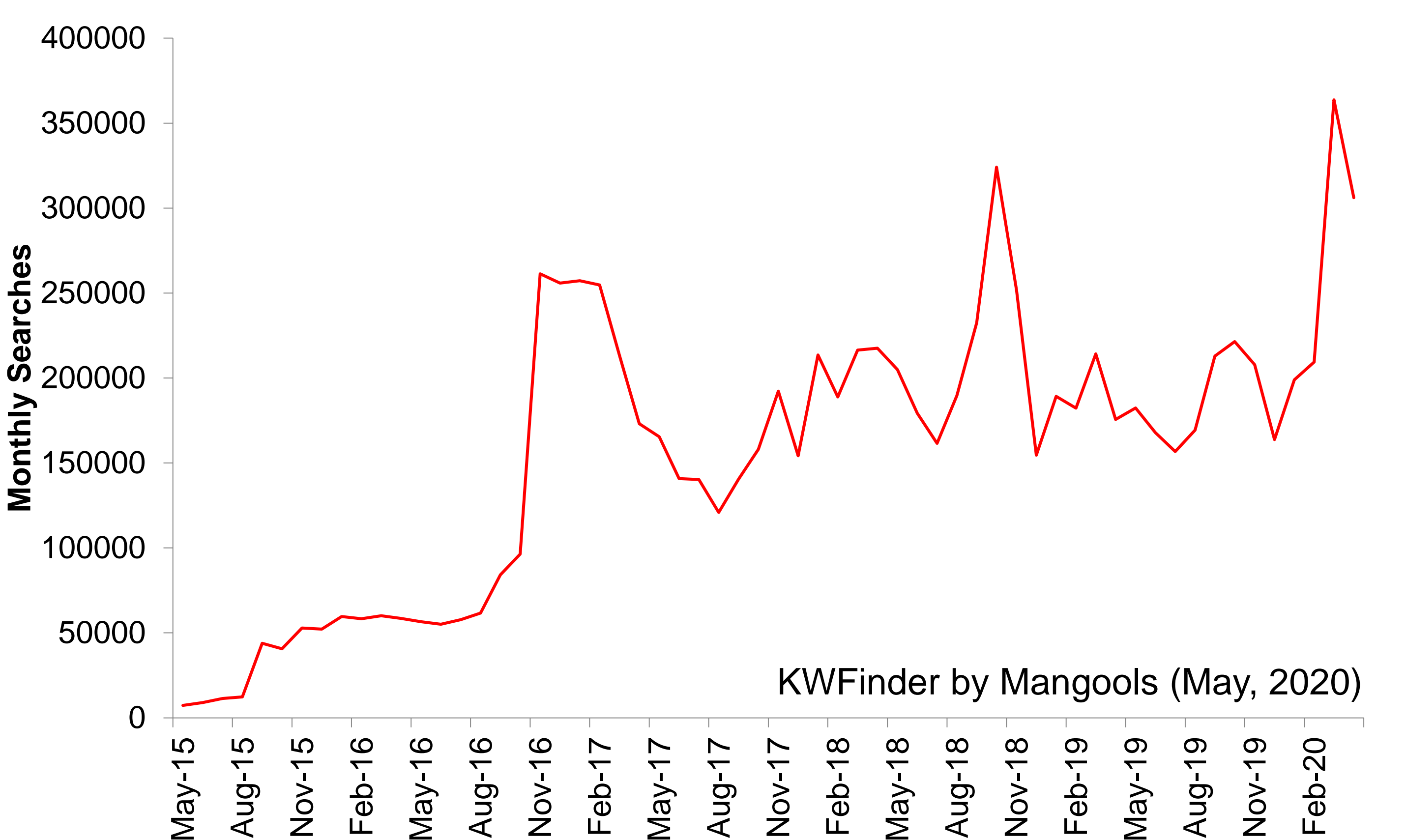


SOCIETAL CONTEXT

- From September to November of 2016, the phrase “fake news” moved from a nearly non-searched phrase to a highly searched phrase.



- The meaning of the phrase has also changed during this time.
- Prior to the 2016 presidential race, the phrase referred to intentional satire
- After the 2016 presidential race, the phrase has come to mean:
 - Stories that are reported in legitimate news sources that may or may not be deliberately false.
- The phrase has been used to try and get people to discount whatever fact they had learned prior to hearing the phrase.
- The success of such reflects and interesting empirical question in memory.

HYPOTHESES

- When informed that something is “fake news” it will act as a form of a retraction similar to other retractions studied in the CIE literature.
- Due to the fact that people do not explicitly tag information with source (Johnson et al., 1992), retracting a source as fake news will not impact memory.

METHOD

- 328 participants were recruited using TurkPrime (a tool that modifies Amazon’s Mechanical Turk) and paid \$2.00 for their time.
 - Following screener questions to ensure competent, human, participants, data from 161 participants was included

- The experiment was presented to participants using the Qualtrics survey platform.

- Participants read a modified version of the bus crash scenario (Ecker et al., 2010).
- The scenario was modified to be presented as headlines and first sentence of the article
 - All news sources were fictional

- Early in the story, participants were informed that the passengers on the bus were elderly.

- Later, participants received an update from the news source “Fact Checker”
 - This presented either no retraction, or one of three types of retraction

- After final headline, participant memory was tested with open-ended inference questions:
 - e.g. “What type on injuries did the passengers have?”

- Participants were tested on whether or not they believed passengers on the bus were elderly.

- Finally, participants answered basic demographic questions including their political orientation.

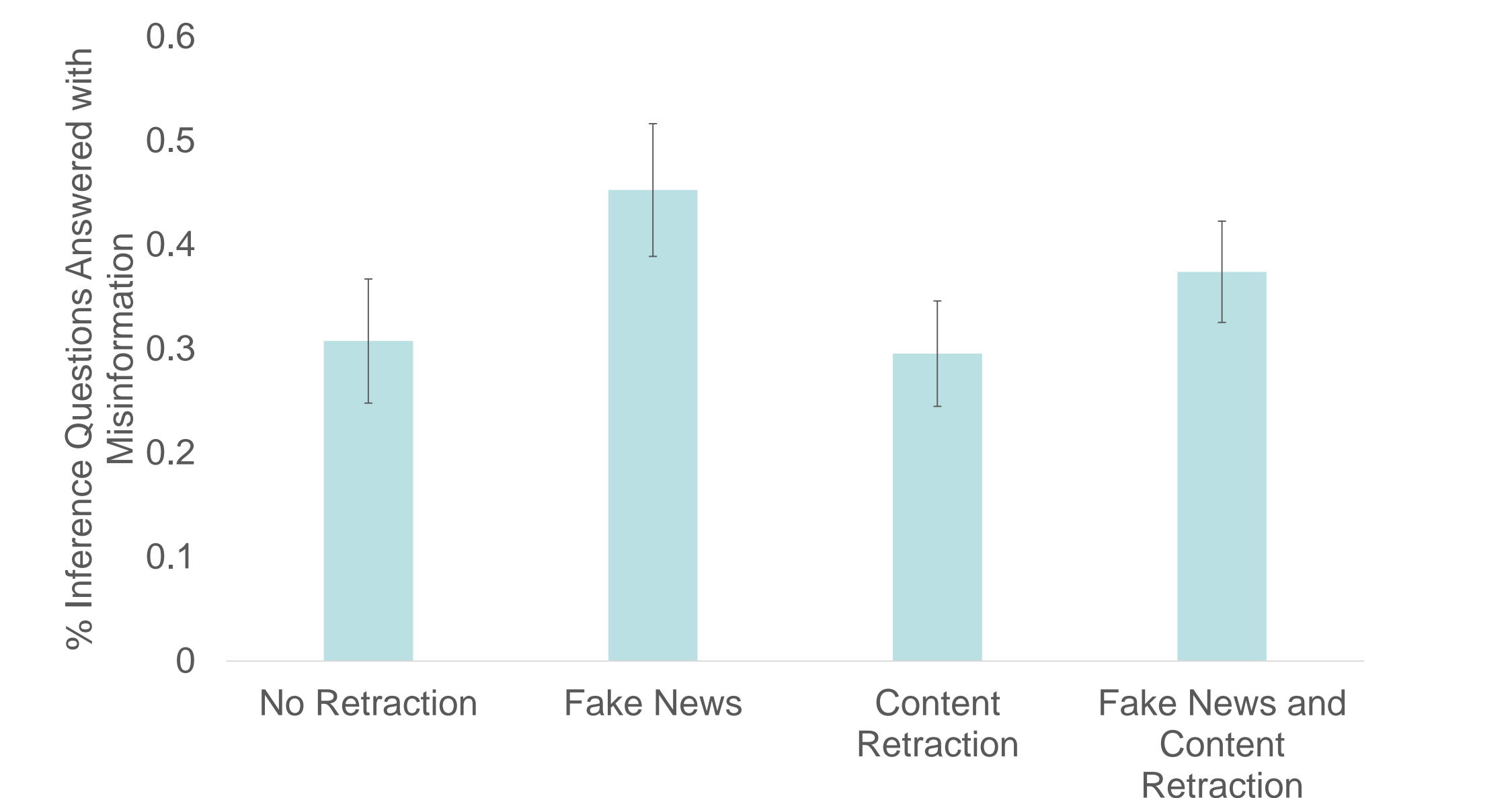
- Responses were coded for acceptance of misinformation by two blind, independent reviewers.
 - Disagreements were resolved by the P.I.
 - There was 74% Inter-rater agreement

RESEARCH BACKGROUND

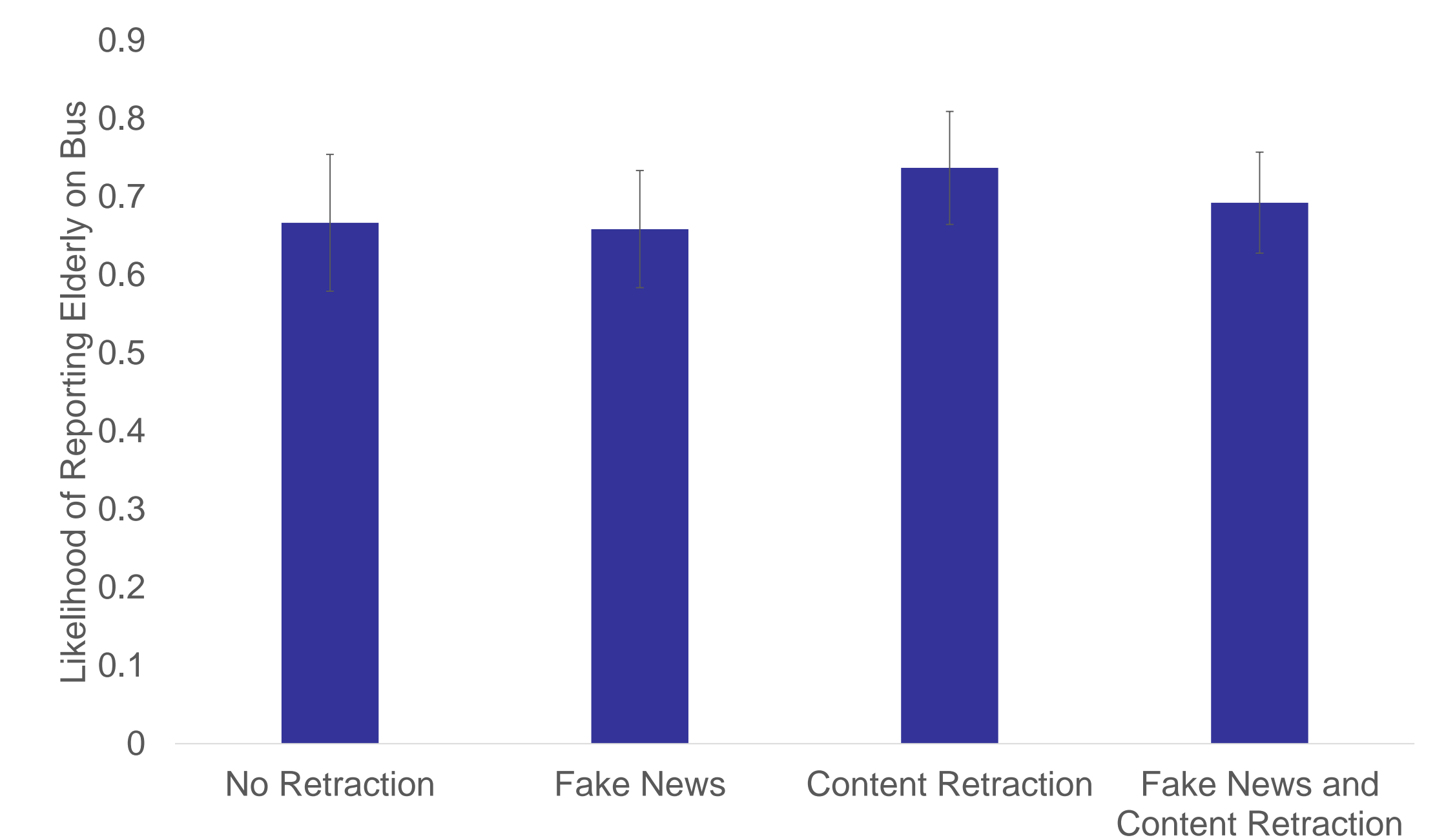
- Memory is a three-stage process (e.g. Simons & Chabris, 2011)
 - Encoding
 - Storage
 - Retrieval
- Memory is reconstructive meaning any time it is retrieved, it is subject to alteration (Loftus, Miller, & Burns, 1978).
 - Because of this, information presented *after* initial encoding can influence interpretations of memorial information.
- Misinformation presented during retrieval can lead people to believe they had seen things that were not there (e.g. Loftus et al., 1978; Roediger & McDermott, 1995), alter their judgments about memory (e.g. Wells & Bradfield, 1998), or even fabricate events that had never occurred (Wade, Garry, Read, & Lindsay, 2002).
- Retrieval presented misinformation is reported due to failures of source monitoring (Johnson, Hashtroudi, & Lindsay, 1992) wherein people incorrectly attribute the source of the newly presented information to the initial event (Tversky & Tuchin, 1989).
- When misinformation is presented during encoding, people have no competing information to process. It is only later, when the information is retracted, that a person can code the false information as such (Johnson & Seifert, 1994).
 - This type of misinformation is resistant to correction, a phenomenon known as the continued influence effect (CIE).
- Research on CIE finds that retractions lead people to be able to report the information is false, but to still use it when making fact-based inferences (Ecker, Lewandowsky, & Tang, 2010).
 - e.g. if misinformed that a bus filled with senior citizens was involved in an accident, people may be able to report that seniors were not on the bus when asked what kind of injuries people sustained they’d be more likely to report senior citizen consistent injuries like broken hips.

RESULTS

- One-way analysis of variance revealed no impact of retraction type on participants’ likelihood of answering inference questions using retracted information $F(3,157) = 1.60, p = .192$.



- Planned comparisons suggest this was likely due to those in the no retraction (Banner Report) condition not using the information about elderly in their answers $t(157) = .308, p = .758$



- Identifying a news source as “fake news” does not reduce the likelihood of its subsequent use $t(157) = 1.71, p = .090, BF_{10} = 0.248$.

IMPLICATIONS / CONCLUSIONS

- As predicted by the source monitoring framework, stating that something is “fake news” does not noticeably impact one’s likelihood of tagging the initially information as false.
- However, all results are tentative due to very low rates of “misinformation” use in the condition where they should have used it (i.e. the condition where it was true information).
- In traditional CIE research, only those who correctly report the retraction are included, but too few participants did that here.
 - Both may be potential issues from using MTurk participants
- To reflect current use of “fake news” retraction needs to be moved closer to the presented information to determine if contiguity matters.
 - e.g. “fake news” may be said immediately after information presentation.
- More participants need to be recruited to better balance conditions.

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	National Investigator	<i>March 26th</i>
	‘SENIOR TRIP TRAVESTY’	
	Passengers involved in minibus accident were elderly residents of a local retirement home.	
n=41	Fact Checker	<i>March 27th</i>
	‘HOAX NEWS’	
	National Investigator revealed to be a source of fake news.	
n=38	Fact Checker	<i>March 27th</i>
	‘HOAX NEWS’	
	Passengers revealed to not be elderly returning to nursing home.	
n=30	Fact Checker	<i>March 27th</i>
	‘HOAX NEWS’	
	The Banner Report revealed to be a source of fake news.	
n=52	Fact Checker	<i>March 27th</i>
	‘HOAX NEWS’	
	National Investigator revealed to be a source of fake news.	
	Passengers revealed to not be elderly returning to nursing home.	