

The Upside of Flip-Flopping: How Former Skeptics Can Shift Public Opinion on Climate Change

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INTRODUCTION

Background:

- 42% of Americans believe in human-caused climate change (Pew, 2013). Who might climate change skeptics consider to be credible?
- Berkeley physicist Richard Muller was once a prominent climate change skeptic, but changed his opinion after his own research found strong evidence that anthropogenic climate change is real. He now calls himself a "converted skeptic" (Muller, 2012).
- In persuasion research, Muller could be considered an *unexpected source* (person who advocates a surprising position). Unexpected sources can increase message scrutiny and attitude change (e.g., Baker & Petty, 1994).

Research Questions and Hypotheses

Influential sources of climate change information.

- Are former skeptics such as Muller perceived as more credible and are they more persuasive – than people who were never skeptics? Is this especially true for those who do not believe that climate change is happening?
- Does 'former skepticism' increase perceived credibility of other types of influential sources, such as politicians?
- Because political ideology predicts belief in human-caused warming (19% of conservatives/Republicans, 57% of liberals/Dems, 43% of independents), does political ideology moderate persuasiveness of skeptics?

Source credibility and persuasiveness

 We hypothesized that an expert source (scientist, politician) who is a former skeptic will be perceived as highly credible and thus more effective than typical sources in changing skeptical individuals' attitudes toward climate change.

What makes a climate change communicator credible to a skeptical audience?

- This study investigates whether people who used to be skeptical of climate change are more credible communicators than those who were never skeptical.
- The results suggest that politically conservative individuals perceive formerly-skeptical communicators as more credible than long-term believers (people who were never skeptics).

METHOD

Study Design

- 3 × 2 × 2 between-subjects experimental design
 - 3(type of source: avg. person, Congressman, scientist)
 - 2(skeptic status: former skeptic, never skeptic)
 - 2(type of costs: high personal cost, low personal cost)
- Participants read an article describing a person who either used to be a skeptic (but changed his mind) or was never a skeptic, and incurred either high or low personal costs for the sake of that belief.

<u>Participants</u>

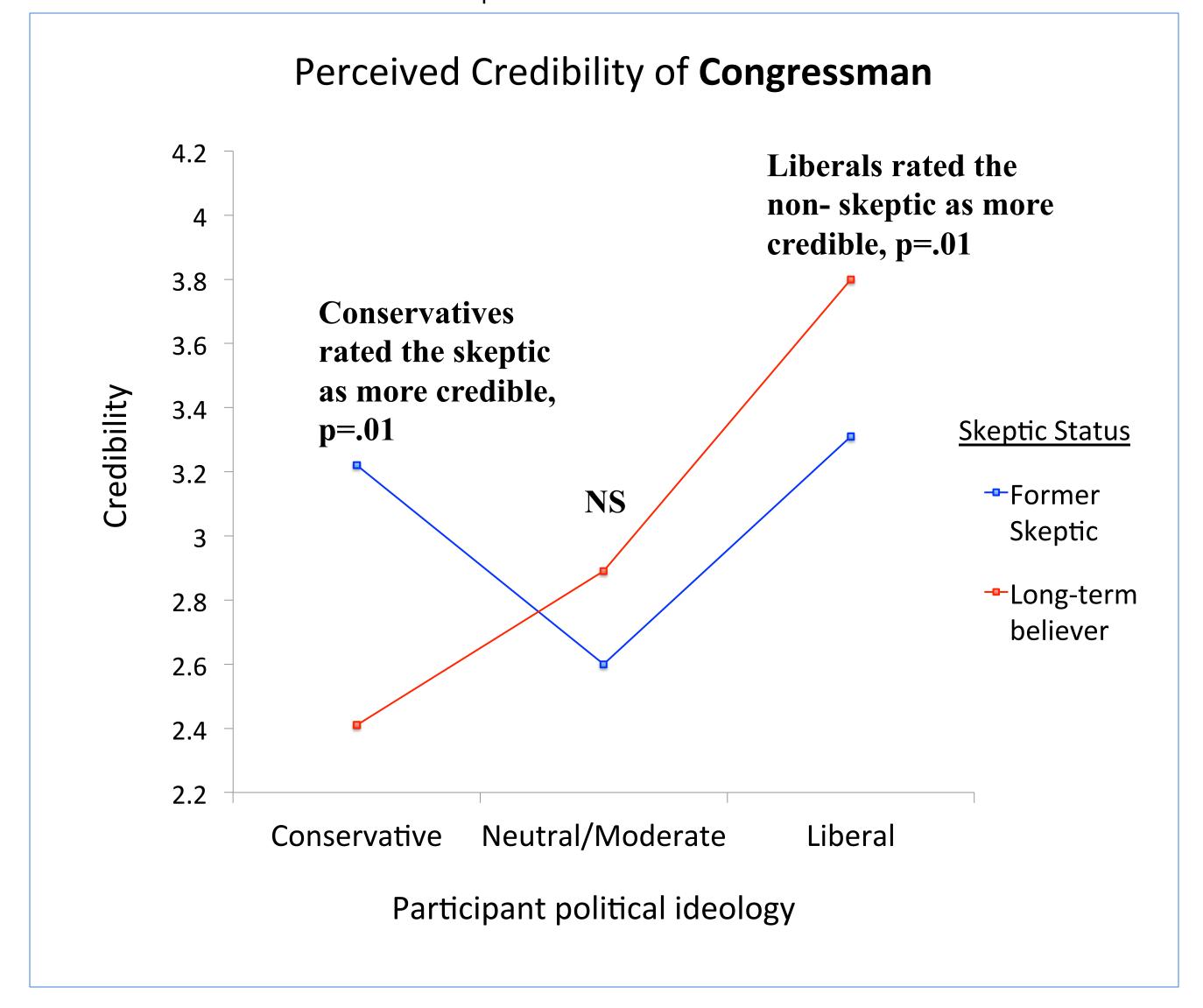
- The final sample consists of 614 respondents on Mturk
- 286 Men, 324 women, *M* age = 36.3 years
- Political Ideology: 146 conservative, 138 neutral/moderate, 327 liberal

RESULTS

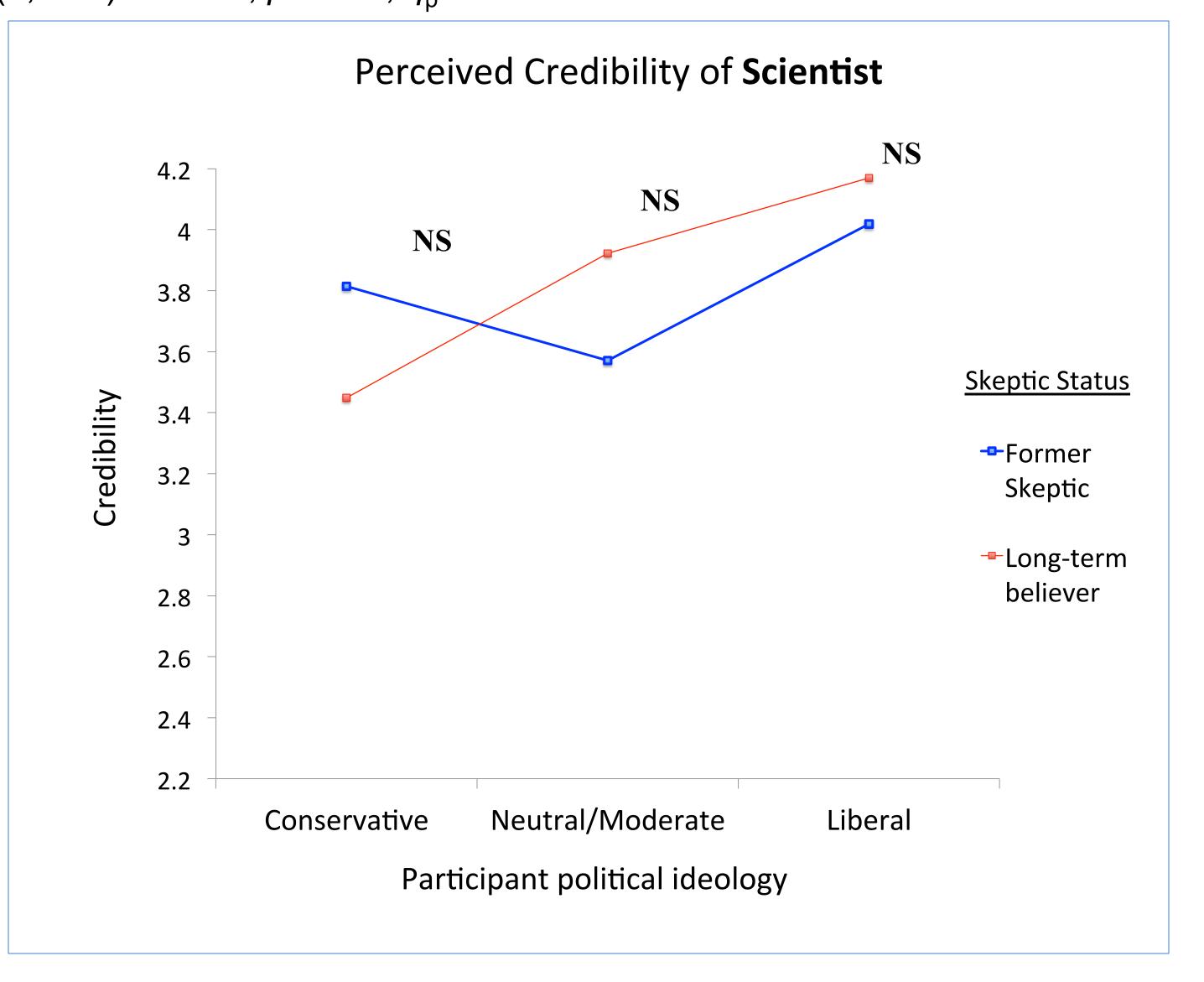
Political orientation affects perceptions of a communicator's credibility

The effect of skeptic status on the Congressman's perceived credibility depended on participant political ideology,

 $F(2, 195) = 5.973, p = .003, \eta_p^2 = .058.$



The effect of skeptic status on the Scientist's perceived credibility trended toward depending on participant political ideology, but was not significant, F(2, 198) = 2.156, p = .116, $\eta_0^2 = .021$.



DISCUSSION

Summary

- Support for hypothesis: Conservative individuals differed significantly in their perceptions of sources' credibility and responded most favorably to former skeptics (scientist, Congressman).
 - Notably, conservatives did not penalize the Congressman for switching positions on climate change – in fact, they viewed him as more credible.
- Despite the observed pattern for credibility, this pattern did not emerge for opinion change (measured pre- and post-manipulation) future work can determine whether this reflects a disconnect between source credibility and persuasiveness vs. methodological challenges.
- Because of possible lack of power to detect some effects, this study should be replicated with a larger sample of conservative participants.

Implications

- Scientific and activist communities may communicate more effectively to skeptics by highlighting scientists and other communicators who have changed their position on climate change.
- Politicians won't necessarily be penalized for switching positions, depending on the circumstances.
- Future research should investigate whether the persuasiveness of skeptics applies to other issues e.g., genetically modified foods (GMOs), nuclear power, and other issues that liberals tend to be skeptical of to see if this kind of pattern holds across political ideologies.

References

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