

Annotated Bibliography: Social Science and Cybersecurity

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June 22, 2025

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Decoding the gendered imaginary of cybersecurity careers: a social shaping of technology perspective

Kilpatrick, M., Foley, S., & others. "Decoding the gendered imaginary of cybersecurity careers: a social shaping of technology perspective." *Info. Commun. & Soc.* (2024).

[reddit.com+1econpapers.repec.org+1tandfonline.com](https://www.researchgate.net/publication/381111111)

Summary & Evaluation:

This interdisciplinary study investigates why women remain underrepresented in cybersecurity roles even non-technical ones through a gendered social lens. Drawing on feminist technology scholarship, it argues that a predominantly technical framing of cybersecurity constrains broader career imaginaries and reinforces gender biases. The article is highly relevant for research into workforce diversity, combining sociology, psychology, and policy. Open-access and published in 2024, it provides both empirical insight and theoretical framing.

Relevance: Highlights how societal norms and imagined career pathways (social science) shape the cybersecurity workforce pipeline (cybersecurity).

What Can Critical Cybersecurity Do?

Dwyer, A.C. et al. "What Can a Critical Cybersecurity Do?" *International Political Sociology* 16(3), 2022. [tandfonline.comdurham-repository.worktribe.com+1link.springer.com+1](https://www.tandfonline.com/durham-repository.worktribe.com+1link.springer.com+1)

Summary & Evaluation:

A collective, reflective piece that invites rethinking cybersecurity through critical social science. Six authors from varied disciplines question dominant power structures, the political economy of cyber threats, and whose interest's cybersecurity services. They propose ways to

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"undo" conventional models and integrate ethical, social, and political dimensions. It's theory-rich and timely published in 2022 with open-access licensing.

Relevance: Excellent for exploring normative, political, and ethical frameworks within cybersecurity beyond mere technical defense.

Social engineering in cybersecurity: domain ontology and knowledge graph application examples

Wang, Z., Zhu, H., Liu, P., & Sun, L. "Social engineering in cybersecurity: a domain ontology and knowledge graph application examples." *Cybersecurity* 4, 31 (2021).

Summary & Evaluation:

This 2021 open-access article develops a formal ontology capturing the concepts and relationships involved in social-engineering attacks. Through knowledge-graph case scenarios, the authors explain how social vulnerabilities and attack mediums interconnect. It's practical, methodical, and bridges computer science with human factors—ideal for anyone studying psychology-informed cyber-attack modeling.

Relevance: Provides a structured, science-based framework for analyzing human-centered cyber threats (social science meets cybersecurity practice).

The social and cultural shaping of cybersecurity capacity building: a comparative study of nations and regions

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“The social and cultural shaping of cybersecurity capacity building: a comparative study of nations and regions.” *Personal and Ubiquitous Computing* (2021).

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Summary & Evaluation:

Using the Cybersecurity Capacity Maturity Model across 78 nations, this study reveals how social and cultural dynamics mediated by national development and internet prevalence—determine cybersecurity readiness. Though regional patterns exist, the authors show that developmental and infrastructural factors are more decisive. It contributes a large-scale, quantitative approach to cultural sociology within cybersecurity policy discourse.

Relevance: Offers a macro-level view into how cultural-sociological contexts drive national cybersecurity strategies.

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Reference list

Kilpatrick, M., Foley, S., & others. "Decoding the gendered imaginary of cybersecurity careers: a social shaping of technology perspective." *Info. Commun. & Soc.* (2024).

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Dwyer, A.C. et al. "What Can a Critical Cybersecurity Do?" *International Political Sociology* **16**(3), 2022. [tandfonline.comdurham-repository.worktribe.com+1link.springer.com+1](#)

Wang, Z., Zhu, H., Liu, P., & Sun, L. "Social engineering in cybersecurity: a domain ontology and knowledge graph application examples." *Cybersecurity* **4**, 31 (2021).

"The social and cultural shaping of cybersecurity capacity building: a comparative study of nations and regions." *Personal and Ubiquitous Computing* (2021).

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