Examining Modern Slavery Statements of Global Fashion Brands Using Text Mining

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Background and Research Purpose: Modern slavery persists in global supply chains, especially in fashion industry, known for unethical labor practices (Jones, 2024; Lusty & Richards, 2024). Rising consumer awareness and regulations pressure brands to publish modern slavery statements (MSS) for transparency (Madhavika et al., 2024). MSS outline initiatives addressing forced labor and unethical practices, establishing standards for corporate accountability (Montgomery, 2025; Pinnington et al., 2023). Research highlights inconsistencies in MSS reporting quality and transparency (Madhavika et al., 2024). Prior studies lack advanced text mining analysis of MSS (Madhavika et al., 2024). This study applies text mining to MSS from 31 global fashion companies to address existing gaps. Using moral responsibility of corporate sustainability (MRCS) theory (Ha-Brookshire, 2017), it aims to: (1) create a modern slavery themes dictionary, (2) analyze reporting practices, and (3) compare company reports. Findings will guide policymakers, advocacy groups, and consumers in assessing transparency and improving ethical reporting (Nolan & Bott, 2018).

Methodology: We collected MSS reports from 31 fashion companies across various sectors and regions from 2019 to 2024, totaling 413 pages. Initial topic extraction used Latent Dirichlet Allocation (LDA) on a sample dataset (Jelodar et al., 2019). Following expert review, a modern slavery themes dictionary was created and applied to classify patterns across all reports. A total of 413 pages of data were systematically analyzed during the theme-generation process. Python was used to analyze all statements sentence-by-sentence based on this dictionary, calculating theme proportions for each company to compare companies' modern slavery prevention efforts.

Results and Discussions: (1) Modern Slavery Dictionary. Our analysis identified 15 modern slavery themes as shown in Figure 1 and categorized these themes into four primary duties: Responsible & Ethical Sourcing, Preventing Modern Slavery & Ensuring Fair Labor Practices, Capacity Building & Remediation, and Supply Chain Disclosure & Reporting. Unlike the fashion sustainability research which emphasized environmental aspects, our dictionary reveals companies prioritize policy-level commitments with prominent keywords centered on risk assessment, supplier governance, and compliance frameworks. This dictionary provides a structured framework for analyzing MSS that maps directly to corporate responsibility domains. **(2) Modern Slavery Practices and Development.** As visualized in Figure 1, our findings reveal companies primarily emphasize Risk Assessment and Policies & Governance in their MSS, with

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significantly less attention to remediation mechanisms or victim support. The horizontal bar graph demonstrates clear prioritization of preventative measures and compliance documentation over effective response systems. Similar to how fashion companies emphasized waste management in sustainability reporting, fashion firms' MSS tends to focus heavily on supply chain mapping and supplier codes of conduct while underreporting on actual cases identified or remediated. This pattern suggests companies view modern slavery primarily through a risk management rather than human rights lens. **(3) Comparison of Companies' Modern Slavery Emphases.** The detailed breakdown in Figure 1 reveals significant variation in modern slavery reporting across different companies and sectors. Certain companies demonstrated comprehensive coverage across all the themes, while others reported minimally on critical areas like Forced Labor and Worker Wellbeing. Unlike the fashion sustainability research where product category drove reporting patterns, our data analysis suggests company size and geographic locations more strongly influence modern slavery reporting comprehensiveness. Particularly notable is the spike in Supplier Engagement reporting among certain companies versus the consistently low reporting on actual Remediation and Grievance mechanisms across nearly all organizations, highlighting a systemic gap between policy commitments and operational implementation.

Conclusion and Implications: This pioneering dictionary-based text mining approach has revealed a critical gap between corporate modern slavery policy commitments and operational implementation, with companies overwhelmingly prioritizing risk assessment and compliance documentation over remediation mechanisms. Our findings provide empirical validation of MRCS theory while establishing a way for evaluating corporate modern slavery reporting that can benefit future research and regulatory development. These insights offer practical value for multiple stakeholders: companies can identify reporting blind spots; investors can make informed ESG (environmental, social, and governance) decisions; policymakers can strengthen reporting requirements to address implementation gaps; and consumers can better evaluate corporate anti-slavery performance beyond surface-level commitments.

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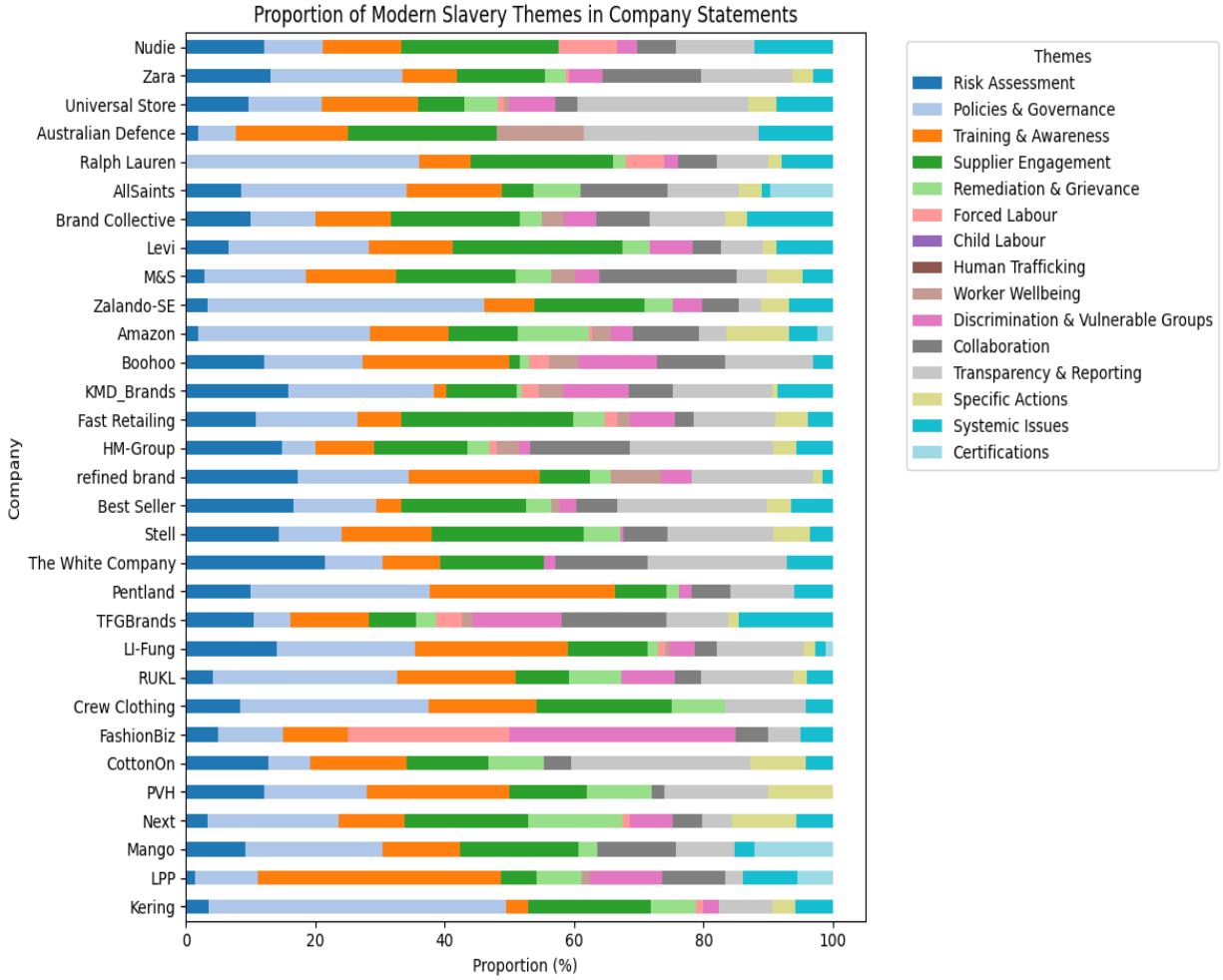
Figure 1: Modern Slavery Statements proportions of fashion companies



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