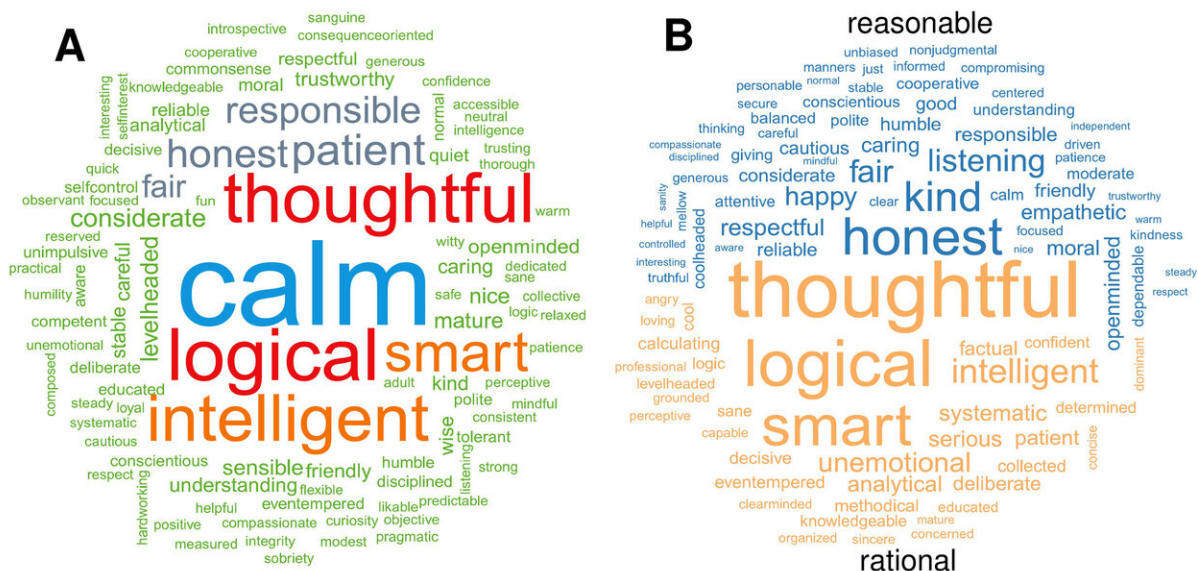


# People view rationality and reasonableness as distinct principles of judgment

January 8 2020



Spontaneous ascriptions of reasonable vs. rational persons. (A) Common themes in descriptions of rational and reasonable persons. (B) Themes differentiating reasonable (in blue on top) from rational (in brown on the bottom); size of the word is mapped to its maximum deviation across reasonable versus rational text corpora. Credit: Igor Grossmann

When it comes to making sound judgements, most people understand and distinguish that being rational is self-serving and being reasonable is fair and balanced, finds new research from the University of Waterloo.

The study is the first systematic attempt to explore what people consider to be sound judgment and whether they understand rationality and reasonableness along the lines advocated by experts in economics, law, and other [social scientists](#).

"Our results show that laypeople grasp economists' view of rationality, yet they favour socially pragmatic reasonableness as a separate standard of judgment," said Igor Grossmann, professor of psychology at Waterloo and lead author on the study.

To understand how the general public views rationality and reasonableness, Grossmann collaborated with colleagues in Canada and Pakistan to examine impressions of rational and reasonable persons and actions.

"The concept of rationality that we found lay people have corresponds to economists' definition, which emphasizes abstract logic and pursuit of self-interest," said Grossmann. "We also found people tend to uphold a distinct standard of reasonableness that corresponds to philosophical traditions encouraging context-specific balance of self-interest with fairness."

# THE MEANING OF SOUND JUDGMENT

**rationality**



**reasonableness**

Economics:  
analytical  
preference  
maximization



Law: attention  
to socially  
conscious  
norms



General study synopsis in a long format. Credit: Igor Grossmann

The researchers analyzed the use of the terms "rational" and "reasonable" in web-based news, US Supreme Court Opinions, scripts of popular soap operas, and Google books covering languages spoken in 1/6 of the world today. They quantified common characteristics attributed to rational and reasonable persons.

Researchers also surveyed laypeople's common stereotypes of rational and reasonable agents, and performed 13 experiments contrasting cooperative and self-serving behavior in economic games. Experiments involved participants in North America as well as urban and rural Pakistan.

"Rationality and reasonableness lead people to different conclusions

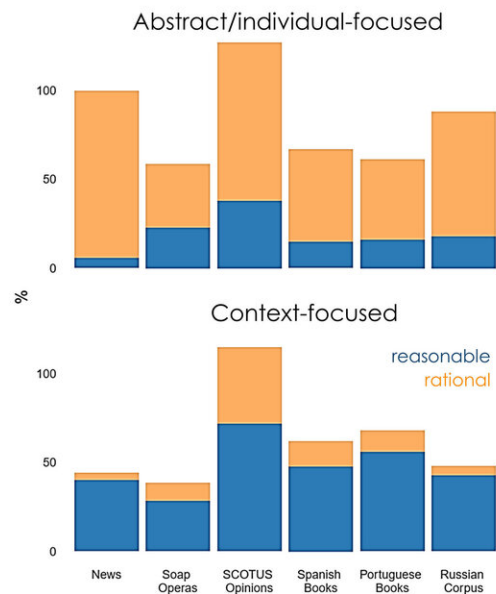
about what constitutes sound judgment in dilemmas that pit self-interest against fairness," said Richard Eibach, professor of psychology at Waterloo and a co-author of the study. "People view [rationality](#) as absolute and preference-maximizing, whereas they view reasonableness as paying attention to particulars and fairness."

## HOW DO RATIONALITY AND REASONABLENESS DIFFER IN TEXTS?



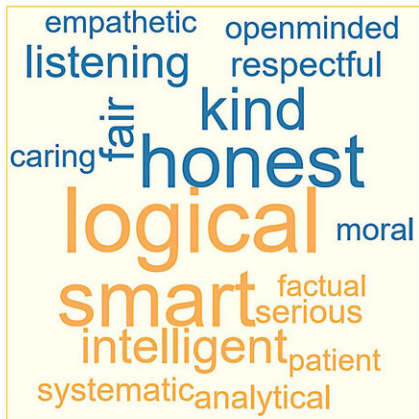
### FOR MORE INFORMATION

I. Grossmann, R. P. Eibach, J. Koyama, Q. B. Sahi, Folk standards of sound judgment: Rationality Versus Reasonableness. *Sci. Adv.* **6**, eaaz0289 (2020)



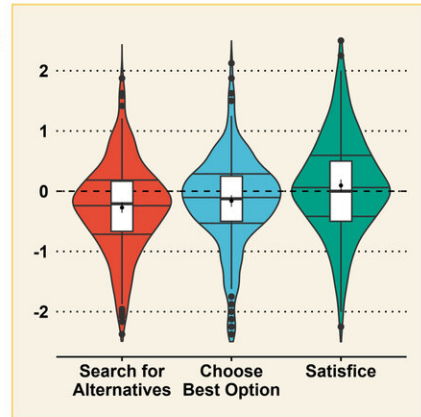
Results of the text-based analyses (news reports, SCOTUS Opinions, Soap Operas, Google Books), wide format Credit: Igor Grossmann

## IMPRESSIONS OF RATIONAL AND REASONABLE PEOPLE



reasonable

rational



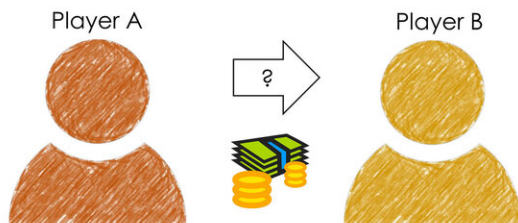
### FOR MORE INFORMATION

I. Grossmann, R. P. Eibach, J. Koyama, Q. B. Sahi, Folk standards of sound judgment: Rationality Versus Reasonableness. *Sci. Adv.* **6**, eaaz0289 (2020)

Results of surveys about spontaneous impressions of rational and reasonable persons, wide format. Credit: Igor Grossmann

## DICTATOR GAME

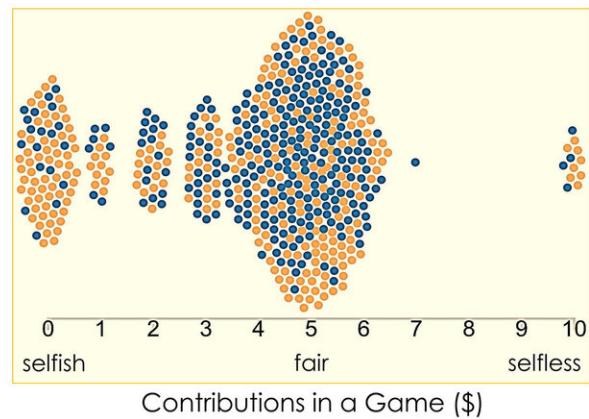
Player A can choose what fraction of a resource (\$10) to share with anonymous Player B, who must accept the offer.



### FOR MORE INFORMATION

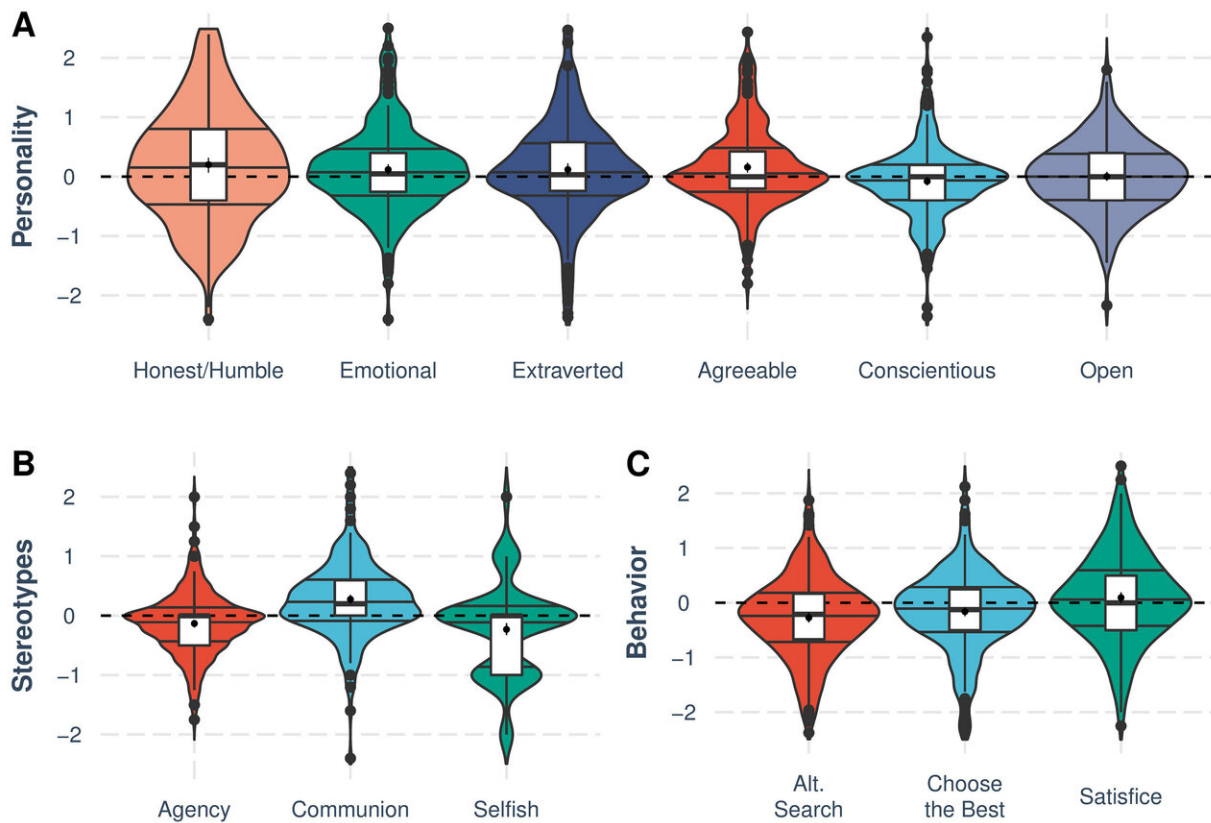
I. Grossmann, R. P. Eibach, J. Koyama, Q. B. Sahi, Folk standards of sound judgment: Rationality Versus Reasonableness. *Sci. Adv.* **6**, eaaz0289 (2020)

● reasonable  
● rational



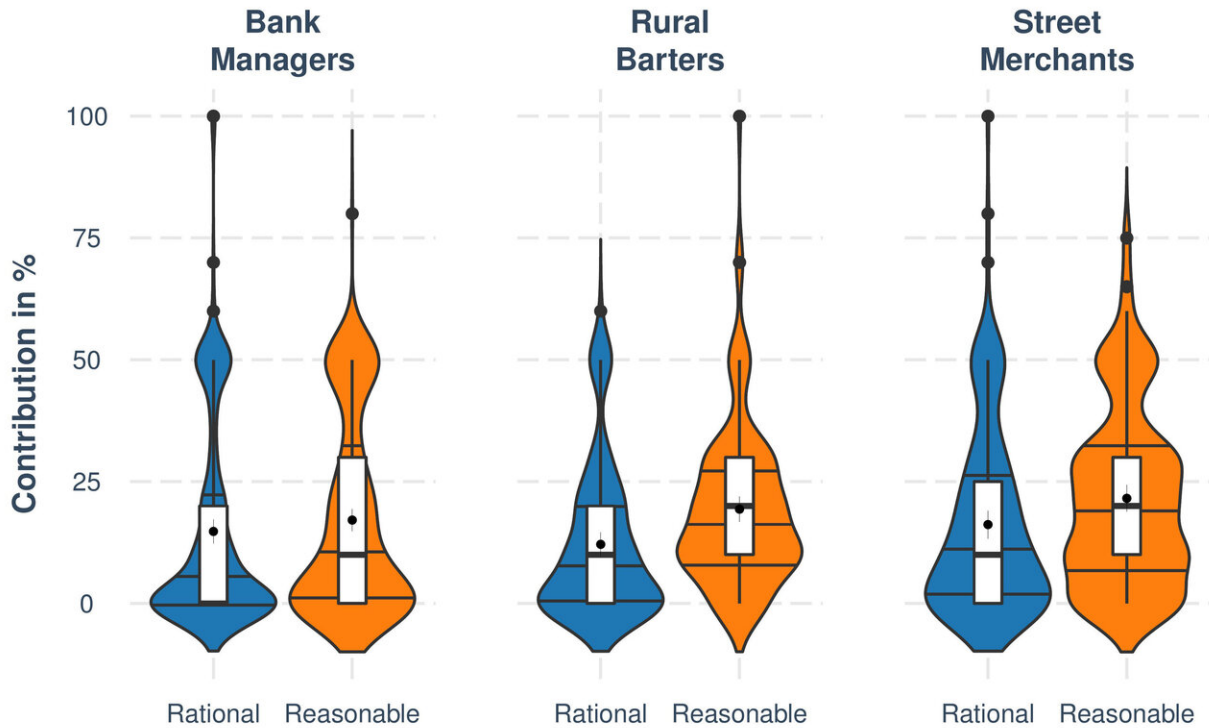
Information about the Dictator Game and results of economic games showing expectations for rational and reasonable agents in Dictator Games, wide format.

Credit: Igor Grossmann



Personality, stereotypes, and behavioral attributes of reasonable vs. rational persons. (A) Difference in attribution of personality characteristics to reasonable versus rational persons. (B) Difference in cardinal stereotype dimensions of agency and communion ascribed to reasonable versus rational persons, along with ascription of selfishness. (C) Expectation of maximizing (alternative search; goal of choosing the best) and satisficing behavior to reasonable versus rational agents. (A) to (C) show violin plots with density distribution of difference

scores, 25% median, 75% quantiles, boxplots, estimated means, and bootstrapped 95% confidence intervals. Scores above zero indicate greater attribution to reasonable persons. Credit: Igor Grossmann



Expected contributions in a Dictator Game by rational and reasonable persons among bank managers, street merchants, and rural barterers in Pakistan. Graphs represent violin plots with density distribution of percentage scores, 25% median, and 75% quantiles, boxplots, estimated means, and bootstrapped 95% confidence intervals. Credit: Igor Grossmann

Researchers also found that people use rational and reasonable standards of judgment strategically, favouring a rational person to represent their

side in economic and social disputes, but choosing a reasonable person to represent the other side.

"These findings cast prior demonstrations of people's irrationality in a new light," says Grossmann. "People may choose to be irrational when it violates their preferred standard of reasonable, socially-conscious behavior."

"Folk standards of sound judgment: Rationality Versus Reasonableness" by Grossmann and Eibach, along with collaborators Jacklyn Koyama (University of Toronto) and Qaisar B. Sahi (Shaheed Zulfikar Ali Bhutto Institute of Science and Technology in Pakistan) was published in the journal *Science Advances*.

**More information:** I. Grossmann et al., "Folk standards of sound judgment: Rationality Versus Reasonableness," *Science Advances* (2019). [advances.sciencemag.org/content/6/1/eaaz0289](https://advances.sciencemag.org/content/6/1/eaaz0289)

Provided by University of Waterloo

Citation: People view rationality and reasonableness as distinct principles of judgment (2020, January 8) retrieved 29 April 2024 from <https://phys.org/news/2020-01-people-view-rationality-distinct-principles.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.