

Who's to Blame for Survey Instability: Respondents with Nonexistent Preferences or Researchers with Flawed Measures?¹

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American Political Science Association, 9/5/2026

¹Slides, paper, data: [GaryKing.org/instability](https://garyking.org/instability)

²Joint work with [Libby Jenke](#)

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- What % answer differently?

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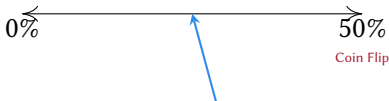
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- **What % answer differently?** 0%  50%
Coin Flip

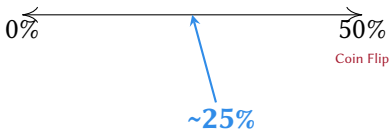
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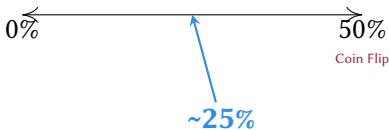
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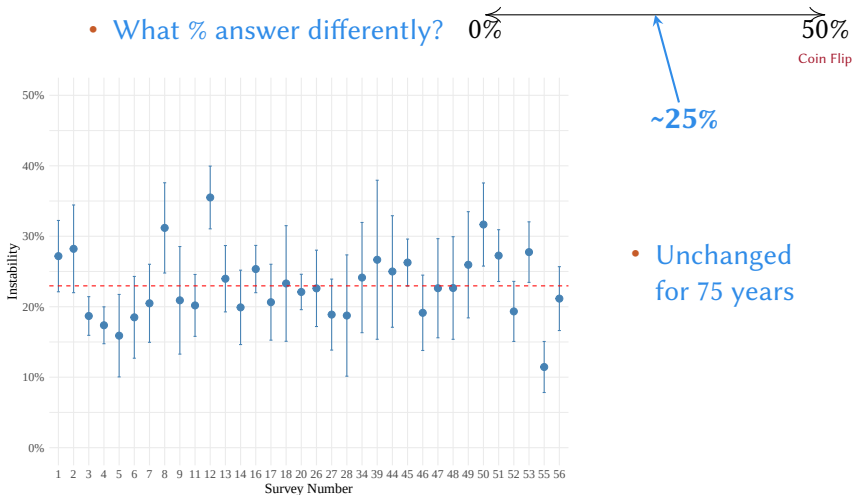
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- **Unchanged**
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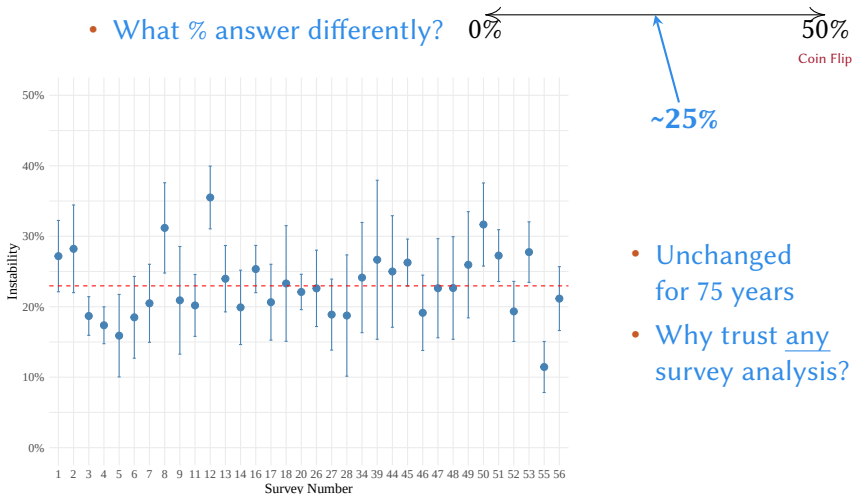
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- Unchanged for 75 years
- Why trust any survey analysis?

Research Strategy

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A Binary Choice Conjoint Question

(Ono and Burden, 2018)

Please carefully review the two potential candidates running for election to the U.S. House of Representatives, detailed below.

	Candidate 0	Candidate 1
Race/Ethnicity	Hispanic	Asian American
Age	52	60
Favorability rating among the public	70%	34%
Position on immigrants	Favors giving citizenship or guest worker status to undocumented immigrants	Opposes giving citizenship or guest worker status to undocumented immigrants
Party affiliation	Republican Party	Democratic Party
Position on abortion	Abortion is not a private matter (pro-life)	Abortion is a private matter (pro-choice)
Position on government deficit	Wants to reduce the deficit through tax increase	Wants to reduce the deficit through tax increase
Salient personal characteristics	Really cares about people like you	Really cares about people like you
Position on national security	Wants to cut military budget and keep the U.S. out of war	Wants to maintain strong defense and increase U.S. influence
Gender	Female	Female
Policy area of expertise	Education	Foreign policy
Family	Single (divorced)	Married (no child)
Experience in public office	12 years	4 years

If you had to choose between them, which of these candidates would you vote to be a member of the U.S. House of Representatives?

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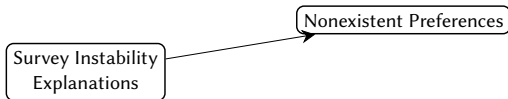
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 - **We were wrong & changed directions:** A lot.

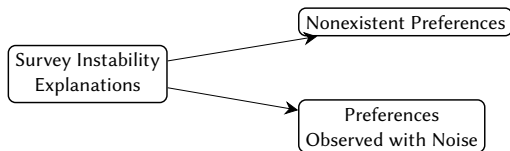
What We Know

Survey Instability
Explanations

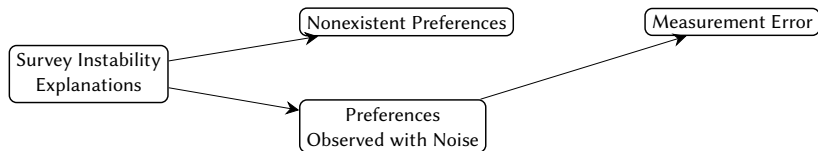
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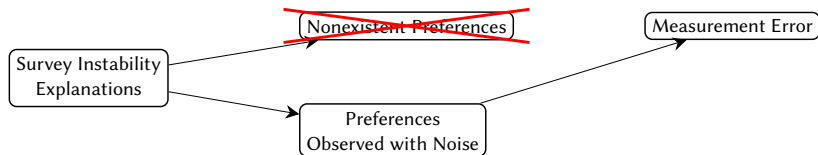
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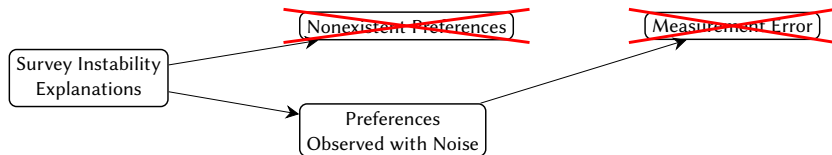
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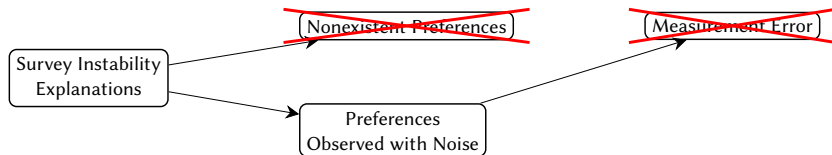
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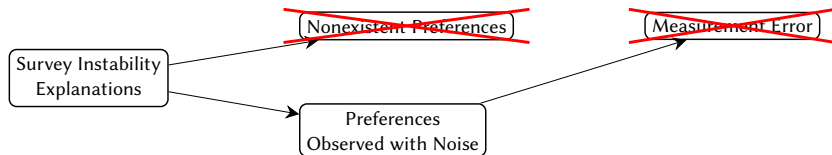


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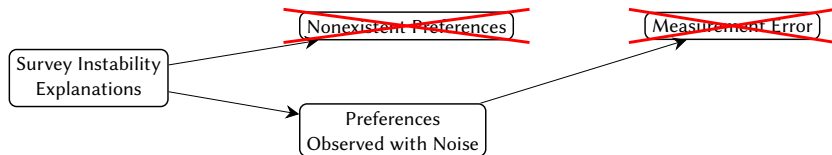
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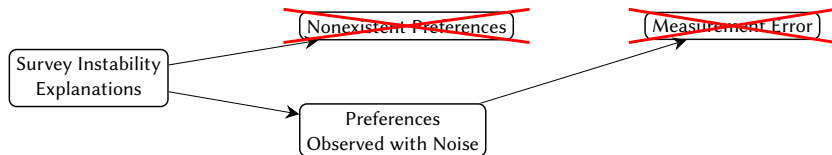
- Measurement Error

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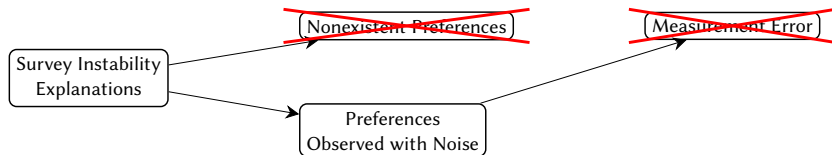
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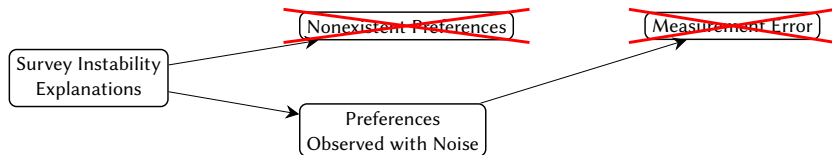
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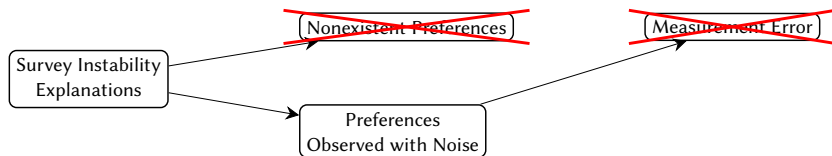
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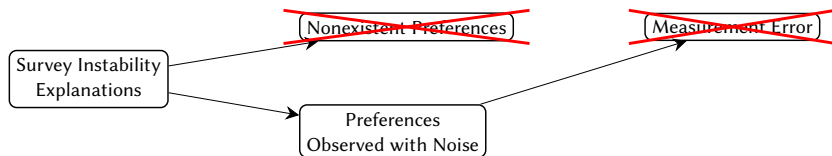
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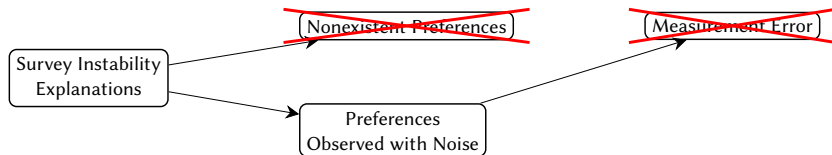


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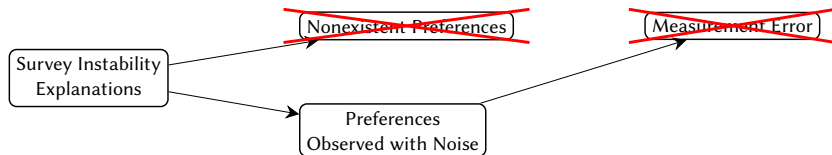
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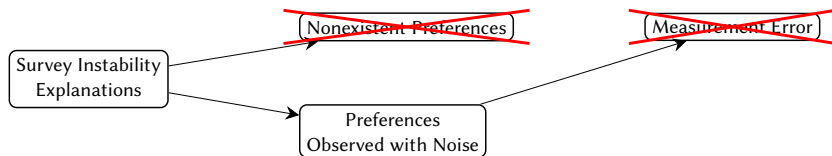
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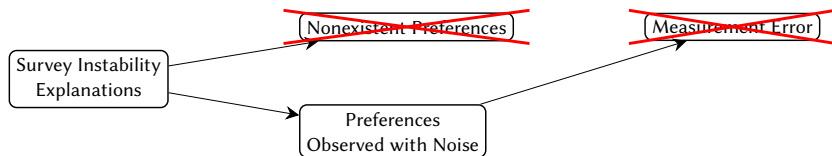
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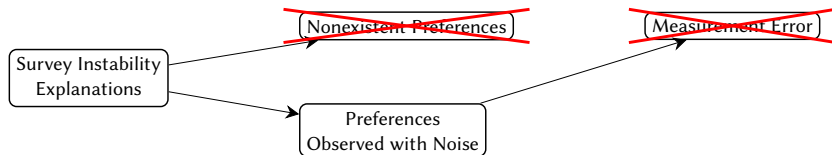
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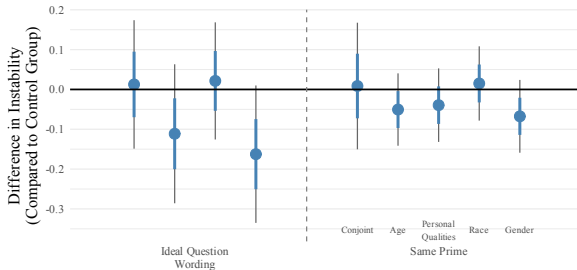
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Survey Instability

Explains

Reducing Bias Doesn't Reduce Instability



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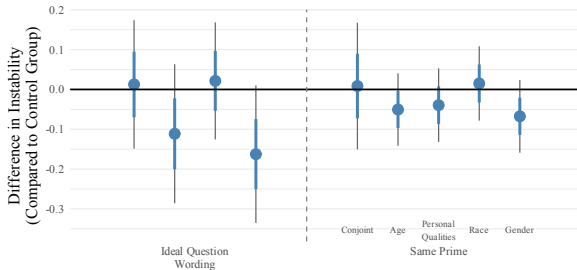
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- Left: 2008 ANES question wording changes
- reduce bias, not instability



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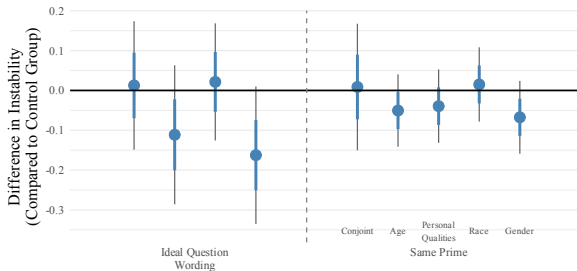
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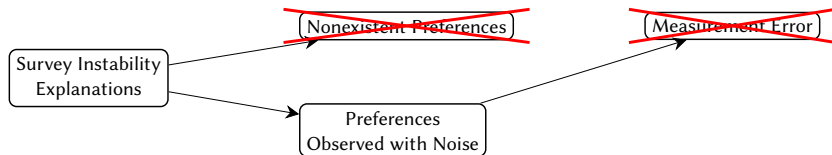
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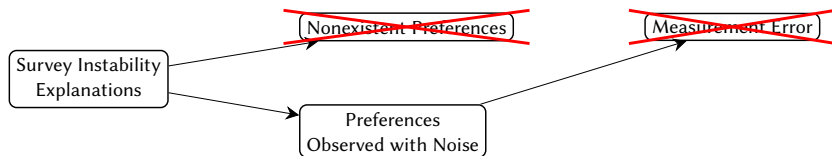
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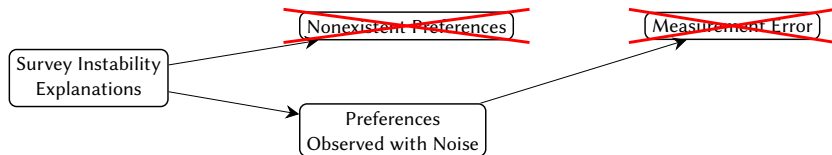
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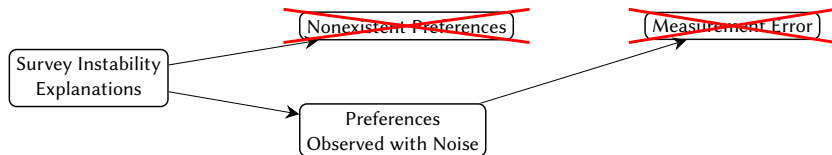
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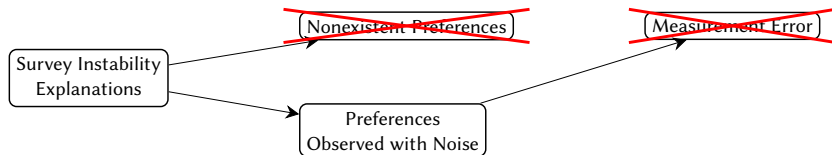
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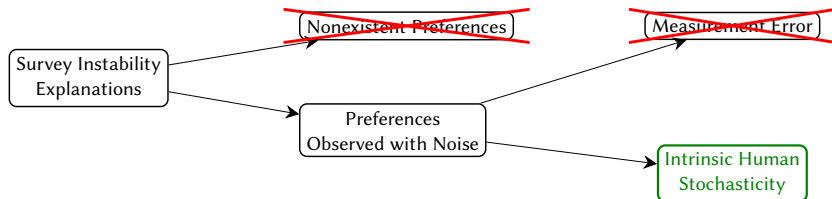
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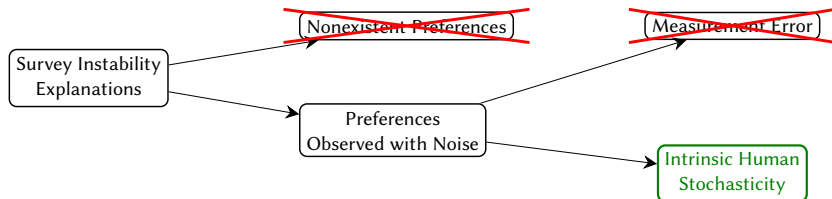
What We Show



What We Show

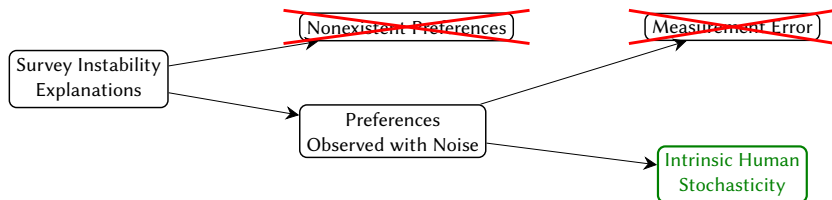


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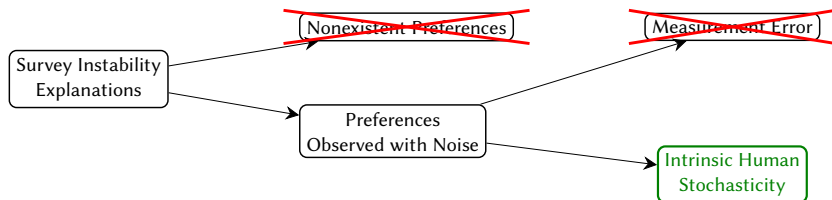
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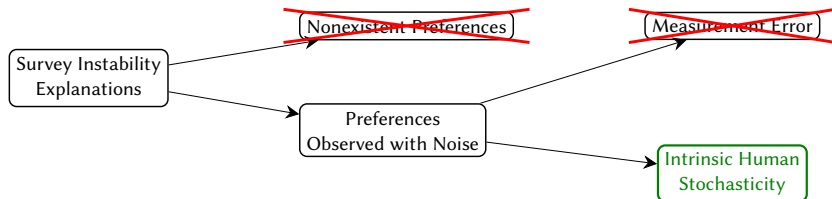
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 - soft matter physics: tracking error v. thermal noise

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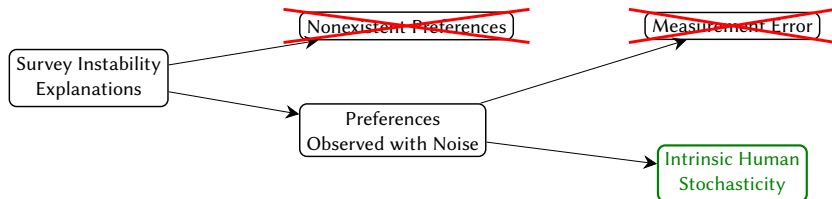
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 - psychometrics: measurement error v. individual differences

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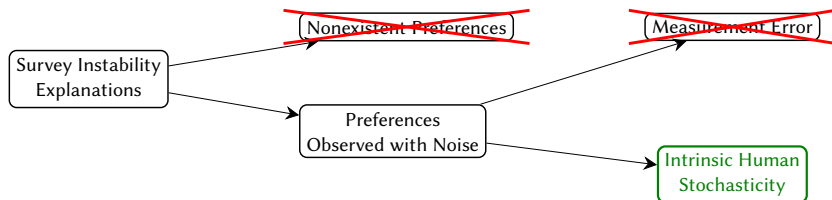
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 - biology, medicine: **technical** v. **biological** variability

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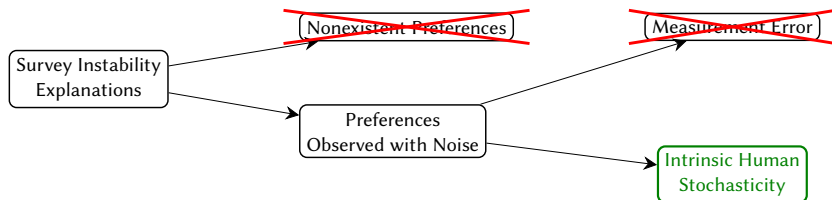
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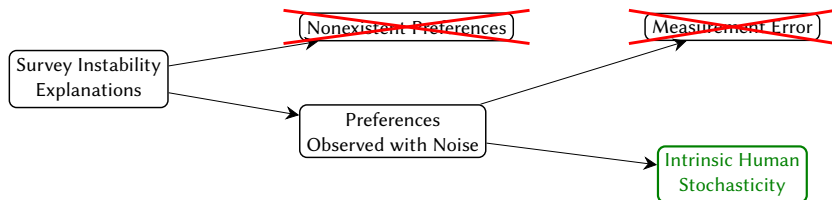
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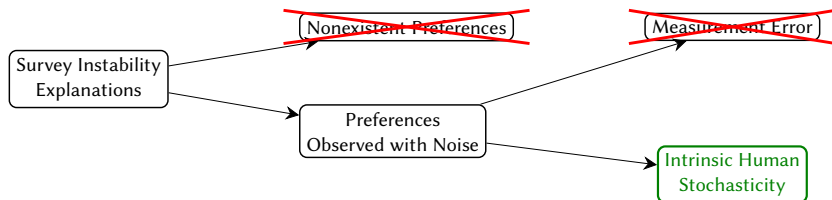
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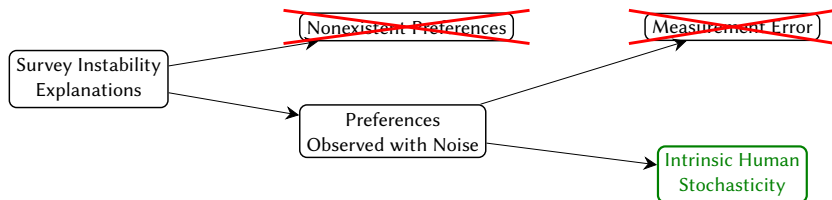
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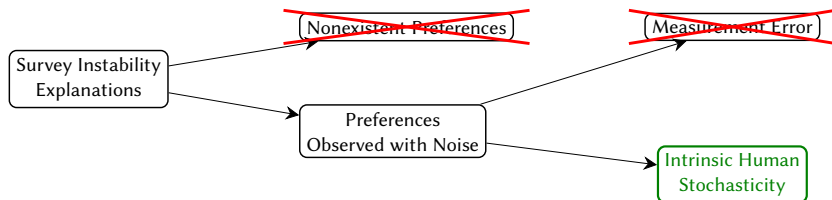
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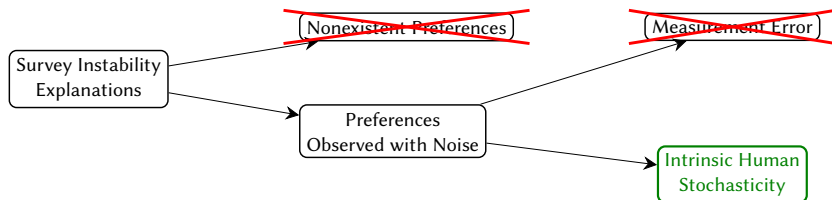
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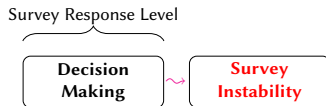
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⇒ **The creatures we study**: variables, not constants

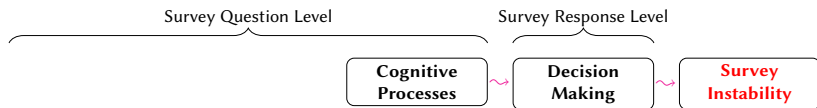
Sources of Stochasticity Leading to Survey Instability

**Survey
Instability**

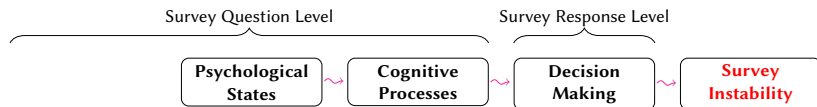
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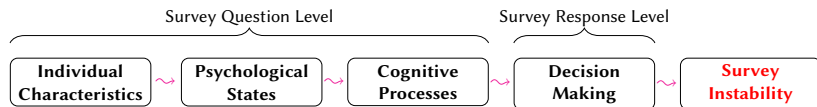
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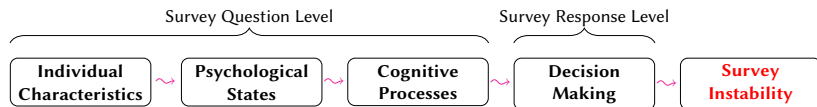
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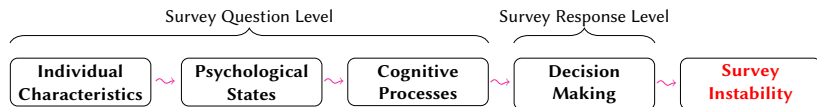


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Used to find

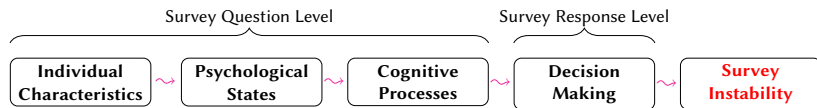
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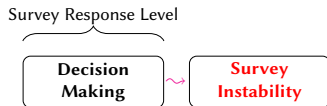
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Election Day

- 10 offices, each with Party A & B candidates
- In 6/10, Party A is better for you than Party B.
- How many Party A candidates will you choose?

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C_t

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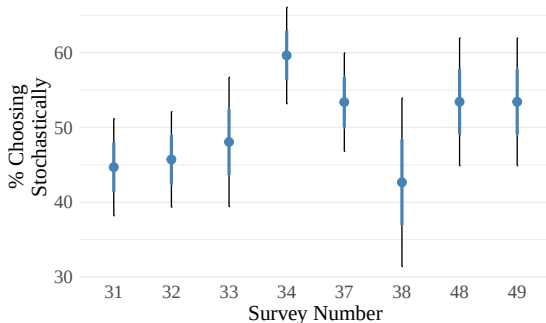
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- Cost: C_t (known)

- History: $\mathcal{H}_t$ (known)

Decision Making: Highly Stochastic!



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$\Rightarrow$ **Human Decision Making: Adds Stochasticity**

Stochasticity Sources: Cognitive Processing

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**Survey
Instability**

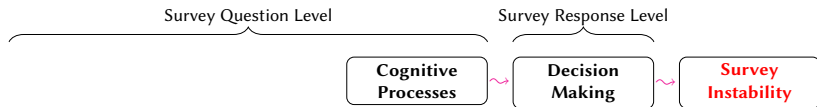
Stochasticity Sources: Cognitive Processing

Survey Response Level

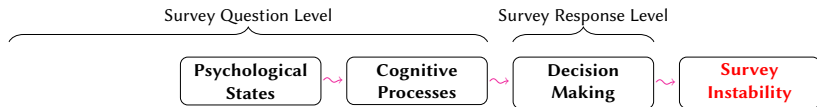
**Decision
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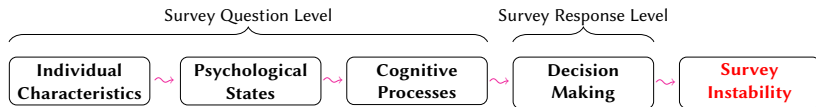
Stochasticity Sources: Cognitive Processing



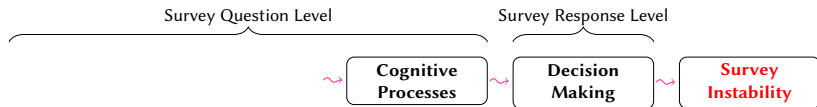
Stochasticity Sources: Cognitive Processing



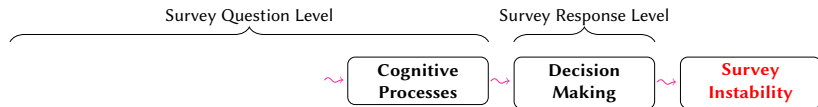
Stochasticity Sources: Cognitive Processing



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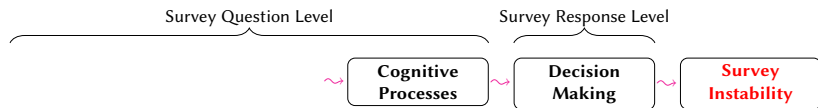


Stochasticity Sources: Cognitive Processing



What increases stochasticity (and thus instability)?

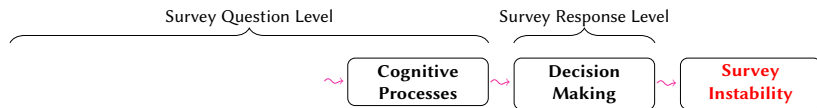
Stochasticity Sources: Cognitive Processing



What increases stochasticity (and thus instability)?

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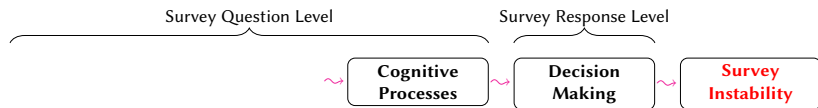
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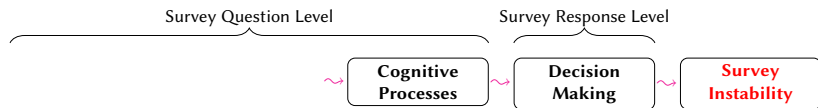
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What increases stochasticity (and thus instability)?

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- **Differential cognitive processing:** Q_1 vs Q_2

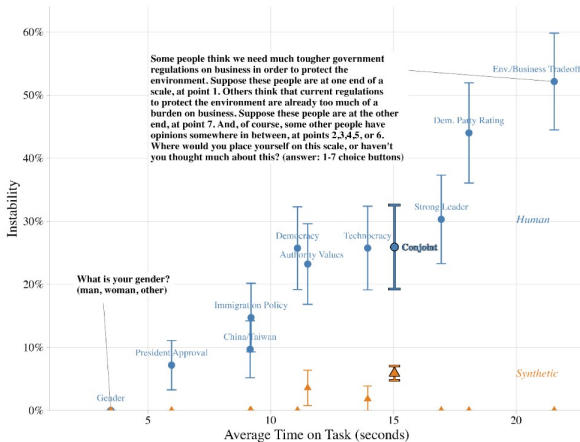
Stochasticity Sources: Cognitive Processing



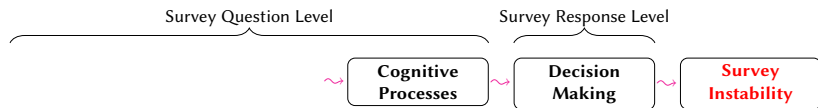
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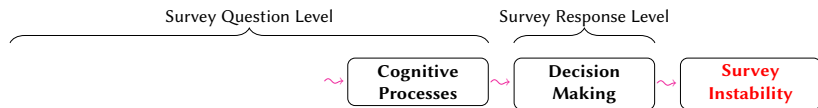
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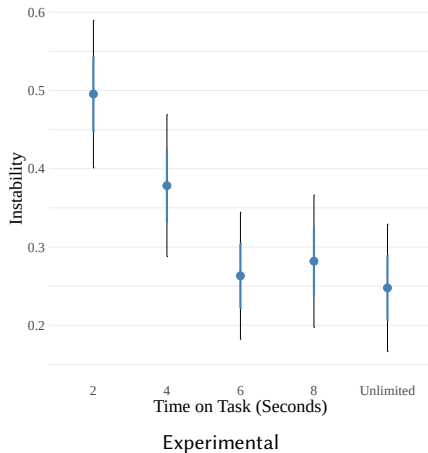
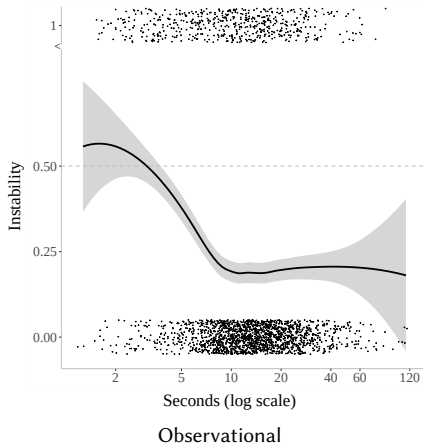


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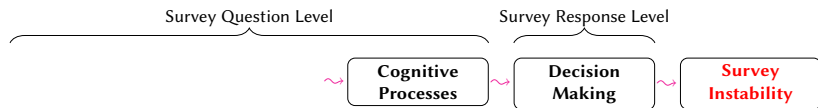
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Stochasticity Sources: Cognitive Processing

Limited time-on-task causes survey instability



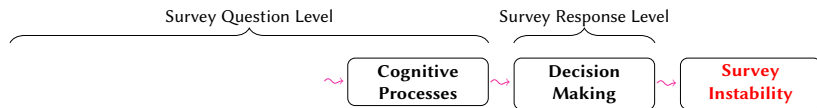
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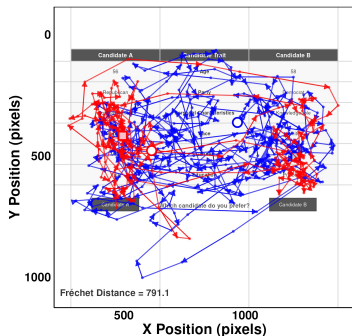
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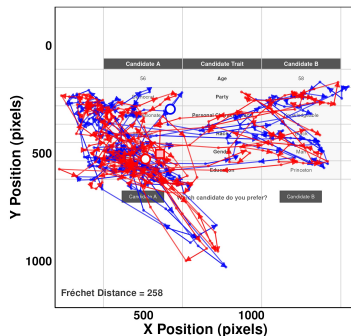
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Stochasticity in Gaze Behavior

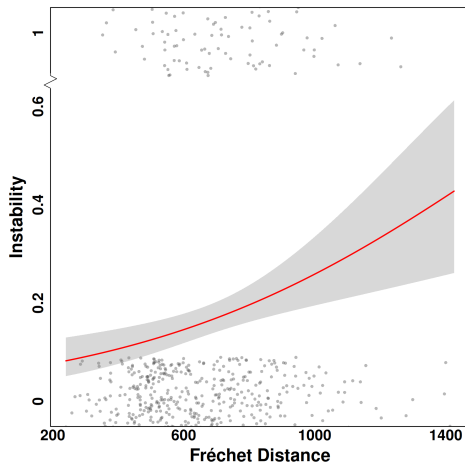


Large difference



Small difference

Stochastic Distance $\leadsto$ Survey Instability

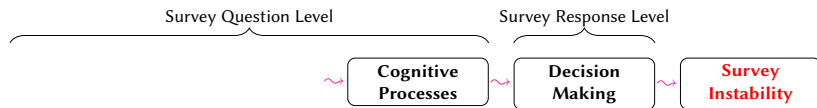


What

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vey
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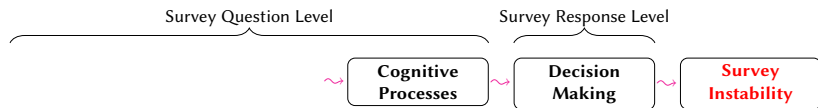
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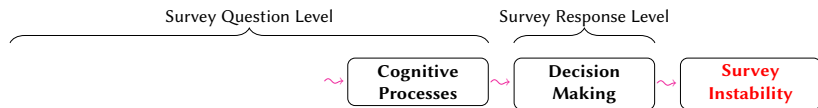
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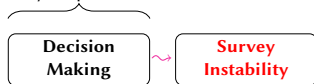
⇒ Human Cognitive Processing: Adds Stochasticity

Stochasticity Sources: Psychological States

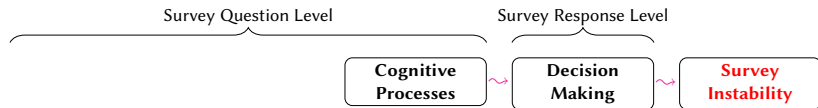
**Survey
Instability**

Stochasticity Sources: Psychological States

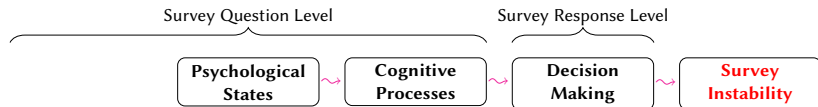
Survey Response Level



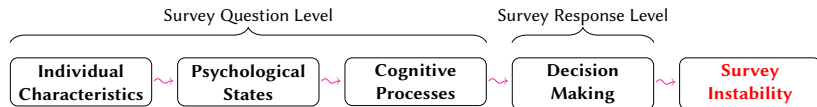
Stochasticity Sources: Psychological States



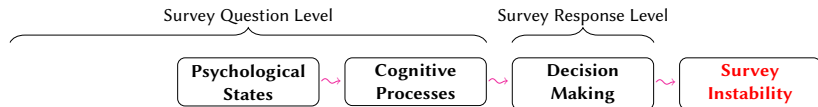
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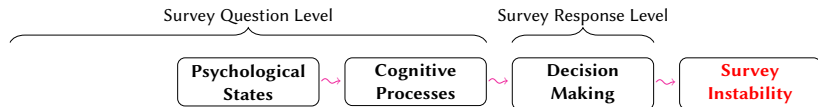
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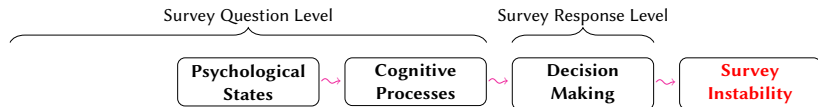


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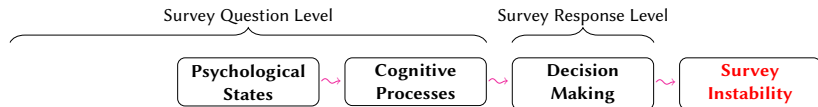
- Psychological States Summary

Stochasticity Sources: Psychological States



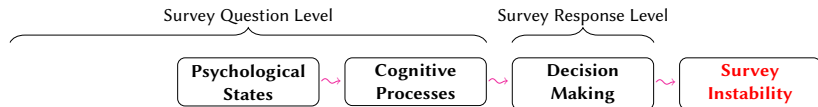
- **Psychological States Summary**
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Stochasticity Sources: Psychological States



- **Psychological States Summary**
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 - Use **Preoccupation** instead

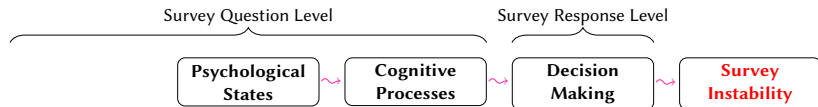
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Everyone comes to a new task (like this survey) with things on their minds. How preoccupied were you, just before you started this survey, with thoughts or worries about your partner, job, health, children, friends, money, or other concerns?

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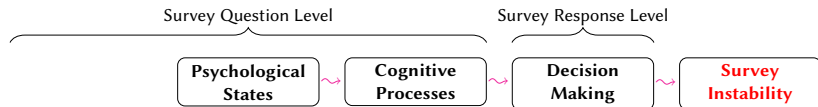


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⇒ **Human Psychology: Adds Stochasticity**

So Who's to Blame for Survey Instability?

So Who's to Blame for Survey Instability?

Explanations

So Who's to Blame for Survey Instability?

Explanations

Survey Instability

~25%

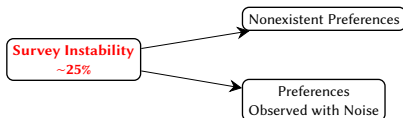
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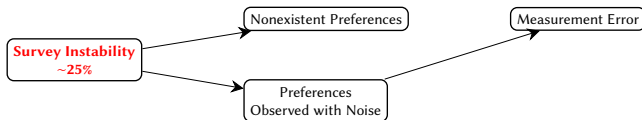
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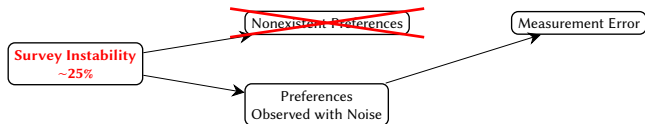
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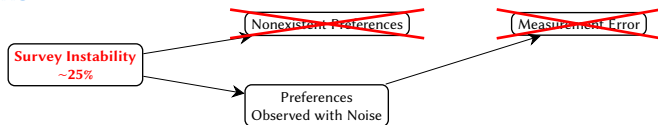
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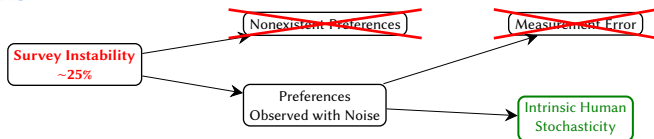
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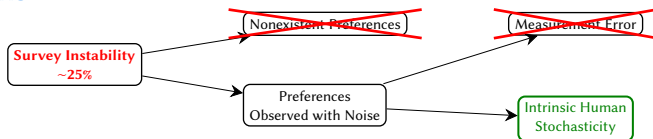
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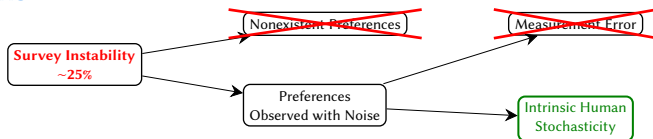
Explanations



Observable Implications

So Who's to Blame for Survey Instability?

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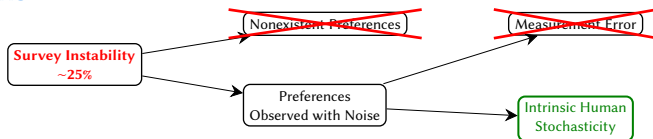


Observable Implications

Survey
Instability

So Who's to Blame for Survey Instability?

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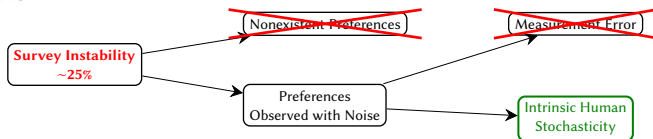


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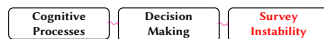


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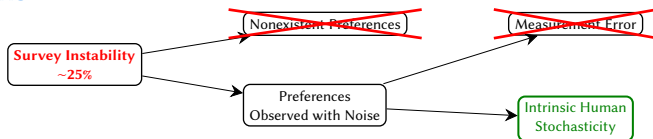


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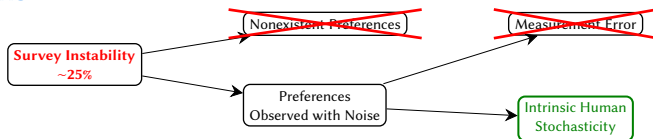


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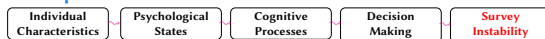


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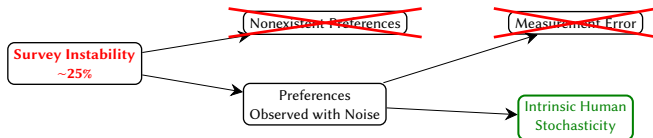


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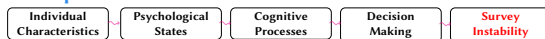


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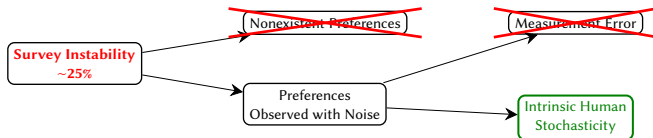
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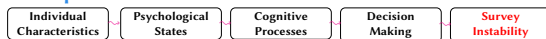
Practical Implications

So Who's to Blame for Survey Instability?

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Observable Implications

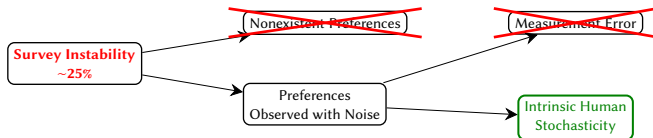


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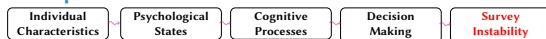
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So Who's to Blame for Survey Instability?

Explanations



Observable Implications

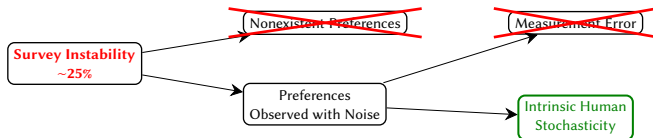


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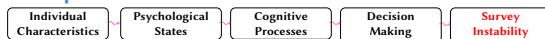
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So Who's to Blame for Survey Instability?

Explanations



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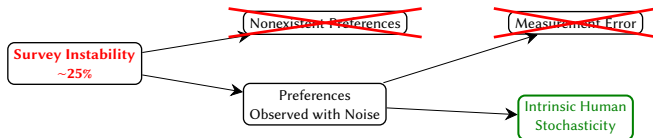


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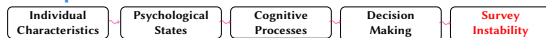
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So Who's to Blame for Survey Instability?

Explanations



Observable Implications

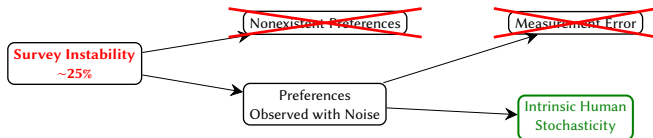


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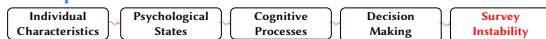
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So Who's to Blame for Survey Instability?

Explanations



Observable Implications

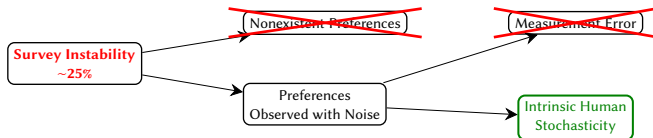


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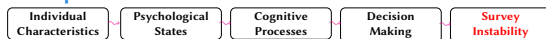
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Explanations



Observable Implications

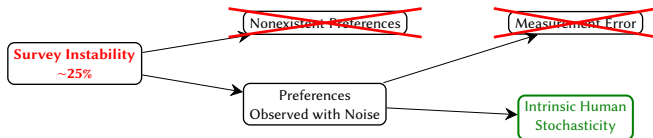


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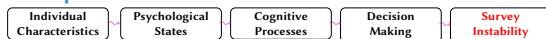
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So Who's to Blame for Survey Instability?

Explanations



Observable Implications

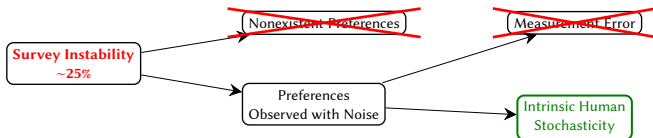


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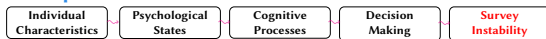
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Explanations



Observable Implications

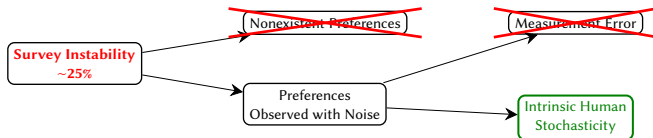


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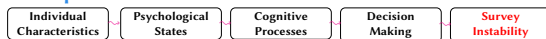
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So Who's to Blame for Survey Instability?

Explanations



Observable Implications

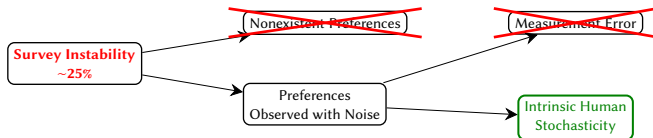


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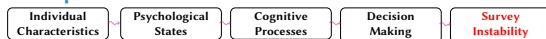
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Explanations



Observable Implications



Practical Implications

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