

RESULTS

Belief consistency effects

Belief-consistent essays

- *more likely*: claim, higher number of reasons, text content

Belief-inconsistent essays

- *more likely*: statements about belief change, evaluative statements (mostly negative)

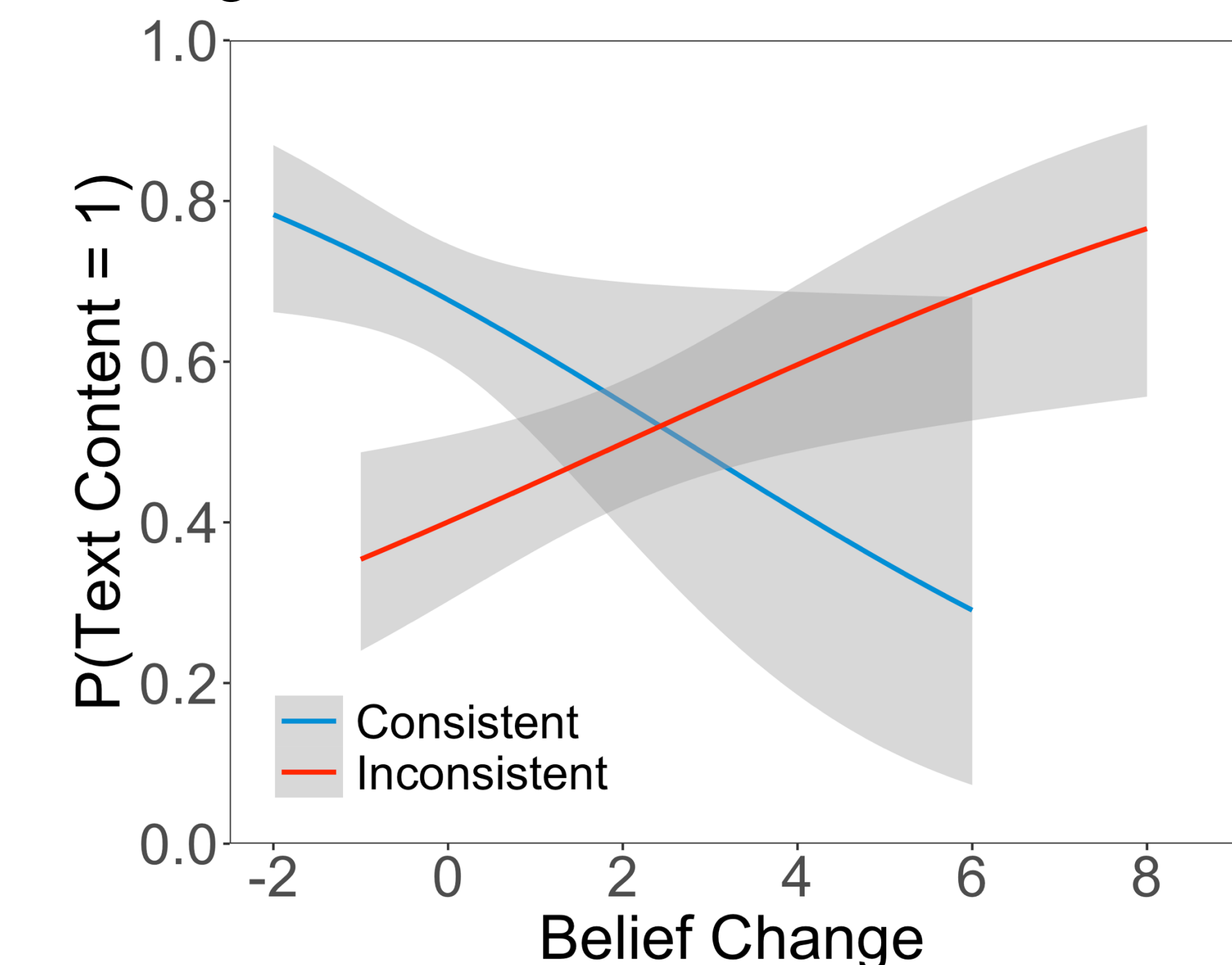
Relationships with belief change

Belief-consistent essays

- As beliefs moved towards text position, essays were *more likely* to include a claim, higher number of reasons, text content,

Belief-inconsistent essays

- As beliefs moved towards text position, essays were *more likely* to include a higher number of reasons, text content, statement about belief change, evaluative statement



DISCUSSION

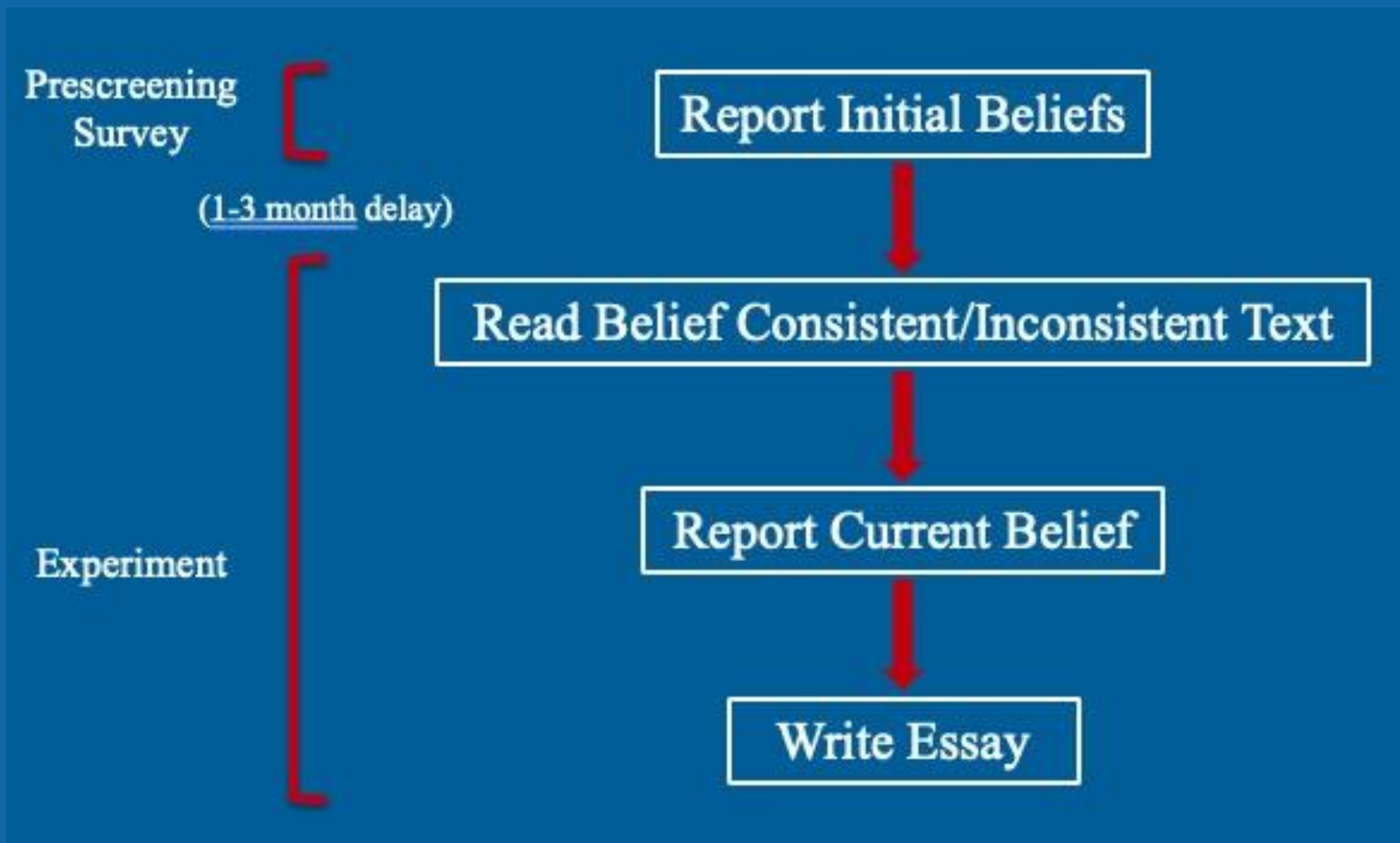
- Reading a belief consistent vs. belief inconsistent text resulted in argumentative essays that differed in important components
- Individual differences in belief change related to whether essay components were included
- Students that read a belief consistent text wrote essays that were more likely to include a claim and more reasons, which are essential elements of informal arguments (Voss & Means, 1991)
- Counterarguments did not differ, suggests that primary determinant is argument schema
- If beliefs are constructed in context based on salient information, these influences arise from beliefs at the moment essays are written

REFERENCES

- van Strien, J. L. H., Kammerer, Y., Brand-Gruwel, S., & Boshuizen, H. P. A. (2016). How attitude strength biases information processing and evaluation on the web. *Computers in Human Behavior*, 60, 245-252. <https://doi.org/10.1016/j.chb.2016.02.057>
- Voss, J. F., & Means, M. L. (1991). Learning to reason via instruction in argumentation. *Learning and Instruction*, 1(4), 337-350. [https://doi.org/10.1016/0959-4752\(91\)90013-X](https://doi.org/10.1016/0959-4752(91)90013-X)

Beliefs influence argumentative essay content

The degree and direction of belief change is associated with whether people include basic components of argumentation in argumentative essays



Essay Component	Description
Claim	Statement that gun control is/is not effective.
# Reasons	Statement that supports a claim.
Counterargument	Reason or data mentioned that is counter to stated claim
Text Content	Specific content from text is mentioned
Other Claim	States claim that gun control policy should/should not be implemented
Statement about Belief Change	Statement that beliefs changed during experiment
Evaluative	Positive or negative evaluation statement about text

Essay Component	Belief Consistent	Belief Inconsistent
Claim	87%***	70%
# Reasons	1.80***	1.10
Counterargument	39%	35%
Text Content	68%***	50%
Other Claim	61%	67%
Statement about Belief Change	4%	10%*
Evaluative	6%	21%***

Beliefs Influence the Components of Essays in Argumentative Writing

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INTRODUCTION

The content of argumentative essays is determined by multiple factors, but belief influences are understudied compared to factors such as knowledge from reading and argument schema. Prior research suggests that beliefs influence the position taken in argumentative essays argued for in an essay and the inclusion of information from source texts (van Strien et al., 2016), but the extent to which beliefs influence other essay content remains unclear.

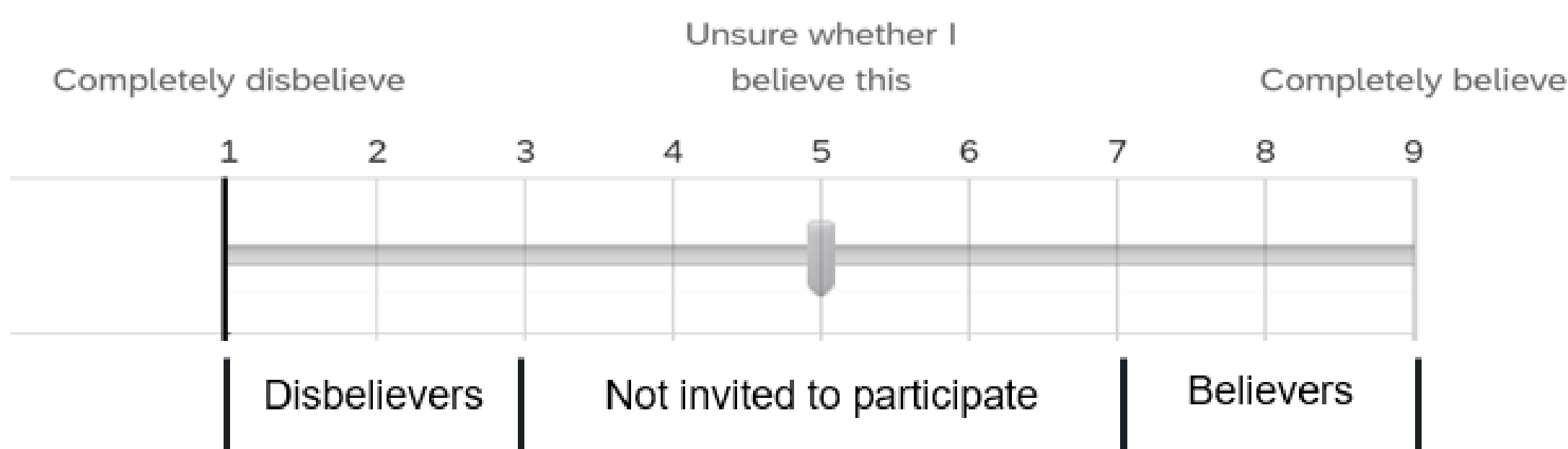
Research Questions:

1. Do beliefs influence the inclusion of basic components of argumentative essays?
2. In particular, do beliefs influence the likelihood that basic components of argumentation are included?

METHODS

- $N = 324$ undergraduate students

“To what extent do you believe that increased gun control will reduce gun violence in the United States?”



Materials:

- “Pro text” – argues gun control is effective.
- ”Con text” – argues gun control is not effective.

Design: Read belief consistent / inconsistent text

Essay Task: “Please write an argumentative essay in which you describe and explain your beliefs about the effectiveness of gun control.”

		Initial subject gun control beliefs	
		Believer	Disbeliever
Text position	Pro text	Belief Consistent	Belief <u>In</u> consistent
	Con text	Belief <u>In</u> consistent	Belief Consistent

Coding System:

- Essays were coded by 3 of the researchers for components of argumentative essays (96% agreement, Cohen's $K = .92$, $p < .01$)