

Lab and life: Differences in risky choices and relevant psychological mechanisms

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Background

It remains unclear to what degree the risky choices studied in the behavioral sciences reflect the choices that people face in their lives. We evaluate how well attuned this "status quo" is to real-world choices and the therein involved psychological mechanisms:

RQ 1: To what extent do the research and layperson perspectives on risky choices overlap?

RQ 2: To what extent do differences between choices imply differences in relevant psychological mechanisms?

RQ 1: Overlap between perspectives

Based on the semantic similarity of 162 choices representing the two perspectives and signal detection analysis, we identified 103 unique choices with an overlap between perspectives of only 18%.

We also evaluated the semantic similarity of these choices' sentence embeddings to real-world risks identified by an inventory of big life decisions,¹ the World Economic Forum,² and the Global Burden of Disease study.³

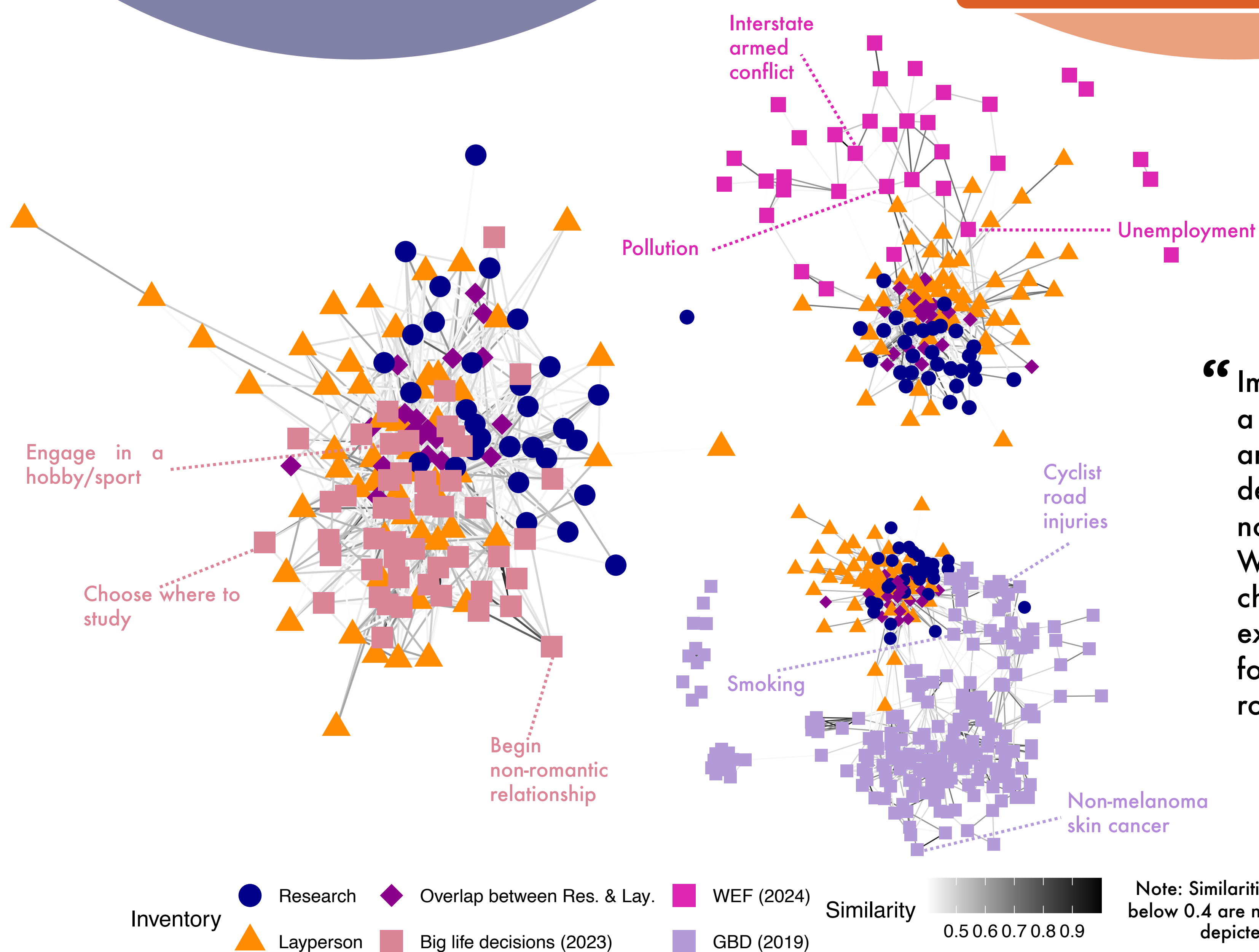
RQ 2: Relevance of psychological mechanisms

In an online study, 825 participants reported the relevance of 7 classes of theoretically derived psychological mechanisms* in 103 choices. Their judgments of relevance credibly differed between the research and layperson perspectives in all but 2 classes of mechanisms. *See poster 58

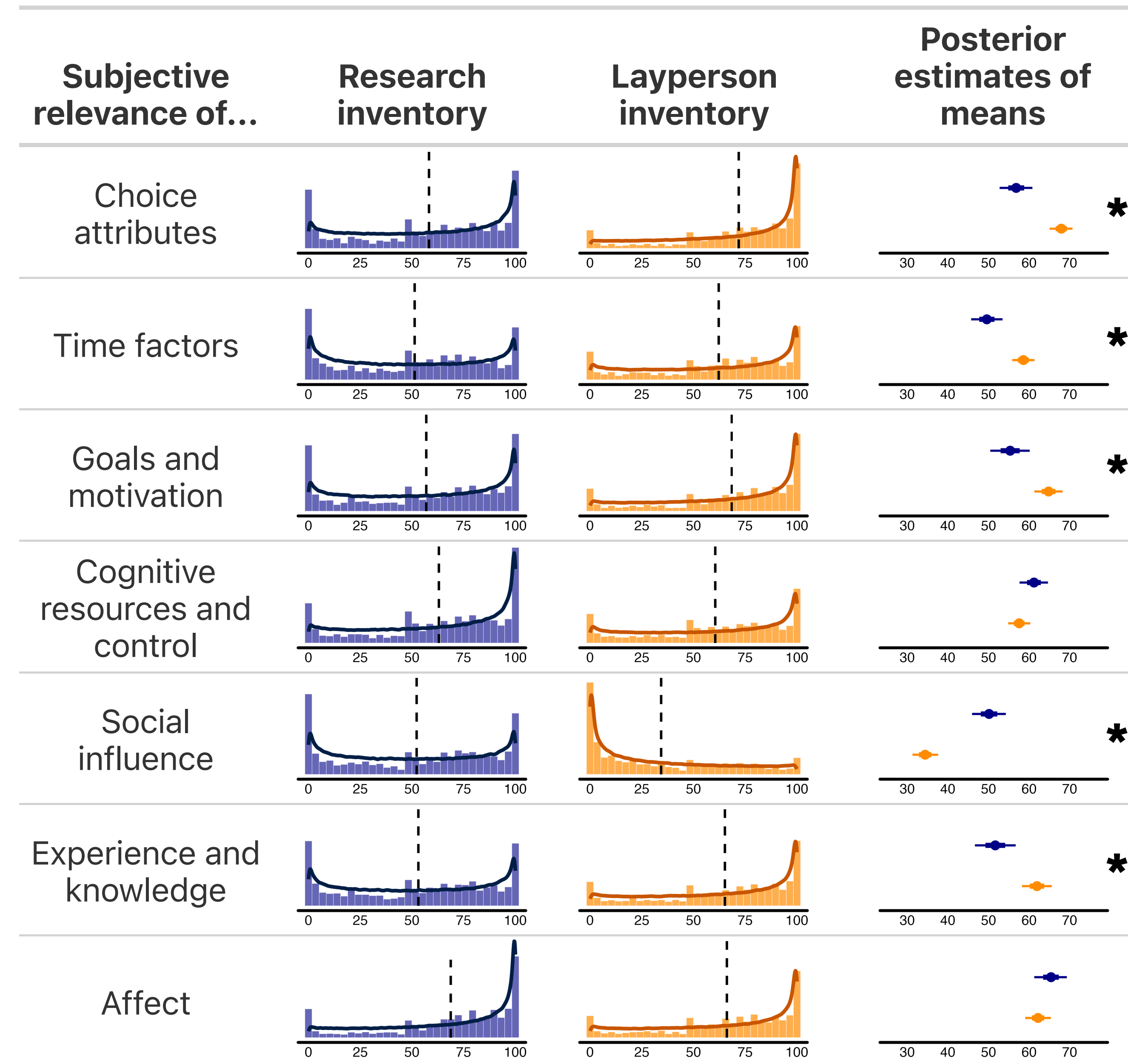


RQ 1a: Unique and overlapping choices in the research and layperson perspectives

Methods & Results



“Imagine you are in a specific situation and about to decide whether or not to [choice]. When making this choice, to what extent would the following play a role for you?”



RQ 2: Posterior estimates of mean perceived relevance differed between perspectives in 5 out of 7 classes of psychological mechanisms (*)

Conclusion

Understanding how people make decisions in real-life scenarios is possible if researchers either study the same choices that people face in their lives (RQ 1) or if the underlying psychological mechanisms at play in these choices are comparable (RQ 2).

The present research suggests that neither of these requirements is met. To improve generalizability, future research should study a broader scope of relevant choices.

References

1. Camilleri, A. R. (2023). An investigation of big life decisions. *Judgment and Decision Making*, 18, e32. <https://doi.org/10.1017/jdm.2023.30>
2. World Economic Forum. (2024). *The Global Risks Report 2024 (19th Edition)*. <https://www.weforum.org/publications/global-risks-report-2024/>
3. University of Washington. (2023). *GBD Results*. Institute for Health Metrics and Evaluation (GBD 2019). <https://vizhub.healthdata.org/gbd-results>

RQ 1b: Semantic similarities to big life decisions, WEF global risks, and GBD risks