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## **MODERN SLAVERY RESEARCH: A COMMENTARY ON METHODS AND THEMES**

### ABSTRACT

This article explores the methods used in the rapidly growing field of modern slavery research. Research on this topic has gained momentum since the introduction of modern slavery legislation in the UK and Australia. Defined as a broad umbrella term encompassing human trafficking, forced labour, and other exploitative practices, modern slavery research spans multiple academic disciplines, including law. This article aims to amplify discussion on the methods used in modern slavery research globally. It analyses 165 relevant articles from the Scopus database and finds a scholarly field with some disciplinary segregation, particularly between business and supply chain literature on the one hand, and legal and criminology scholarship on the other. It also finds distinct methodological preferences in different disciplines. We suggest there is scope to broaden modern slavery research to increase interdisciplinary dialogue, diversify methodologies, support scholars from the Global South, and give voice to victim-survivors.

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## I INTRODUCTION

Research on modern slavery is a rapidly growing field, spurred — at least in part — by the introduction of modern slavery legislation in the United Kingdom<sup>1</sup> ('UK') and Australia<sup>2</sup> with other similar business reporting, or more robust human rights due diligence regimes, emerging internationally. Modern slavery is a global challenge, defined as 'a broad umbrella term used to describe a number of crimes including, but not limited to, human trafficking, forced labour, sexual slavery, child labour and trafficking, domestic servitude, forced marriage, bonded labour including debt bondage, slavery and other slavery-like practices'.<sup>3</sup> As such, although described by some as a 'novel phenomenon',<sup>4</sup> modern slavery covers slavery and other crimes and exploitative practices that have existed historically, as well as contemporary forms of slavery.

Prior scholarship has focused on investigating modern slavery from specific disciplinary perspectives, including: social sciences; business, management and accounting; and, arts and humanities. This scholarship has also spanned many fields of research, including: behavioural;<sup>5</sup> human and labour rights;<sup>6</sup> supply chains;<sup>7</sup> and policy and history,<sup>8</sup> to name a few. While each discipline is valuable in advancing our understanding of modern slavery, and more importantly in discovering mechanisms to tackle it, this is still a somewhat embryotic area of research which has gained greater traction recently due to the aforementioned modern slavery legislation. Best practices for investigating this arguably 'wicked problem' are still open to debate.<sup>9</sup> Therefore, we are interested in better understanding the research methodologies employed by various fields, to see which methodological tools are being used by which disciplines, and where there is potential for cross-fertilization across scholarly domains to address research gaps.

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<sup>1</sup> *Modern Slavery Act 2015* (UK) ('UK MSA').

<sup>2</sup> *Australian Modern Slavery Act 2018* (Cth) ('Australian MSA').

<sup>3</sup> Joint Standing Committee on Foreign Affairs, Defence and Trade, *Modern Slavery and Global Supply Chains* (Interim Report, August 2017) 2.

<sup>4</sup> Robert Caruana et al, 'Modern Slavery in Business: The Sad and Sorry State of a Non-Field' (2021) 60(2) *Business and Society* 251, 251.

<sup>5</sup> See, eg, Andrew Crane, 'Modern Slavery as a Management Practice: Exploring the Conditions and Capabilities for Human Exploitation' (2013) 38(1) *Academy of Management Review* 49.

<sup>6</sup> See, eg, Bill Cooke, 'The Denial of Slavery in Management Studies' (2003) 40(8) *Journal of Management Studies* 1895.

<sup>7</sup> See, eg, Stefan Gold, Alexander Trautrimms and Zoe Trodd, 'Modern Slavery Challenges to Supply Chain Management' (2015) 20(5) *Supply Chain Management: An International Journal* 485.

<sup>8</sup> See, eg, Julia O'Connell Davidson, *Modern Slavery: The Margins of Freedom* (Palgrave Macmillan, 2015).

<sup>9</sup> Caruana et al (n 4).

Academic scholarship requires a robust, rigorous, and defensible method,<sup>10</sup> irrespective of the field of research,<sup>11</sup> and scholars take great pains to articulate and justify their selected method(s).<sup>12</sup> Many scholars return time and again to tried and tested methods unique to their discipline or sub-discipline. Academic books, journals, and conferences are dedicated to presenting and critiquing methods. Yet, regarding modern slavery related research, while a wide range of research methods are employed, they are generally under examined. We propose two main possible reasons for this gap: (1) temporal — the relatively recent turn to modern slavery research; and (2) disciplinary — the interdisciplinary nature of the field, which encompasses different types of studies that are often siloed, thus defying methodological consistency, with each academic discipline gravitating towards well-established, discipline-specific methods. What constitutes ‘good’ research and research methods, particularly in an interdisciplinary or multidisciplinary context, has long been debated.<sup>13</sup> Todd Landman argues that human rights related research and advocacy — including on slavery — requires what he refers to as ‘trans-disciplinary’ methods.<sup>14</sup> He outlines a problem based and action oriented approach that identifies the problem, undertakes rigorous and systematic research to determine the nature and extent of the problem and its main drivers, and proposes solutions and ways of assessing outcomes from these solutions. It is clear that this approach is not doctrinal in nature but rather requires a multidisciplinary approach both to understand the substantive issues and suitable research methods. Landman’s article is a useful insight into the work of the Rights Lab at the University of Nottingham, but does not present a global study of methods used in modern slavery research, which is what we offer here.

The overarching goal of this article is to amplify discussion on methods in modern slavery research and encourage acknowledgement of the complexity of the field and of methodological solutions. It also aims to incite further reflection on and critique of methods; begin to develop a shared language across disciplines researching modern slavery; and contribute to the development of innovative and robust research methods to address research gaps.

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<sup>10</sup> See, eg: Reza Banakar and Max Travers, *Theory and Method in Socio-Legal Research* (Bloomsbury, 2005); Stacy M Carter and Miles Little, ‘Justifying Knowledge, Justifying Method, Taking Action: Epistemologies, Methodologies, and Methods in Qualitative Research’ (2007) 17(10) *Qualitative Health Research* 1316.

<sup>11</sup> See, eg, Till Grüne-Yanoff, ‘Justifying Method Choice: A Heuristic-Instrumentalist Account of Scientific Methodology’ *Synthese* (11 December 2020) 3903.

<sup>12</sup> Nikolaos Basias and Yannis Pollalis, ‘Quantitative and Qualitative Research in Business & Technology: Justifying a Suitable Research Methodology’ (2018) 7(1) *Review of Integrative Business and Economics Research* 91.

<sup>13</sup> Pär Mårtensson et al, ‘Evaluating Research: A Multidisciplinary Approach to Assessing Research Practice and Quality’ (2016) 45(3) *Research Policy* 593.

<sup>14</sup> Todd Landman, ‘Out of the Shadows: Trans-Disciplinary Research on Modern Slavery’ (2018) 2(2) *Peace Human Rights Governance* 143.

As a group of scholars from diverse disciplines and sub-disciplines but broadly within law and business, we use an interdisciplinary research theoretical framework. A.S. CohenMiller and Elizabeth Pate acknowledge that an interdisciplinary research theoretical framework can be elusive, but they note that as a framework it provides: an orientation for guiding perspectives for research and practice; allows solutions beyond one discipline; and is based on an assumption that intentionally examining problems and issues from multiple disciplines is critical.<sup>15</sup> This aligns well with our approach to this research and to our understanding of modern slavery research in general. Although more science focused, the United States (‘US’) National Academy of Sciences provides a useful definition of interdisciplinary research:

a mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice.<sup>16</sup>

It also identifies four drivers of interdisciplinary research that resonate with us: (1) the inherent complexity of nature and society; (2) the drive to explore basic research problems at the interfaces of disciplines; (3) the need to solve societal problems; and (4) the stimulus of generative technologies.

Our theoretical framework was also informed by postcolonial approaches to research on modern slavery,<sup>17</sup> which led us to ask: from which countries does modern slavery research emanate and which stakeholders are participants in modern slavery research?

The article is structured as follows: Part II provides an overview of the emergence of modern slavery research and its diverse disciplines and briefly notes some of the challenges that result. Part III outlines the methods we employed in conducting this survey of the field. As a cross-disciplinary team of scholars, we noted the diverse range of methods now used to research modern slavery but also the limited scholarly scrutiny of the methods used. There have been systematic literature reviews, but

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<sup>15</sup> A.S. CohenMiller and Elizabeth Pate, ‘A Model for Developing Interdisciplinary Research Theoretical Frameworks’ (2019) 24(6) *The Qualitative Report* 1211, 1215–16.

<sup>16</sup> National Academy of Sciences, National Academy of Engineering, and Institute of Medicine, *Facilitating Interdisciplinary Research* (National Academies Press, 2005) 26.

<sup>17</sup> See, eg: Swati Nagar, ‘Modern Slavery in Contemporary India: Addressing the Elephant in the Room — Contributions From Stringer and Samonova’ in Vijayta Doshi (ed), *Postcolonial Feminism in Management and Organization Studies* (Routledge, 2023) 72; Nádia Campos Pereira Bruhn et al, ‘Contributions of International Business from a Postcolonial Perspective: A Critical Review’ (2023) 63(4) *Revista De Administração De Empresas* 1.

these tend to be specific to one discipline rather than across disciplines.<sup>18</sup> So far there has been no comprehensive global analysis of the *methods* used in modern slavery research. By methods we mean the way in which modern slavery research is carried out — the tools of data collection and analysis.

Part IV reports on our findings; followed by a discussion in Part V of the key trends and gaps in research methods used and proposals for future research directions. Here we also reflect on the implications of interdisciplinary research and research methods for lawyers and legal researchers. We conclude that there is scope for further dialogue across disciplinary silos, and scope to critique and expand existing methods in modern slavery research.

## II TAKING STOCK OF THE EMERGENCE AND DIVERSITY OF MODERN SLAVERY RESEARCH

Although nascent as a research field, modern slavery research is diverse, spanning disciplines and countries and bringing new and varied analyses of modern slavery drivers, manifestations, responses, and legislation. As Figure 1 indicates, scholarly works that expressly focus on ‘modern slavery’ — and use that specific terminology — were largely non-existent until 2002, and became more common around 2014/2015. Our analysis of these publications indicates that this was at least partly related to the introduction of the UK *Modern Slavery Act 2015* (‘UK MSA’).<sup>19</sup> Modern slavery works became more prolific in 2018 (78 publications compared to 28 in 2017) as scholarship that engaged with the implementation of the UK MSA reached the publication stage, and preliminary commentary on the introduction of an Australian Modern Slavery Act began to feature in the literature before the introduction of the *Australian Modern Slavery Act 2018* (Cth) (‘Australian MSA’).<sup>20</sup>

In our study, we refer to modern slavery as a ‘field’ of research. The Organization for Economic Cooperation and Development (‘OECD’) uses ‘fields of research and development’ as a way of classifying research and development (‘R&D’) by ‘fields of enquiry, namely, broad knowledge domains based primarily on the content of the R&D subject matter’.<sup>21</sup> These are high level categories and national data collection

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<sup>18</sup> See, eg: Chen Han et al, ‘Modern Slavery in Supply Chains: A Systematic Literature Review’ (2022) 27(7) *International Journal of Logistics: Research And Applications* 1206; Barnabas Jossy Ishaya et al, ‘A Systematic Literature Review of Modern Slavery Through Benchmarking Global Supply Chain’ (2023) 31(2) *Benchmarking: An International Journal* 558. But with the exception of Waqas Mehmood et al, ‘Modern Slavery: A Literature Review using Bibliometric Analysis and the Nexus of Governance’ (2022) 23(1) *Journal of Public Affairs* 1.

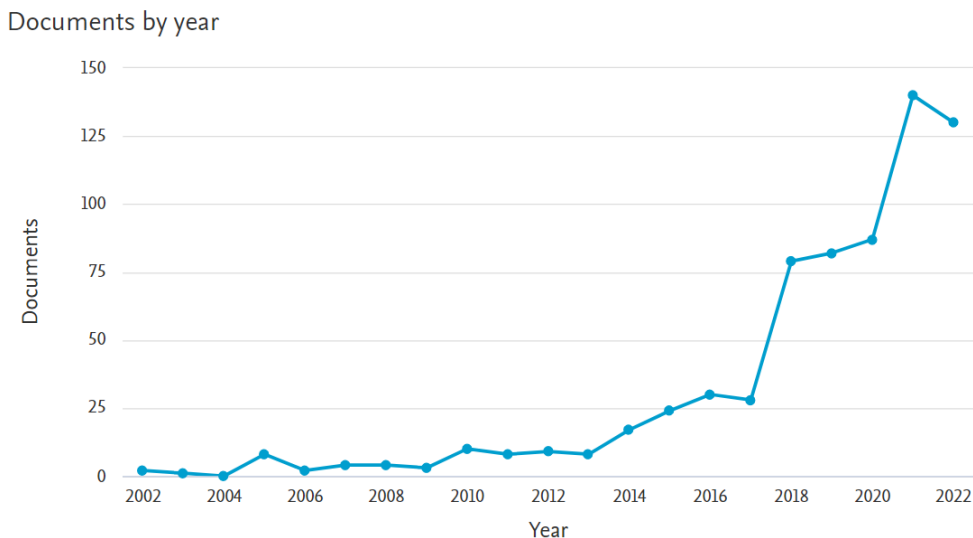
<sup>19</sup> UK MSA (n 1).

<sup>20</sup> Australian MSA (n 2).

<sup>21</sup> OECD, *Frascati Manual 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development* (The Measurement of Scientific, Technological and Innovation Activities, 2015) 370.

is often aligned with these classifications. For example, although our study is global, the lead scholars are based in Australia where the Australian and New Zealand Standard Research Classification (‘ANZSRC’) is used for the measurement and analysis of R&D in Australia and New Zealand. This uses Fields of Research (‘FoR’) to describe ‘common knowledge domains and/or methodologies used’ in research and experimental development;<sup>22</sup> which are broadly aligned with the OECD classifications. ANZSRC FoR codes of relevance to modern slavery research within ‘48. Law and Legal Studies’, could include diverse fields such ‘480103 Corporations and associations law’ and ‘480704 Migration, asylum and refugee law’.<sup>23</sup> Such R&D classification systems are slow to change and so it is not surprising that there is no distinct code for the field of modern slavery research. As a field, it has roots in well-established disciplines such as law, social sciences, and business, and in subject areas such as slavery, human trafficking, child labour, and labour exploitation, but research on the specific topic of modern slavery is relatively recent.

**Figure 1: Scopus Documents by Year — Search Term ‘modern slavery’<sup>24</sup>**



<sup>22</sup> ‘Australian and New Zealand Standard Research Classification (ANZSRC): A Statistical Classification Used for the Measurement and Analysis of R&D in Australia and New Zealand’, *Australian Bureau of Statistics* (Web Page, 30 June 2020) <<https://www.abs.gov.au/statistics/classifications/australian-and-new-zealand-standard-research-classification-anzsrc/latest-release>>.

<sup>23</sup> Ibid, see ‘Data downloads > ANZSRC 2020 FoR — structure, definitions and explanatory notes’.

<sup>24</sup> Search of Scopus database using search term ‘modern slavery’.

We identify this immaturity of the field as a challenge for methodology. Elizabeth Fisher et al grappled with a similar challenge in the area of environmental law in 2009.<sup>25</sup> They argued that ‘the subject can only mature when we face its methodological challenges head on’.<sup>26</sup> Like us, they identified the interdisciplinary nature of the subject as a challenge, in addition to some further challenges that are more specific to law, but resonate with the legal and regulatory aspects of modern slavery research, namely: the speed and scale of legal and regulatory change; the heavy reliance on a diverse range of governance arrangements; and the multi-jurisdictional nature of the subject.<sup>27</sup>

Given the multifaceted character of modern slavery, there are a wide range of relevant disciplines including law, business, management, accounting, social sciences, economics, human geography, criminology, industrial relations, political science, and so forth. Robert Caruana et al have bemoaned the ‘sad and sorry state of a non-field’ when examining the underdeveloped nature of modern slavery research in business and management.<sup>28</sup> As a cross-disciplinary team of scholars, we noted the diverse range of methods now used to research modern slavery but also the lack of scholarly scrutiny of the methods used. There have been systematic literature reviews, but these tend to be specific to one discipline rather than across disciplines.<sup>29</sup> An exception to this was the recent literature review by Waqas Mehmood et al.<sup>30</sup> They carried out a qualitative and quantitative meta-literature review of 280 publications and found three research streams on modern slavery, these were: overview and growth; theories; and country behaviour. Here, we add to this by examining a subset of the literature with a focus on methods and we specifically examine the methods used in modern slavery research. Those who have engaged specifically with overarching questions of methods in modern slavery research (rather than simply discussing methods applied in their particular project) have tended to focus on methods for estimating prevalence,<sup>31</sup> critiquing systems and methods for estimating prevalence,<sup>32</sup> or discussing technology-based solutions

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<sup>25</sup> Elizabeth Fisher et al, ‘Maturity and Methodology: Starting a Debate about Environment Law Scholarship’ (2009) 21(2) *Journal of Environmental Law* 213, 213.

<sup>26</sup> *Ibid.*

<sup>27</sup> *Ibid.*

<sup>28</sup> Caruana et al (n 4).

<sup>29</sup> See, eg, Han et al (n 18).

<sup>30</sup> Mehmood et al (n 18).

<sup>31</sup> David P Durgana and Paul L Zador, ‘Fighting Slavery through Statistics: A Discussion of Five Promising Methods to Estimate Prevalence in the United States’ (2017) 30(3) *CHANCE* 50.

<sup>32</sup> Anne T Gallagher, ‘What’s Wrong with the Global Slavery Index?’ (2017) 8(1) *Anti-Trafficking Review* 90; John Whitehead et al, ‘On the Unreliability of Multiple Systems Estimation for Estimating the Number of Potential Victims of Modern Slavery in the UK’ (2021) 7(1) *Journal of Human Trafficking* 1.



for modern slavery research.<sup>33</sup> There have also been studies on business and human rights methods more broadly (not confined to modern slavery).<sup>34</sup>

Methods are generally situated within a methodology and informed by a theoretical framework of the research, the research question(s) and the object(s) of inquiry.<sup>35</sup> A challenge, beyond the scope of this study, is that scholars — even within the same discipline — often mean different things when discussing ‘methodology’ or ‘methods’<sup>36</sup> and in some cases the terms are used interchangeably.<sup>37</sup> Further, many struggle to articulate a theoretical framework.<sup>38</sup> This is a well-established problem for doctrinal legal scholars:

The researchers’ philosophical stance frequently determines the research questions, progress and possible outcomes of academic research. However, the ‘perspective’ or theoretical stance often lies unstated.<sup>39</sup>

In any case, in this study, we are focused on methods and not broader questions of methodology or theoretical frameworks. By method, we mean the way in which the research in the literature we examine has been carried out. As Bal Sokhi-Bulley posits:

A method has empirical and sociological connotations — so, is the method a qualitative or quantitative analysis? What methods of data collection are used — documentary analysis, case studies, observation, interviews, for example? It is essentially about *what you do* in a project, as opposed to *how you think it*.<sup>40</sup>

As in many scholarly areas, the field of modern slavery research remains largely dominated by scholars from the Global North, with a need to amplify voices and scholarship from developing countries and Indigenous peoples — among the groups

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<sup>33</sup> Rosa Lavelle-Hill et al, ‘Machine Learning Methods for “Wicked” Problems: Exploring the Complex Drivers of Modern Slavery’ (2021) 8(247) *Humanities and Social Sciences Communications* 1.

<sup>34</sup> Karin Buhmann, Björn Fasterling and Aurora Voiculescu, ‘Business & Human Rights Research Methods’ (2018) 36(4) *Nordic Journal of Human Rights* 323.

<sup>35</sup> Sundhya Pahuja, ‘Methodology: Writing about How We Do Research’ in Rossana Deplano and Nicholas Tsagourias (eds), *Research Methods in International Law* (Edward Elgar, 2021) 60.

<sup>36</sup> *Ibid.*

<sup>37</sup> Bal Sokhi-Bulley, ‘Alternative Methodologies: Learning Critique as a Skill’ (2013) 3(2) *Law and Method* 6, 12.

<sup>38</sup> Norman G Lederman and Judith S Lederman, ‘What Is a Theoretical Framework? A Practical Answer’ (2015) 26(7) *Journal of Science Teacher Education* 593, 593.

<sup>39</sup> Terry Hutchinson and Nigel Duncan, ‘Defining and Describing What We Do: Doctrinal Legal Research’ (2012) 17(1) *Deakin Law Review* 83, 107.

<sup>40</sup> Sokhi-Bulley (n 37) 11 (emphasis in original).



most impacted by modern slavery.<sup>41</sup> Simply put, different researchers may be trying to answer different questions, have a different theoretical starting point, may be bound by different disciplinary or cultural constraints, and personal skillsets.<sup>42</sup> Here we aim to respect disciplinary differences and innovative approaches while advocating for more dialogue on methods in modern slavery research. At best, disparate approaches illuminate new findings or ways of understanding the issue; at worst, they cause confusion and apparent inconsistency in research findings.<sup>43</sup>

We acknowledge that a limitation of this study is that much of the groundwork in modern slavery research has been outside the academy and indeed non-academic publications remain prolific and influential in the field. These include non-governmental organisation ('NGO') reports, government reports and policy documents, and reports by international organisations — 'grey literature'.<sup>44</sup> Whereas academics are concerned with developing and defending a robust method for their research, this is not always high on the agenda of those producing grey literature. In addition, the university sector has strict and onerous ethics application processes for the collection of primary data from people (eg through a survey or interview) to avoid risks to participants, but the same hurdles do not always present themselves for grey literature researchers. In short, there are epistemological differences in method between academic literature and grey literature. Riley Klassen-Molyneaux cautions that NGO research might be useful for some specific purposes, but that the research and methods used warrant scrutiny.<sup>45</sup> Grey literature on the topic of modern slavery, while prolific, is not typically contained in the scholarly databases we have used for this study, and so does not form part of our dataset of journal articles that we analyse here, but its impact has been significant in some areas. A key example is the Global Slavery Index ('GSI'), which

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<sup>41</sup> See, eg: Kamala Kempadoo, 'Revitalizing Imperialism: Contemporary Campaigns Against Sex Trafficking and Modern Slavery' (2016) 47(1) *Cadernos Pagu* 1; Caroline Omari Lichuma, '(Laws) Made in the 'First World': A TWAAIL Critique of the Use of Domestic Legislation to Extraterritorially Regulate Global Value Chains' (2021) 81(2) *ZaöRV Heidelberg Journal of International Law* 497.

<sup>42</sup> Bryan S Schaffer and Christine M Riordan, 'A Review of Cross-Cultural Methodologies for Organizational Research: A Best-Practices Approach' (2003) 6(2) *Organizational Research Methods* 169, 169.

<sup>43</sup> See for example reports analysing modern slavery statements under the UK and Australian Modern Slavery Acts, which may choose a different sample of statements with some overlap of companies but reach slightly different conclusions. Nga Pham, Bei Cui and Ummul Ruthbah, *Modern Slavery Statement Disclosure Quality: ASX100 Companies* (Research Brief, Monash Centre for Financial Studies, October 2021); Amy Sinclair and Freya Dinshaw, *Paper Promises: Evaluating the Early Impact of Australia's Modern Slavery Act* (Report, Human Rights Law Centre, 6 February 2022); Freya Dinshaw et al, *Broken Promises: Two Years of Corporate Reporting under Australia's Modern Slavery Act* (Report, Human Rights Law Centre, 1 November 2022).

<sup>44</sup> Quenby Mahood, Dwayne Van Eerd and Emma Irvin, 'Searching for Grey Literature for Systematic Reviews: Challenges and Benefits' (2014) 5(3) *Research Synthesis Methods* 221, 221.

<sup>45</sup> Riley Klassen-Molyneaux, 'Doing Good and Feeling Good: A Critical Analysis of Human Rights Research' (2022) 14(2) *Journal of Human Rights Practice* 513, 525, 528.

seeks to establish what no previous report or study has done with any certainty or authority, namely publish global estimates of the prevalence of modern slavery,<sup>46</sup> and its citations within journal articles in our dataset is analysed here.

### III METHOD OF ANALYSIS

For our dataset of journal articles, we used Scopus, a curated abstract and citation database of scholarly literature across a wide variety of disciplines. A Scopus search for ‘modern slavery’ but without ‘method\*’ (the asterisk allows for inclusion of similar terms such as ‘methods’ and ‘methodology’) in ‘Article title, abstract, keywords’ returns 667 results across 24 subject areas. Table 1 indicates the top 14 subject areas (the number of items fell to seven after number 14) with social sciences accounting for 452 publications, followed by business, management and accounting with 147. Social sciences in the Scopus classification includes law, although a limitation is that it indexes a ‘miniscule numbers of law journals’, a criticism it shares with Web of Science.<sup>47</sup>

**Table 1: Scopus Subject Areas, January 2023**

	Scopus Subject	Number of items
1	Social Sciences	452
2	Business, Management and Accounting	147
3	Arts and Humanities	115
4	Economics, Econometrics and Finance	78
5	Medicine	48
6	Engineering	46
7	Environmental Science	42
8	Computer Science	23
9	Decision Sciences	23
10	Agricultural and Biological Sciences	20
11	Psychology	19
12	Earth and Planetary Sciences	14
13	Energy	12
14	Mathematics	11

<sup>46</sup> Walk Free produce two types of reports: *The Global Estimates of Modern Slavery* produced in partnership with the International Labour Organization and International Organization for Migration, see, Walk Free, International Labor Organization, and International Organization for Migration, *Global Estimates Of Modern Slavery: Forced Labour And Forced Marriage* (Report, September 2022); and the widely used Global Slavery Index which includes a country-by-country analysis of the estimates, see, ‘Global Slavery Index’, *Walk Free* (Web Page, 2024) <<https://www.walkfree.org/global-slavery-index/>>.

<sup>47</sup> Kathy Bowrey, *A Report into Methodologies Underpinning Australian Law Journal Rankings* (Report, Council of Australian Law Deans, 8 February 2016) 5.

To identify articles of relevance to our focus on methods, we used a Scopus search for ‘modern slavery’ and ‘method\*’, producing 165 search results. We then codified the data using Microsoft Excel, carried out co-citation analysis (Biblioshiny), and thematic analysis using text mining (Leximancer), as discussed next.

There are limitations of this approach and scope for further research. First, ‘modern slavery’ as a term omits several more well-established terms which sit within the modern slavery umbrella term — for example, forced labour, debt bondage, slavery, human trafficking, and so forth. Future research could include additional search terms. Second, including the word ‘method’ may have produced some results where the word ‘method’ was used in the article but it did not relate specifically to the academic research method for the article. Our coding of methods was aimed at minimising this risk (see Part III(A)).

### A Coding

Using Microsoft Excel, each journal article was coded for: (a) primary method used; (b) country of lead author institution; (c) research participants (if applicable); (d) primary academic discipline; and (e) whether one of our identified reports or data sources was used (Global Slavery Index; US Trafficking in Persons Report; and United Nations or International Labour Organization reports). Each entry was coded once by a research assistant and coding was verified by the discipline experts within the research team.

### B Co-citation Analysis

Co-citation analysis has recently gained traction throughout supply chain management literature,<sup>48</sup> and other fields.<sup>49</sup> It is particularly recommended in specialised and emerging fields of research to build consilience about ideas and constructs that are relevant across a range of disciplines.<sup>50</sup> When using co-citation analysis, the frequency of pairs of articles cited in tandem (ie by another article) is examined; thereby, the more often articles are co-cited alongside other articles, the

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<sup>48</sup> See, eg: Mehrdokht Pournader, Andrew Kach and Srinivas (Sri) Talluri, ‘A Review of the Existing and Emerging Topics in the Supply Chain Risk Management Literature’ (2020) 51(4) *Decision Sciences* 867; Xinhuan Xu et al, ‘Supply Chain Finance: A Systematic Literature Review and Bibliometric Analysis’ (2018) 204(c) *International Journal of Production Economics* 160.

<sup>49</sup> Kevin W Boyack and Richard Klavans, ‘Co-citation Analysis, Bibliographic Coupling, and Direct Citation: Which Citation Approach Represents the Research Front Most Accurately?’ (2010) 61(12) *Journal of the American Society for Information Science and Technology* 2389, 2389. See also, Daniel Holman, Rebecca Lynch and Aaron Reeves, ‘How Do Health Behaviour Interventions Take Account of Social Context? A Literature Trend and Co-citation Analysis’ (2018) 22(4) *Health* 389.

<sup>50</sup> Caleb M Trujillo and Tammy M Long, ‘Document Co-citation Analysis to Enhance Transdisciplinary Research’ (2018) 4(1) *Science Advances* 1, 1.

greater the influence that particular article gains.<sup>51</sup> Likewise, the more frequently a pair of articles is co-cited,<sup>52</sup> the greater the chance they will share similar cluster categorization. The clusters extracted using co-citation analysis can help to identify common categories or thematic groups from a pool of articles.

Co-citation analysis begins by performing a network analysis across a pool of articles. To perform this analysis, we used Biblioshiny within RStudio (version 2022.12.0). To prepare the package, the Scopus csv file output was imported into RStudio, maintaining all the major information categories (eg article title, authors, keywords, citations, etc). The 165 articles were then mapped using Biblioshiny's co-citation analysis process. The network degree range was then adjusted contingent upon the number of observed emerging clusters. If this value is set too high then the cluster may lack consistency across themes (ie muddling effects). Thereby, we set the cluster threshold maximum to 500.

### C *Leximancer Analysis*

Following the co-citation analysis, we then used Leximancer, a text mining software tool, to identify themes and relationships within the pool of articles. Text mining is a method of discovering concepts and themes within unstructured data by analysing the words used in documents.<sup>53</sup> Identifying patterns can help researchers find potential avenues for future research and contribute to a more comprehensive understanding of the way the issue is discussed in the literature. Leximancer is useful for deciphering textual data in burgeoning fields, such as modern slavery research, where there may be a lack of consensus about the domain boundaries and the methods being used. It can complement citation-based analysis by providing a systematic, unbiased, and content-driven review of the literature.<sup>54</sup>

Leximancer is a valuable tool for this type of research, as it identifies related terms that signify key concepts and themes in text data. The software applies a Bayesian learning algorithm to identify frequently used concepts and relationships between

<sup>51</sup> Erjia Yan and Ying Ding, 'Scholarly Network Similarities: How Bibliographic Coupling Networks, Citation Networks, Cocitation Networks, Topical Networks, Coauthorship Networks, and Coword Networks Relate to Each Other' (2012) 63(7) *Journal of the American Society for Information Science and Technology* 1313, 1313; Jinhyuk Yun, 'Generalization of Bibliographic Coupling and Co-citation Using the Node Split Network' (2022) 16(2) *Journal of Informetrics* 1, 2.

<sup>52</sup> Aaron Clauset, MEJ Newman and Cristopher Moore, 'Finding Community Structure in Very Large Networks' (2004) 70(6) *Physical Review E* 70, 066111.

<sup>53</sup> Sarah Kaine and Martijn Boersma, 'Women, Work and Industrial Relations in Australia in 2017' (2018) 60(3) *Journal of Industrial Relations* 317, 320–1; Krithika Randhawa, Ralf Wilden and Jan Hohberger, 'A Bibliometric Review of Open Innovation: Setting a Research Agenda' (2016) 33(6) *Journal of Product Innovation Management* 750, 751

<sup>54</sup> Ibid.

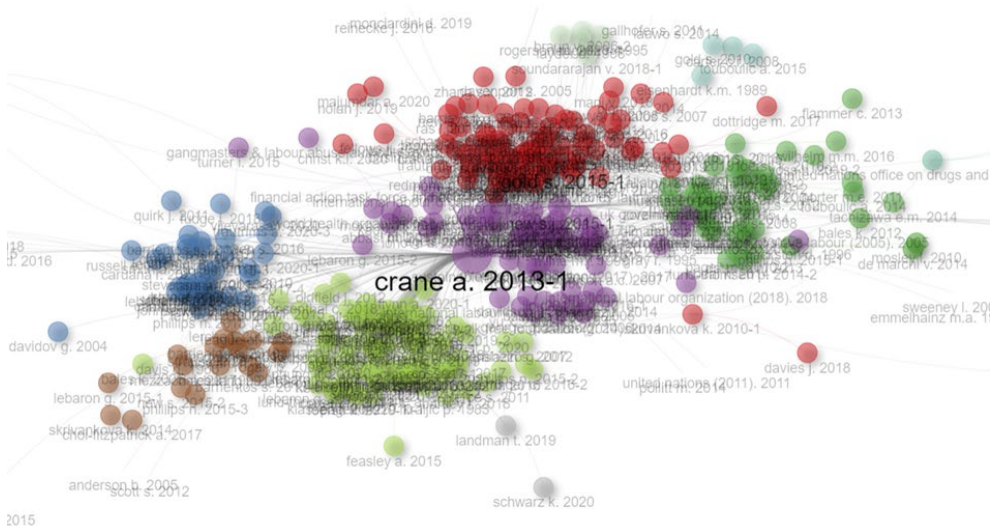
them, allowing for the examination of both individual concepts and groups of related concepts that form themes.<sup>55</sup>

## IV FINDINGS

### A *Networks and Themes in Modern Slavery Research*

The co-citation analysis produced six major clusters, with the minimum cluster containing 23 nodes, and the maximum containing 84 (see Figure 2 and Table 2). Node colour represents the cluster to which the articles belong, and node size portrays the frequency with which the node is connected via co-citation to other nodes. The modularity of our co-citation network (which ranges from  $-1$  to  $+1$ ) was .734, indicating strong ties between the nodes within each cluster.<sup>56</sup>

**Figure 2: Co-citation Network**



<sup>55</sup> Christine Mathies and Marion Burford, ‘Customer Service Understanding: Gender Differences of Frontline Employees’ (2011) 21(6) *Managing Service Quality* 636, 640.

<sup>56</sup> Vincent D Blondel et al, ‘Fast Unfolding of Communities in Large Networks’ (2008) 1(10) *Journal of Statistical Mechanics: Theory and Experiment* P10008 2.

**Table 2: Cluster Analysis**

Cluster	Top Connector(s)	Theme	Nodes
Purple	Crane 2013	Foundational Modern Slavery	66
Red	Gold 2015	Modern Slavery in Supply Chains	84
Blue	Allain 2012	Human Trafficking	35
Dark Green	Pagell 2014, Croom 2018	Supply Chain Sustainability	39
Brown	Davidson 2015; Bales 1999	International Labour & Migration	23
Light Green	Cooke 2003	Human and Labour Rights	78

Note: The clusters are listed in order based on extraction.

*Purple:* This is the most central cluster, representing literature which commonly cites Andrew Crane’s 2013 article on modern slavery as a management practice,<sup>57</sup> alongside other seminal modern slavery literature such as Stephen John New (2015),<sup>58</sup> and Kevin Bales, Zoe Trodd and Alex Kent Williamson (2009).<sup>59</sup> Given Crane’s centrality in the model, other clusters also cite this work (as depicted by the lines in the network model flowing from that node). However, different themes emerged from those clusters. This cluster is the least consolidated of the six in terms of any emergent theme, containing more general work targeted at organisations in terms of how they (mis)manage modern slavery related challenges. For example, work here ranges from International Labor Organization (‘ILO’) and Walk Free Reports, to accounting-oriented scholarship such as Katherine Leanne Christ, Kathyayini Kathy Rao, and Roger Leonard Burritt (2019).<sup>60</sup>

*Red:* This is the largest cluster, containing work heavily focused around modern slavery issues across supply chains, with Stefan Gold et al (2015) the top connector.<sup>61</sup> The more influential articles in this cluster have been published in supply chain themed journals (eg Mark Stevenson and Rosanna Cole 2018; Anthony Flynn 2020)<sup>62</sup> as well as more general business journals (eg Christina Stringer and Snejina

<sup>57</sup> Crane (n 5).

<sup>58</sup> Stephen John New, ‘Modern Slavery and the Supply Chain: The Limits of Corporate Social Responsibility?’ (2015) 20(6) *Supply Chain Management: An International Journal* 697.

<sup>59</sup> Kevin Bales, Zoe Trodd and Alex Kent Williamson, *Modern Slavery: The Secret World of 27 Million People* (Oneworld, 2009).

<sup>60</sup> See, eg, Katherine Leanne Christ, Kathyayini Kathy Rao and Roger Leonard Burritt, ‘Accounting for Modern Slavery: An Analysis of Australian Listed Company Disclosures’ (2019) 32(3) *Accounting, Auditing and Accountability Journal* 836.

<sup>61</sup> Gold, Trautrim and Trodd, (n 7).

<sup>62</sup> See, eg: Mark Stevenson and Rosanna Cole, ‘Modern Slavery in Supply Chains: A Secondary Data Analysis of Detection, Remediation and Disclosure’ (2018) 23(2) *Supply Chain Management: An International Journal* 81; Anthony Flynn, ‘Determinants of Corporate Compliance with Modern Slavery Reporting’ (2020) 25(1) *Supply Chain Management: An International Journal* 1.



Michailova 2018; Alexander Trautrimis et al 2020).<sup>63</sup> The main difference between this cluster and the *dark green* cluster is that the articles here focus specifically on modern slavery; whereas, the *dark green* cluster references modern slavery when discussing the broader work of social sustainability risks. This cluster shares high proximity to the *purple* cluster, indicating a higher level of citations between the two. Lastly, this cluster contains some of the youngest influential work in modern slavery, compared to other clusters.

*Blue*: This is a smaller cluster which is heavily focused and consolidated around two human trafficking books (Jean Allain 2012 and Joel Quirk 2011).<sup>64</sup> Many of the articles in this cluster are oriented more towards human rights violations and law (eg Landman 2020; Ashley Russell 2018).<sup>65</sup> This is one of the most focused yet isolated clusters, sharing the least ties with other clusters and linked primarily through Crane's 2013 article.<sup>66</sup>

*Dark Green*: This cluster is primarily formed of supply chain sustainability work centred around more general sustainability-related issues (eg Mark Pagell and Anton Chevchenko 2014; Stefan Seuring and Martin Muller 2008)<sup>67</sup> and social issues (Simon Croom et al 2018; Robert D Klassen and Ann Vereecke 2012).<sup>68</sup> While less focused directly on modern slavery issues than its *red* cousin, this cluster shares heavy ties with both the *purple* and *red* clusters, making it one of the most inter-connected clusters.

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<sup>63</sup> See, eg: Christina Stringer and Snejjina Michailova, 'Why Modern Slavery Thrives in Multinational Corporations' *Global Value Chains* (2018) 26(3) *Multinational Business Review* 194; Alexander Trautrimis et al, 'Survival at the Expense of the Weakest? Managing Modern Slavery Risks in Supply Chains During COVID-19' (2020) 23 (7–8) *Journal of Risk Research* 1067.

<sup>64</sup> Jean Allain, *Slavery in International Law: Of Human Exploitation and Trafficking* (Martinus Nijhoff, 2012); Joel Quirk, *The Anti-Slavery Project: From the Slave Trade to Human Trafficking* (University of Pennsylvania Press, 2011).

<sup>65</sup> See, eg: Todd Landman, 'Measuring Modern Slavery: Law, Human Rights, and New Forms of Data' (2020) 42(2) *Human Rights Quarterly* 303; Ashley Russell, 'Human Trafficking: A Research Synthesis on Human-Trafficking Literature in Academic Journals from 2000–2014' (2018) 4(2) *Journal of Human Trafficking* 114.

<sup>66</sup> Crane (n 5).

<sup>67</sup> See, eg: Mark Pagell and Anton Shevchenko, 'Why Research in Sustainable Supply Chain Management Should Have No Future' (2014) 50(1) *Journal of Supply Chain Management* 44; Stefan Seuring and Martin Müller, 'From a Literature Review to a Conceptual Framework for Sustainable Supply Chain Management' (2008) 16(15) *Journal of Cleaner Production* 1699.

<sup>68</sup> Simon Croom et al, 'Impact of Social Sustainability Orientation and Supply Chain Practices on Operational Performance' (2018) 38(12) *International Journal of Operations and Production Management* 2344; Robert D Klassen and Ann Vereecke, 'Social Issues in Supply Chains: Capabilities Link Responsibility, Risk (Opportunity), and Performance' (2012) 140(1) *International Journal of Production Economics* 103.



*Brown*: This cluster shares similar themes with the *blue* and *light green* clusters (hence the proximity) in terms of human trafficking and labour force abuses. However, the focus is more on the people (victim/survivors) and the abusers (eg Kevin Bales 1999; O’Connell Davidson 2015).<sup>69</sup> Migrant labour is a major theme in this cluster (eg Siobhán McGrath 2013; Ben Rogaly 2008).<sup>70</sup> Interestingly, this is a more dispersed cluster (ie weaker ties) considering the level of similarity between much of the work.

*Light Green*: This was the second largest cluster focusing heavily on forced labour and human rights (Bill Cooke 2003).<sup>71</sup> Many of the papers in this cluster explore human rights in general (eg Olga Martin-Ortega 2018; Genevieve LeBaron 2021),<sup>72</sup> alongside modern slavery pertaining to forced labour (eg Justine Nolan and Gregory Bott 2018; Miriam Wilhelm et al 2020).<sup>73</sup> The proximity of this work to the blue and brown clusters is not surprising given the legal and socio-criminology ties amongst these articles. Moreover, this cluster is less tightly coupled compared to the similarly sized purple and red clusters, indicating less strength of ties between co-citation pairs (ie pairs were discovered less frequently).

One of the most significant emergent developments from this analysis is the segmentation between legal (brown, blue, and light green clusters) and supply chain (red and dark green clusters) scholarship. The common thread connecting these two fields is the purple cluster (more targeted at organisational (mis)management of modern slavery related challenges). The following contextual analysis will shed some light on how verbiage in the articles across different fields may, in part, be playing a role in this segregation.

Turning then to the Leximancer analysis, we find 12 themes (Figure 3). The colour of the themes denotes their importance, ranging from cooler colours that signify lesser relative importance, while warmer colours signify greater relative importance (Figure 4).

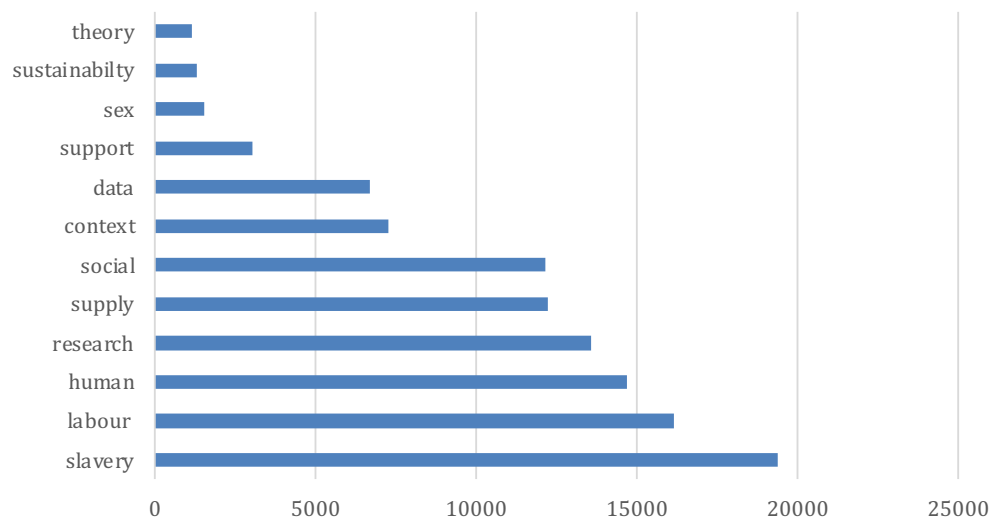
<sup>69</sup> O’Connell Davidson (n 8); Kevin Bales, *Disposable People: New Slavery in the Global Economy* (University of California Press, 1999).

<sup>70</sup> Siobhán McGrath, ‘Fuelling Global Production Networks with Slave Labour?: Migrant Sugar Cane Workers in the Brazilian Ethanol GPN’ (2013) 44(1) *Geoforum* 32; Ben Rogaly, ‘Migrant Workers in the ILO’s Global Alliance Against Forced Labour Report: A Critical Appraisal’ (2008) 29(7) *Third World Quarterly* 1431.

<sup>71</sup> Cooke (n 6).

<sup>72</sup> See, eg: Olga Martin-Ortega, ‘Public Procurement as a Tool for the Protection and Promotion of Human Rights: A Study of Collaboration, Due Diligence and Leverage in the Electronics Industry’ (2018) 3(1) *Business and Human Rights Journal* 75; Genevieve LeBaron, ‘The Role of Supply Chains in the Global Business of Forced Labour’ (2021) 57(2) *Journal of Supply Chain Management* 29.

<sup>73</sup> Justine Nolan and Gregory Bott, ‘Global Supply Chains and Human Rights: Spotlight on Forced Labour and Modern Slavery Practices’ (2018) 24(1) *Australian Journal of Human Rights* 44; Miriam Wilhelm et al, ‘Private Governance of Human and Labor Rights in Seafood Supply Chains: The Case of the Modern Slavery Crisis in Thailand’ (2020) 115 *Marine Policy* 103833.

**Figure 3: Leximancer Themes**

In the concept map (Figure 4) Leximancer groups themes based on their co-occurrence patterns in text data, which offer insights into major themes and sub-themes, their interconnections, and importance. Leximancer maps closely related concepts together, denoting semantic relationships and facilitating a map of meaning. The distance between concepts illustrates their relational proximity.<sup>74</sup> Concepts that are close together in the concept map are more strongly related, meaning that they frequently co-occur in the text or share similar contexts. On the other hand, concepts that are farther apart are less related, indicating that they are less likely to co-occur or share contexts.<sup>75</sup>

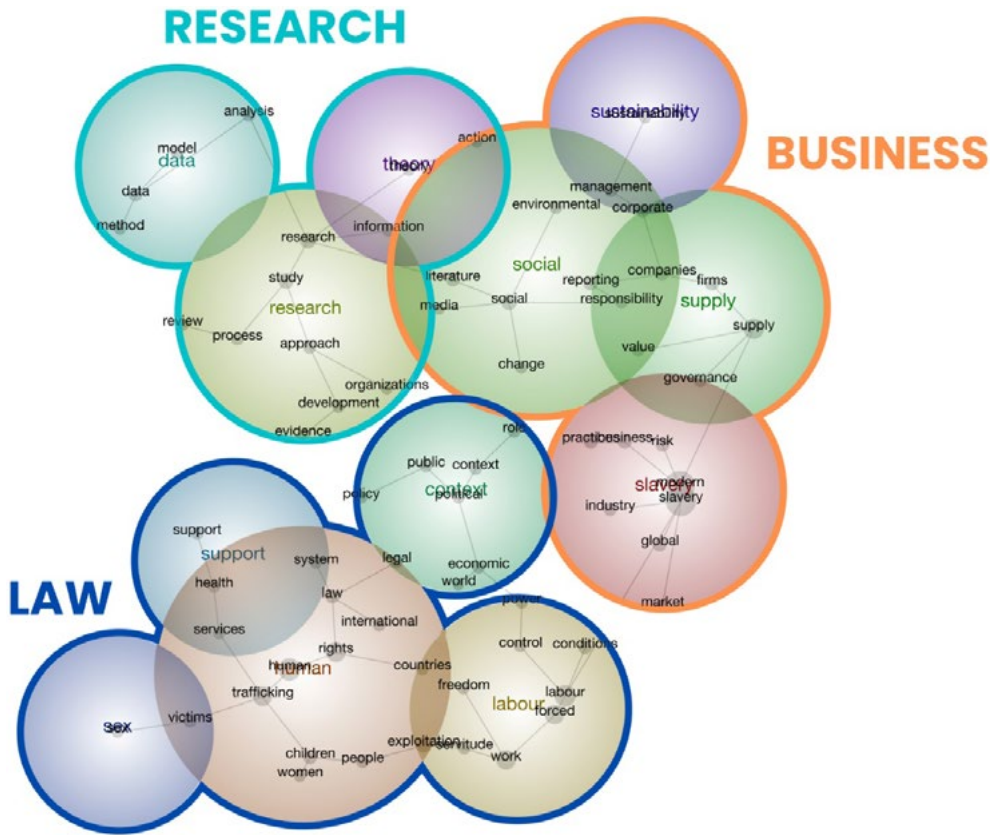
Concept maps visually represent concept relationships, while Leximancer generated lists of ‘related word-like concepts’ (see Figures 5–14) detail the associations between a target concept and others, ranking them by relevance. This dual approach provides a comprehensive overview and specific insights into text data, enhancing understanding of concept relationships and patterns.<sup>76</sup> Figures 5 to 14 show ‘related word-like concepts’ with count being the number of occurrences, and likelihood being the probability of the occurrence compared to other word-like concepts.

<sup>74</sup> Andrew E Smith and Michael S Humphreys, ‘Evaluation of Unsupervised Semantic Mapping of Natural Language with Leximancer Concept Mapping’ (2006) 38(2) *Behavior Research Methods* 262, 264.

<sup>75</sup> Kaine and Boersma (n 53) 322.

<sup>76</sup> Leximancer, *User Guide Release 4.5* (10 March 2021).

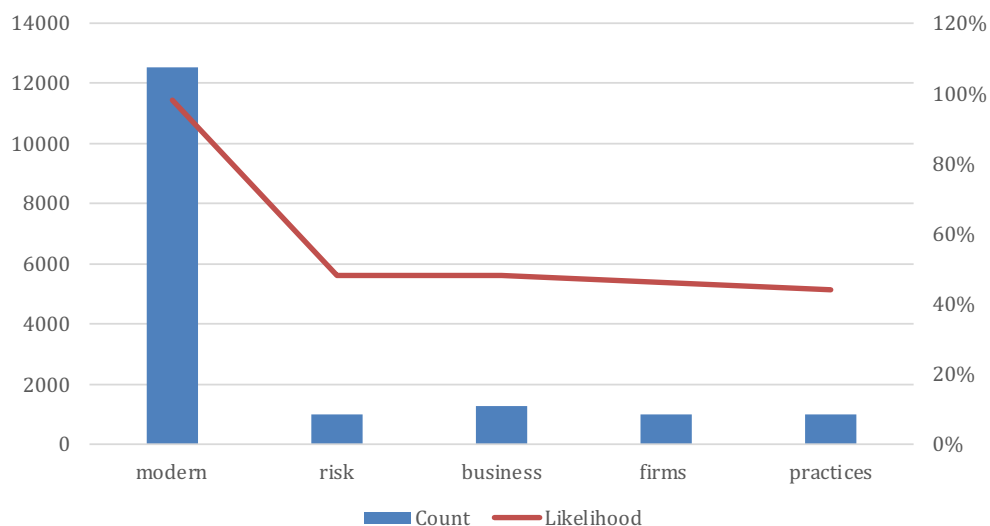
Figure 4: Leximancer Clusters



Overall, in the concept map we find three thematic clusters: modern slavery in connection to business as a discipline; forced labour and human trafficking in connection to legal studies and criminology; and research, data, and theory as discussed below.

1 'Business' Thematic Cluster

The first thematic cluster contains the themes 'slavery', 'supply', 'social' and 'sustainability', with 'slavery' being the most prominent of the twelve identified themes. Within the slavery thematic bubble, the concepts 'modern' and 'slavery' are — unsurprisingly given the search terms and dataset — closely connected. It is interesting to see the close connection to the concepts 'business', 'practices' and 'risk', in addition to references to concepts such as 'industry', 'global' and 'market'. This suggests a strong connection of this part of the dataset to business as a scholarly discipline. A closer look at the top five word-like concepts (Figure 5) related to 'slavery' suggest that, in the dataset under analysis, modern slavery research is

**Figure 5: Slavery — Related Word-Like Concepts**

strongly related to the *risk* of modern slavery,<sup>77</sup> and the practices of businesses and firms that may contribute to,<sup>78</sup> or alleviate,<sup>79</sup> these risks.

The assertion that part of the dataset makes a connection to business as a scholarly discipline gains credibility when looking at the ‘supply’ thematic, which overlaps with the ‘slavery’ theme. This theme relates to suppliers and supply chains:<sup>80</sup> on the concept map we see terms that are synonymous with ‘business’, eg ‘firms’,

<sup>77</sup> Katherine L Christ and Roger L Burrirt, ‘Exploring Effectiveness of Entity Actions to Eliminate Modern Slavery Risk—Early Australian Evidence’ (2023) 55(1) *The British Accounting Review* 101065; Gabriela Gutierrez-Huerter O, Stefan Gold, and Alexander Trautrim, ‘Change in Rhetoric but Not in Action? Framing of the Ethical Issue of Modern Slavery in a UK Sector at High Risk of Labor Exploitation’ (2023) 182(1) *Journal of Business Ethics* 35.

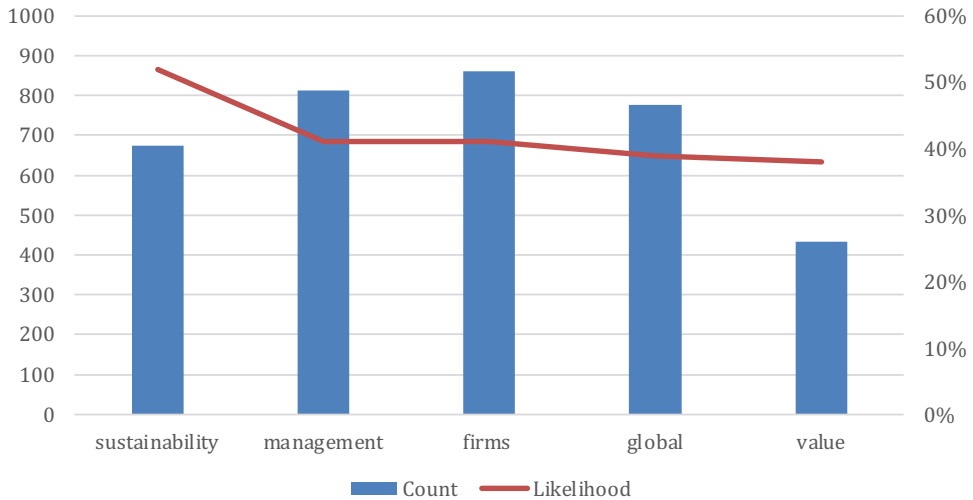
<sup>78</sup> Udeni Salmon, ‘Modern Slavery in the Criminal Family Firm: Misrecognition and Symbolic Violence in Recruitment and Retention Practices’ (2022) 12(2) *Journal of Family Business Management* 280.

<sup>79</sup> Ehi Eric Esoimeme, ‘Using the Risk-Based Approach to Curb Modern Slavery in the Supply Chain: The Anglo American and Marks and Spencer Example’ (2020) 27(2) *Journal of Financial Crime* 313; Anthony Flynn and Helen Walker, ‘Corporate Responses to Modern Slavery Risks: An Institutional Theory Perspective’ (2021) 33(2) *European Business Review* 295.

<sup>80</sup> See, eg: Mark Stevenson and Rosanna Cole, ‘Modern Slavery in Supply Chains: A Secondary Data Analysis of Detection, Remediation and Disclosure’ (2018) 23(2) *Supply Chain Management: An International Journal* 81; Amy V Benstead, Linda C Hendry and Mark Stevenson, ‘Detecting and Remediating Modern Slavery in Supply Chains: A Targeted Audit Approach’ (2021) 32(13) *Production Planning and Control* 1136.

‘companies’ and ‘corporate’. There is also a ‘governance’ concept, which suggests emphasis on supply chain governance.<sup>81</sup> The top five word-like concepts related to ‘supply’ (Figure 6) suggest the importance of sustainable supply/value chain management.<sup>82</sup>

**Figure 6: Supply — Related Word-Like Concepts**

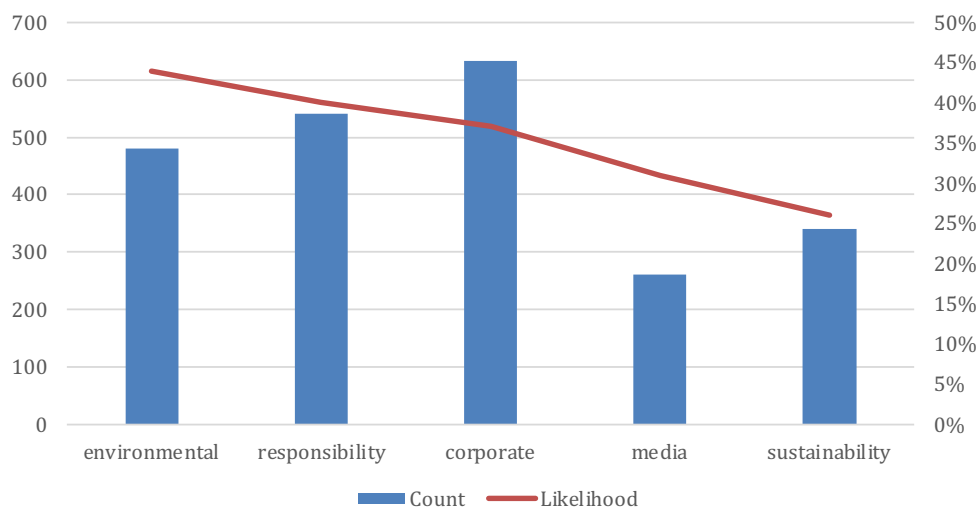


In the concept map (Figure 4), the ‘supply’ thematic bubble overlaps with the ‘social’ bubble, and key concepts in the overlapping area are ‘reporting’ and ‘responsibility’. These two concepts are indicative of the modern slavery reporting responsibilities of commercial entities.<sup>83</sup> In the ‘social’ thematic bubble, the concept ‘environmental’ features near the ‘sustainability’ thematic bubble. The top five word-like concepts related to ‘social’ (Figure 7) suggest frequent references to the social and environmental

<sup>81</sup> See, eg: Stephen J Frenkel, Shahidur Rahman and Kazi Mahmudur Rahman, ‘After Rana Plaza: Governing Exploitative Workplace Labour Regimes in Bangladeshi Garment Export Factories’ (2022) 64(2) *Journal of Industrial Relations* 272; Michael Rogerson et al, ‘Organisational Responses to Mandatory Modern Slavery Disclosure Legislation: A Failure of Experimentalist Governance?’ (2020) 33(7) *Accounting, Auditing and Accountability Journal* 1505.

<sup>82</sup> Camila Lee Park, Mauro Fracarolli Nunes and Alessio Ishizaka, ‘End-to-End Sustainability: Trade-offs, Consumers’ Perceptions and Decisions Beyond B2C Interfaces’ (2023) 28(2) *Supply Chain Management: An International Journal* 225, 225; Camila Lee Park, Mauro Fracarolli Nunes and Jose AD Machuca, ‘Social Sustainability in Supply Chains: The Role of Local Practices and Informal Networks’ (2023) 53(1) *International Journal of Physical Distribution and Logistics Management* 35.

<sup>83</sup> Christ, Rao and Burritt (n 60), 842.

**Figure 7: Social — Related Word-Like Concepts**

responsibility of corporations,<sup>84</sup> as well as corporate sustainability.<sup>85</sup> A closer inspection of the pool of articles shows that the ‘media’ concept is indicative of the rise in media attention to modern slavery.<sup>86</sup>

The ‘sustainability’ thematic bubble is the ‘coldest’ in the cluster, and therefore — relatively speaking — of less importance compared to the other themes. In the ‘sustainability’ theme, apart from the homonymous concept, ‘management’ is the only other concept to be found. The top five word-like concepts related to ‘sustainability’ (Figure 8) suggest links to corporate environmental and social sustainability (discussed in the previous paragraph), as well as management.<sup>87</sup> ‘Literature’ in the

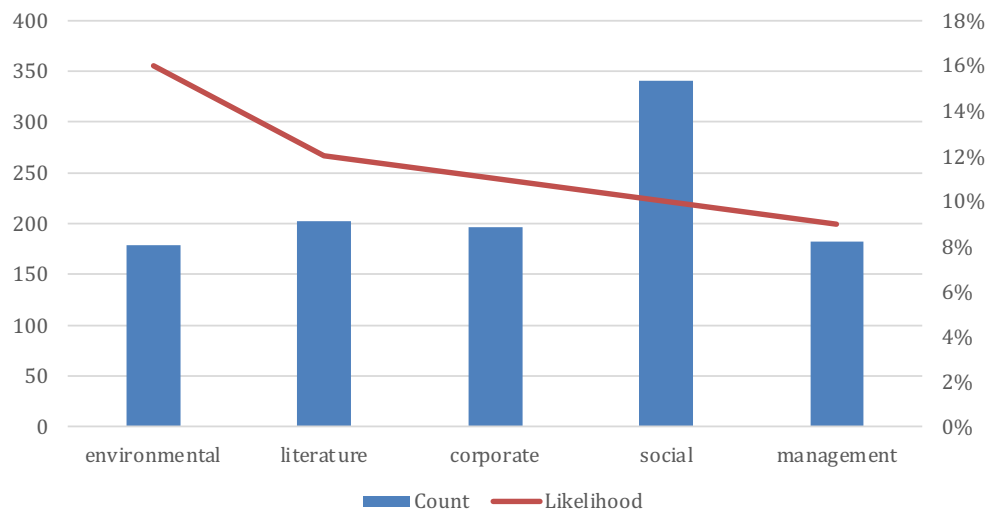
<sup>84</sup> New (n 58); Mauro Fracarolli Nunes, Camila Lee Park and Hyunju Shin, ‘Corporate Social and Environmental Irresponsibilities in Supply Chains, Contamination, and Damage of Intangible Resources: A Behavioural Approach’ (2021) 241 (November) *International Journal of Production Economics* 108275, 2.

<sup>85</sup> Irene Pollach and Stefan Schaper, ‘Social Visibility and Substance in Corporate Social Sustainability Disclosures’ (2023) 28(3) *Corporate Communications: An International Journal* 400; Sumit Kishore Lalwani et al, ‘Benchmarking Self-declared Social Sustainability Initiatives in Cocoa Sourcing’ (2018) 25(9) *Benchmarking: An International Journal* 3986.

<sup>86</sup> Katherine Leanne Christ and Roger Leonard Burritt, ‘Current Perceptions on the Problem of Modern Slavery in Business’ (2018) 1(2) *Business Strategy and Development* 103, 103; Amy V Benstead, Linda C Hendry and Mark Stevenson, ‘Horizontal Collaboration in Response to Modern Slavery Legislation: An Action Research Project’ (2018) 38(12) *International Journal of Operations and Production Management* 2286, 2286.

<sup>87</sup> Crane (n 5); Miguel Pina e Cunha et al, ‘The Paradox of the Peasantry in Management and Organization Studies’ (2021) 31(5) *International Journal of Organizational Analysis* 1802.

**Figure 8: Sustainability — Related Word-Like Concepts**



top five word-like concepts list is closely related to the ‘research’, ‘data’ and ‘action’ thematic cluster, according to the concept map. This is indicative of references to sustainability in business studies on modern slavery.<sup>88</sup>

## 2 Legal Studies and Criminology Thematic Cluster

The ‘hottest’ thematic bubble in the second cluster is ‘labour’, with the other themes being ‘human’, ‘context’, ‘support’ and ‘sex’. The ‘labour’ thematic bubble seems to refer to the term forced labour, servitude, and exploitative working conditions.<sup>89</sup> While the concept map shows a direct conceptual link between ‘labour’ and ‘slavery’, the proximity of this thematic bubble to the ‘human’ thematic bubble is possibly explained by forced labour being defined in (inter)national law — as distinct from modern slavery. Other interesting concepts in this thematic bubble are ‘freedom’, ‘power’ and ‘control’, likely referring to means by which people’s freedom is curtailed.<sup>90</sup> The top five word-like concepts related to the ‘labour’ theme underline attention to forced labour, labour exploitation, and servitude, while also

<sup>88</sup> Caruana et al (n 4); Yazan Alzoubi, Giorgio Locatelli, and Tristano Sainati, ‘Modern Slavery in Projects: A Systematic Literature Review and Research Agenda’ (2023) 54(3) *Project Management Journal* 235.

<sup>89</sup> Nolan and Bott (n 73); Jessie Hohmann, ‘Conceptualising Domestic Servitude as a Violation of the Human Right to Housing and Reframing Australian Policy Responses’ (2022) 31(1) *Griffith Law Review* 98.

<sup>90</sup> Amy Chisholm et al, ‘Rituals as a Control Mechanism in Human Trafficking: Systematic Review and Thematic Synthesis of Qualitative Literature’ (2022) *Journal of Human Trafficking* 1; Joseph Whittle, ‘Snakehead: The Extent to Which Chinese Organised Crime Groups are Involved in Human Smuggling from China to the UK’ (2022) *Trends in Organized Crime* 1.

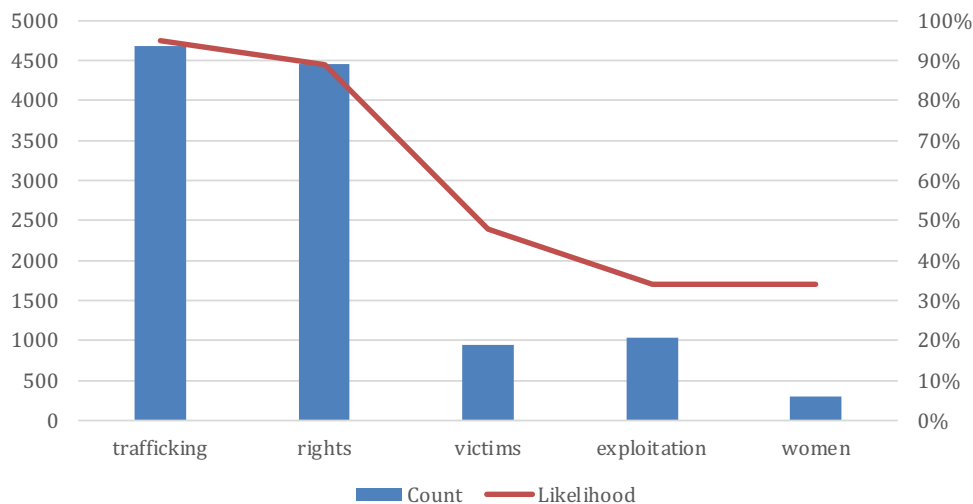


referring to children as an affected group.<sup>91</sup> The concept map shows that ‘market’, as a related word-like concept, is found in the ‘slavery’, ‘supply’, ‘social’ and ‘sustainability’ thematic cluster.

The ‘human’ thematic bubble shows a close connection of this similarly named concept with ‘trafficking’ and ‘rights’, indicative of the terms human trafficking and human rights. The proximity of ‘international’, ‘law’ and ‘legal’ suggest a strong connection to legal studies and criminology, an assertion that gains credibility given that human trafficking, like forced labour (but unlike modern slavery), is defined in international law and many domestic laws, and so this term is more likely to be used in these disciplines. In the concept map, at the bottom end of the thematic bubble, we see ‘children’, ‘women’ and ‘people’, referring to those being subjected to human trafficking.<sup>92</sup> The top five word-like concepts list seems to confirm the focus on the human dimension of trafficking (Figure 9).

The next theme to be discussed is ‘context’, which, judging by the concept map (Figure 4), contains several concepts that link human trafficking to macro-factors. Examples are ‘world’, ‘political’, ‘economic’, ‘policy’, ‘public’ but also ‘legal’, a concept which can be found in the area overlapping with the ‘human’ thematic

**Figure 9: Human — Related Word-Like Concepts**

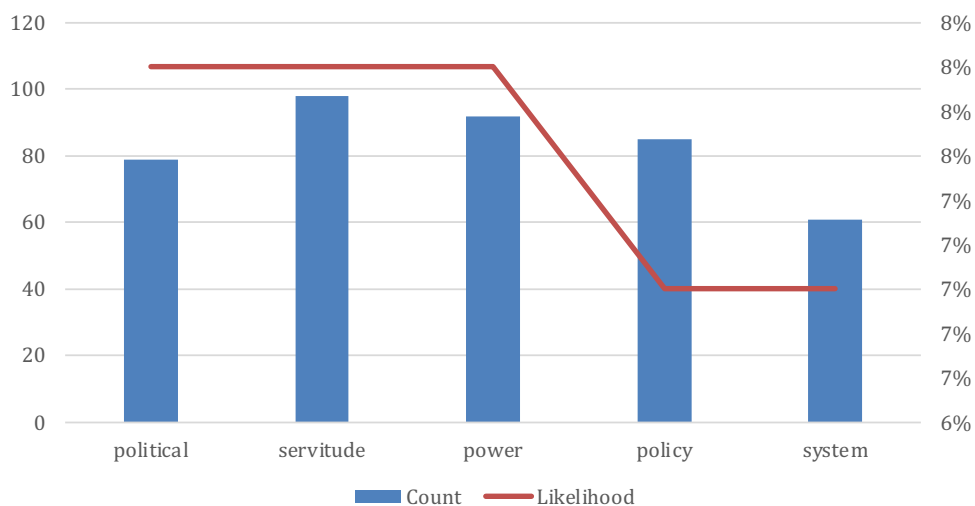


<sup>91</sup> Sheldon X Zhang et al, ‘Victims Without a Voice: Measuring Worst Forms of Child Labor in the Indian State of Bihar’ (2019) 14(7) *Victims and Offenders* 832; Craig Barlow et al, ‘Circles of Analysis: A Systemic Model of Child Criminal Exploitation’ (2022) 17(3) *Journal of Children’s Services* 158.

<sup>92</sup> Carly Lightowlers, Rose Broad and David Gadd, ‘Victims and Suspects of Modern Slavery: Identifying Subgroups Using Latent Class Analysis’ (2021) 15(2) *Policing: A Journal of Policy and Practice* 1384; David M Doyle et al, “‘I Felt Like She Owns Me’: Exploitation and Uncertainty in the Lives of Labour Trafficking Victims in Ireland’ (2019) 59(1) *The British Journal of Criminology* 231.

bubble. The fact that ‘context’ as a theme is conceptually linked to themes in the ‘human’, ‘labour’, ‘context’, ‘support’ and ‘sex’ cluster, could be indicative of research in this cluster taking a holistic approach, looking at the broader context in which human trafficking occurs. This becomes apparent in the publications that examine causes and indicators of human trafficking and publications that set out to measure prevalence.<sup>93</sup> The top five word-like concepts related to the ‘context’ theme confirm the emphasis on contextual factors surrounding human trafficking.

**Figure 10: Context — Related Word-Like Concepts**

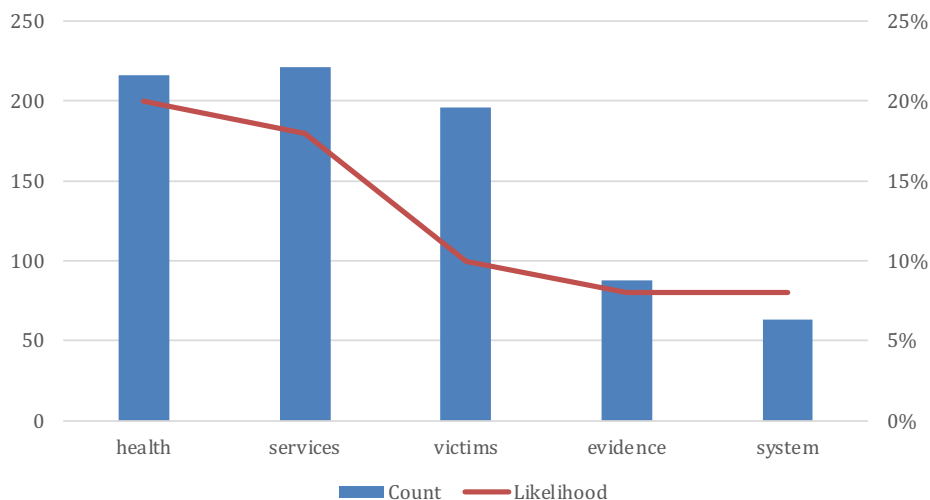


The final two thematic bubbles in this cluster are ‘support’ and ‘sex’. The support theme contains the concepts ‘health’, ‘services’ and ‘system’, which suggests discussions pertaining to access to support services for human trafficking victim-survivors.<sup>94</sup> This assertion is given credence by the significant overlap of the ‘support’ and ‘human’ thematic bubbles. The top five word-like concepts related to the ‘support’ theme also seem to underline the emphasis on support systems for trafficking victims.

<sup>93</sup> Serveh Sharifi Far et al, ‘Multiple Systems Estimation for Modern Slavery: Robustness of List Omission and Combination’ (2021) 67(13–14) *Crime and Delinquency* 2213; John Whitehead et al, ‘On the Unreliability of Multiple Systems Estimation for Estimating the Number of Potential Victims of Modern Slavery in the UK’ (2021) 7(1) *Journal of Human Trafficking* 1.

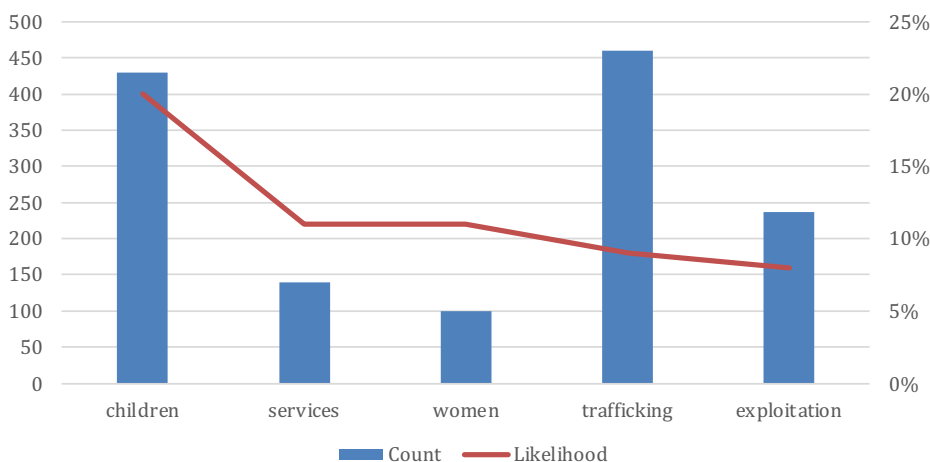
<sup>94</sup> Sheila Bird, ‘Public Health Perspective on UK-Identified Victims of Modern Slavery’ (2021) 67(13–14) *Crime and Delinquency* 2295; Runa Lazzarino, Nicola Wright and Melanie Jordan, ‘Mental Healthcare for Survivors of Modern Slavery and Human Trafficking: A Single Point-in-Time, Internet-Based Scoping Study of Third Sector Provision’ (2022) 10(3) *Journal of Human Trafficking* 479; Carly Lightowlers, Rose Broad and David Gadd, ‘Temporal Measures of Modern Slavery Victimisation’ (2022) 24(1) *Criminology and Criminal Justice* 79.

**Figure 11: Support — Related Word-Like Concepts**



In the ‘sex’ thematic bubble we find the concept ‘victims’, which is positioned in the area that overlaps with the ‘human’ thematic bubble. This connection refers to victim-survivors of sex trafficking.<sup>95</sup> It is not surprising to see the ‘sex’ thematic bubble in this cluster, as this form of trafficking is arguably less relevant for business as a scholarly discipline. The top five word-like concepts related to the ‘sex’ thematic bubble confirms the link to sexual exploitation, particularly concerning children and women.

**Figure 12: Sex — Related Word-Like Concepts**

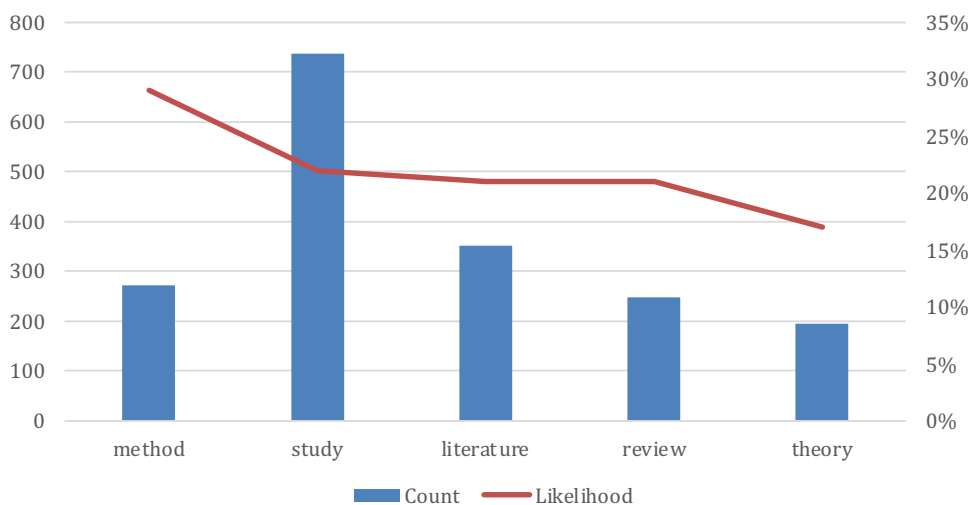


<sup>95</sup> Beulah Shekhar, ‘The Debt Trap, a Shadow Pandemic for Commercial Sex Workers: Vulnerability, Impact, and Action’ (2023) 29(1) *International Review of Victimology* 106; Karin Wachter et al, ‘Responding to Domestic Minors Sex Trafficking (DMST): Developing Principle-Based Practices’ (2016) 2(4) *Journal of Human Trafficking* 259.

### 3 'Research' Thematic Cluster

The third thematic cluster is formed by the themes 'research', 'data' and 'theory'. Given that the dataset consists of academic publications, it is not surprising to see this thematic cluster emerge. This is also considering the search terms used in Scopus, which looked for a reference to methods. The concepts mentioned in the 'research' thematic bubble reveal relatively limited information about specific research approaches, as the concepts are generic. The top five word-like concepts seem to confirm this assertion (Figure 13).

**Figure 13: Research — Related Word-Like Concepts**

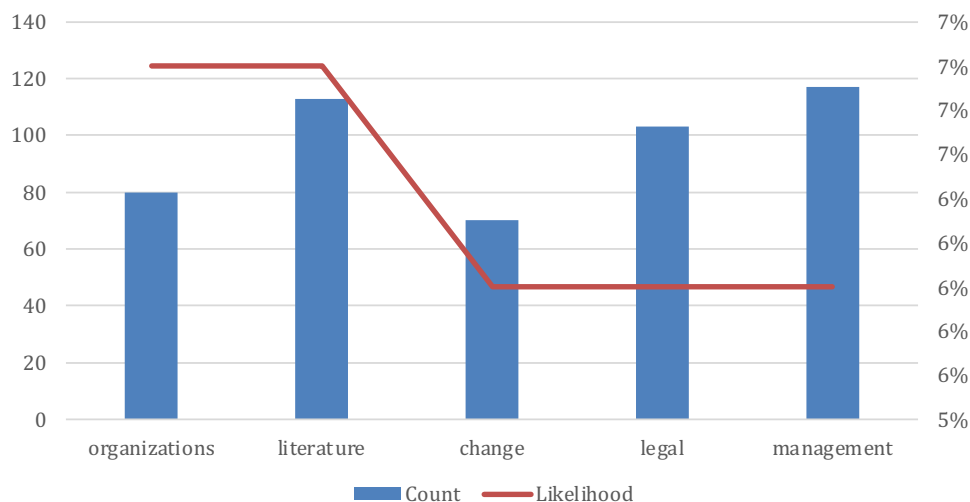


What is interesting to see is that the research thematic bubble is in closer proximity — indeed overlaps with — the cluster related to the business discipline. This suggests that, in the case of this pool of articles, descriptions of research approaches feature more prominently in the business discipline than they do in legal studies and criminology. The same can be said for the 'data' and 'theory' thematic bubbles, which are further removed from the legal studies and criminology thematic cluster. The distance from this cluster, and the proximity to the business cluster, suggest that data and theory are of higher relative importance.<sup>96</sup>

The top five word-like concepts for 'data' does not provide much additional insight but the top five word-like concepts for 'theory' highlight reference to organisations, literature (which was highlighted in the related word-like concepts for 'sustainability'), and management. This confirms the comparative importance of theory in the business discipline cluster compared to the legal studies and criminology cluster.

<sup>96</sup> Flynn and Walker (n 79); Cynthia Hardy, Vikram Bhakoo and Steve Maguire, 'A New Methodology for Supply Chain Management: Discourse Analysis and its Potential for Theoretical Advancement' (2020) 56(2) *Journal of Supply Chain Management* 19.

**Figure 14: Theory — Related Word-Like Concepts**



Overall, in this pool of articles, references to research approaches, data, and theory feature more prominently in the business discipline than they do in the legal studies and criminology discipline. Furthermore, regarding the business literature, it is interesting to see the emphasis on the risks to businesses when it comes to modern slavery and less attention on the risk to individuals and groups. After all, business research is mainly focused on companies (and their organisation, teams and employees). This contrasts with legal and criminology research, which in general pay more attention to the human dimension, for instance by discussing vulnerable groups and support for victim-survivors (which include victims of sex trafficking and the ways in which people’s freedom is curtailed). Apart from the human dimension, legal and criminology scholarship also takes a more holistic approach by looking at contextual factors that contribute to the problem, whereas the view in business studies is narrower and focuses on business practices such as the governance and sustainable management of supply/value chains, and reporting on these actions. Finally, in legal studies and criminology literature there seems to be a preference for the use of legally defined terms such as forced labour and human trafficking, rather than the broad umbrella term modern slavery.

We can draw a few conclusions from this Leximancer analysis for future research. For instance, business studies could broaden their scope to consider root causes of modern slavery — to help inform business responses — and the human cost of modern slavery, for example by tackling solutions for remediation. Legal scholarship in turn could be more explicit in articulating methods, theories, and data. Terry Hutchinson has previously acknowledged this limitation whereby legal scholars have not reflected on process, drawing on doctrinal research methodology developed intuitively — a research method at the core of practice.<sup>97</sup> However, it

<sup>97</sup> Terry Hutchinson, ‘The Doctrinal Method: Incorporating Interdisciplinary Methods in Reforming the Law’ (2015) 3(1) *Erasmus Law Review* 130, 130.

is acknowledged that this no longer suffices in the contemporary academy, where identifying and justifying methods in an increasingly interdisciplinary context, is simply required.<sup>98</sup> There is also scope to draw on these distinct disciplinary strengths through interdisciplinary research.

### B *Analysis of Research Methods*

Following analysis of the networks and themes, we then examined the specific methods used in the dataset. As indicated in Table 3, the most commonly used primary method was qualitative interviews (19% of articles). Within the dataset, a range of approaches were used in conducting interviews. For example, Coretta Phillips' 2020 study *Utilising 'Modern Slave' Narratives in Social Policy Research*,<sup>99</sup> published in *Critical Social Policy*, is based on one narrative interview with a victim-survivor of forced labour. It finds that the form and structure of the survivor's narrative of forced labour resemble those used in the abolitionist cause against antebellum slavery.<sup>100</sup> Another, Beulah Shekhar's 2023 study *The Debt Trap, a Shadow Pandemic for Commercial Sex Workers: Vulnerability, Impact, and Action*, uses a 'rapid assessment' method to carry out interviews of 15 minutes or less with commercial sex workers in India.<sup>101</sup> More commonly though, as discussed further below, the interviews were carried out with professionals in businesses or government, or with civil society representatives.

Other methods used that were likely to involve human participants included mixed methods (7%); action research (4%); case studies (2%); quantitative survey (2%); ethnographic studies (1%) and qualitative focus groups (1%). Table 4 indicates that where research involved human participants, these were most commonly: 'businesses / other professionals' (26 studies); followed by civil society (11 studies); victim-survivors (9 studies); at-risk populations (8 studies) and consumers (3 studies).

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<sup>98</sup> Ibid.

<sup>99</sup> Coretta Phillips, 'Utilising "Modern Slave" Narratives in Social Policy Research' (2020) 40(1) *Critical Social Policy* 30.

<sup>100</sup> Ibid, 30.

<sup>101</sup> Shekhar (n 95).

**Table 3: Primary Method Used in Scopus Dataset**

Primary Method	No.	%
Qualitative interview	32	19%
Content analysis	19	12%
Quantitative secondary data analysis	19	12%
Conceptual	17	10%
Systematic literature review	13	8%
Mixed methods	11	7%
Doctrinal	10	6%
Other	7	4%
Action Research	6	4%
Discourse analysis	6	4%
Historical methods	6	4%
Case studies	4	2%
Experimental design	4	2%
Quantitative survey	4	2%
Ethnographic	2	1%
Policy Analysis	2	1%
Regression analysis	2	1%
Qualitative focus group	1	1%

**Table 4: Research Participants in Scopus Dataset**

Research participants	No.
Businesses / other professionals	26
Civil Society	11
Victim-survivors	9
At-risk populations	8
Consumers	3
Other	3

After qualitative interviews, the most commonly used methods employed secondary data sources — quantitative secondary data analysis, and content analysis, discussed further below. This was followed by ‘conceptual’ (10%), and this method’s category included the most highly cited papers in our database — Hannah Lewis et al with 268 citations and Crane with 237 citations.<sup>102</sup> After this, all other methods were less frequently used (less than 10%).

<sup>102</sup> Hannah Lewis et al, ‘Hyper-Precarious Lives: Migrants, Work and Forced Labour in the Global North’ (2015) 39(5) *Progress in Human Geography* 580; Crane (n 5).



Of these methods, the use of secondary datasets, and content analysis, warrant further discussion. Much of the content analysis involved analysing modern slavery statements. This is unsurprising given the introduction of two accessible data sources in the UK and Australia whereby the mandatory modern slavery statements required by large businesses under the UK and Australian MSAs are available via public repositories. In the UK, this was originally hosted by the Business and Human Rights Resource Centre,<sup>103</sup> but later became a government repository.<sup>104</sup> In Australia, this repository was public from the outset.<sup>105</sup> Indeed, in the absence of penalties for non-compliance, or other enforcement mechanisms, public scrutiny of modern slavery statements was anticipated as an informal means of regulation.<sup>106</sup> In these publications, we see a concentration of authors working collaboratively (predominantly from Australia and the UK) such as Christ, Burritt, Bruce Pinnington, Rao (K.K.), Nadia Bernaz and Joanne Meehan.

In terms of the quantitative secondary data analysis, these papers were often accessing large data sets such as police or national databases (eg Carly Lightowlers, Rose Broad and David Gadd 2021, 2022; Cockbain, Bowers and Hutt 2022);<sup>107</sup> or using internet or social media data (eg Luca Giommoni and Ruth Ikwu 2021; Anne Vestergaard and Julie Uldam 2022; Runa Lazzarino, Nicola Wright and Melanie Jordan 2022).<sup>108</sup> Some of these also relied on data from the Global Slavery Index ('GSI') or other international or national publications. In our coding, we captured whether articles referenced these commonly used data sets and found that 30% of the articles referenced the GSI, with the US Trafficking in Persons and United Nations or ILO reports less commonly used at 4% in both cases (see Table 5).

<sup>103</sup> 'Modern Slavery Statements', *Business and Human Rights Resource Centre* (Web Page) <<https://www.business-humanrights.org/en/from-us/modern-slavery-statements/>>.

<sup>104</sup> 'Modern Slavery Statement Registry', *UK Government* (Web Page) <<https://modern-slavery-statement-registry.service.gov.uk/>>.

<sup>105</sup> 'Online Register for Modern Slavery Statements', *Australian Government Attorney General's Department* (Web Page) <<https://modernslaveryregister.gov.au/>>.

<sup>106</sup> See, eg: Paul Redmond, 'Regulating Through Reporting: An Anticipatory Assessment of The Australian Modern Slavery Acts' (2020) 26(1) *Australian Journal of Human Rights* 5, 5; Fiona McGaughey, 'Behind the Scenes: Reporting Under Australia's Modern Slavery Act' (2021) 27(1) *Australian Journal of Human Rights* 20.

<sup>107</sup> Lightowlers, Broad and Gadd (n 92); Ella Cockbain, Kate Bowers, Oli Hutt, 'Examining the Geographies of Human Trafficking: Methodological Challenges in Mapping Trafficking's Complexities and Connectivities' (2022) 139 *Applied Geography* 102643.

<sup>108</sup> Luca Giommoni and Ruth Ikwu, 'Identifying Human Trafficking Indicators in the UK Online Sex Market' (2021) 27 *Trends in Organized Crime* 10, 11; Anne Vestergaard and Julie Uldam, 'Legitimacy and Cosmopolitanism: Online Public Debates on (Corporate) Responsibility' (2022) 176(2) *Journal of Business Ethics* 227; Runa Lazzarino, Nicola Wright and Melanie Jordan, 'Mental Healthcare for Survivors of Modern Slavery and Human Trafficking: A Single Point-in-Time, Internet-Based Scoping Study of Third Sector Provision' (2022) 10(3) *Journal of Human Trafficking* 479.

**Table 5: Data Sources / Reports Used in Scopus Dataset**

Data Sources Used	No.	%
Global Slavery Index	49	30%
US Trafficking in Persons Report	6	4%
United Nations / International Labour Organization Reports	6	4%
Other	2	1%

The GSI is produced by Australian headquartered, international NGO Walk Free. It is partly based on data collated for the Global Estimates of Modern Slavery, published in collaboration with the ILO and the International Organization for Migration (‘IOM’) since 2017 and is the primary international dataset in the field of modern slavery published periodically.<sup>109</sup> Critique of the GSI and its methods is explored in the Discussion section.

Turning then to coding by discipline, the most common were business, criminology, law, and social sciences, and when coded by subdiscipline, 56 separate subdisciplines were recorded. When subdisciplines were analysed by method, generally there were strong similarities in the main methods used within a sub-discipline. For example, commonly used methods in the subdiscipline of business, management and accounting were ‘conceptual’ and ‘content analysis’. This subdiscipline includes Crane,<sup>110</sup> which, as per our co-citation analysis, is highly influential in the field and uses a conceptual method. This means it is likely that given the disciplinary segregation noted in our co-citation and Leximancer analyses, leading authors influence the methods in their discipline. The profile of criminological research is quite distinct — favouring quantitative secondary data analysis and qualitative interviews. Legal research is strongly dominated by the doctrinal method, and qualitative interviews and systematic literature reviews are prevalent in the social sciences. Some subdisciplines (albeit with a small sample size in the dataset) such as ‘Economics, Econometrics and Finance (miscellaneous)’ and ‘Management Science and Operations’ had a wide variety of methods (eg action research, content analysis, qualitative interviews, systematic literature reviews etc).

Finally, we coded the 165 journal articles based on the country of the institution with which the lead author was affiliated. Here we sought to examine whether authors and scholarship from countries where modern slavery is more prevalent were adequately reflected in the dataset, amid concerns of imperialism in the literature.<sup>111</sup> As Figure 15 indicates, this analysis confirms the Western dominance in modern slavery literature. For 149 of the 165 articles, the lead author’s institution

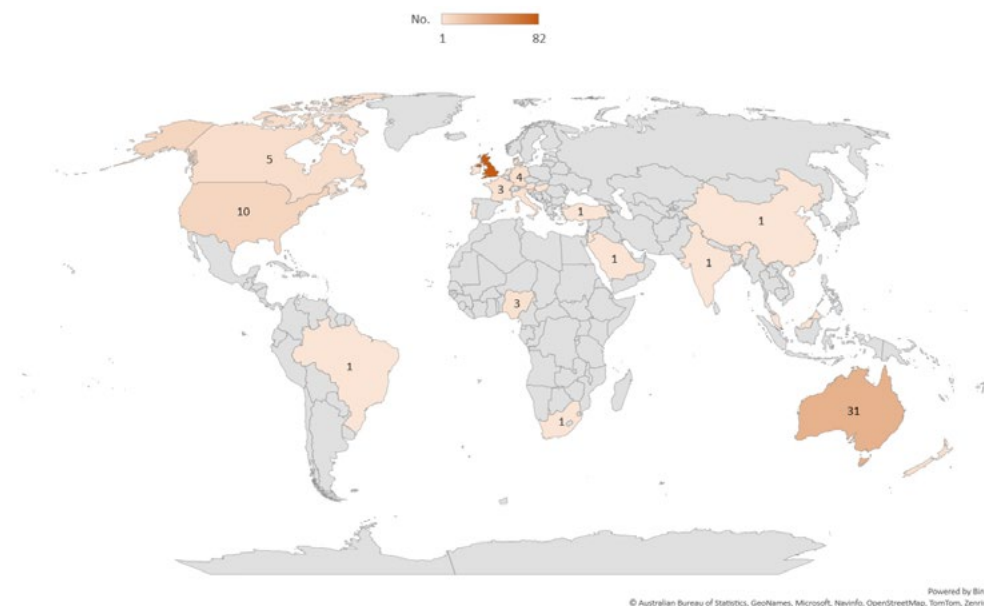
<sup>109</sup> Editions of the Global Slavery Index have been published in 2013, 2014, 2016, 2018 and 2023.

<sup>110</sup> Crane (n 5).

<sup>111</sup> Although more focused on campaigns, see, eg, Kamala Kempadoo, ‘Revitalizing Imperialism: Contemporary Campaigns against Sex Trafficking and Modern Slavery’ (2016) 47(1) *Cadernos Pagu* 1.

was in a ‘Western European or Other’ country using the United Nations regional groupings.<sup>112</sup> There were scant articles in the dataset from the other regional groupings: Latin American and Caribbean States, Eastern European States, Asia-Pacific States, and African States. As noted in the Introduction, there was also evidence of the country’s domestic legislation driving research in this area — with most articles coming out of the UK (82), followed by Australia (31) — the only two jurisdictions with laws specifically using the term ‘modern slavery’.

**Figure 15: Map of Scopus Articles by Country of Lead Author’s Institution**



## V DISCUSSION

As a complex, multi-faceted issue, modern slavery requires breadth of analysis through interdisciplinary research, as well as depth of analysis within disciplinary boundaries. As researchers, we need to consider to what extent we engage across disciplinary boundaries — a gap identified in our co-citation and Leximancer analysis. As an illustration of why interdisciplinary (or multidisciplinary) approaches may be useful, scholarship in the business discipline tends to focus on risks to business (rather than risks to people)<sup>113</sup> whereas legal and criminology research engages more with the context and human aspects of modern slavery. In practice, we know that a key element in effectively tackling modern slavery within businesses and

<sup>112</sup> ‘Regional Groups of Member States’, *United Nations Department for General Assembly and Conference Management* (Web Page) <<https://www.un.org/dgacm/en/content/regional-groups>>.

<sup>113</sup> Hardy, Bhakoo and Maguire (n 96).

their supply chains is engagement with a range of stakeholders including workers, unions, suppliers, and others,<sup>114</sup> and yet the business literature is predominantly focused on the risk to businesses and how to mitigate these risks.

We note some developments in interdisciplinary approaches to modern slavery research such as Andrew Smith and Jennifer Johns' 2020 study on consumer knowledge in modern slavery at the interface of history, business ethics, and policy making,<sup>115</sup> and Nithya Natarajan, Katherine Brickell and Laurie Parsons' 2020 investigation of the structural drivers of modern slavery through the lens of global economics, political science, and international business.<sup>116</sup> The scholarly disciplines also complement each other, allowing us to develop a more comprehensive understanding of modern slavery. For example, in addition to examining legal duties, legal scholarship generally takes a more holistic approach than business scholarship by looking at contextual factors that contribute to the problem, whereas the business discipline offers an analysis of supply/value chains that legal scholars may lack. There is also some segregation in the methods used in different disciplines and some adherence to tried and tested methods, particularly in subdisciplines. We discuss below the scope to broaden methods used in modern slavery research in general, but similarly, disciplines can learn from each other in adopting new approaches within their fields.

We posit that lawyers and legal scholars can benefit from an interdisciplinary approach to tackling modern slavery, and to modern slavery research, in a number of ways. For example, for business-related modern slavery such as forced labour, an understanding of supply chain management and the associated terminology is essential for the drafting, application, and interpretation of relevant primary legislation and associated secondary legislation and guidelines. Assessing the *effectiveness* of legislation — such as the Modern Slavery Acts — also requires at least socio-legal, if not more rigorous empirical methods, more commonly used in other disciplines in the social sciences. Further, in most democracies, proposals for new laws and statutory reviews of existing laws involve social sciences type data collection in consultation processes with experts and the public.<sup>117</sup> In the Australian context for example, this method was used in: trafficking and slavery related revisions to the *Criminal*

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<sup>114</sup> See, eg, Shelley Marshall et al, *Australia's Modern Slavery Act: Is it Fit for Purpose?* (Report, 2023).

<sup>115</sup> Andrew Smith and Jennifer Johns, 'Historicizing Modern Slavery: Free-Grown Sugar as an Ethics-Driven Market Category in Nineteenth-Century Britain' (2020) 166(2) *Journal of Business Ethics* 271.

<sup>116</sup> Nithya Natarajan, Katherine Brickell and Laurie Parsons, 'Diffuse Drivers of Modern Slavery: From Microfinance to Unfree Labour in Cambodia' (2021) 52(2) *Development and Change* 241.

<sup>117</sup> Maria Jesus Garcia, 'Smart Regulation Law-Making and Participatory Democracy: Consultation in the European Union' (2019) 59(1) *Catalan Journal of Public Law* 85.

*Code 1995 (Cth)*;<sup>118</sup> the inquiry into whether a MSA in Australia was required;<sup>119</sup> the statutory review of the *Australian MSA*;<sup>120</sup> and, most recently, the inquiry into establishing an Anti-Slavery Commissioner.<sup>121</sup> This engagement through consultation aligns with a smart regulation approach which Neil Gunningham and Darren Sinclair define as encompassing:

self-regulation and co-regulation, using commercial interests and non-governmental organisations ... as regulatory surrogates, together with improving the effectiveness and efficiency of more conventional forms of direct government regulation. The underlying rationale is that, in the majority of circumstances, the use of multiple rather than single policy instruments, and a broader range of regulatory actors, will produce better regulation.<sup>122</sup>

As such, this involves processes and methods that are clearly not purely doctrinal in nature. In fact though, as IJ Kroeze argues, multidisciplinary is actually something legal researchers regularly do because law is a social artefact and the consideration of legal issues ‘require looking at socio-political and economic factors’.<sup>123</sup> Kroeze concludes that this ‘is one of the reasons why regarding law as an axiomatic or logical discipline only is impossible’.<sup>124</sup> The benefits of interdisciplinary work goes both ways, legal researchers can contribute legal expertise and share our doctrinal training with others. In terms of methods employed, our analysis found that the combined ‘content analysis’ and ‘qualitative secondary data analysis’ equate to 24% of the publications we examined, meaning that researchers are making use of existing datasets such as repositories of modern slavery statements and police and criminology data. Further, the GSI was cited in 30% of the articles. We question whether the availability of such datasets has reduced the perceived need for quantitative research — ‘quantitative survey’ as a method was used in only 2% of the articles and mixed methods were used in only 7%. In using these existing datasets, researchers must question the robustness of these datasets and acknowledge their limitations. Modern slavery statements provide an important source of information

<sup>118</sup> Attorney General’s Office, ‘Targeted Review of Divisions 270 and 271 of the *Criminal Code 1995 (Cth)*’ (Discussion Paper, Commonwealth of Australia, 2022).

<sup>119</sup> Joint Standing Committee on Foreign Affairs (n 3).

<sup>120</sup> See, eg, John McMillan, *Report of the Statutory Review of the Modern Slavery Act 2018 (Cth) The First Three Years* (Report, Australian Government, 2023).

<sup>121</sup> Australian Human Rights Commission Senate Legal and Constitutional Affairs Legislation Committee, *Inquiry into the Modern Slavery Amendment (Australian Anti-Slavery Commissioner) Bill 2023*, 29 January 2024. See submissions for this bill at: ‘Submissions’, *Parliament of Australia* (Web Page) <[https://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Legal\\_and\\_Constitutional\\_Affairs/Anti-Slavery23/Submissions](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Legal_and_Constitutional_Affairs/Anti-Slavery23/Submissions)>.

<sup>122</sup> Neil Gunningham and Darren Sinclair, ‘Smart Regulation’ in Peter Drahos (ed), *Regulatory Theory: Foundations and Applications* (ANU Press, 2017) 133, 133.

<sup>123</sup> IJ Kroeze, ‘Legal Research Methodology and the Dream of Interdisciplinarity’ (2013) 16(3) *Potchefstroom Electronic Law Journal* 36, 53.

<sup>124</sup> *Ibid.*

about corporate performance — but it remains self-reported performance, not data collected by an independent researcher. Similarly, there are limitations to the reliance on the GSI as a dataset, including the fact that it does not include all forms of modern slavery, only forced labour and forced marriage. In terms of methods, the GSI relies on data from the Global Estimates of Modern Slavery which draws on three sources of data: (1) nationally representative surveys; (2) the IOM's Counter Trafficking Data Collaborative dataset; and (3) comments from the ILO Committee of Experts on the Application of Conventions and Recommendations relating to state-imposed forced labour and other secondary sources.<sup>125</sup>

Anne Gallagher has questioned the GSI and its methods, but also the lack of critical engagement with the dataset by others, questioning the allure of philanthropic funding as a motivating factor.<sup>126</sup> With regard to estimates, she points out that the complexities of estimating the numbers of people in modern slavery were well known to those working in the field.<sup>127</sup> The primary source of such estimates prior to the GSI, and still widely used for actual cases, is the authoritative US Trafficking in Persons Report ('TIP').<sup>128</sup> The TIP report no longer provides estimates due to concerns over the accuracy of the data due to 'methodological weaknesses, gaps in data, and numerical discrepancies'.<sup>129</sup> Now, the TIP Report cites only published, hard data including numbers of 'victims' identified and traffickers prosecuted and convicted.<sup>130</sup> In addition, Gallagher notes that the ILO has previously estimated forced labour and that changes to the methodology used caused a jump in estimates from 12.3 million to more than 20 million in seven years.<sup>131</sup> Similarly, we note that changes in the GSI methodology led to significant changes in global slavery estimates from 2016 to 2018 and again in 2023, casting doubt over the reliability and consistency of the method and the data.<sup>132</sup> Gallagher acknowledges that the ILO has tried to be open about the difficulties of measuring the number of those in forced labour, the fragility of the resulting data and the highly provisional nature of any conclusions based on that information.<sup>133</sup> Andrew Guth et al also cast doubt on the methodology used for the GSI, arguing that the use of improper methods is

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<sup>125</sup> Walk Free, 'Methodology: Prevalence', *Global Slavery Index* (Web Page 2023) <<https://www.walkfree.org/global-slavery-index/methodology/methodology-content/#prevalence>>.

<sup>126</sup> Gallagher (n 32) 92.

<sup>127</sup> *Ibid* 93.

<sup>128</sup> The reports are available at: 'Trafficking in Persons Report', *US Department of State* (Web Page, 2024) <<https://www.state.gov/trafficking-in-persons-report/>>.

<sup>129</sup> Gallagher (n 32) 94.

<sup>130</sup> *Ibid*.

<sup>131</sup> *Ibid*.

<sup>132</sup> See, eg, Walk Free Foundation, *Global Slavery Index 2018*, (Report, 2018) 32: 'Due to substantial differences in scope, methodologies, and expanded data sources, prevalence estimates in the 2018 Global Slavery Index are not directly comparable to the previous edition.'

<sup>133</sup> Gallagher (n 32) 92.



damaging as it advances data and policy that is not based on sound methodology.<sup>134</sup> They recommend a committee of experienced methods experts to develop measurement tools and constantly analyse and refine the methods used in the GSI.<sup>135</sup> We suggest that the GSI is an important dataset but should be subject to scrutiny by researchers, particularly given its widespread usage in the dataset we examined.

Our analysis of this dataset also shows that there is scope overall to broaden the range of methods used. Examples include use of photographs and videos in field studies to capture the reality of workers' experiences. Photovoice and other photo and video tools have been used effectively as a tool of empowerment for workers in participatory action research projects,<sup>136</sup> leading to improved working conditions.<sup>137</sup> More broadly, use of photography and videography in research by those at risk of human rights exploitation has been found to have a panopticon effect.<sup>138</sup> Further, there is a gap in terms of employing scenario-based experiments which would be very useful to test ethical dilemmas encountered by purchasing or sustainability managers when facing decisions about how to tackle an incident of modern slavery.<sup>139</sup> Case studies to include both buyers and suppliers (particularly high risk) could be used to examine policy versus its implementation by a supplier; and to look further upstream in the supply chain, specifically at raw material suppliers.

The limitations of secondary data sets described above make a strong case for employing primary data sources such as interviews. Indeed researchers have gravitated towards qualitative methods such as interviews, which was the most commonly used single method at 19%. 'Business / other professionals' are the most common participants (26 studies) but with less engagement with victim-survivors (nine studies) and at-risk populations (eight studies). We believe this is a serious omission in modern slavery scholarship as we need a more comprehensive understanding of the experiences of victim-survivors, including the conditions that

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<sup>134</sup> Andrew Guth et al, 'Proper Methodology and Methods of Collecting and Analyzing Slavery Data: An Examination of the Global Slavery Index' (2014) 2(4) *Social Inclusion* 14, 14.

<sup>135</sup> Ibid 20.

<sup>136</sup> See, eg, Saskia Duijs et al, 'Navigating Voice, Vocabulary and Silence: Developing Critical Consciousness in a Photovoice Project with (Un)Paid Care Workers in Long-Term Care' (2022) 19(9) *International Journal of Environmental Research and Public Health* 5570.

<sup>137</sup> Mariam Flum et al, 'Photovoice in the Workplace: A Participatory Method to Give Voice to Workers to Identify Health and Safety Hazards and Promote Workplace Change — A Study of University Custodians' (2010) 53(1) *American Journal of Industrial Medicine* 1150, 1150.

<sup>138</sup> Pini Miretski and Sascha-Dominik Bachmann, 'The Panopticon of International Law: B'Tselem's Camera Project and the Enforcement of International Law in a Transnational Society' (2014) 52(1) *Osgoode Hall Law Journal* 235, 235.

<sup>139</sup> See, eg, David T Welsh et al, 'The Slippery Slope: How Small Ethical Transgressions Pave the Way for Larger Future Transgressions' (2015) 100(1) *Journal of Applied Psychology* 114.



incubate modern slavery, the approaches that have resulted in positive outcomes, the support systems required to overcome the trauma, and the impact of the experience on survivors' lives.

It is worth acknowledging that university human research ethics processes are complex — a necessary protection for vulnerable communities that have experienced trauma. However, the very risk-averse approach to granting ethics approval inadvertently leaves researchers restricted in their ability to give voice to the concerns of affected populations, despite calls for survivor informed responses to modern slavery, including through research.<sup>140</sup> In this regard, the research of the Modern Slavery Policy and Evidence Centre in the UK is of interest and adopts an approach that could be replicated elsewhere. Their research is underpinned by the three principles of: effectiveness; equity; and survivor involvement — which aims to involve those affected by modern slavery at all stages of the research process in selection, design, production and implementation.<sup>141</sup>

Other areas for development include scope for marketing scholars to engage further with research to tackle the modern slavery problem, particularly consumer perceptions of modern slavery. Since consumers are a vital stakeholder in influencing and potentially championing change, we see merit in marketing scholars pursuing this fertile and impactful line of research. Use of ethnographic studies also warrants consideration — with only two such studies reported in our analysis.<sup>142</sup> Ethnographic studies that require prolonged engagement in the field are warranted to understand the lived experience of survivors and are critical in designing effective remediation measures and developing strategies for victim-survivors in specific contexts.

Finally, we highlight that 90% of the research in our dataset was led by an author based at a university in the Global North. To advance this field, we need more participation from the Global South, and an ambitious research agenda across different countries, industries, and migrant groups. This can be supported through grants, partnerships, bilateral assistance, and other means. In-country research has been shown to be more sustainable and improve research uptake in policy frameworks.<sup>143</sup>

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<sup>140</sup> Frances Simmons and Jennifer Burn, *Beyond Storytelling: Towards Survivor-Informed Responses to Modern Slavery* (Report, University of Technology Sydney, September 2022).

<sup>141</sup> 'How we fund research', *Modern Slavery and Human Rights Policy and Evidence Centre* (Web Page) <<https://modernslaverypec.org/how-we-fund-research>>.

<sup>142</sup> Cristiana Giordano, 'Practices of Translation and the Making of Migrant Subjectivities in Contemporary Italy' (2008) 35(4) *American Ethnologist* 588; Foluké Abigail Badejo, Ross Gordon, and Robyn Mayes, 'Transforming Human Trafficking Rescue Services in Nigeria: Towards Context-specific Intersectionality and Trauma-informed Perspectives' (2021) 35(7) *Journal of Services Marketing* 878.

<sup>143</sup> See, eg, OECD, *Development Co-operation Tips, Tools, Insights, Practices: Investing in Research and Innovation in Developing Countries* (Report, 2021).

## VI CONCLUSION

Research on modern slavery is burgeoning, and yet critical analysis of its scholarly methods, disciplinary contours, and key themes remain under explored in the literature. As an interdisciplinary team of scholars, we embarked on this study with a view to initiating dialogue on these topics to advance research on this egregious, global human rights issue. Modern slavery as a complex social issue cannot be tackled without an understanding of its various components and as such, interdisciplinary research is critical. We provide examples of reciprocal benefits for law and non-law scholars and argue that the theory of smart regulation shows that law is not always the singular discipline we might assume.

Analysing 165 relevant articles from the Scopus database provided some preliminary findings to begin this conversation. Using co-citation and Leximancer analysis we find a scholarly field with some disciplinary segregation, particularly in the gap between business and supply chain literature on the one hand, and legal and criminology scholarship on the other. By codifying the methods used, we also find quite distinct methodological preferences in different disciplines and adherence to tried and tested methods, particularly in subdisciplines. We find that researchers rely heavily on existing datasets such as repositories of modern slavery statements, and around one third cite Walk Free's Global Slavery Index. These are useful datasets, but their limitations must be acknowledged. To counter-balance this use of secondary datasets, qualitative interviews are quite prevalent and where human participants are involved, business or professional staff are more likely to be involved than victim-survivors or consumers. In terms of authors, the literature remains dominated by scholars from the Global North, despite the prevalence of modern slavery being higher in the Global South. We suggest there is scope to broaden modern slavery research to increase inter-disciplinary dialogue, diversify methodologies, support scholars from the Global South, and give voice to victim-survivors.