

Do users trust search engines? And if so, why?

Developing a trust measure and applying it in an experiment

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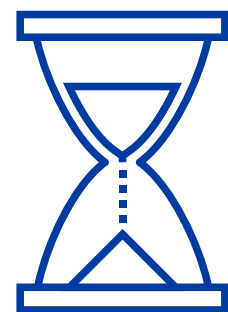
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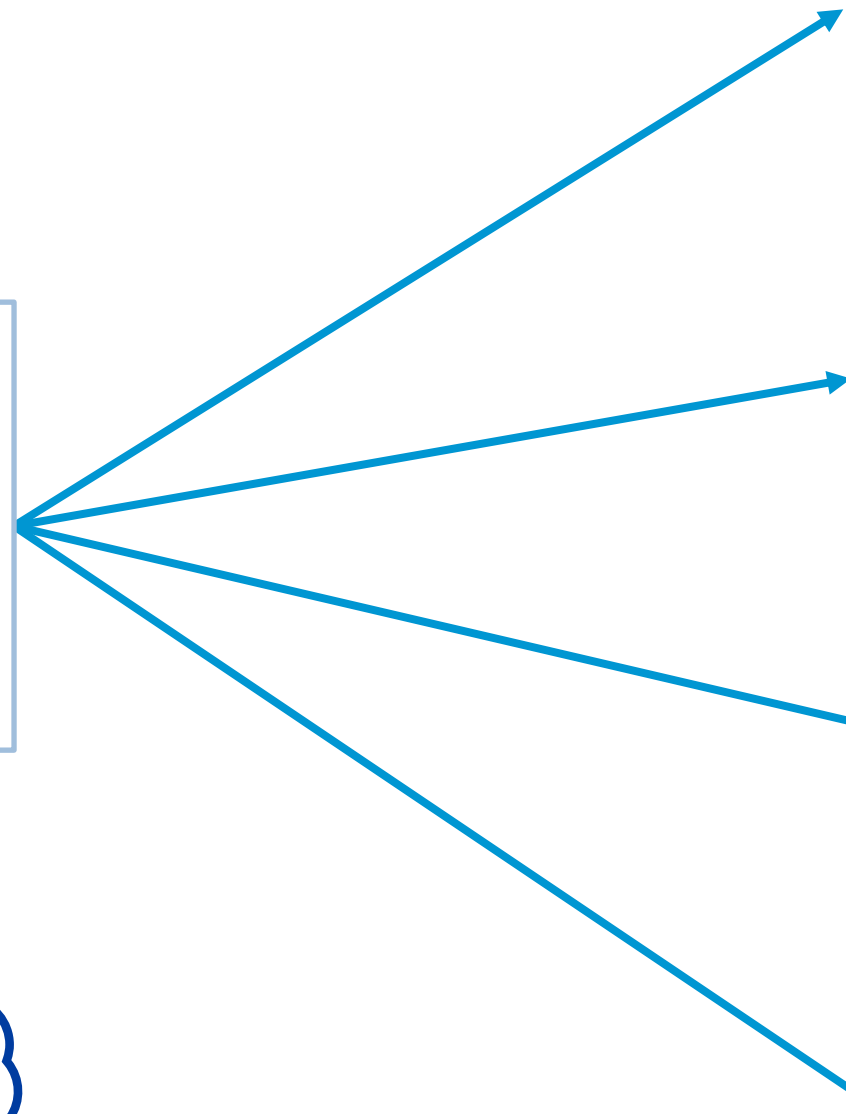
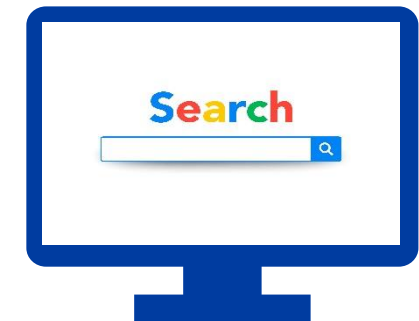


Trust concept

Trust subject



Trust object



PytlíkZillig & Kimbrough 2016

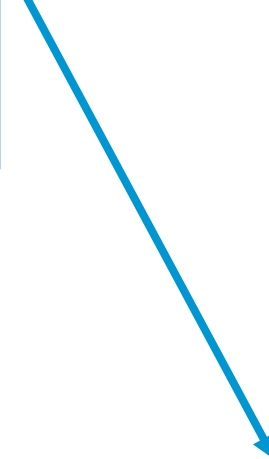
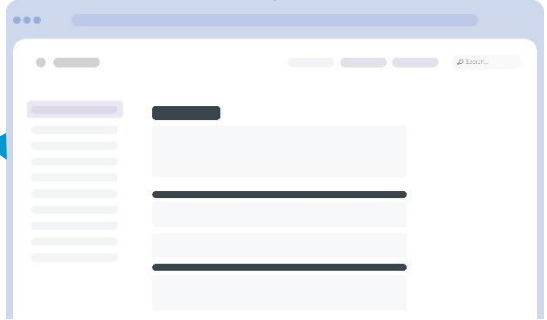
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Trust in search engines

Trust subject



Trust object



Trust model



Trust in search engines

Confident expectation
Subjective risk

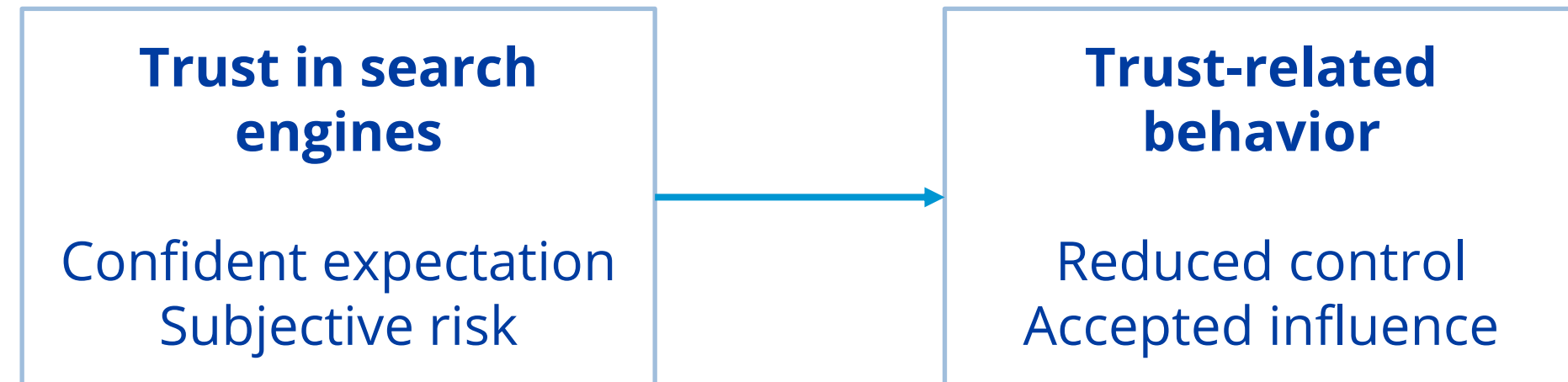
Google displays search results that help the user doing their taxes.

Mayer et al. 1995, McKnight & Chervany 2001

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Trust model



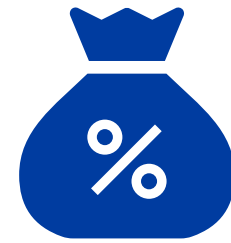
On the SERP, the user clicks on ads, featured snippets and uses the retrieved information for doing their taxes.

Mayer et al. 1995, McKnight & Chervany 2001, Pan et al. 2007

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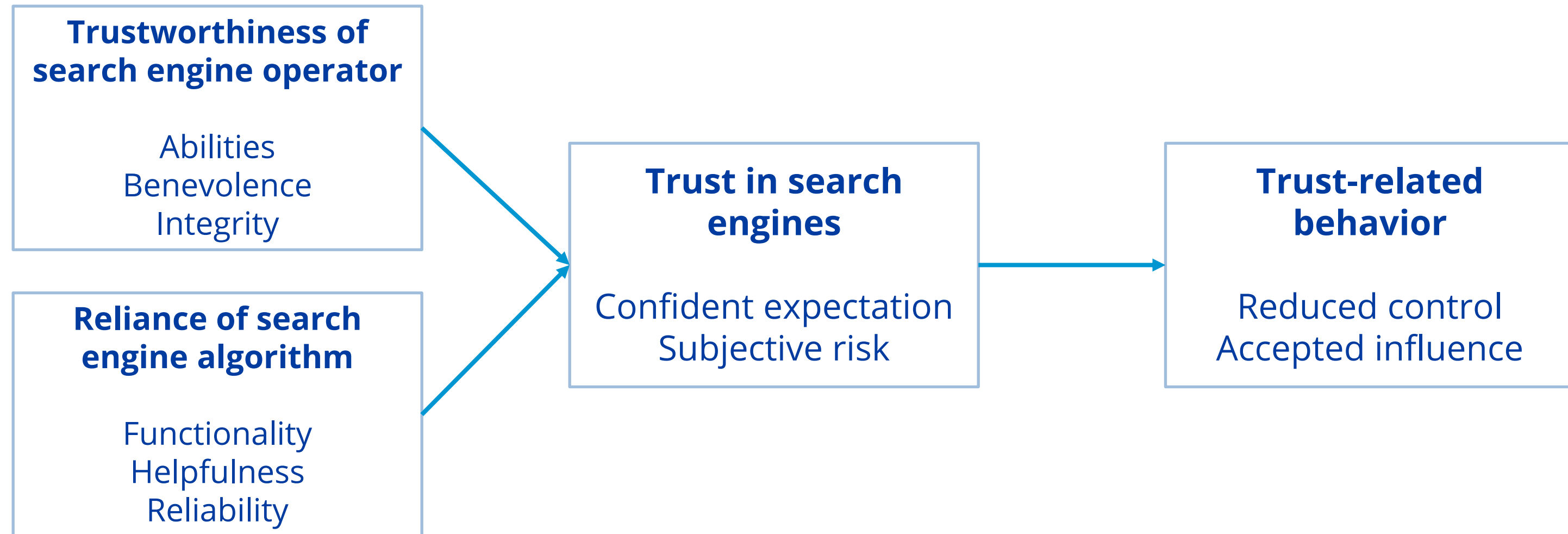
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Trust model



Google has the expertise and motivation, complies with the user's principles regarding retrieving financial information.

The sorting and ranking algorithm has the necessary functions, supports the user and functions without errors when retrieving financial information.



Mayer et al. 1995, McKnight & Chervany 2001, Pan et al. 2007, Thatcher et al. 2011

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Research Questions

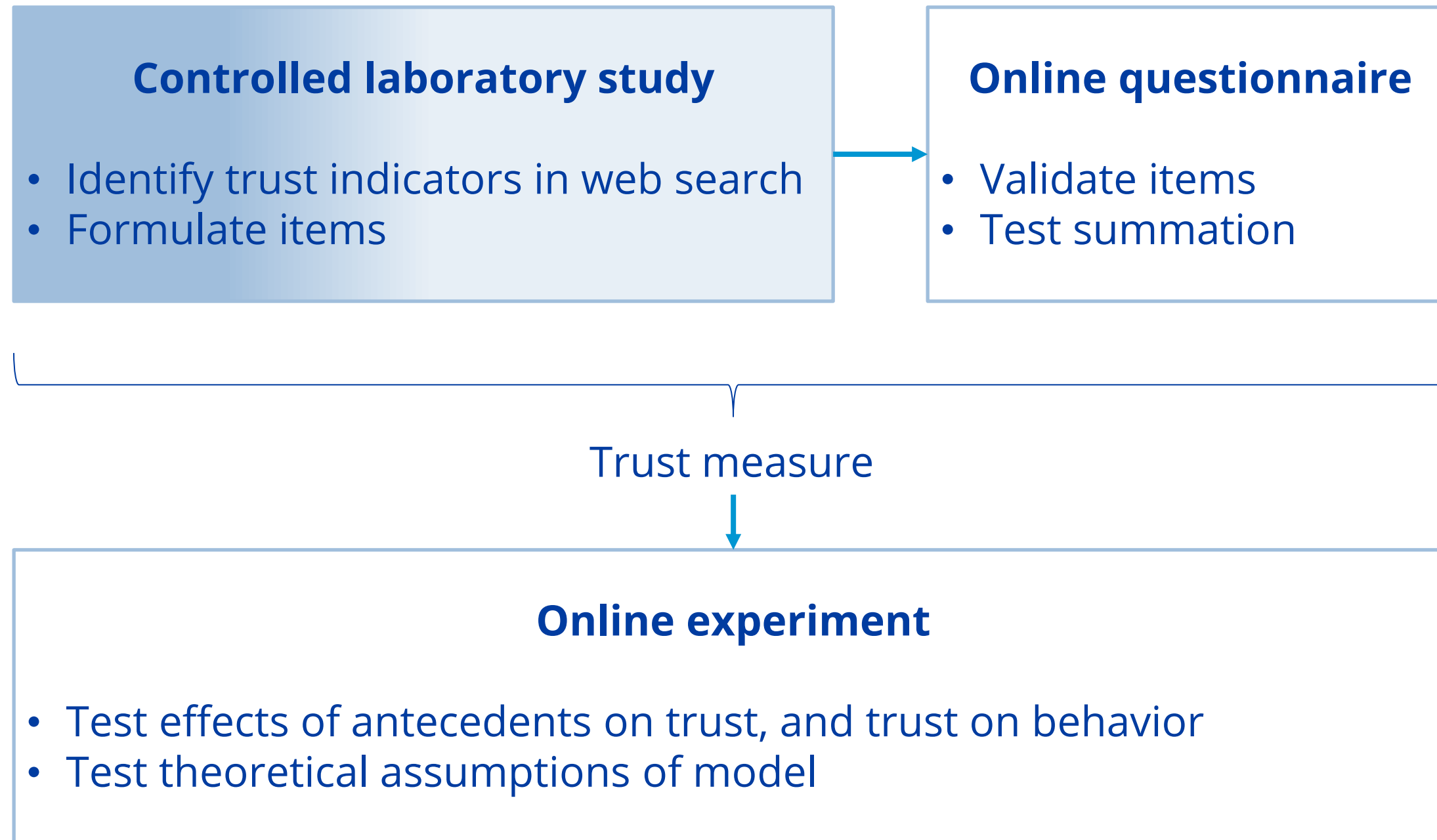
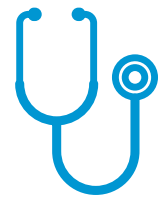
- To what extent does the **trustworthiness** of the search engine **operator**, as perceived by the user, affect trust in the search engine?
- To what extent does the **reliance** of the search engine **algorithm**, as perceived by the user, affect trust in the search engine?
- How does **trust** in the search engine affect the **behavior** of users?

- How can trust in search engines be measured?

Research Design

Google

ECOSIA



Contributions

- Methodological contributions
 - Formative and re-usable trust measure
 - Blueprint for novel AI applications
- Conceptual contributions

Contributions

- Methodological contributions
- Conceptual contributions
 - Holistic understanding of trust
 - Socio-technical notion of search engines
 - Identify legitimate/ misplaced trust

Many thanks...

... for the SIGIR travel fund and the DAAD scholarship!

... for the ongoing support and advice by my supervisors!

... for the comments by the reviewers of my submission!

Thanks for listening!

Feel free to connect / reach out:

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