

Creating synergies in methods of review research and bibliometric analysis

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Background

- There has been a rapid growth in research publications internationally over the last decades.
- There is a growing need for “review research”¹ employing scientific methods to keep track with the state-of-the-art.

Scoping and mapping reviews

- Address broader questions than systematic reviews, drawing on large datasets retrieved by international databases, e.g., Web of Sciences (WoS).
- Aim to identify knowledge gaps and describe a topic with its conceptual and logistic boundaries².
- Are in particularly useful when the literature is complex and heterogeneous, as well as for topics with emerging evidence.

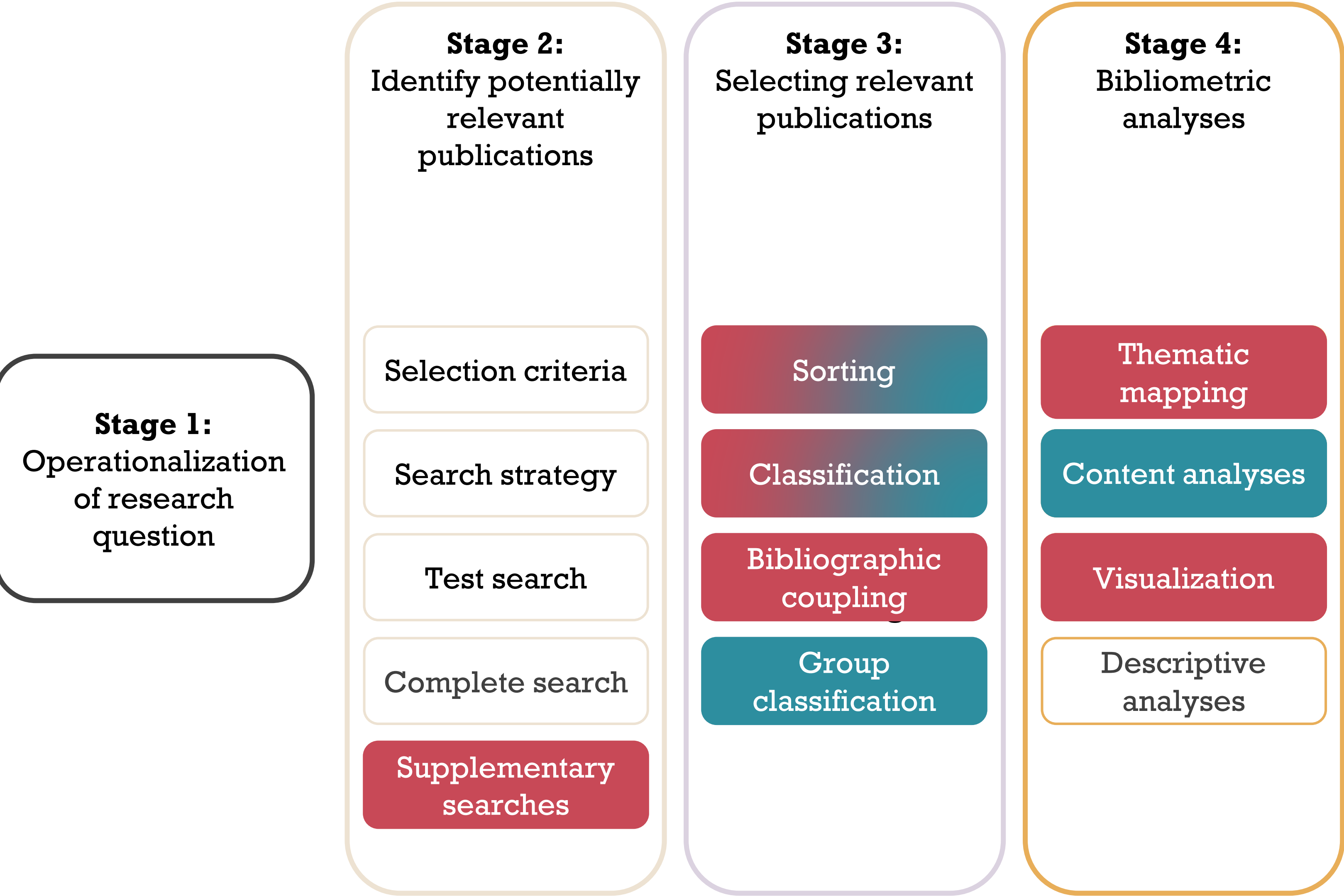
Purpose

- How can different bibliometric analyses, e.g., science mapping and network analysis, be used at different review stages to facilitate the process and improve visualization?

Methodology

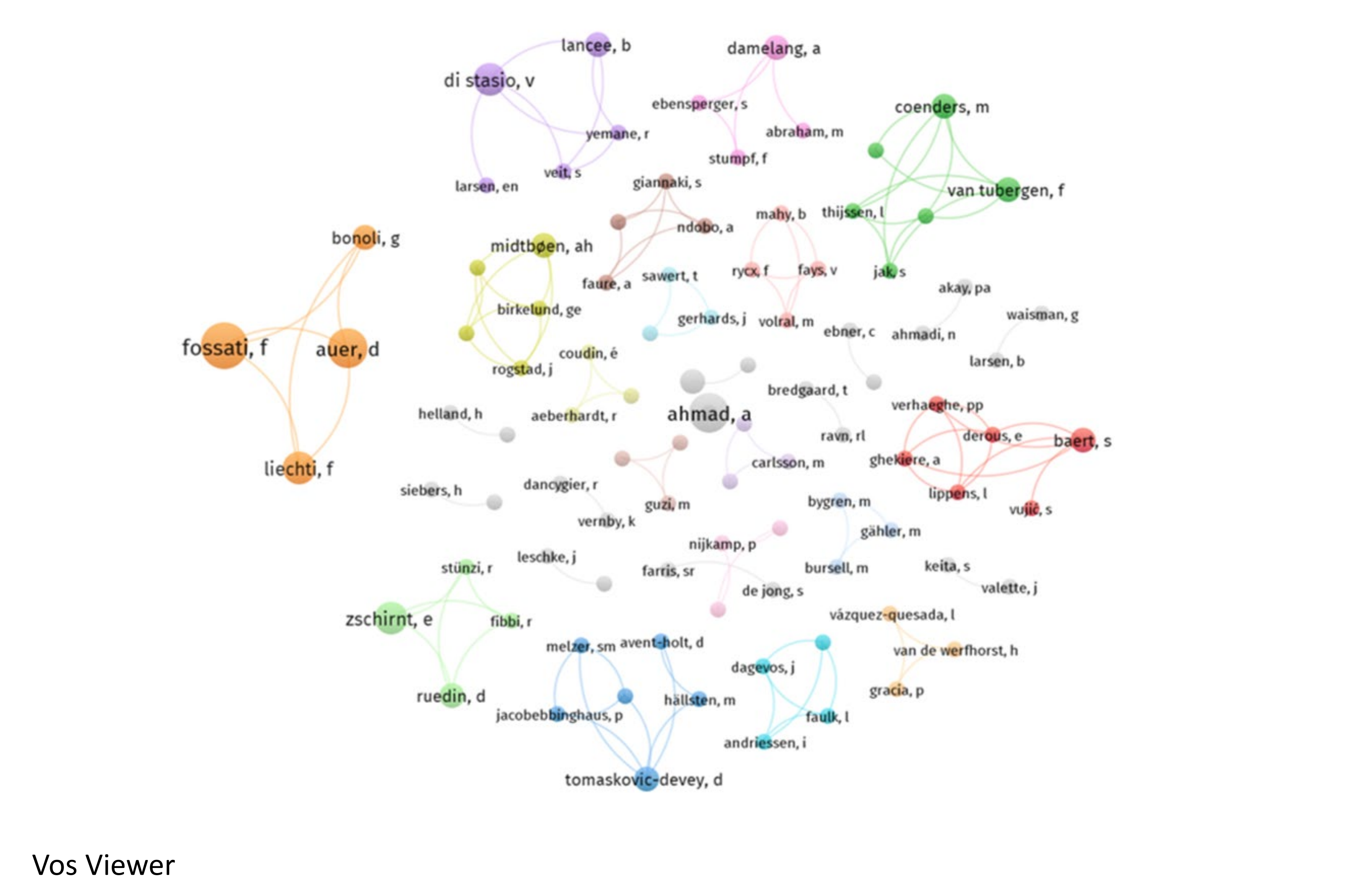
- Combining bibliometric analysis and review-methodology to stimulate synergies and efficiency.
- Addressing a broad scope, applying large datasets comprising bibliometric meta-data³.
- Software such as e.g., VOS Viewer and Leximancer may be used.

Figure 1: Facilitating the process of scoping reviews



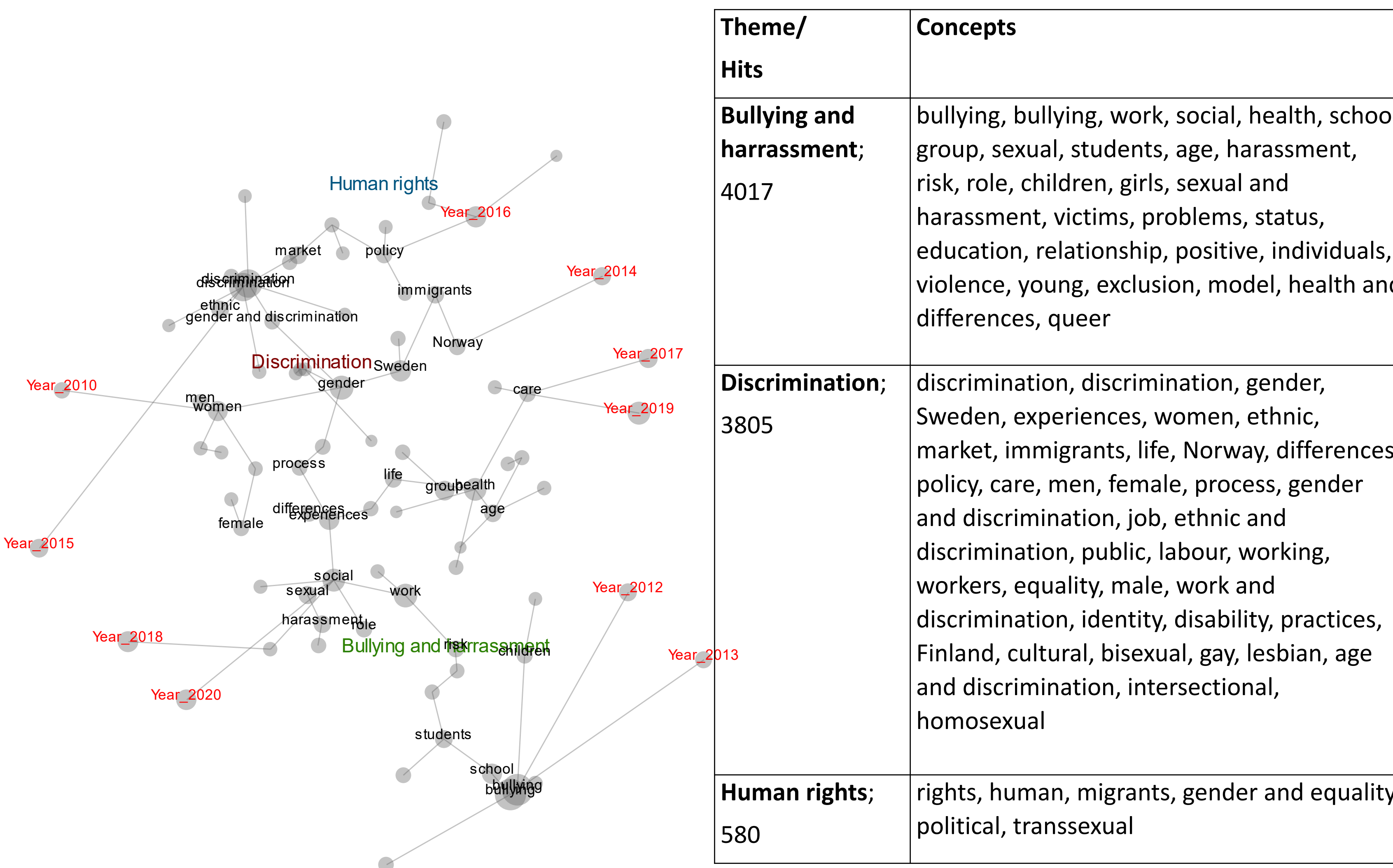
- Various bibliometric analyses can be used at different stages to facilitate the process of scoping reviews.
- For selecting relevant publications, sorting and classification methods can be combined with bibliographic coupling and group classification.
- For analyses bibliometric methods can be used including descriptive analyses, thematic mapping, content analyses and visualization.
- The broader the research question and the topic, the larger the sample of (meta-)data.

Figure 2: Network analyses in scoping reviews



- Figure 2 demonstrates the relationship between study authors of a sample of literature. It shows several clusters of studies that are connected to each other by references.

Figure 3: Nordic research on discrimination – 2010-2020 –concept map



Conclusions

- Diverse bibliometric analyses comprising science mapping, content analyses and visualization, contribute to synergies and efficiency in scoping reviews at all stages, addressing broad research questions and large samples.
- Before conducting and integrating bibliometric analysis in the workflow of scoping reviews, a mindful selection of appropriate tools has to be done.

References

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