

CONNECTED PAPERS: A RESEARCH ARTICLE COLLECTION METHOD

HAVE YOU EVER FELT IT HARD TO COLLECT SOURCES RELEVANT TO YOUR RESEARCH TOPIC?

Connected papers (<https://www.connectedpapers.com/>) is a helpful tool that can assist you in this process.

POWERFUL FEATURES OF CONNECTED PAPERS:

Enter one paper that you already collected.

Discover new papers that are related to the original one you entered:

- recognize their authors
- read their abstracts
- navigate to their webpages
- add them to your saved papers
- identify their number of citations

Identify a list of prior works. This list is a subset of the whole set of discovered papers and contains the ones that were commonly cited by the papers in the set.

Identify a list of derivative works. This list is a subset of the whole set of discovered papers and contains the ones that cited many papers in the set.

Interactively visualize the new papers (in addition to the original paper) using a graph (Figure 1):

- each node represents a paper
- edges connecting the nodes represent similarities between the papers
- papers tackling similar subjects are strongly connected and clustered together
- the node size is proportional to the number of citations
- the node color reflects the publishing year

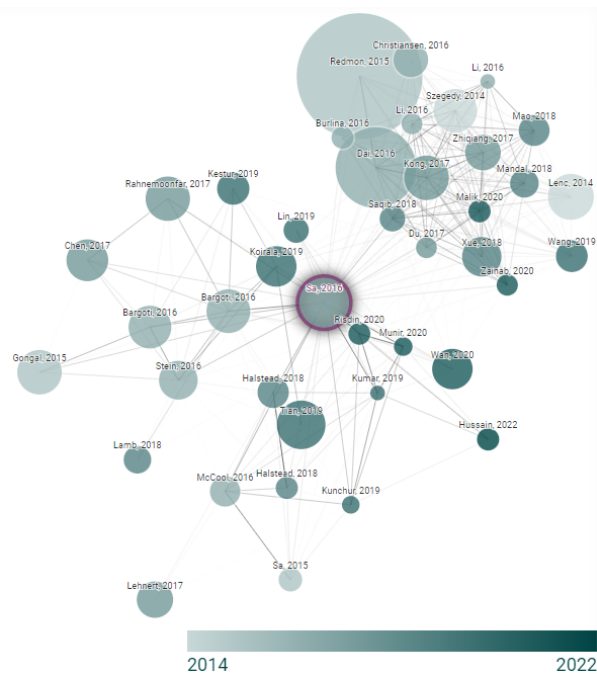


Figure 1 Graph containing the original paper (highlighted in purple) and the related papers. The color bar at the bottom shows the color scale of the publication year.

HOW ELSE CAN CONNECTED PAPERS HELP?

Connected Papers can also help you **organize your research process**. For example, **prior works** (highly cited papers of the graph) usually are seminal works that were the first to introduce concepts, theories, or methods. By reading these important papers, you can build a **strong foundation** for your research project. Moreover, **derivative works** (papers that cited many graph papers) tend either to be survey papers or recent works, so you can read these if you want a **quick summary** of previous studies in an area or if you are interested in looking at the **latest trends** in a field. Overall, both lists can help you efficiently plan your research process without wasting time on reading irrelevant papers.

Additionally, Connected Papers can aid your prewriting process because it gives ideas on how to **organize your literature review**. Particularly, you may use the **graph visualization** to identify **themes** in your literature review. This can be achieved by examining the papers that are close to each other because they are more likely to belong to the same theme. Once you identify these themes, you can organize your literature review section into coherent paragraphs, each synthesizing information from multiple papers that belong to the same theme. This helps you to avoid just listing summaries of research papers and allow you to think critically since you'll add your analysis and interpretation.