

How Emotions and Advisor Identity Shape
Our Use of Al Advice
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### The Al Revolution

- ChatGPT boasts 400 million weekly active users
- AI has demonstrated exponential growth and improvement
- True AGI may be coming within a couple years





Al is everywhere—from Spotify to surgery.

## Why Care About Al Advice?

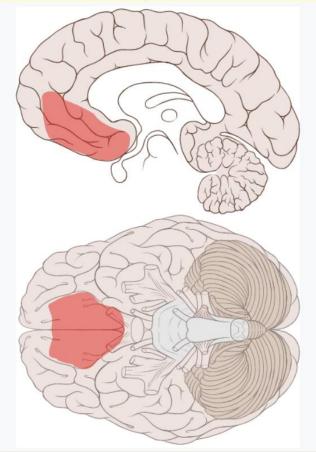


But people still don't trust Al—even when it performs better than humans



This is called algorithm aversion.

#### **Ventromedial prefrontal cortex**



## Receiving advice in the brain

- Advice-taking from both humans and Al involves mentalizing networks—used to understand others' thoughts and intentions.
- Key Brain Regions:
  - Ventromedial Prefrontal Cortex (vmPFC), Precuneus, Temporoparietal Junction (TPJ)

## The Judge Advisor System

A paradigm used to study the utilization of advice

Advisor identities can be manipulated

### Enter the Advisors





Human



**Unnamed Al** 



Anthropomorphized Al ("Sam" the cartoon owl)

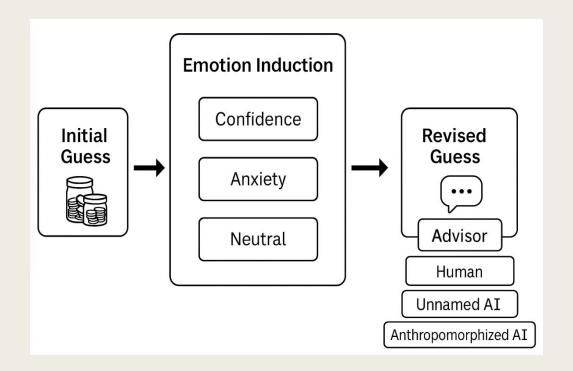
## **Inducing Emotions**

Participants were assigned to one of three emotional groups

- Anxiety
- Neutral
- Confidence

### A Tale of Jars and Judgments

Participants
 guessed
 how much
 money was
 in jars of
 coins.





Coin Estimation Task (Part 1).



**Detailed Recall Task** 



Self-confidence Measurements

#### Procedure



Receive Advice



Coin Estimation Task (Part 2)



**Quality Of Advice** 



**Attitudes Towards AI** 

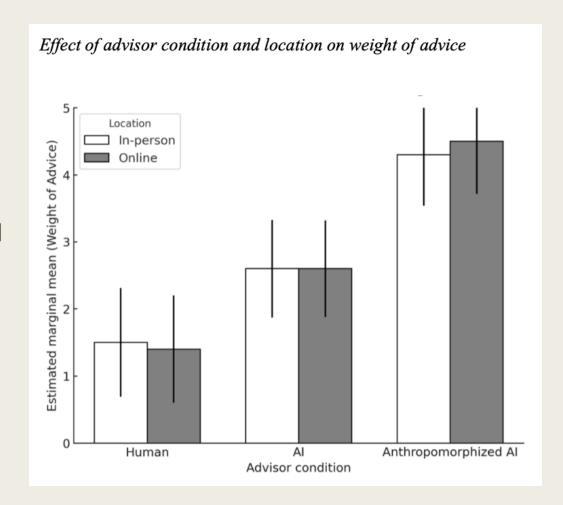
## WHO DID THEY LISTEN TO?

We used Weight of Advice (WOA): how much people changed their answer toward the advice.

WOA = | final estimate - initial estimate | advice - initial estimate |

## Sam the Owl Wins

- People listened more to anthropomorphized Al than to humans.
- Emotions didn't change advice usage much.
- People trusted"Sam" more than humans





## Making Al More Human Might Work

- Framing Al with names and faces builds trust.
- Emotions may matter less than we thought—or need stronger triggers.
- Designers should think socially, not just technically.

Improve

Improve emotion induction (e.g., guided meditations or videos).

## What's Next?

Test

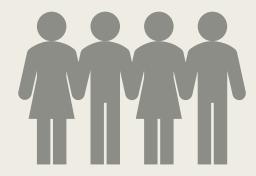
Test with real-life stakes.

Explore

Explore when anthropomorphism becomes creepy (uncanny valley).

# Man, Machine, or Something in Between?

- Maya Angelou "I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel"
- Al utilization will only improve if people have a positive relationship with it
- Trust in Al might depend on how "human" it seems.



## Acknowledgments

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