Measuring modern slavery: Moving beyond prevalence

Modern Slavery Evidence Unit Briefing on an article by Professor Todd Landman, May 2020[i]

Lessons learned in the measurement of human rights can, and are, being applied to the measurement of modern slavery. The anti-slavery sector has made laudable progress in understanding prevalence; however, significant challenges remain.

Key research findings

1. The practice of modern slavery – a complex and contested concept - remains elusive, hidden, and difficult to observe, however efforts to measure the phenomenon have made great strides.

2. Modern slavery encompasses a significant subset of human rights found in international law, the parameters of which can be delineated and operationalized in ways that make the phenomenon amenable to measurement across a wide range of different data.

3. Events-based data, standards-based data, survey-based data, and the analysis of new forms of data, such as satellite imagery, provide a variety of direct and indirect ways to measure modern slavery prevalence.

4. However, precise and definitive prevalence measures remain elusive; current estimates in circulation have significant, and in places, unreported margins of error.

5. Given the importance of measuring modern slavery more accurately, the endeavour should not be abandoned; however, the limitations of current measures must be consistently acknowledged.

Why is this important?

The collective goal of the global anti-slavery movement is to bring an end to slavery and related forms of exploitation, and therefore the preoccupation with measuring modern slavery prevalence is understandable. Quantifying modern slavery to understand the scale and scope of the phenomenon provides an evidence base for concerted advocacy efforts, and allows for monitoring, evaluation, and impact assessment of direct and indirect interventions.

Whilst significant progress has been made to directly and indirectly measure modern slavery, none of the approaches, which are often costly and time-intensive, yields statistics that are fully reliable. The focus on prevalence measures to assess the success of anti-slavery interventions and strategies is therefore problematic. Alongside addressing these challenges, it is important to complement quantitative efforts with the collection and analysis of qualitative data, where survivor voices and experiences play a central role in shaping the anti-slavery response.

Recommendations for the anti-slavery sector

- Be overt, transparent and upfront about the limitations of quantitative data approaches to measuring modern slavery.

- Consistently use the word 'estimated', or an equivalent, when sharing prevalence statistics.

- Advocate for the complementarity of qualitative research, alongside the importance of quantitative data.

- Utilise qualitative data and resources, such as the VOICES database[ii] of narratives of modern slavery survivors, in your work.

Recommendations for funders

- Fund more qualitative work, and more reviews of qualitative work to grow the evidence base.

- Ask for measures of impact from your funding that take into account qualitative as well as quantitative outcomes. Findings from systematic analysis of qualitative research can help to provide evidence on the feasibility and acceptability of interventions.[iii]

- Build capacity to ensure that funding decision-makers know how to evaluate the nature and reliability of evidence produced through qualitative and quantitative work.[iv]

Research overview

Over the last twenty years, modern slavery - an umbrella term that captures the offence of slavery, human trafficking and related forms of exploitation - has garnered increasing international attention; reflected by the UN's promulgation of Sustainable Development Goal (SDG) 8 and, in particular, target 8.7.

In this article, the author provides an overview of how the lessons learned in the measurement of human rights can be, and are being, applied to the measurement of modern slavery; a phenomenon that encompasses a significant subset of human rights found in international law.

Challenges in measurement

Like many other human rights abuses, such as arbitrary detention, torture, disappearance, and extra-judicial killing, modern slavery is mostly hidden from direct observation. Compounding this, the sources of data available to develop measures of modern slavery, such as individual reporting or referrals into victim support and assistance programmes, are inherently biased. Such reporting constitutes a "convenience sample", meaning that there are significant challenges in making reliable inferences based upon it.

However, the parameters of modern slavery can be delineated and operationalized in ways that make the phenomenon amenable to measurement across a wide range of different data. The different modes of direct and indirect measurement of modern slavery – measurement strategies taken from the field of human rights - include events-based data, standards-based data, survey-based data, and new forms of data made possible through machine learning and artificial intelligence (AI) applications.

Types of measurement data

1) **Events-based data** involve discrete and time-bound occurrences in the social, political, and economic world that can be enumerated. In a modern slavery context, such work typically focuses on establishing the number of people in modern slavery. In the contemporary human rights field, the American Association for the Advancement of Science (AAAS) and now the Human Data Analysis Group (HRDAG) have developed the "who did what to whom model" for documenting, deconstructing, and coding human rights abuses from narrative accounts.[v] This model originally used simple convenience samples but has now developed to incorporate multiple-samples and the statistical technique "capture- recapture". This approach, also known as 'multiple systems estimation' (MSE), has now been used in the UK[vi], the Netherlands[vii] and in the City of New Orleans[viii] to estimate the number of modern slavery victims. In 2013, using MSE, it was estimated that there were between 10,000 -13,000 people in modern slavery in the United Kingdom.

2) **Standards-based data** draws heavily on the international law, or frameworks for standardised coding of human rights

information into scales that provide comparable measures on human rights performance over time and space. The Cingranelli and Richards Human Rights Data Project[ix], for example, maps government respect across 17 internationally recognised human rights, including variables on workers' rights; a measure that includes an assessment of the degree to which forced labour is present in any given country-year.

The Anti-Slavery in Domestic Legislation Database[x], which displays data on anti-slavery legislation for all 193 UN member states and details the degree to which countries participate in relevant international legal instruments and the presence of domestic legislation, is an example of the application of a standards-based data approach by the anti-slavery sector.

3) **Survey-based data** consists of structured, semi-structured, and open survey tools to uncover perceptions, attitudes, and real life experiences of individuals. They are based on specific research objectives, a sampling frame, a sample, data collection, and descriptive, second-order data analysis. The approach can be used for revealing human rights abuses and has been adopted in work estimating the prevalence of modern slavery, including by the International Labour Organisation in its Global Estimates of Modern Slavery[xi], and in Walk Free's Global Slavery Index (GSI).[xii]

4) The last few years has seen an explosion of **new forms of data** and the means with which to analyse them. These data include social media and the increasing availability of satellite imagery in the public domain. Such images have been the mainstay data source for the field of "earth observation" and geospatial analysis, which can be used to identify and count sites known for the presence of modern slavery. The "Slavery from Space" research programme at the University of Nottingham's Rights Lab has engaged in such techniques on fisheries, mines, brick kilns, quarries, and charcoal production farms.[xiii] While the analysis of satellite data does not measure modern slavery*, per se*, it does provide a mapping of sites that have a very high probability of the presence of modern slavery, which can be combined with on-the-ground data to estimate prevalence.

Moving beyond prevalence

These varying data techniques and measurement strategies provide direct and indirect measures of slavery that are proving useful to the movement to end it by 2030 in line with the aspirations of SDG 8.7. However, the limitations to these data sets, including inherent biases in source material, and sparse coverage across and between sources, mean that resulting prevalence estimates are just that, estimates, and therefore should not be used and promoted without caveats.

The quest for accurate prevalence measures should not be abandoned, and can be complemented with qualitative data; focusing on the *experiences* of victims and survivors as well as the numbers.

[i] Measuring Modern Slavery: Law, Human Rights, and New Forms of Data, Landman (2020). Available at: https://muse.jhu.edu/article/754938
[ii] https://www.nottingham.ac.uk/research/beacons-of-excellence/rights-lab/mseu/mseu-resources/2019/september/voices.pdf
[iii] https://methods.cochrane.org/qi/news/cerqual-new-approach-supporting-use-qualitative-evidence-decision-making
[iv] https://www.alliance4usefulevidence.org/assets/2018/05/Mapping-Standards-of-Evidence-A4UE-final.pdf
[v] Patrick Ball, Human Rights Data Analysis Group (HRDAG), *Who Did What to Whom?*, https://hrdag.org/whodidwhattowhom/contents.html
[vi] Bernard W. Silverman, Modern Slavery: An Application of Multiple Systems Estimation 1 (2014), https://www.gov.uk/government/publications/modern-slavery-an-application-of-multiple-systems-estimation.
[vii] Jan Van Dijk, Peter G.M. Van Der Heijden, & Suzanne L.J. Kragten-Heerdink, *Multiple Systems Estimation for Estimating the Number of Victims of Human Trafficking Across the World*, University of Southampton Institutional Repository 23 (2016), https://eprints.soton.ac.uk/399731/.
[viii] Kevin Bales, Laura T. Murphy, Bernard W. Silverman, *How Many Trafficked People Are There in Greater New Orleans? Lessons in Measurement*, 1 J. HUM. TRAFFICKING 7 (2019).
[ix] DAVID L. CINGRANELLI, DAVID L. RICHARDS & K. CHAD CLAY, CIRI HUMAN RIGHTS DATA PROJECT: THE CINGRANELLI-RICHARDS (CIRI) HUMAN RIGHTS DATA PROJECT CODING MANUAL 65 (2014).
[x] https://antislaverylaw.ac.uk/
[xi] https://www.ilo.org/global/publications/books/WCMS_575479/lang--en/index.htm
[xii] https://www.globalslaveryindex.org/
[xiii] University of Nottingham, *Fighting Slavery from Space,* https://www.nottingham.ac.uk/vision/in-focus/2018/summer/slavery-space.aspx.