledge children possess).
verification is now more affordable for content providers and accessible to consumers than ever before. The economic feasibility of age-verification systems has drastically increased. Age checks can be done for as little as one cent. Enabling users to save their age credentials so that they do not have to continue verifying at each use can also reduce the cost to industry. Further, the BBFC reported that many AV providers were ready to offer their services for free to increase use of their offline services. MindGeek invested significant funds into developing its own AV system, AgeID, which would serve a wide swath of the industry at an affordable price. These innovations make age verification available to nearly every internet content provider.

The wide variety of methods by which an individual may prove their age makes age verification available to virtually everyone. Viewers can verify their age by providing identifying information to a third-party that will verify their age while maintaining anonymity. Trust and confidence in the privacy and security standards of AV systems can be built up by appropriate certification and/or regulation. The industry is developing more light touch methods that retain little-to-no data and further reduce the burden on viewers. Those without identifying documents can use other methods like purchasing a “porn pass” or using age-estimation systems that retain no data. Consequently, no adult speech will be suppressed. It will simply be directed to its appropriate audience. This form of age verification is much more narrowly tailored to protecting children online than prior regimes were.

In addition, the prior courts were concerned about the chilling effect of vague criminal statutes would have on speech. COPA and the CDA both threatened criminal charges. Any future act should not include criminal

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443. See Reno, 521 U.S. at 881 (explaining that “[credit card and adult] verification is not only technologically available but actually is used by commercial providers of sexually explicit material”).
444. Id.
445. Id.
446. York, supra note 174.
447. See supra notes 165–78 and accompanying text (describing different commercial forms of age verification that private companies have developed).
448. York, supra note 174 (explaining that a customer’s information remains anonymous after a third-party verification site); see supra text accompanying notes 165–78 (providing examples of third-party age verification that preserves user anonymity).
449. York, supra note 174
451. Reno, 521 U.S. at 871–72; Ashcroft, 542 U.S. at 667; ACLU, 534 F.3d at 203–06.
charges. Under the United Kingdom’s DEA Part 3, age verification was enforced by four primary powers: (1) fines; (2) requiring ISPs to block noncompliant websites; (3) requesting, but not requiring, PSPs to withdraw services; and (4) requesting, but not requiring, ASPs to withdraw services.\footnote{452}{Digital Economy Act 2017, Part 3 §§ 19, 21, 23 (U.K.), http://www.legislation.gov.uk/ukpga/2017/30/part/3/enacted?view=plain.} The BBFC reports that these methods of enforcement were sufficient to prompt compliance from the adult industry because PSPs and ASPs were willing to withdraw services upon notification of noncompliance.\footnote{453}{Digital Economy Act 2017, c. 30 §§ 20–21, 23 (U.K.).} No criminal threats were necessary. In the United States, it may be appropriate to adapt the enforcement powers such that ISPs are requested, but not required, to block noncompliant websites. This would make sure that the government is not accused of suppressing speech. Effective fines could remain in place as a civil penalty where appropriate. These strategies do not chill speech using criminal penalties. Because some of these strategies rely on the voluntary cooperation of other industry members, the government’s cooperation with the adult industry, ISPs, ASPs, and PSPs will be vital.\footnote{454}{See BRIT. BD. OF FILM CLASSIFICATION [BBFC], ANNUAL REPORTS AND ACCOUNTS 11 (2019), https://darkroom.bbfc.co.uk/original/34f2007b15c39ade41c152db866248dd0edc710c0f09b2d8129fd80794250dd8/bbfc-annual-report-2019.pdf (explaining the BBFC continually engages with PSPs and ASPs “to ensure that the enforcement regime would be effective . . . .”).}

Eliminating the criminal penalties would also reduce the Court’s concern with vagueness but may not completely resolve it. A clear and appropriate scope must be determined to adapt the system to the United States. I suggest that the most appropriate scope is one similar to that previously used in COPA and currently used by CIPA: “harmful to minors.” This standard, from CIPA, is as follows:

\[
(B) \text{The term “harmful to minors” means any picture, image, graphic image file, or other visual depiction that—}
\]

(i) taken as a whole and with respect to minors, appeals to a prurient interest in nudity, sex, or excretion;
(ii) depicts, describes, or represents, in a patently offensive way with respect to what is suitable for minors, an actual or simulated sexual act or sexual contact, actual or simulated normal or perverted sexual acts, or a lewd exhibition of the genitals; and
(iii) taken as a whole, lacks serious literary, artistic, political, or scientific value as to minors.\footnote{455}{20 U.S.C. § 9134(f)(7)(B).}
The Supreme Court is familiar with this definition as it mimics the definition of obscenity.456 Though not specifically considered, this definition was before the Court in United States v. American Library Ass’n and the Court did not attack it.457 In an earlier case related to Ashcroft, a very similar definition that contained more detail and relied on “community standards,” was before the Court. The principle issue was whether the inclusion of a community-standards consideration made the definition unconstitutional.458 The Court held that “any variance caused by the statute’s reliance on community standards is not substantial enough to violate the First Amendment.”459 Though again not specifically considered, the Court did not attack the other portions of the definition for unconstitutionality.

However, the appellate court that ultimately held COPA unconstitutional did take issue with a few elements of the definition.460 The Third Circuit in Mukasey states that the definition of “minors” makes application of the statute vague.461 A minor was defined as anyone under the age of 17.462 This includes children aged zero to five—but what is harmful to these minors may be appropriate to minors aged twelve to sixteen. Perhaps greater specificity could resolve this issue.

The Mukasey court also stated that the “as a whole” standard “when read in context with other language in the statute, mandates evaluation of an exhibit on the Internet in isolation, rather than in context.”463 Though a lay reader may believe that “as a whole” necessitates viewing the content “in context,” the court disagreed.464 To mitigate this vulnerability, the definition could simply substitute, or otherwise incorporate, the language “in context.”

As a further note on vagueness and narrow tailoring, the Mukasey court also took issue with the definition of “for commercial purposes”, which

458. This case is often referred to as “Ashcroft I.” Ashcroft v. ACLU, 535 U.S. 564, 556 (2002).
459. Id. at 584–85.
460. See ACLU v. Mukasey, 534 F.3d 181, 188 (3d Cir. 2008) (explaining that the prior holding on COPA implicated certain defined terms as “overbroad,” and that holding was binding precedent on the present decision).
461. Id. at 191 (discussing how the term “minor” viewed in conjunction with “material harmful to minors” is not narrowly tailored to satisfy strict scrutiny).
463. Mukasey, 534 F.3d at 191.
464. Id.
limited the statute’s application to commercial pornography. Part of the court’s concern was that the statute did not place any limitations on the amount—or the proportion—of a website’s content that must be pornographic before the statute applied. Therefore, “even if posted material that is harmful to minors constitutes . . . [an] infinitesimal, part of a publisher’s entire Web site, the publisher may still be subject to liability.” The United Kingdom’s DEA Part 3 provides a useful model for mitigating this concern. The scope of that statute was limited by a one-third threshold. Therefore, any website with less than one-third pornographic content was outside the scope of the age-verification requirements unless they marketed themselves as providing access to United Kingdom consumers with access to pornography. This definition is much more narrowly tailored and helps to mitigate some of the court’s concerns.

The Supreme Court further stated that COPA and the CDA failed narrow tailoring because the statutes did not deal with materials hosted overseas. Therefore, any future framework must take into account foreign materials to be successful under strict scrutiny. The solution is simple. Instead of the statute focusing on content hosted in the United States, the scope should be—as the DEA set forth—content that is accessible from the United States without any technical circumventions. The BBFC indicates that the enforcement powers of the DEA would be very effective against foreign content providers.

Because the United States is the world’s primary consumer of internet pornography, foreign content providers will want to comply to access this market. Whatever protections can be put in place will have a significant global impact because of the United States’ dominance in the adult industry.

465. Id. at 191–92 (referring to the court’s position regarding the validity of “for commercial purposes”).
466. Id. at 192.
467. Id.
468. See Margot James, Explanatory Note in The Online Pornography (Commercial Basis) Regulations 2019, http://www.legislation.gov.uk/uksi/2019/23/pdfs/uksi_20190023_en.pdf (explaining that under the DEA, “Pornographic material that is made available free of charge . . . will not be considered to be made available on a commercial basis if . . . [it] makes up less than one-third of the content of the internet site . . . .”)
470. BBFC Statement on Age-verification Under the Digital Economy Act, BBFC (Oct. 16, 2019), https://www.bbfc.co.uk/about-us/news/bbfc-statement-on-age-verification-under-the-digital-economy-act (explaining the BBFC’s role as the regulatory body for age-verification in the United Kingdom and noting that it will “ensure that the child protection goals of the DEA are achieved”).
471. See PORNHUB, 2019 Review, supra note 23 (noting that the United States has the highest daily rate of traffic to Pornhub.com).
472. Id.
Finally, it may also be worth narrowing the government interest. Children’s engagement with pornography comes from three sources: (1) commercial pornography, (2) social media, and (3) search engines.\textsuperscript{473} The asserted interests in COPA and the CDA were to protect minors from all “harmful to minors” content on the internet.\textsuperscript{474} A future statute as contemplated here would not apply to all of the internet; it would only apply to commercial pornography. The end of this law is not to protect children from all of these sources of harmful materials. Rather, it is narrowly fashioned to protect children from commercial pornography, where the most harmful materials are most prevalent.

2. Less Restrictive, Equally Effective Alternatives

Under strict scrutiny, the government must prove that there are no available less restrictive, equally effective alternatives with which the government could satisfy its compelling interest.\textsuperscript{475} This is an understandably heavy burden that protects the free-speech interests of all Americans. The Supreme Court struck down COPA because parent-enabled filters were an equally effective, less-restrictive alternative.\textsuperscript{476} This holding may be the single greatest legal challenge to introducing age verification or content-regulation measures to the internet. The Court relied heavily on a congressional report that explicitly found that filters were more effective than age-verification measures.\textsuperscript{477} After assigning scores for effectiveness, accessibility, and adverse impacts to a variety of solutions, the report plotted solutions onto a graph.\textsuperscript{478} The report “assign[ed] a score for ‘Effectiveness’ of 7.4 for server-based filters and 6.5 for client-based filters, as compared to 5.9 for independent adult-ID verification, and 5.5 for credit card verification.”\textsuperscript{479} Both filtering solutions also had less adverse impacts than the two age-verification solutions.\textsuperscript{480}

Certainly, filters, age verification, and children’s interaction with the internet have all changed since these findings were published. Age

\begin{itemize}
\item \textsuperscript{473} BBFC, Young People and Age Verification, supra note 8, at 26.
\item \textsuperscript{474} Ashcroft v. ACLU, 542 U.S. 656, 661 (2004).
\item \textsuperscript{475} See Reno v. ACLU, 521 U.S. 844, 874 (1997) (applying strict scrutiny under a First Amendment challenge to the CDA).
\item \textsuperscript{476} Ashcroft, 542 U.S. at 668–69.
\item \textsuperscript{477} Id. at 668.
\item \textsuperscript{478} Id.
\item \textsuperscript{479} Id.; COMM’N ON CHILD ONLINE PROTECTION (COPA), REPORT TO CONGRESS 19, 21, 25, 27 (Oct. 20, 2000), https://govinfo.library.unt.edu/copacommission/report/COPAreport.pdf.
\item \textsuperscript{480} Ashcroft, 542 U.S. at 668.
\end{itemize}
verification in particular has made significant advancements. If replicated
today, I predict that a modernized assessment would show far less adverse
impacts and far more effectiveness and accessibility for age-verification
measures. So much so that, as represented on the previously described
diagram, age verification (AV) may surpass filters from a holistic perspective.

Further, empirical evidence supports that, in today’s digital
environment, filters are an ineffective means for preventing children’s
access to sexual content online.481 “[T]here is little consistent evidence that
filtering is effective at shielding young people from online sexual
material.”482 A recent study “provided strong evidence that caregivers’ use
of Internet filtering technologies did not reduce children’s exposure to a
range of aversive online experiences including, but not limited to,
encountering sexual content that made them feel uncomfortable.”483

Andrew K. Przybyslki and Victoria Nash of Oxford University “sought to
determine if fewer than 10 households needed to have internet filters in
place for one additional child to be protected from exposure to a range of
online sexual materials.”484 They found that “[d]epending on the form of
content, results indicated that between 17 and 77 households would need to
be filtered to prevent a young adolescent from encountering online sexual
material.”485 They concluded by stating that “[o]ur preliminary findings
suggested that filters might have small protective effects, but evidence
derived from a more stringent and robust empirical approach indicated that
they are entirely ineffective.”486 The pervasiveness and complexity of the
internet may render filters less effective than they once were.

In addition, parents are generally unaware of their children’s exposure
to pornography. According to research from the BBFC, “25% of parents
thought their child had seen pornography.”487 However, 63% of those
children had actually seen pornography.488

If a parent fails to enable a filter, the government’s interest goes
completely unsatisfied. Factoring this in further limits the effectiveness of
filtering solutions in achieving the government’s compelling interest of

481. See Andrew K. Przybyslki et al., Internet Filtering and Adolescent Exposure to Online
age verification or educational instruction as a solution to ineffective internet filters).
482. Id. at 406.
483. Id.
484. Id.
485. Id. at 409.
486. Id.
488. Id.
ensuring that every child is protected from exposure to pornographic materials on the internet.

If comparative studies are done and filters are still more effective than age verification, then the government can either (1) find a content-neutral way to regulate so as to avoid strict-scrutiny analysis, or (2) advance the argument posed by the dissent in Ashcroft that filters are part of the existing status quo. Justice Breyer stated:

\[
\text{[T]he presence of filtering software is not an alternative legislative approach to the problem of protecting children from exposure to commercial pornography. Rather, it is part of the status quo, i.e., the backdrop against which Congress enacted the present statute. It is always true, by definition, that the status quo is less restrictive than a new regulatory law. It is always less restrictive to do nothing than to do something. But “doing nothing” does not address the problem Congress sought to address—namely, that, despite the availability of filtering software, children were still being exposed to harmful material on the Internet.}^{489}
\]

Filtering options have been in place for many years. Clearly it is not working.

Easy circumvention also limits effectiveness. The Court in Ashcroft agreed with the lower court “that verification systems may be subject to evasion and circumvention, for example, by minors who have their own credit cards.”^{490} Modern AV systems are much more sophisticated and would provide accurate verification for a minor with a credit card of their own. Filters are also easily circumvented. I do not think that there is any significant difference between the circumvention of AV and the circumvention of filtering systems. Comparatively, any differences in circumvention methods are so minute that they have no effect in distinguishing between the effectiveness of both solutions.

3. Parental Consent

Another issue the courts had with COPA and CDA was that those statutes did not provide a way for parents to provide access to their

490. Id. at 668.
children. Existing technologies can provide secure and private parental authorization for parents who want to provide access to their children. However, looking at the broader issue, should parents be legally allowed to consent to their child’s use of pornography that is harmful to minors? The court in Ginsberg v. New York recognized that parental choice as to the “rearing of their children” is fundamental to society. However, the scope of future AV protections would exclude works that have “serious literary, artistic, political, or scientific value as to minors.” Therefore, any website that is primarily composed of content that provides educative value to minors will be excluded.

How could any reasonable parent purposely expose their child to something that is genuinely harmful? And, as a society, will we allow that to happen? Many parents simply do not understand the harms associated with exposure to pornographic content. Based on social science and governmental duties, there is a clear argument here that the government’s interest in protecting children from pornography that is harmful to minors supersedes parental choice in these circumstances. The government often creates laws to protect children, and sometimes these laws limit parental choice. Car seat laws are a perfect example. Though some parents may not understand the value of a car seat, and some parents may find it economically burdensome to purchase a car seat, the government’s independent interest in the safety of each child takes priority over parental decisions, which could be extremely dangerous for the child. We simply do not allow parents to endanger their child’s future with such reckless disregard. Though this example does not include free speech, the principle is the same. Exposing a child to pornography that is harmful to minors carries a great risk of causing harm to that child. Nevertheless, if parental

491. See id. at 669–70 (“COPA presumes that parents lack the ability, not the will, to monitor what their children see.”).
authorization must be an element of future reiterations of age-verification laws in the United States, that is possible through current technologies.

4. Significant Changes in the Digital Environment

Technologies evolve rapidly in today’s digital world. The internet of the late 1990’s and early 2000’s was vastly different than today’s internet. Ninety-five percent of children have access to a smart phone and the average teen is using a screen nearly seven-and-a-half hours per day excluding school and homework. The way we access media is changing. The prior courts distinguished relevant precedent related to broadcast media (like cable TV and radio) by pointing to the differences between broadcast media and the internet. In the past two decades, the lines between those two mediums have increasingly blurred. Now, children primarily watch television, and other media, through the internet. Broadcast media is a fading industry while streaming services and online video sharing are booming.

More specifically, the prior courts stated that the internet was substantially different from broadcast media because: (1) the nature of the internet is not as invasive as broadcast media; (2) users seldom encounter indecent materials accidentally; (3) children’s unattended internet use is low; (4) there is no reliable way to screen for age; (5) broadcast media has a history of extensive government regulation; and (6) broadcast media has a scarcity of available frequencies. Though the internet may not have a scarcity of available frequencies, and may not have a history of government regulation, the remaining points are no longer true. The internet of today is far more invasive and pervasive than broadcast media ever was. Child users frequently encounter indecent materials by accident.

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496. See MONICA ANDERSON ET AL., supra note 9, at 3 (discussing how vastly different the social-media landscape in 2018 looks from a 2014–2015 survey).


501. PACHECO ET AL., supra note 20; BBFC, NEW RESEARCH ON THE IMPACT OF PORN ON CHILDREN, supra note 18, at 1.
children must take to access indecent materials on the internet have been reduced to a single click or tap. There are now several reliable and secure ways to screen for age online.\textsuperscript{502} The internet is an integral part of every child’s life. It is where they play, learn, and socialize. They deserve to be safe when accessing these resources.

5. Secondary-Effects Doctrine

The secondary-effects doctrine is another legal doctrine that may be a useful tool for legislators to consider. Generally, content-based restrictions on protected speech are subject to strict scrutiny.\textsuperscript{503} However, content-based regulations of the near obscene are not subject to strict scrutiny if the government is acting out of concern for the secondary effects of the establishment rather than trying to suppress the speech.\textsuperscript{504} Courts historically have applied this to zoning laws related to the adult industry.\textsuperscript{505}

In these cases, the court will apply a standard sometimes referred to as “intermediate scrutiny,” which is significantly easier to satisfy than strict scrutiny.\textsuperscript{506} It requires the government demonstrate a “substantial government interest . . .”\textsuperscript{507} This is held to be less pressing than a compelling government interest.\textsuperscript{508} In addition, the means must be narrowly tailored to meet that end.\textsuperscript{509} However, this version of narrow tailoring is such that the presence of less-restrictive alternatives and some under-or over-inclusivity is not fatal.\textsuperscript{510} Rather, the government need only prove that the government’s end would be less effectively achieved without the regulation. To satisfy intermediate scrutiny, the regulation must also leave

\begin{footnotesize}
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\item 502. See supra notes 164–87 and accompanying text (listing and describing commercial age-verification software and card options).
\item 503. See Sable Commc’ns of Cal., Inc. v. FCC, 492 U.S. 115, 126 (1989) (holding that “[t]he government may . . . regulate the content of constitutionally protected speech in order to promote a compelling interest if it chooses the least restrictive means to further the articulated interest.”).
\item 504. Renton v. Playtime Theatres, 475 U.S. 41, 49 (1986).
\item 505. See Young v. Am. Mini Theatres, 427 U.S. 50, 71–73 (1976) (concluding “that the city’s interest in the present and future character of its neighborhoods adequately supports its classification of motion pictures.”).
\item 506. See Vivid Ent. v. Fielding, 774 F.3d 566, 580 (9th Cir. 2014) (indicating less speech restriction requires a lower standard of scrutiny).
\item 507. Id.
\item 508. See id. at 578 (denoting the additional factor which triggers “strict” scrutiny, rather than “intermediate”).
\item 509. Id. at 580.
\item 510. Compare 16B C.J.S. Constitutional Law § 1275 (June 2020) (“To withstand the strict scrutiny test . . . the means employed must be the least intrusive or restrictive available . . .”), with id. § 1278 (“To survive intermediate scrutiny, a party must show reasonable inferences based on substantial evidence that the statutes are substantially related to the governmental interest.”).
\end{itemize}
\end{footnotesize}
open alternative channels of communication. An adaption of the United Kingdom’s DEA Part 3 could certainly meet this standard.

The Courts in Reno and Ashcroft did not apply intermediate scrutiny because the government’s interest was in protecting the child users themselves from the primary effects of exposure to pornography. However, if legislators shift to the substantial government interest of protecting other children from the secondary effects of a child’s exposure to pornography, then this “intermediate scrutiny” standard may apply. All of the secondary effects of children’s use of pornography, referenced above, are incorporated here and support the argument that the government has a significant interest in mitigating the secondary effects of children viewing pornography. A child’s consumption of pornography does not just damage that child, it is often also harmful to other children and our communities at large.

Alternatively, the government may also consider the argument that the legislation is aimed at the secondary effects emanating from adult consumption of the material rather than children’s consumption of the material. There is certainly an argument that all childhood exposure to pornography is a secondary effect of adult speech and consumption of pornography. Therefore, all of the primary and secondary effects of children consuming this material are essentially a secondary effect of adult consumption of the material.

Justice O’Connor recognized the potential application of zoning laws to the internet in her dissent in Reno. She stated, “[t]he creation of ‘adult zones’ is by no means a novel concept. States have long denied minors access to certain establishments frequented by adults,” and “I view the Communications Decency Act of 1996 (CDA) as little more than an attempt by Congress to create ‘adult zones’ on the Internet.” She concludes by stating that “the prospects for the eventual zoning of the

512. Reno v. ACLU, 521 U.S. 844, 868 (1997); see Ashcroft v. ACLU, 542 U.S. 656, 666–67 (2004) (affirming the District Court’s analysis that there was a less restrictive option for achieving a reduction in the direct effects of pornography on children).
513. See supra Parts I.A–B. (detailing the various secondary effects of children’s use of pornography).
514. See, e.g., Bloom et al., supra note 52 (finding that adolescents who watch pornography have a lower degree of social integration, higher levels of delinquent conduct, and decreased emotional connection with caregivers).
516. Id. at 886–87.
Internet appear promising . . . .517 Today, we know much more about the secondary effects of children’s and adults’ exposure to pornography than we did 10–20 years ago.518 It is clear that pornography negatively affects communities and individuals.

6. Captive-Audience Doctrine

Though the burden is generally on the viewer to avert his or her eyes from unwanted speech, when a “degree of captivity makes it impractical for the unwilling listener or viewer to avoid exposure,” the government may place restrictions on that speech.519 The doctrine most often applies to unwanted material coming into the home.520 Some scholars argue that children of the twenty-first century are “captive” to the internet, in whatever form their parents give to them.521 As such, the government may place restrictions on some speech exhibited there. This argument is certainly plausible considering children’s heavy reliance on the internet for education, social life, and entertainment. Children’s prolifically high rates of exposure to pornography further the argument that even unwilling viewers cannot avoid exposure.522

7. Attractive-Nuisance Doctrine

Children’s natural curiosity often lead them to hazards. The attractive-nuisance doctrine holds that society’s interest in child safety justifies a burden upon landowners to keep their properties free of hazards that may entice and potentially harm children.523

The elements for attractive nuisance include: (1) the possessor must know or have reason to know that children are likely to

517. See Reno, 521 U.S. at 891 (O’Connor, J., dissenting) (expressing agreement “with the Court that we must evaluate the constitutionality of the [Communications Decency Act] as it applies to the Internet as it exists today.”).
518. See generally supra Part I.
520. See, e.g., Rowan v. U.S. Post Office Dep’t, 397 U.S. 728, 736 (1970) (discussing the captive-audience doctrine within the context of unwanted mail).
521. Garry, supra note 519.
occupy the place of the unsafe condition; (2) the possessor should recognize that the unsafe condition is one which involves an unreasonable risk of harm to such children; (3) the child, because of the child’s immaturity, either does not discover the condition or does not in fact appreciate the danger involved; and (4) the utility to the possessor of maintaining the condition is slight as compared with the risk to children involved.524

Though this doctrine has not been applied to the internet, it provides a useful example of society’s tolerance for child-protection measures. Based in part on the personal reports made public by the #TraffickingHub movement, Pornhub and other purveyors of adult content online likely know that children are on their platforms.525 They also should recognize that the content and circumstances provide an unreasonable risk of harm to such children. In addition, due to children’s immaturity, they routinely fail to appreciate the dangers of internet pornography. Further, the burden on commercial pornography websites and their consumers to use robust age-verification measures is slight compared to the risk involved to our children and their future communities.

8. Spending Powers

CIPA was followed by a lawsuit regarding the constitutionality of making federal funds to libraries and public K-12 schools conditional upon their use of internet-filtering services.526 The Court held that “Congress has wide latitude to attach conditions to the receipt of federal assistance in order to further its policy objectives. . . . ‘A refusal to fund protected activity, without more, cannot be equated with the imposition of a “penalty” on that activity.’ . . . ‘A legislature’s decision not to subsidize the exercise of a

525. #TraffickingHub is an online movement started by Laila Mickelwait that aims bring awareness to and end Pornhub’s sexual exploitation of minors and other sexual victims by advocating that the online platform stop allowing content containing these abuses on its platform. Nicholas Kristof, The Children of Pornhub, N.Y. TIMES (Dec. 4, 2020), https://www.nytimes.com/2020/12/04/opinion/sunday/pornhub-rape-trafficking.html; see, e.g., Gail Honor, Child and Adolescent Pornography Exposure, J. PEDIATRIC HEALTH CARE 191, 192 (2020) (describing several studies done between 2007–2017, which show minors are accessing pornography both intentionally and unintentionally). By creating its own age-verification software, it is implied that MindGeek, owner of Pornhub, RedTube, and YouPorn, likely knows that children are accessing pornography. See York, supra note 174 (describing MindGeek’s age-verification package, AgeID, which is available to any content provider).
fundamental right does not infringe the right.’’\textsuperscript{527} Perhaps Congress could create a bill that made funding to mobile-network providers and internet-service providers conditional upon the use of filtering or age-verification software to protect children from adult content online.

IV. AN AMERICAN HYPOTHESIS

A. Promote Education Regarding Pornography’s Harm to Children

Several stakeholders need additional education about pornography’s harm to children. First, the general public needs a greater understanding of these issues so that they will elect representatives that are ready to make a difference. The more that the public is aware of this issue, the more they will press legislators to implement appropriate solutions. Second, pornography providers and consumers need to be educated so that they will build tolerance and trust for age restrictions on the content they are engaging with. Third, legislators need to become more aware of this issue and the innovative solutions that can help. The more that legislators understand this issue, the more willing they will be to develop legislation to mitigate its harms. Fourth, American youth need to understand the harms of pornography so that they can be prepared to make safe choices in media consumption.

B. Support the Digital-Identity Industry

As a nation, we should encourage the use of digital-identity services in our retail stores. Technological solutions, such as age-estimation software, can be easily integrated into existing cash registers and self-check-out stations in retail stores.\textsuperscript{528} As more and more consumers get used to verifying their age using an app or age scan, consumers will gain a certain level of comfort and awareness that will ease the introduction of online age-verification systems for online purchase of the same materials.

C. Draft the “Digital Responsibility Act”

Congress needs to take a holistic approach to preventing online harms and promoting digital responsibility by individuals and companies. New

\textsuperscript{527.} Id. at 203, 212 (internal quotations omitted).

\textsuperscript{528.} YOTI, Age Verification, supra note 186.
legislation, titled—the “Digital Responsibility Act” or something similar—can provide the necessary protections and incentives. One of the first steps in drafting thoughtful and innovative legislation is bringing together the nation’s best minds on the topic. Therefore, Congress or a nongovernmental organization (NGO) should call together a working group to prepare legislation on these issues. The draft should contain the following.

1. Legislation Requiring Robust Age Verification for Commercial Pornography

The “Digital Responsibility Act” should first include mandatory age verification for commercial pornography. We know that many children are accessing commercial pornography. We need to restrict underage access to these platforms due to the harmful nature of the content and children’s particular susceptibilities. The working group should use the United Kingdom’s DEA Part 3 and Poland’s draft legislation as models, and adapt them as needed to work within United States law. Several of those adaptions are contemplated above.

It is crucial that the adult industry is involved in this process. Willing compliance is far more favorable than forced compliance. The solution that is created must be practical for adult-industry consumers and producers. It is also important to have ISPs, PSPs, and ASPs involved in the process so that the voluntary elements of the scheme accomplish their designed purpose. The Federal Communications Commission (FCC) should also be involved in this process as they would most likely provide regulatory oversight and, potentially, enforcement of fines and other mandatory requirements.

The legislation should be drafted for application at the federal level. However, it may be possible to adapt the legislation to the state level, perhaps for a larger state like California, Texas, or New York.

2. Congressional Call to Action Regarding Social Media

In 1996, Congress passed the Telecommunications Act.529 “The law called upon the entertainment industry to establish a voluntary television rating system . . . .”530 Subsequently, the National Association of

530. About Us, TV PARENTAL GUIDELINE MONITORING BD., http://www.tvguidelines.org/
Broadcasters, the Internet & Television Association, and the Motion Picture Association of America created the television rating system which uses the TV-Y, TV-Y7, TV-G, TV-PG, TV-14, and TV-MA ratings with appropriate content descriptors.531 The system also utilizes an oversight monitoring board.532 The FCC approved this system in 1998 and adopted technical requirements for all televisions to be able to filter according to these ratings.533

Similarly, through the “Digital Responsibility Act,” Congress could issue a call to action calling upon social-media platforms, popular tube sites, internet-service providers, and other film and broadcast regulatory bodies to create a voluntary system for rating user-generated content (UGC). Perhaps a system organizing content into the following three categories would be appropriate: Y,534 13+,535 and 18+.536 Age verification could be used for 18+ content. Then, whether through third-party filtering services or through the platforms own filter, parents could easily enable appropriate content restrictions.

Because of the massive amounts of UGC across these platforms, traditional human viewing and rating of this content is impractical. These ratings could be produced by (1) artificial intelligence (AI) with human oversight, (2) crowdsourcing from viewers, or (3) requiring users to self-rate content. AI systems exist that can process billions of digital interactions per month.537 In addition, some AI systems are capable of image processing, object recognition, audio fingerprinting, speech-to-text analysis, brand and sensitive data identification, and can input descriptions and tags for potentially problematic content like nudity, language, violence, etc.538

aboutUs.html (last visited Nov. 29, 2020).

531. Id.
532. Id.
533. Id.
534. Roughly equivalent to the MPA’s G and PG ratings.
535. Roughly equivalent to the MPA’s PG-13 rating.
536. Roughly equivalent to the MPA’s R rating.

These sophisticated tools can be calibrated to rate content. Some can even work with live streams in real time. Many platforms use this type of technology to locate content in violation of their community standards or to prioritize user complaints about content. However, these systems can also screen for illegal and harmful materials at the point of upload, flagging concerning content, and allowing innocuous content to pass straight through. Regardless of the means used to classify content, a user-based complaint mechanism could help optimize the system and handle miscategorized content. These systems could also be subject to periodic auditing by a self-regulatory body to ensure that minimum standards are satisfied.

3. Congressional Regulation of Social Media

If the industry is unwilling to cooperate and create a voluntary system, Congress could require these types of systems by law. Because the requirement to rate content would apply to all speech on the platform, the regulation would be content-neutral and therefore subject to intermediate scrutiny. To withstand constitutional muster, the government would need to prove that it has a “substantial” government interest and that the means are narrowly tailored to accomplish that end; meaning that the regulation increases the effectiveness with which the objective is achieved. Of course, the regulation must also leave open other channels of communication and must not be unreasonably under- or over-inclusive or unreasonably restrictive.

The government has a significant interest in empowering end users’ content choices, protecting children from online harms, and allowing parents to filter their child’s internet and social-media experience. The

539. See generally Compliance Detection Report, VALOSSA.COM, [hereinafter VALOSSA, Compliance Detection Report], https://portal.valossa.com/portal/heatmap/167b4bf5-9e50-4e77-8894-7ede58ee3f6 (last visited Nov. 29, 2020) (aggregating data pulled from videos to tag for nudity, violence, and other general adult themes which can be used to calibrate a rating).


541. See, e.g., VALOSSA, Compliance Detection Report, supra note 540 (showing the ability of software to detect and aggregate explicit material or any material that could go against community standards).


543. Id. at 802.
legislation would certainly increase the effectiveness with which these goals are achieved. In addition, no channel of communication is restricted. Rather, the system organizes the communications within these channels so that users can have a more age-appropriate experience. To avoid being over-inclusive or over-burdensome, it may be appropriate to narrow the scope of the legislation to platforms of a certain size or platforms where children are present. In addition, the legislation should permit a variety of methods for rating content and should leave room for innovative solutions. This type of system also does not conflict with § 230 because it does not moderate content or hold platforms liable for UGC or third-party content. 544

4. Congressional Call to Action Regarding ISP-Level Filtering

Congress should also call upon internet-service providers, mobile networks, the age-verification industry, and the internet-filtering industry to create a voluntary system to make the internet a safer place for children. This could include child-friendly filters by default with a simple way to use age verification to get access to adult content.

D. Pass the KIDS Act

Digitally responsible design is a significant tool to keep children safe online. The United States needs legislation like the Kids Internet Design and Safety (KIDS) Act that requires applications to take into account the age of their users. 545 The United Kingdom’s Age-Appropriate Design Code and Australia’s Safety by Design can serve as useful models in considering this bill. 546

Under the KIDS Act, child-directed platforms must not (1) use damaging design features, (2) amplify harmful content, or (3) use

544. 47 U.S.C. § 230 (emphasizing the importance of user control over what is viewed on the internet).


manipulative marketing. Thus, action by platforms within scope may help to reduce adolescent exposure to pornography. The KIDS Act also requires the FTC to study and submit a report to Congress regarding recommendations for a content-labeling system that could help parents and children to easily identify appropriate content online.

E. Pass the PROTECT Kids Act

CPPOA’s child data-protection laws are one effective way of limiting children’s exposure to harmful content and keeping tech companies accountable. The Preventing Real Online Threats Endangering Children Today (PROTECT) Act updates COPPA to account for new technologies and raises the relevant age from 13 to 16. In order for COPPA to apply, the platform must have actual knowledge that the data was collected from a child. The PROTECT Act also requires the FTC to study the “knowledge standard” of COPPA and consider whether it should be removed.

F. Pass the EARN IT Act

The Eliminating Abusive and Rampant Neglect of Interactive Technologies (EARN IT) Act establishes a National Commission on Online Child Sexual Exploitation Prevention (Commission). The Commission must “develop recommended best practices,” which platforms may voluntarily “implement to prevent, reduce, and respond to the online sexual exploitation of children . . . “ The recommended best practices will be updated at least every five years and must address various enumerated

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548. See S. 3411, 116th Cong. § 4(b)(1)(A) (prohibiting platforms directed towards children from the amplifying sexual material).

549. See generally S. 3411, 116th Cong. § 5 (explaining the content-labeling report and recommendations).


551. 15 U.S.C § 6501(4)(B).

552. H.R. 5573, 116th Cong. § 3.


issues including “employing age rating and age gating systems to reduce online child sexual exploitation . . . .”

In addition, the EARN IT Act revokes § 230 immunity for platforms that knowingly possess, receive, distribute, advertise, or promote child sexual-abuse material (CSAM). It is thought that in determining liability, a court will look to whether the platform took appropriate prevention and protection measures under the Commission’s recommended best practices.

It should be noted that one major criticism of the EARN IT Act is that it provides an exception for “encrypted messaging services, device encryption, or other encryption services . . . .” Thus, the platform is not liable for any CSAM sent via encryption services. This could make it more difficult for law enforcement to gather and eradicate CSAM in two ways: (1) it could lead more bad actors to send CSAM via encryption services; and (2) it could lead more social media and private-messaging services to use or provide encryption services.

In response, Senators introduced the Lawful Access to Encrypted Data Act (LAEDA) “[t]o improve the ability of law enforcement agencies to access encrypted data . . . .” This Act should be fully considered in conjunction with the EARN IT Act to counteract the potential unintended consequences.

G. Consider Obscenity Warning-Label Legislation

The State of Utah recently enacted an obscenity warning-label statute modeled after California’s Proposition 65 toxic substances warning label (Prop. 65). Utah Code 78B-6-2105(1) states the following:

A person who predominately distributes or otherwise predominately provides pornographic material to consumers with the intent to earn revenue or profit directly or indirectly from the

557. Interview with Eleanor Gaetan, Dir. Of Public Pol’y, Nat’l Ctr. On Sexual Exploitation, (Oct. 23, 2020) (“Yes, all companies will be liable for CSAM and in determining liability, the court may look to the Congressional Commission’s best practices.”).
558. S. 3398, 116th Cong. § 7(A).
560. Compare UTAH CODE ANN. § 78B-8-2105 (LexisNexis 2020) (creating an obscenity warning label statute), with CAL. HEALTH & SAF. CODE Div. 20, Ch. 6.6 (Deering 1986) (stating the text of Proposition 65 as an initiative measure in the Health and Safety code).
distribution may not distribute any obscene material or performance . . . without first giving a clear and reasonable warning of the harmful impact of exposing minors to the material or performance. The warning of the harm shall be prominently displayed in the following form:

STATE OF UTAH WARNING
Exposing minors to obscene material that may damage or negatively impact minors. 561

Similar to Prop. 65, both the attorney general and private persons may bring a cause of action against platforms that do not display an appropriate warning label. 562 Violators may be liable for up to $2,500 per violation plus attorneys’ fees and filing costs. 563 There is also a series of circumstances, which if present, prevent a private person from bringing suit against an alleged violator. For example, if (i) the attorney-general’s office is already pursuing an action concerning the violation or (ii) within thirty days of receiving notice from the private person, the alleged violator takes corrective steps to cure the violation and pays a $500 penalty for each violation alleged, then the private person cannot bring suit against the alleged violator. 564 Platforms can also comply by imbedding appropriate metadata. 565 Notably, Utah Code 78B-6-2105 does not apply to victims of revenge porn or sextortion. 566

Though the warning label can be clicked through without any significant age verification, and probably bypassed with a VPN, it does provide a basic barrier to shield the youngest eyes that stumble upon the material accidentally. It may also have some deterrence effect for adolescents. Despite its shortcomings, the obscenity warning label is a clever solution that contributes to online child protection and provides an adequate means of enforcement against platforms.

561. UTAH CODE ANN. § 78B-6-2105(1) (LexisNexis 2020).
562. UTAH CODE ANN. § 78B-6-2105(7) (Lexis); CAL. HEALTH & SAF. CODE § 25249.7(c)(d) (Deering 2020).
563. UTAH CODE ANN. § 78B-6-2105(3) (LexisNexis).
564. UTAH CODE ANN. § 78B-6-2105(11).
565. UTAH CODE ANN. § 78B-6-2105 (subjecting internet providers to liability for failing to include “utahobscenitywarning” as searchable text within the websites electronically stored software).
566. UTAH CODE ANN. § 78B-6-2105(22) (highlighting that the statute does not apply when a person is depicted in pornography created without their knowledge or consent; or when an individual is coerced or blackmailed into dispersing pornography); Sextorting is “[t]he practice of extorting money or sexual favors from someone by threatening to reveal evidence of their sexual activity.” Definition of Sextortion in English, LEXICO, https://www.lexico.com/en/definition/sextortion (last visited Nov. 29, 2020).
H. Promote State and Federal Prosecution of Current Obscenity Laws

Obscenity is not protected by the First Amendment. Thus, 18 U.S.C. § 1465 and § 1466 prohibit two acts. First, the statute prohibits producing obscene matter with intent to sell or distribute. Second, the statute prohibits a person from “us[ing] a facility or means of interstate commerce for the purpose of transporting obscene material in interstate or foreign commerce[,]” including the use of interactive computer services. Therefore, it is illegal to sell and distribute obscene material on the internet.

In the 1973 case Miller v. California, the Supreme Court defined “obscenity” as content that (1) “as a whole, appeals to the prurient interest as judged by the average person applying contemporary community standards, (2) depicts or describes sexual conduct in a patently offensive way, and (3) “taken as a whole, lacks serious literary, artistic, political, or scientific value.” A substantial portion of internet pornography is obscene under this definition.

The Department of Justice (DOJ) and the U.S. Attorney General (AG) have a responsibility to enforce federal obscenity laws. However, they have consistently failed to do so. Under Presidents Bill Clinton and George W. Bush, federal prosecution of obscenity drastically declined. In 2011, President Barack Obama allowed former AG Eric Holder to dismantle the Obscenity Prosecution Task Force. Consequently, Eric Holder or the DOJ landed themselves on the National Center on Sexual Exploitation’s (NCOSE) “Dirty Dozen List” from 2013–2016. State and federal prosecution of obscenity remains dismally low today.

569. Miller, 413 U.S. at 24. A “prurient interest” is a shameful or morbid interest in nudity, sex, or excretion, which goes substantially beyond customary limits of candor. Roth v. United States, 354 U.S. 476, 487 n. 20 (1957).
570. 18 U.S.C. § 1467(f)–(h).
572. Id.
574. See id. (noting that the DOJ “outright refus[es] to enforce federal laws against adult obscenity,” and that no new obscenity cases have been brought against commercial distributors of pornography “in the last seven years”); Tim Wu, How Laws Die, SLATE (Oct. 15, 2007), https://slate.com/news-and-politics/2007/10/how-laws-die.html (discussing the lack of prosecutions for “mainstream adult pornography”).
We must petition the DOJ and AG to enforce the protections that exist. The people of the United States are entitled to those protections and our youth desperately need their help.

I. Consider Legislative Resolutions that Declare Pornography a Public-Health Issue

Since 2016, many states have passed legislative resolutions declaring pornography a public-health issue. Some argue that these resolutions are irresponsible and ineffective. However, successful reformation of internet norms will require a significant cultural shift. Education and public involvement will be a vital part of this movement. Each time a state passes a resolution to label pornography as a public-health issue, especially with reference to American youth, it makes local headlines. This plays an important role in influencing local populations, state legislatures, and state judges. As more states pass these types of resolutions, it also signals to the federal government that the states are unified and willing to address this issue.

For the same reasons, Congress should pass a federal resolution labeling pornography as a public-health issue. This will act as a preparatory unification for legislators to discuss and become more aware of this issue and potential solutions. Further, no single country controls the world’s internet. Therefore, a global approach is appropriate. The United Nations should draft a resolution recognizing pornography as a public-health issue and recommend appropriate solutions including age verification for commercial pornography and content rating and/or moderation for social media.

575. See supra note 6 for a list of states who passed legislative resolutions on the dangers of pornography since 2016.

576. See Nelson et al., Should Pornography Be Considered a Public Health Crisis, supra note 6, at 151–52 (noting that pornography does not constitute a public health crisis).

CONCLUSION

Thirty-first President of the United States Herbert Hoover once stated, “[c]hildren are our most valuable natural resource.” In the modern world, the number one threat to our children’s health and wellbeing comes from content and interactions on the internet. In the past, governments, parents, and online platforms have failed to adequately protect children online. As a result, young adults are increasingly desensitized to, and fail to recognize, even the most basic of human harms. Let us ensure that the next generation is better insulated from harmful content and interactions online. Now is the time for innovation, not only by the marketplace but also by the legislature. Governments everywhere need to prioritize online child-protection measures. By so doing, we will preserve the innocence of our children and the integrity of our societies.
