

MIT Computational Law Report

The Impact of COVID-19 on Modern Slavery and Human Trafficking

**Shawna Hoffman, Brian Ulicny, Adriana Bora, Bryan Wilson,
Tomas Lares, Wilfredo Martinez, David Crowley, George Pullen,
Dazza Greenwood**

Published on: May 20, 2020

License: [Creative Commons Attribution 4.0 International License \(CC-BY 4.0\)](https://creativecommons.org/licenses/by/4.0/)

The Impact of COVID-19 on Modern Slavery and Human Trafficking

When a Pandemic Encounters an Epidemic

Dear Reader,

I hope you and your families are well, healthy and safe during this unprecedented time. It is extremely difficult watching the news and hearing the tragic stories of those who have lost loved ones.

Tragically, we are finding many traffickers/pimps are taking advantage of individual's vulnerabilities during these tragic times. Myself and other leaders in the anti-human trafficking space, including the FBI, are seeing that right now is a time of increased recruiting and grooming of victims via online connections. There is data from the FBI supporting these conclusions of an current increase in exploitation activities. FBI News: <https://bit.ly/347ywiP>

Even though this has definitely been a challenging time, myself and our highly qualified volunteers have been able to offer quality services via our 24/7 human trafficking hotline. We also are working in triage and providing presentations/trainings/meetings via Zoom. In fact, in the last month we assisted 79 reported and verified victims of both sex, labor, male, female, foreign-born and domestic victims including those who identify as LGBTQ. This is the highest number of victims we have assisted on record in a 4 week period.

Please stay safe and healthy. Thank you for your support!

All my best,

Tomas J. Lares

President/CVO United Abolitionists

Email from Task Force Member, Tomas Lares to the Board of Advisors for [United Abolitionists](#), discussing the impact of COVID-19 on their daily work.

Introduction

What happens when the COVID-19 pandemic encounters the epidemic of modern slavery and human trafficking? And how are these pandemics relevant to computational law?

COVID-19 has created an impact felt in every community on Earth. The world's current state of **3.6 million** COVID-19 cases and over **260 thousand** deaths has shone a light on the true reach of a pandemic. While stay-at-home orders and social distancing efforts have necessarily changed daily routines, disrupted global supply chains, and shuttered the global economy, such efforts put additional

strain on already marginalized communities and increased their vulnerabilities.¹ The COVID-19 pandemic has also demonstrated the ways that collective action, coordination, and the development of new tools can help reduce the spread of a life-threatening disease.

While this Task Force on Computational Law for Combatting Modern Slavery (Task Force) was established with the goal of identifying ways that data and computation could be effectively leveraged to combat these problems, many of our members have taken an active role in helping combat the COVID-19 crisis, and view everyday COVID-19 issues as interconnected challenges.²

This post provides an overview of the epidemic of modern slavery and human trafficking, surveys some of ways that these challenges have been negatively transformed by COVID-19, and explores how approaches rooted in principles of computational law can help educate readers about these issues, improve transparency and accountability, and reduce the spread of modern slavery and human trafficking.

Overview of Modern Slavery and Human Trafficking

There are more slaves today than ever before in human history. With an estimate of 40.3 million, the number of slaves today is larger than the population of Canada, with one in four of the people enslaved being a child.³ Regardless of its spread use across speeches, legal documents and advocacy papers, the concept of modern slavery does not have a universal definition.⁴ For measurement purposes, modern slavery is defined by the International Labour Organisation (ILO) and the Walk Free Foundation (WFF) as *any situation of exploitation that a person cannot refuse or leave because of threats, violence, coercion, deception, and abuse of power.*⁵ Thus, modern day slavery, an *umbrella term includes forced labour, debt bondage, forced marriage, slavery and slavery-like practices and human trafficking.*⁶ As the United Nations Office on Drugs (UNODC) and Crime notes, *the common denominator of these crimes is that they are all forms of exploitation in which one person is under the control of another.*^{7 8}

There are two common forms of abuse within those categories: sexual exploitation and labor exploitation. Sexual exploitation generally manifests in the forms of domestic sex trafficking of minors, forced prostitution, forced on-line pornography, sex tourism, and sextortion.⁹ Labor exploitation generally manifests in the forms of agriculture work, construction work, forced panhandling, debt bondage, child labor, and domestic servitude.¹⁰

While 96% of all 193 United Nations member states have some legislation in place addressing anti-trafficking, research and mapping done by the University of Nottingham Rights Lab and Monash University show that 94 countries appear not to have the criminal legislation prohibiting slavery, and thus, no one can be there prosecuted and punished in court for enslaving another human being. What is more important is that 112 countries are not found to have in place penal provisions punishing forced

labour, 170 countries failed to criminalize practices similar to slavery and 180 of the countries have not enacted legislative provisions criminalizing servitude.¹¹

The United Nations' Sustainable Development Goal 8.7 calls for *immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms.*¹² This demonstrates an important point. Lack of effective legal and technical interventions and safeguards created a global landscape that has allowed the epidemic of modern slavery to take hold.

The Impact of COVID-19 on Modern Slavery and Human Trafficking Tactics

“[H]uman trafficking thrives on chaos and desperation in communities already ravaged by ills including addiction and poverty. So while we do not - and cannot - know exactly how the pandemic will affect sex and labor trafficking in America, we can be pretty sure that those communities will be even more vulnerable to violence, abuse, and exploitation in the wake of this massive, worldwide economic and social disruption.”¹³

COVID-19 is not something that can be seen, smelled, or tasted. Yet, it can kill anyone. Sites that use data to track and monitor the rate of infections and the rate of deaths help make it clear which communities are most susceptible and how or when to deploy resources in order to effectively respond. This work requires coordination and collaboration between people in government, medicine, and science. Even though the threat is difficult to comprehend the danger of something that is not seen, we have all changed our behaviors as a result of the threat that is posed. People are staying at home. People are wearing masks. People are buying up hand sanitizer and sanitizing any time there is perceived contact with others. This is perhaps one of the most remarkable aspects of the pandemic. Even though the threat is only visible with the help of special tools and instruments, there has been a globally coordinated effort to prevent this threat from reaching any more people.

Yet, for years, another threat has been lurking and operating unnoticed and posing life-threatening danger. This other threat continues to lurk in unexpected places - in the local park, in an online chatroom, in too many places to single handedly monitor. This threat is human trafficking and modern slavery. Whether you like it or not, this threat has the potential to reach anyone in the real world or online. This threat can manifest from games, chat rooms, text messages, or emails from so called friends. In school playgrounds and at fast food restaurants. In phone apps that allow for funny face modifications or body modifications on purportedly protected sites. This threat also results in the development of the clothes you wear, the food you buy, and other products that travel through supplychains on the shoulders of forced labor.

These threats, however do not exist in a vacuum. The myriad disruptions of COVID-19 have created ripples throughout communities around the globe, including those engaged in modern slavery and human trafficking. There is evidence that various criminal enterprises, including gangs that previously stole oil and sold drugs, have moved to sex trafficking as their primary lines of business are halted.¹⁴ The global migration crisis has also led to conditions that are seeing a rise in sex and labor trafficking.¹⁵

The rest of this section will examine, in detail, some of the impact of COVID-19 on the ability of these groups to recruit and groom potential victims of human trafficking and modern slavery, as well as the impact COVID-19 has had on the ability of victims, potential victims, and others to report such behavior.

Recruiting & Grooming

Many forms of modern-day slavery require the victim to be physically present in order to be recruited, manipulated, and abused. However, as governments implement stay-at-home orders, traffickers have shifted to recruiting and grooming victims online. While online communication and engagement have long been tools for trafficking, the pandemic and resulting disruption have elevated the reliance of traffickers on these tools out of necessity.

For schoolchildren, during this time of quarantine and stay home orders, many will be spending even more time on their smartphones, tablets, laptops and playing video games. The dark side of this interaction between children and technology has been an unprecedented surge in online sexual abuse of children. Not only are children increasingly exposed to abusive behavior online, but today 1 in 5 children are sexually solicited while online.¹⁶

We already know that online recruiting and grooming into human trafficking has slowly increased year after year. It is critical that parents, guardians and other authorities are vigilant and knowledgeable of what to look for and how to keep their children safe. The FBI affirmed in a March 23, 2020, press statement that minors were at a higher risk of online exploitation due to being online more than usual.¹⁷ The impact of COVID-19, however, has been felt in other areas of the lifecycle for human trafficking and modern slavery.

Reporting

Fewer in-person contacts also have had a marked impact on reporting. Social service providers working with underage child sex trafficking victims have reported receiving far fewer reports from possible victims, from teachers, nurses, and others because children are no longer attending school. These groups also report that it is difficult for service providers to interact with their clients in congregate homes because access to the Internet is typically limited in those settings and the rules have not been modified to adjust to the new realities of the crisis. On the other hand, law enforcement reports that many missing and runaway children have returned during the crisis because they no

longer have a place to be. Many of them are being referred to social services. Domestic violence services are receiving fewer calls as victims are forced to cohabit with their abusers. Monitors of sexual service provider review sites (john boards) report that some online reviewers state that they are still going to sex providers but wearing masks. Others report that venues are not operational, or that they are staying away.¹⁸

The Impact of COVID-19 on Specific Sectors of Modern Slavery and Human Trafficking

Beyond the changes COVID-19 has had on fundamental aspects of Modern Slavery and Human Trafficking, several areas have felt a sharper impact than others. This section provides an overview of the ways the illicit massage industry, labor exploitation, virtual sex work, and child exploitation have been impacted by the COVID-19 crisis.

Illicit Massage Industry

The illicit massage industry was a nexus for human trafficking prior to the COVID-19 crisis. It is estimated to generate \$3.8 billion USD annually.¹⁹ During the COVID-19 crisis, many states have closed these establishments as nonessential businesses. It is estimated these state-specific closures could result in the temporary loss of approximately \$23,000 to \$39,000 dollars in monthly gross revenue per storefront, although online review sites have described many of these sites as being open clandestinely. Online review sites report that some victim-workers were fleeing to safe havens or refusing certain acts because of the health crisis. As illicit businesses, some of these establishments will no doubt defy state closures. Some may move to serving their clientele in apartment brothels, hotels, or in homes. Some will no doubt take advantage of emergency small business loans to recoup losses. Law enforcement efforts will undoubtedly need be reprioritized due to the crisis.

Labor Exploitation

As the Delta 8.7 UN organization reports, labor exploitation results from power imbalances, and those vulnerable to labor exploitation are disproportionately vulnerable to the COVID-19 virus.²⁰ A global economic slowdown will increase the supply of desperate workers who could be exploited as forced labor. Healthcare crises are known to push workers toward exploitative businesses. As the Guardian reports, for example, vulnerable migrant workers on construction sites for the 2022 World Cup in Qatar are still showing up to crowded work sites despite bans on large gatherings.²¹ Demand for forced labor may decrease as the global economy sags, but this may also increase the demand for forced labor as a cost saving measure given an impending global economic slowdown. In Bangladesh, over 100 factories have lost business as retailers close stores and reduce orders.²² The apparel industry employs 4 million people in Bangladesh who are now either at risk of losing their jobs or in a situation of vulnerability due to loss of their steady income. These workers will need income in order

to survive, putting many at risk. Prison labor may also be exploited in this emergency.²³ A global downturn may also lead to an increase in child marriage, as a strategy for household capital formation. Enforcement efforts may also decline due to fears of the virus.²⁴ We have seen that forced labor standards on goods are being revisited in the face of the emergency.²⁵

Virtual Sex Work

The economic shut down has caused certain kinds of online sex work to appear more attractive as an option for those losing other income. As predicted by the FBI, the New York Times reports that camming sites such as CamSoda and ManyVids report significant upticks in new models signing up during the last month of the crisis, as compared with the same month last year.²⁶ Models sign up to strip or perform sexual acts online for tips. The OnlyFans site, which enables the private selling of erotic photos and videos from performers reported a 75 percent increase in overall new sign-ups — 3.7 million new sign-ups this past month, with 60,000 of them being new creators.²⁷ While participating in these online sites does not constitute evidence of the force, fraud or coercion that constitutes human trafficking, merely participating in sites like these increases the potential likelihood that participants will become targets for grooming for human trafficking and other forms of exploitation. Other similar live video streaming platforms are reporting increases in traffic during the crisis.²⁸

In response to these changing dynamics, many private sector actors are providing help to governments and society to ease this difficult period. Some offered financial support, materials, volunteering hours or services. Controversy arose, however, when Pornhub decided to offer free premium viewing to countries most affected during the crisis to encourage people to stay more indoors.²⁹ Critics raised concerns about sexual exploitation in its user-generated videos and argued that the increased traffic could exacerbate abuse to most vulnerable. And while the website has denied any allegations, this unsettled case brings into the light a larger problem, the difficulty of crafting definitive laws that help tech platforms balance protection and autonomy. Everyday sites that you and I might use as social networks or other communications tools, they pose more of an issue of child sexual abuse material than Pornhub does, Internet Watch Foundation spokeswoman Emma Hardy told Reuters.³⁰

Child Exploitation

The requirement that children stay home, away from school, while the pandemic rages on has added a level of complexity to caregiving for children. For example, in countries like Ivory Coast and Ghana, children are being forced into the forced labor related to the cocoa harvest because the safety net of the school has been temporarily dissolved.³¹ While the social and health impacts of COVID-19 on the child and starting to be closely analysed, what is still largely overlooked is the great economic stress that the pandemic causes to many families, which might lead to an increase in forced marriage and child labor. In most vulnerable households, children are at risk to become key to strategic household

capital formation.³² A recent IMF Working Paper Measures Economic Impact of Child Marriage shows in a basic growth equation that the impact of child marriage on growth was negative and significant. In the long term, avoiding these issues will only deepen the negative economic impact of these practices and of COVID-19 for these communities.³³

Computational Law Systems as a Partial Solution

The primary thrust of computational law is to reimagine and reengineer law and legal processes as computational systems. As a concept, both law and computer science can be intimidating. However, the incremental steps to get there are far less so. Some of these steps include things that already happen all the time — bringing together stakeholders from different groups, developing measurable goals and testing criteria, and establishing protocols for how to adapt, revise, and audit these systems.³⁴ While it is important to recognize that technology alone will never solve this problem, we believe it is worth examining the roles, of law, technology, and human intervention as a step toward reducing modern slavery and human trafficking. Here, we look at how computational approaches can help address different aspects of both COVID-19 and modern slavery and human trafficking, with a specific focus on education, transparency, and applications that could help with interventions on modern slavery and human trafficking.

Education

One of the benefits of moving toward computational approaches for law and legal processes is that the internet and digital technologies make it possible for people to learn about things very quickly at a low nominal cost. Open and collaborative projects, including this one, promote education through a shared collection of resources and ongoing dialog about issues. Then, applied specifically to COVID-19 and modern slavery and human trafficking, there can also be a different, more direct form of education to specific users. During the COVID-19 crisis, static websites that include information about what people should do when they or where to go for a testing center play a crucial role in helping people understand what to do when they believe they are facing the challenge of the pandemic. Developing systems like this for members of the hospitality industry could help people who observe incidences of human trafficking to learn what they should do if they come across a situation like this.

Transparency and Accountability

Another way that computational approaches can be useful to combatting the aforementioned challenges is by bringing transparency and accountability to these situations, as a way to better and more comprehensively understand them as they are unfolding. The scientific method only works in those instances where events can be measured, evaluated, and understood. In the context of COVID-19, one basic example of this is the data collected by public health authorities. This data is used to make determinations as to how or when to issue stay at home orders, populate visualizations, and let

the public know what to do in case of infection. On its own, each record is not very useful. In fact, there is a much greater potential for an individual record to do more harm than good.

However, when this data is treated responsibly – whether through data anonymization, cryptography, or other techniques – and combined with action, these large sets of data can help deploy resources more effectively, change policies to more directly combat the spread of the pandemic (e.g., through stay-at-home orders), determine which communities need greater attention, and promote a better overall discussion about difficult and complex issues.

Applications

Around the world, applications are being developed to slow the spread of COVID-19. One specific type of type of app being used to combat the spread of COVID-19 is contact tracing apps. As an epidemiological process, contact tracing takes place in three steps: contact identification, contact listing, and contact follow-up.³⁵ In some places, these apps are mandatory. In other places these apps are voluntary. The purpose of these apps is to use data from a user’s cell phone to analyze their connections with other people and physical places, specifically through bluetooth connections and GPS trails. This can be useful in helping people understand whether they have come into contact with an infected person and whether they should quarantine.³⁶ As applied to modern slavery and human trafficking, it is possible to imagine situations where victims and potential victims install apps like this that produce information about that common connections to other people and physical places as a way to map out the landscape of modern slavery and human trafficking better. Like with COVID-19 contact tracing apps, the aim would be to use these apps as a tool to help distribute resources more effectively and reduce the flow of this pandemic.

Open Questions

While COVID-19 has certainly been an instructive for understanding pandemic response, many questions remain. Indeed, it is certain that as computational law develops, new challenges will emerge and questions will arise. Below are some of the questions we have identified as needing attention.

Open Questions

The COVID-19 crisis and human trafficking intersect in a variety of ways with computational law. One area is computational systems of identity for age verification and identity verification. Online sexual services currently require 2257 compliance (referring to 18 US Code § 2257). This statute requires that performers submit a copy of a government ID certifying their age as over 18, along with their legal and stage names, production date, and production title to a records custodian. The extent to which these requirements are met and audited is questionable, but the industry continues to fight these requirements in court and may one day succeed in overturning them. Verification of performer age would seem to be a first step in preventing exploitation. Are there more effective and efficient ways to enforce performer age than the current 2257 compliance regime?³⁷ What are the data retention rules, and are they being followed and enforced?

Sites like Pornhub allow anyone to upload video their site with an email address as the only requirement, enabling exploitation. To be verified on the site, no government-issued ID is necessary, only a photo and a username are required. Is this enough to prevent the exploitation of unwilling video subjects?³⁸

Moreover, even if the age of performers is verified, has consent been adequately verified? Although a performer's age can be verified, has it been verified that the performer is not performing under the conditions of force, fraud or coercion that determine sex trafficking? Does 2257 compliance by itself constitute sufficient evidence of consent for a performance free of force, fraud or coercion, or are there additional best practices that can be adapted from informed consent for medical experimentation and similar?

The US Federal Government has decided that workers engaged in prurient entertainment are not eligible for small business disaster relief loans. The application form from the Small Business Administration for COVID-19 relief excludes applicants who offer live performances of a prurient sexual nature, and anyone who derive(s) directly or indirectly more than de minimis gross revenue through the sale of products or services, or the presentation of any depictions or displays, of a prurient sexual nature.³⁹ In this way, the government has disfavored certain legal businesses. (Spain, on the other hand, is providing special aid to prostituted persons and victims of sex trafficking as part of COVID-19 relief.⁴⁰) Is self-reporting an efficient way to achieve this goal? Has the government provided adequate standards to distinguish prurient sexual depictions or displays? Can businesses be automatically categorized in this way, making self-reporting redundant? Secondly, does making cam performers, strippers, and others ineligible for relief make them more vulnerable to exploitation?

Conversely, efforts to enforce the age of consumers of online explicit content have been unsuccessful. In 2017, the UK passed legislation as part of the Digital Economy Act requiring privacy-preserving age verification technology to access explicit materials online. The British Board of Film Classification was to evaluate sites for their explicitness. The proposal was later abandoned in 2019 when difficulties in implementing the plan were encountered.⁴¹

Have anti-money laundering laws kept up with the boom in camming sites? Camming sites are well-known as sites for potential money laundering.⁴² Are financial crime authorities creating red flags to help banks look out for money laundering activity in the new era of cam operators? Is most of the money going to the performers or to the site or third parties?

Given today's technologies, do copyright laws allow performers to delete online records of their performances if they no longer wish them to be sold? Do all online erotic performers, even those who aren't copyright holders, have a right to be forgotten? Even when the performer is the copyright holder, can technology and digital watermarking enable a performer to remove every copy of their performances, or must they live with unauthorized copies perpetuating online beyond their control?

For underage children on gaming platforms, potential targets of grooming, do the platforms enable parents and guardians to understand what safeguards are in place to prevent unwanted contact of their children through these platforms? Can parents specify policies as to who can interact with their child? What records are kept and for how long? How is interaction monitored? Can parents request to learn which adults have been interacting with their children and how? What responsibilities to the platforms have for inappropriate interactions between adults and children and how is this conveyed to parents and children?

Is there a way that parents might be able to learn which adults have been interacting with their children? Under what conditions might this be possible or even desirable?

For labor trafficking, how are online ads for jobs vetted for legitimacy? Does more need to be done to ensure that a Facebook ad for jobs doesn't lead to modern slavery, particularly among vulnerable populations? Should a person's interaction with a recruiter be registered with authorities so that they can be located if they go missing, rather than have the interaction with the job site be something that is discovered via investigation?

Is it possible or desirable for the private sector to play some role in monitoring supply chains to reduce the impact of forced labor?

States have been experimenting with various kinds of online hearings during the COVID-19 crisis. None have held online criminal jury trials. Does the move to online hearings provide opportunities to help victims of modern slavery? Or does the move to remote hearing disadvantage victims further? What rules about access to the internet should be relaxed for exploited youth in congregate care environments during this crisis to provide the best care and best access and preparation for online hearings?

The epidemiological nature of the current crisis means that the need to track contacts of those infected with COVID-19 will intersect with those who are perhaps involved with sex work or forced labor. How will these intersections play out? Will the rights to privacy of exploiters prevail over exploited persons who will not receive the care they need and not stop spreading the disease because of the nature of their activity? Are the correct legal protections in place for those who provide information for contact tracing, no matter how that contact came about?

Finally, can any of these issues be solved with new technologies such as blockchain, verifiable credentials, EU-style rights to be forgotten, and other innovations?

Conclusion

This article is intended as a wake-up call.

Like COVID-19, modern slavery passes by us on a daily basis, often undetected – it can pass through the front door in the form of fresh food picked by people hundreds of miles away, in meats that are processed by workers you will never meet; it can pass by the nail saloon that you are excited to get back to after your government allows your businesses to reopen; it is in the massage parlor that helps alleviate your back pain, in your kid’s day care, in your maid service, and so many other places

The hope of this article is that it forges some connections about how to take what we have all learned about ourselves from the COVID-19 crisis and apply it to a new problem. Let’s show that the COVID-19 pandemic can serve as a way to understand how to help eliminate another invisible virus.

While we do not purport to have the all the answers to all of these questions, we recognize that these issues are harming lots of people, and do believe that by educating people about these issues, collecting data about these challenges, and working together to reduce the impacts of these problems, we can help combat these challenges in new ways.

Over the next few months we will be exploring some of the issues described above in more detail. We have also been shortlisted to participate alongside Gallup and Walk Free at the United Nations Global Data Forum on October 18 - 21, where we will be exploring how to measure and combat modern slavery with data-driven solutions. Future posts will explore strategies for measuring and analyzing human trafficking and modern slavery, developing interventions for these problems, and continuing to iterate solutions that address these challenges.

If you or your organization is interested in supporting the work of the Task Force on Computational Law, fill out [this form](#) and we will be in touch with you.

If we want to build a world where modern slavery and human trafficking our things of the past, we must be willing to create such a place.

To learn more about the Task Force on Computation Law for Combating Modern Slavery, check out the original announcement [here!](#)

Footnotes

1. “Coronavirus disease (COVID-19) Situation Report”. World Health Organization. May, 2020. <https://www.who.int/docs/default-source/coronaviruse/situation-reports/>. ↵
2. Ulicny, Brian and Hoffman, Shawna. “Task Force on Computational Law for Combating Modern Slavery”. MIT Computational Law Report. Jan 21, 2020. <https://law.mit.edu/pub/taskforce-on-computational-law-for-combating-modern-slavery>. ↵

3. “Global estimates of modern slavery: Forced labour and forced marriage”. International Labour Office (ILO), Geneva. 2017 https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_575479.pdf. ↵
4. Zweynert, Astrid. “Does Modern Slavery Need a New Definition?”. World Economic Forum. Dec 1, 2015. <https://www.weforum.org/agenda/2015/12/does-modern-slavery-need-a-new-definition/> ↵
5. “Global estimates of modern slavery: Forced labour and forced marriage”. International Labour Office (ILO), Geneva. 2017 https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_575479.pdf. ↵
6. “Global estimates of modern slavery: Forced labour and forced marriage”. International Labour Office (ILO), Geneva. 2017 https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_575479.pdf. ↵
7. “Global Report on Trafficking in Persons 2016”. United Nations Office on Drugs and Crime. United Nations. Jan 11, 2017. https://www.unodc.org/documents/data-and-analysis/glotip/2016_Global_Report_on_Trafficking_in_Persons.pdf. ↵
8. “G20 Countries”. Global Slavery Index. 2018. <https://www.globalslaveryindex.org/2018/findings/importing-risk/g20-countries/> ↵
9. Allain, Jean and Schwarz, Katarina. “Antislavery in domestic legislation world mapping visualisation toolkit”. University of Nottingham Rights Lab. 2020. <https://antislaverylaw.ac.uk/>. ↵
10. “Labor Trafficking Fact Sheet”. US Department of Health and Human Services. Aug 6, 2012. <https://www.acf.hhs.gov/archive/otip/resource/fact-sheet-labor-trafficking-english> ↵
11. Schwarz, Katarina et al. “Slavery is not a crime in almost half the countries of the world – new research”. The Conversation. February 13, 2020. <https://theconversation.com/slavery-is-not-a-crime-in-almost-half-the-countries-of-the-world-new-research-115596>. ↵
12. “Target 8.7” UN Sustainable Development Goals. <https://indicators.report/targets/8-7/>. ↵

13. “COVID-19 May Increase Human Trafficking in Vulnerable Communities”. Polaris Project. April 7, 2020. <https://polarisproject.org/blog/2020/04/covid-19-may-increase-human-trafficking-in-vulnerable-communities/>. ↵
14. Murray, Christine. “Drugs, oil ... women? Mexican cartels turn to human trafficking”. Thomson Reuters Foundation. April 29m 2020. <https://news.trust.org/item/20200429164955-34hfv/>. ↵
15. Murray, Christine “Migrants raped and trafficked as U.S. and Mexico tighten borders, charity says”. Thomson Reuters Foundation. February 11, 2020. <https://news.trust.org/item/20200211170856-zp22z>. ↵
16. Péron, Clara and Macdonald, Jeff. “Artificial Intelligence Combating Online Abuse of Children”. Bracket Foundation.
2019. https://valueforgood.com/publications/AI_Making_Internet_Safer_for_Children.pdf. ↵
17. “School Closings Due to COVID-19 Present Potential for Increased Risk of Child Exploitation”. FBI. March 23, 2020. https://www.fbi.gov/news/pressrel/press-releases/school-closings-due-to-covid-19-present-potential-for-increased-risk-of-child-exploitation/layout_view. ↵
18. Goldblatt Grace, Lisa et al. “State of My Life My Choice: Strength and Resilience in Challenging Times”. My Life My Choice. April 9, 2020. <https://www.mylifemychoice.org/our-voice/state-of-my-life-my-choice-strength-and-resilience-in-challenging-times>. ↵
19. “Snapshot - Assessing the Potential Impact of COVID-19 on the IMI”. Heyrick Research. March, 2020. <https://www.heyrickresearch.org/research/snapshot-assessing-the-potential-impact-of-covid-19-on-the-imi>. ↵
20. “COVID-19 and the world of work: Impact and policy responses” International Labour Organization. March 18, 2020 https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_738753.pdf. ↵
21. Patisson, Pete. “Despite coronavirus, it’s ‘business as usual’ for World Cup workers in Qatar”. Guardian. Mar 26, 2020. <https://www.theguardian.com/global-development/2020/mar/26/despite-coronavirus-its-business-as-usual-for-world-cup-workers-in-qatar>. ↵
22. Karim, Naimul. “Job cut fears as fashion brands slash orders in Bangladesh with coronavirus”. Thomson Reuters Foundation. Mar 19, 2020. <https://news.trust.org/item/20200319190509-6de6x/> ↵
23. Eisen, Lauren-Brooke and Seabrooks, Lauren. “Covid-19 Highlights the Need for Prison Labor Reform”. Brennan Center for Justice. April 17, 2020. <https://www.brennancenter.org/our-work/analysis-opinion/covid-19-highlights-need-prison-labor-reform>. ↵

24. Texeira, Fabio. “EXCLUSIVE-Brazil halts mobile groups anti-slavery operations due to coronavirus”. Mar 17, 2020. Thomson Reuters Foundation. <https://news.trust.org/item/20200317170106-ultz8>. ↵
25. “U.S. lifts ban on Malaysian medical glove maker amid shortage”. Reuters. MARCH 24, 2020. <https://www.reuters.com/article/us-health-coronavirus-malaysia-gloves/u-s-lifts-ban-on-malaysian-medical-glove-maker-amid-shortage-idUSKBN21C05Y>. ↵
26. Drolet, Adrienne. “Sex Work Comes Home”. New York Times. April 10, 2020. <https://www.nytimes.com/2020/04/10/style/camsoda-onlyfans-streaming-sex-coronavirus.html?searchResultPosition=1>. ↵
27. Drolet, Adrienne. “Sex Work Comes Home”. New York Times. April 10, 2020. <https://www.nytimes.com/2020/04/10/style/camsoda-onlyfans-streaming-sex-coronavirus.html?searchResultPosition=1>. ↵
28. Steadman, Otilia. “Sex Workers Are Facing Increasingly Risky Conditions As The Coronavirus Spreads”. BuzzFeed News. Mar 13, 2020. <https://www.buzzfeednews.com/article/otiliasteadman/coronavirus-sex-workers>. ↵
29. Boroff, David and Rogers, Jon. “LENDING A HAND Pornhub Premium now FREE to encourage everyone to stay home during virus crisis”. The Sun. Mar 25 2020. <https://www.the-sun.com/news/588915/coronavirus-pornhub-free-premium-service-pandemic/>. ↵
30. Milne, Amber “Porn site’s free service during coronavirus raises sex trafficking fears”. Reuters. March 26, 2020. <https://www.reuters.com/article/us-britain-women-trafficking-trfn/porn-sites-free-service-during-coronavirus-raises-sex-trafficking-fears-idUSKBN21D3E9>. ↵
31. Peyton, Nellie. “West African countries on alert for child labor spike due to coronavirus”. Thomson Reuters Foundation. April 30, 2020. <https://news.trust.org/item/20200430132011-9aq7i/>. ↵
32. Smith, Angharad and Cockayne, James. “This is the impact of COVID-19 on modern slavery”. World Economic Forum. April 7, 2020. <https://www.weforum.org/agenda/2020/04/covid19-modern-slavery/>. ↵
33. Mitra, Pritha. “Does Child Marriage Matter for Growth?”. International Monetary Fund. February 7, 2020. <https://www.imf.org/en/Publications/WP/Issues/2020/02/08/Does-Child-Marriage-Matter-for-Growth-49011>. ↵
34. Pentland, Alex “Sandy”. “A Perspective on Legal Algorithms”. MIT Computational Law Report. Dec 06, 2019. <https://law.mit.edu/pub/aperspectiveonlegalalgorithms>. ↵

35. “Contact tracing”. World Health Organization. May 9, 2017. <https://www.who.int/news-room/q-a-detail/contact-tracing>. ↵
36. Maragakis, Lisa Lockerd. “Coronavirus, Social and Physical Distancing and Self-Quarantine”. Johns Hopkins Medicine. 2020. Jo <https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/coronavirus-social-distancing-and-self-quarantine>. ↵
37. “Quick 2257”. <https://quick2257.com/>. ↵
38. Rhodes, Shea. Twitter. April 30, 2020. <https://twitter.com/ShMrnRhds/status/1255898676213485571?s=20>. ↵
39. “COVID-19 Economic Injury Disaster Loan Application”. Small Business Administration. 2020. <https://covid19relief.sba.gov/#/>. ↵
40. Davis, Sophie. “Spain provides lockdown support for trafficking victims, prostitutes”. Thomson Reuters Foundation. April 21, 2020. <https://news.trust.org/item/20200421140948-8firh> ↵
41. Waterson, Jim and Hern, Alex. “UK age-verification system for porn delayed by six months”. The Guardian. June 20, 2019. <https://www.theguardian.com/technology/2019/jun/20/uks-porn-age-verification-system-to-be-delayed-indefinitely>. ↵
42. Biddle, Sam. “Indentured Servitude, Money Laundering, and Piles of Money: The Crazy Secrets of Internet Cam Girls (NSFW)”. Gizmodo. Sept 18, 2012. <https://gizmodo.com/indentured-servitude-money-laundering-and-piles-of-mo-5941976>. ↵