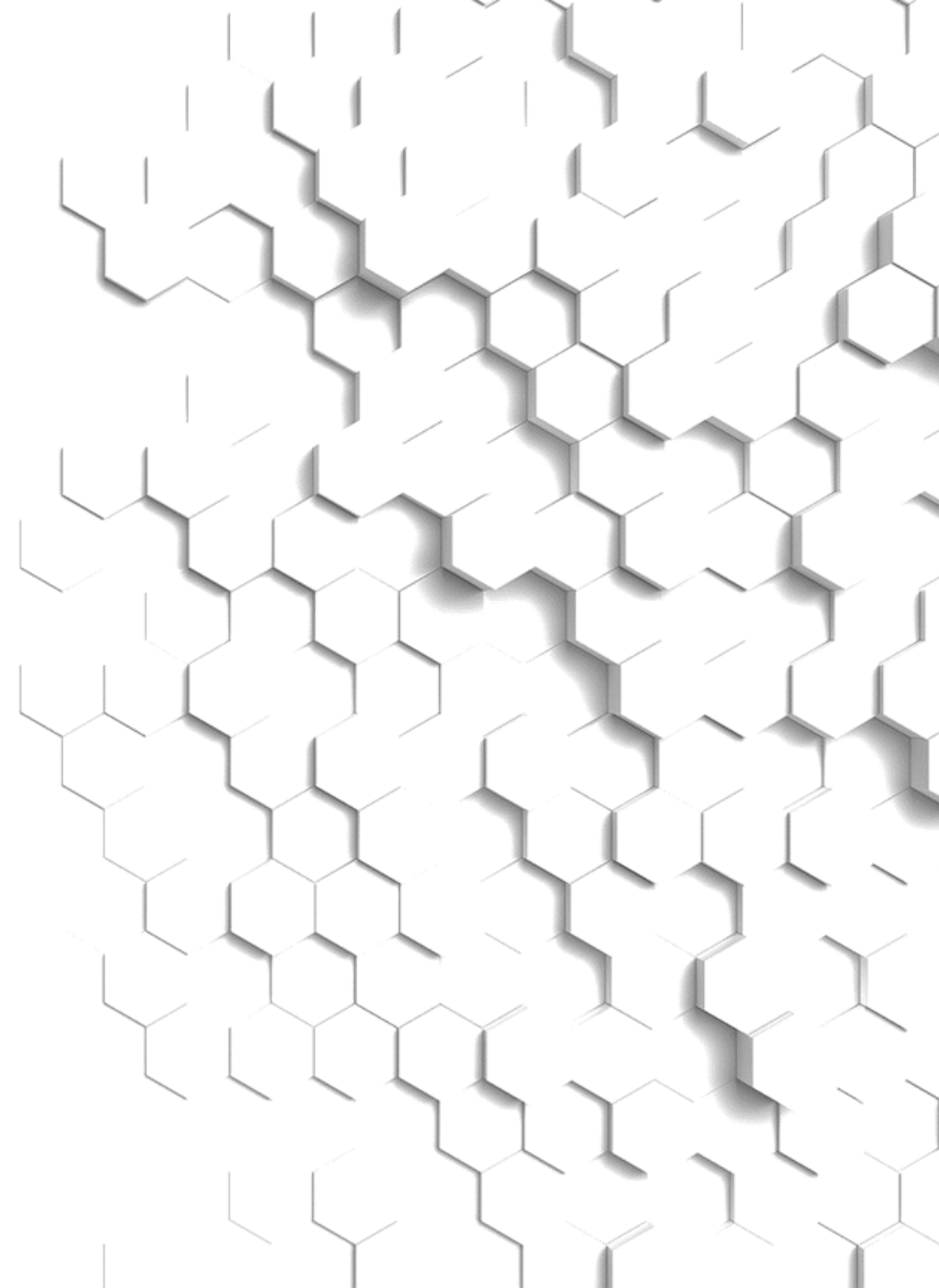


Panel Discussion

Debunking misinformation: Fact-checking and emotion

The 1st International Workshop on
News Recommendation and Intelligence
Apr 14, 2021

Meeyoung Cha
Institute for Basic Science (IBS)
Korea Advanced Institute of Science and Technology (KAIST)





Fact-checking efficacy



Misinformation and Anger

How are borderline messages perceived?

Standard true-or-false labels

True	Mostly True	Right	One Pinocchio
False	Mostly False	Pants of Fire	Four Pinocchios

Borderline labels are becoming common

Mixture	Unproven	A bit of both
Half True	Misleading	Debatable
Middle-of-the-road	Lack of evidence	Divided

JANUARY 27, 2021

PEER REVIEWED

The presence of unexpected biases in online fact-checking

The increasing amount of information online makes it challenging to judge what to believe or discredit. Fact-checking unverified claims shared on platforms, like social media, can play a critical role in correcting misbeliefs. The current study demonstrates how the effect of fact-checking can vary by several factors. We show that fact-checking helps self-correct one's views among young adults. However, this effect is weaker for individuals who perceived the claim negatively at first. Furthermore, borderline messages like "Lack of Evidence" can be perceived as false rather than neutral. We explain these biases via human cognitive mechanisms that avoid risk and uncertainty.

BY SUNGKYU PARK

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Experimental study design (*N=11,145 young adults*)

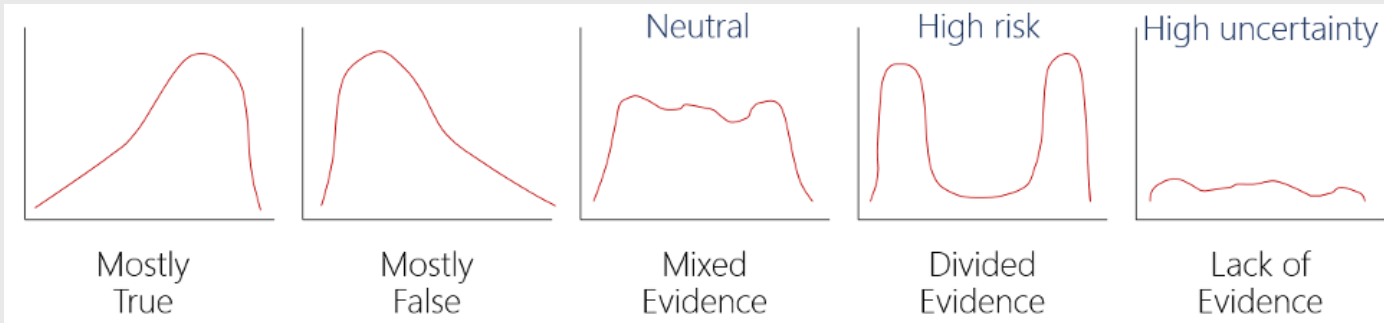
Step 1. Show an unproven claim and measure **pre-stance**

Claim) Marilyn Monroe's IQ was measured at 168.

To what extent do you think the above claim is true?



Step 2. Show a random fact-check **intervention**



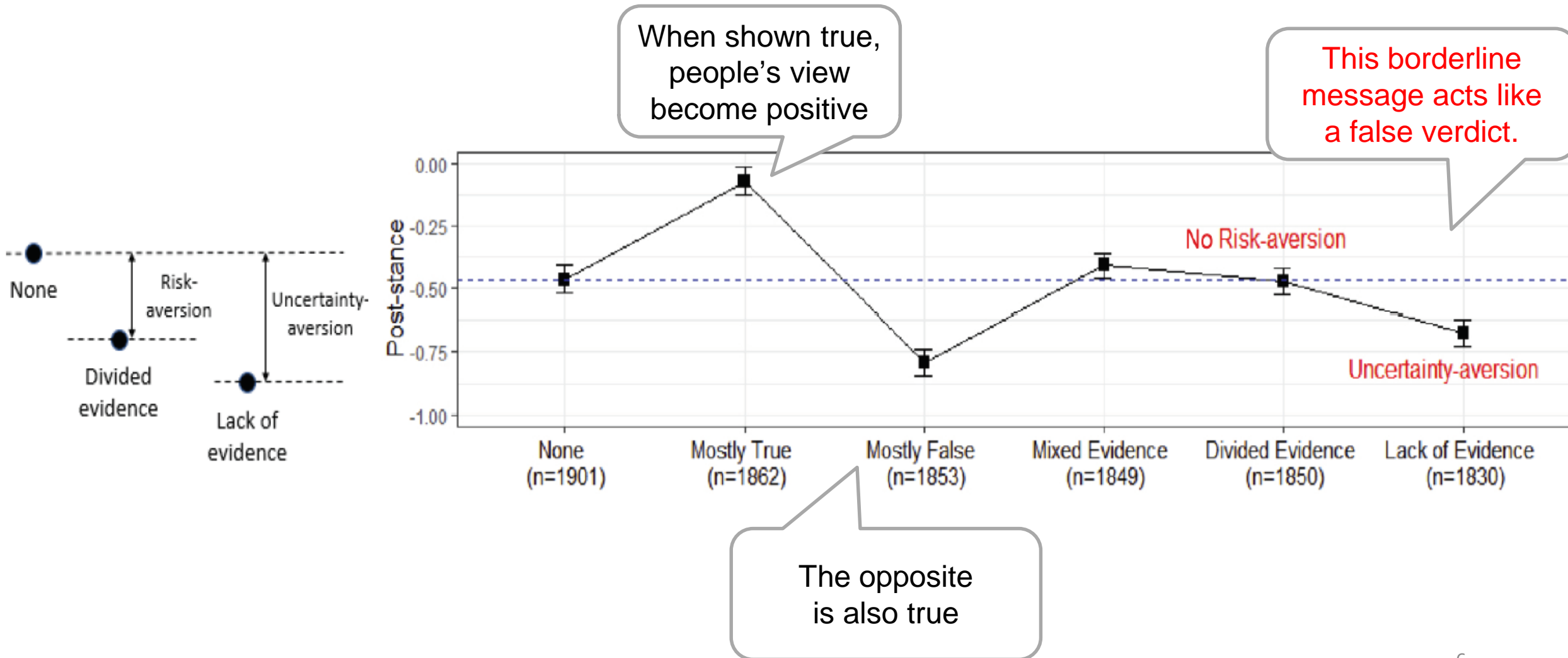
Step 3. Measure **post-stance**

Claim) Marilyn Monroe's IQ was measured at 168.

To what extent do you think the above claim is true?



We confirm **fact-check helps self-correct views** & **borderline messages may be perceived negatively**



Key findings

- **Uncertainty-Avoidance Bias**

Online users exposed to the *Lack of Evidence* fact-check label are more likely to develop a negative post-stance toward a claim than those exposed to mixed evidence

→ **Supported**

- **Disapproval Bias**

Subjects with *negative pre-stance* toward unproved claims are less likely to correct their stance than those with positive pre-stance, by a disconfirming fact-checking result

→ **Supported**



Fact-checking efficacy



Misinformation and Anger

**Which emotion triggers the spread of misinformation upon a social crisis?
Anxiety (or fear) vs. Anger**

SEPTEMBER 17, 2020

PEER REVIEWED

Anger contributes to the spread of COVID-19 misinformation

A survey conducted over South Korean adults (N=513) reveals that emotions, specifically anger, contribute to the broader spread of misinformation on COVID-19 by leading angry individuals to consider false claims to be “scientifically credible.” This pattern is more evident among conservatives than liberals. Our finding sheds light on new measures and journalistic interventions that could alleviate the public’s anger and foster science-based conversations during a public health crisis.

BY JIYOUNG HAN

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Thank you