

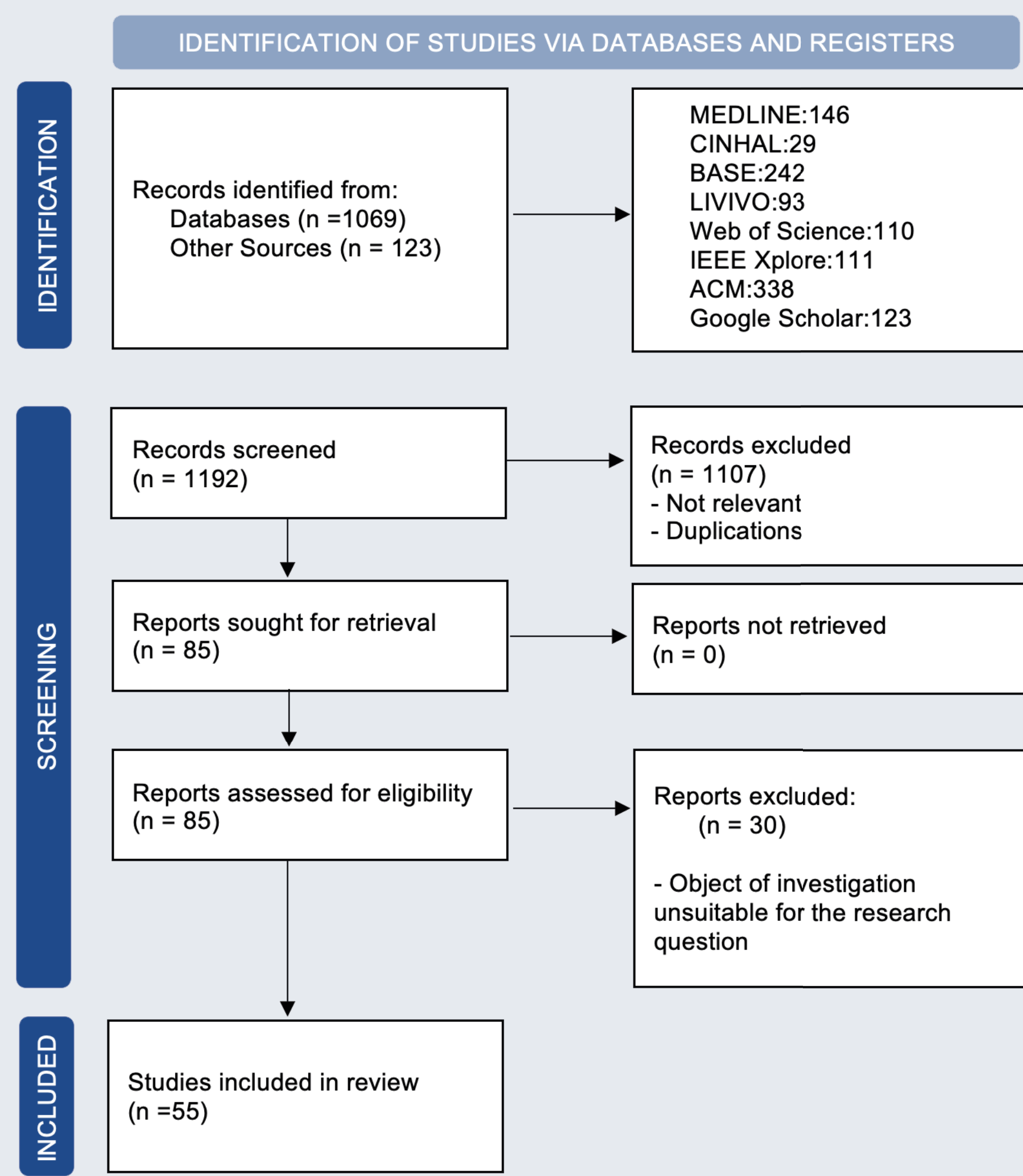
ANALYSIS OF THE BARRIERS AND SUPPORT FACTORS OF OPEN DATA

A SCOPING REVIEW

- Use of personal data as open data is an important topic worldwide across various sectors and disciplines (Kamikubo et al. 2023, Rehman et al. 2022)
- Technological advances have significantly expanded the possibilities for analysis of large datasets, comprehensive and cross-disciplinary use of open data is not fully implemented (Dove et al. 2023)
- Analysis of open data is intended to drive innovation, improve services and optimize administrative processes (Kawashita et al. 2022; Pesqueira et al. 2020; Mutambik et al. 2022; Feeney et al. 2020)
- A legally and ethically secure framework and intelligent technical tools are needed to comprehensively analyze data for the benefit of society (Rehman et al. 2022; Dove et al. 2023)

METHODOLOGY

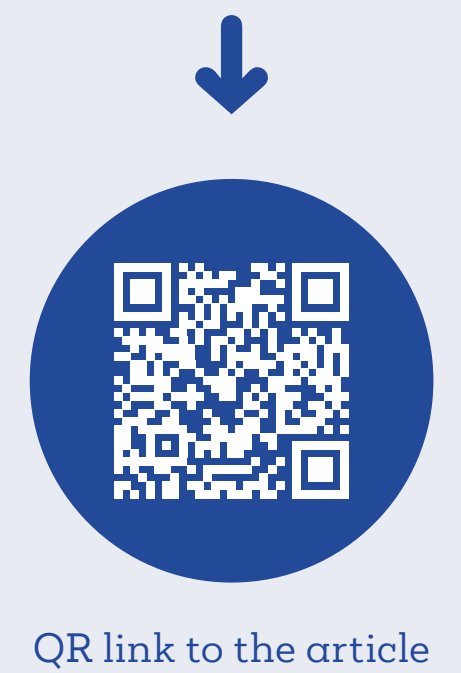
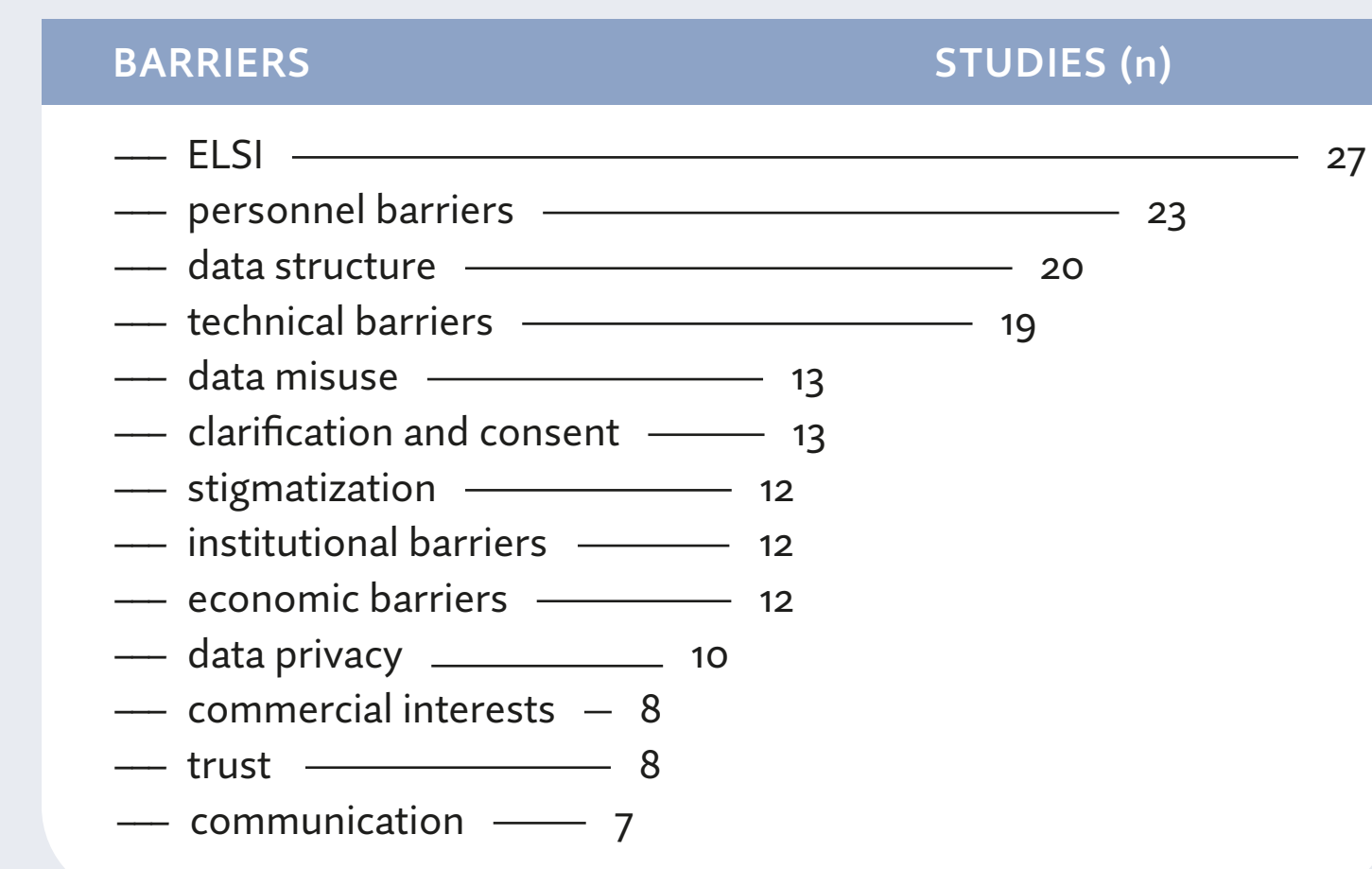
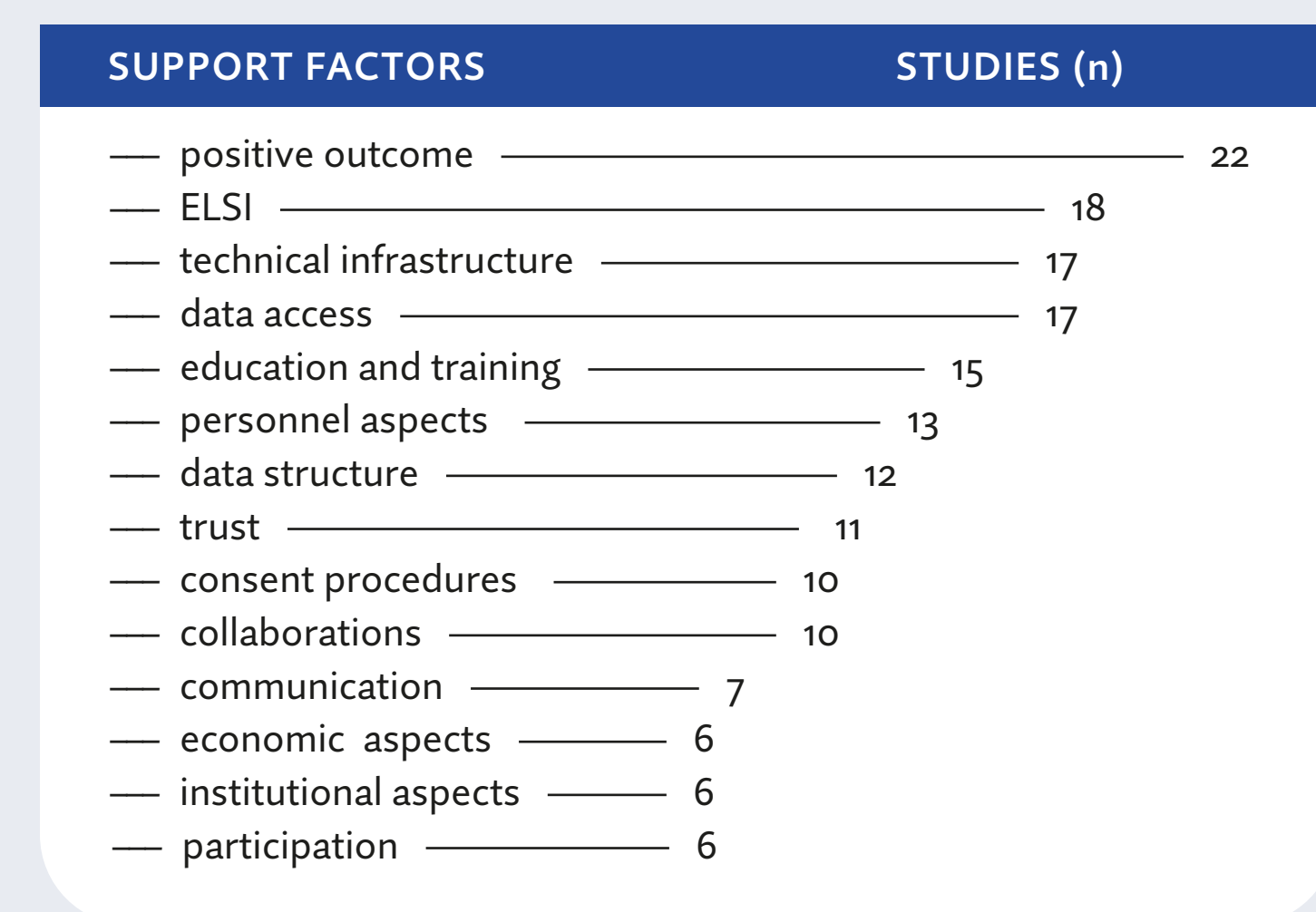
- Systematic review of seven databases, supplementary search in Google Scholar
- Evaluation of the state of research on barriers and support factors for the anonymized processing of personal data as open data
- n = 1192 studies were identified and n = 55 met the inclusion criteria



PRISMA FLOW CHART for systematic screening

RESULTS

- Supporting factors (n = 14) and barriers (n = 13) to the provision and anonymisation of personal data were categorized
- These factors included technical requirements, institutional and personnel aspects and ethical, legal and social considerations (ELSI)
- The results provide insights into existing barriers and supporting structures within open data processes to ensure effective implementation



SUMMARY

Obstacles to open data can manifest at various levels, including data generation, publication, discovery, utilization, and user feedback. (Crusoe & Melin 2018)

DATA PRIVACY AND LEGAL FRAMEWORKS \ Evident that the use of open data, especially personally identifiable information, relies on a robust legal foundation and a clear ethical framework. (Eva et al. 2022)

ETHICS AND TRUST \ Strict adherence to ethical principles are fundamental requirements for open data ensuring society's trust including transparency regarding data usage, especially with sensitive health data. (Burgess et al. 2018)

RESOURCES \ Adequate financial and human resources are essential for the collection, maintenance, and dissemination of open data. (Kawashita et al. 2022)

INTEROPERABILITY AND STANDARDS \ Standards, guidelines, and professional associations have a critical role, e.g. freely accessible databases. (Thorald et al. 2021)

EVALUATION AND REVIEW \ Imperative to identify and select appropriate data before releasing meticulously with continuous evaluation of the impact and utility of the data. (Crusoe & Melin 2018)

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PROJECT EAsyAnon – Empfehlungs- und Auditsystem zur Anonymisierung

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PROJECT CONSORTIUM

