



# Polarization in a Global State of Emergency: Quantifying Heterogeneity in Perceived Risks of Pandemic Mitigation Measures

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## Background

Polarization has gained increasing attention.<sup>1</sup> But it remains unclear how polarized society really is concerning societal issues for **two reasons**:

- Jingly fallacy: Lack of agreement on how to measure polarization<sup>2,3</sup>
- Neglect of context: Broad claims about polarization that do not identify driving forces

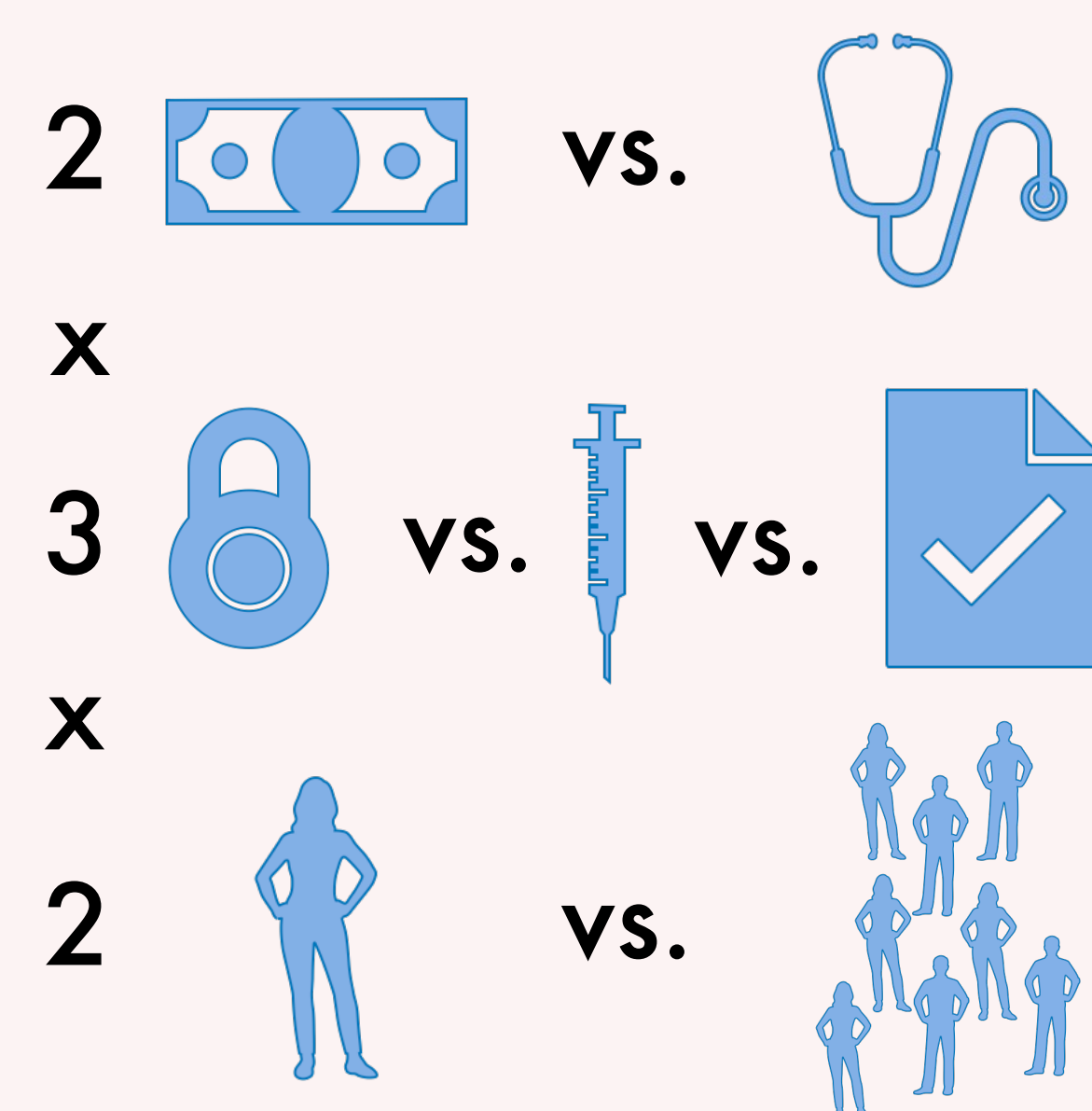
## Methods

Case study: Risk perceptions regarding Covid-19 mitigation measures in **12 unique scenarios**

MTurk  
survey

N = 768

Mixed Design



Example item:

“In the coming weeks, there could be another spike in new Covid-19 infections. If this were to happen, imagine that the United States government therefore decides to enforce a **lockdown**. How risky do you find this decision for **your own** financial situation?”

## RQ 1

Theory Crisis and Jingle Fallacy:  
To what degree do different  
operationalizations of polarization  
concur?

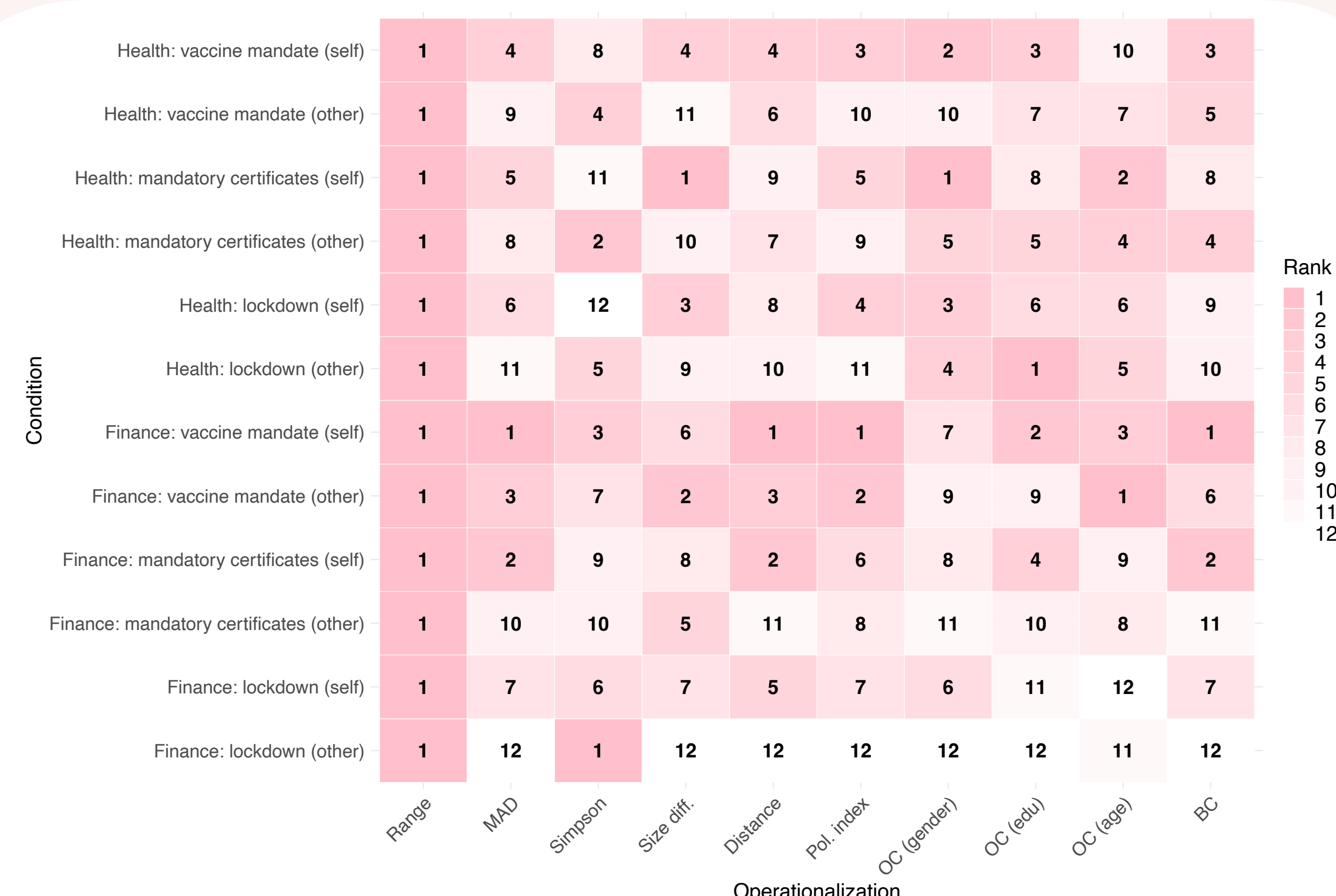


Fig. 1: Heat map ranking operationalizations across 12 scenarios

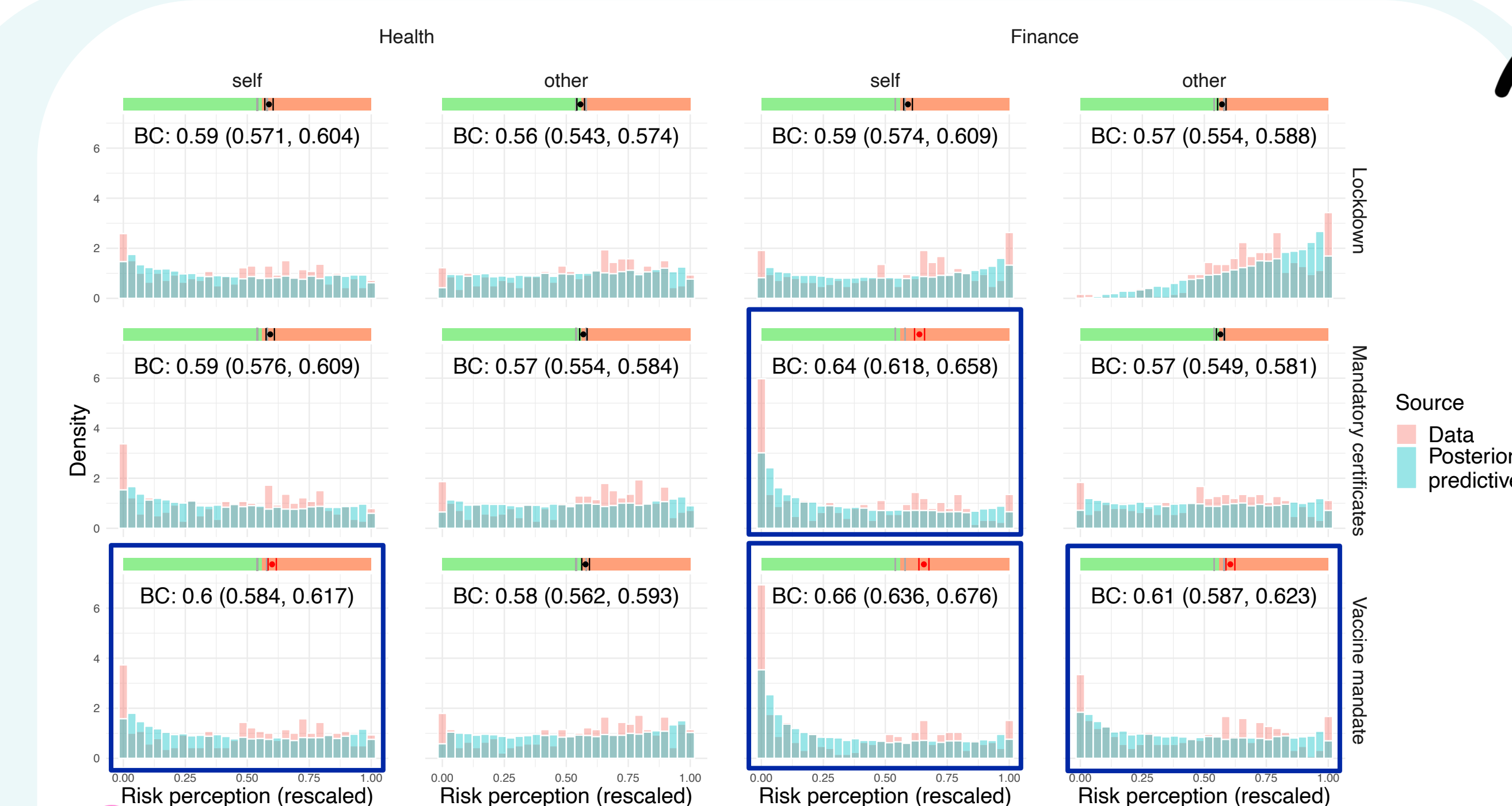


Fig. 2: Distributions of risk perceptions across 12 scenarios (data and post. pred.)

## Results

- RQ 1: Moderate agreement between operationalizations of polarization (**Fig.1**). Mean absolute rank correlation:  $r = 0.39$
- RQ 2: Credible polarization in **4 out of 12** scenarios in both health-related and financial risks (**Fig.2**)

## Conclusion

- Moderate convergent validity: Importance of considering **multiple operationalizations**
- Condition-specific effects: Covid-19 polarization dominated by scenarios with a focus on **consequences for the individual**

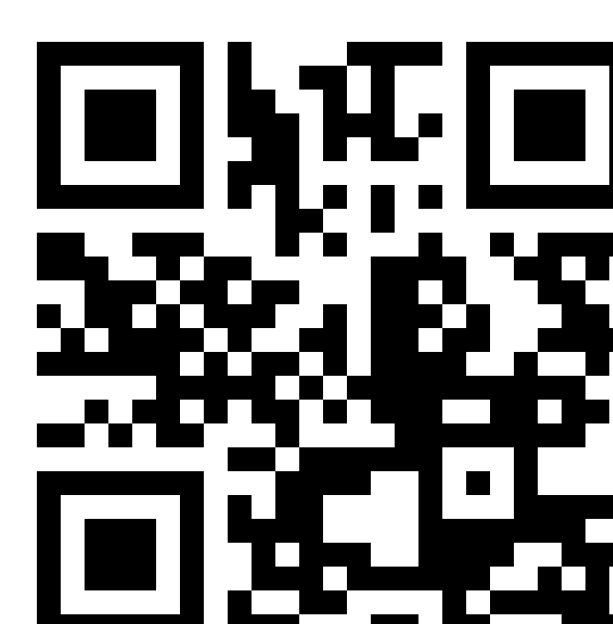
## RQ 2

Unraveling Polarization in Context:  
Under which conditions  
can we identify polarization?

## Try it yourself

Examine polarization in your own data with this **Shiny app**: [ofischer.shinyapps.io/polarization\\_analysis/](https://ofischer.shinyapps.io/polarization_analysis/)

Just upload your data, simulate a distribution, or explore data from the World Values Survey and compare different operationalizations of polarization.



Preprint available:  
[psyarxiv.com/bv496](https://psyarxiv.com/bv496)

## References

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2. Bramson, A., Grim, P., Singer, D. J., Berger, W. J., Sack, G., Fisher, S., Flocken, C., & Holman, B. (2017). Understanding Polarization: Meanings, Measures, and Model Evaluation. *Philosophy of Science*, 84(1), 115–159. <https://doi.org/10.1086/688938>
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