Source Memory is More Accurate for Opinions Than For Facts

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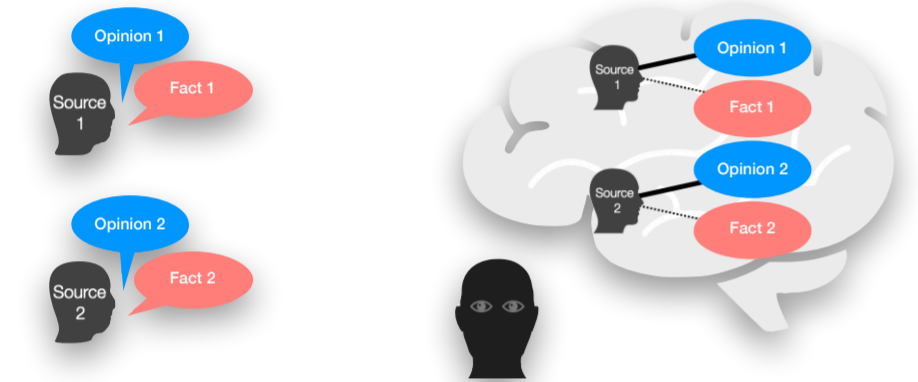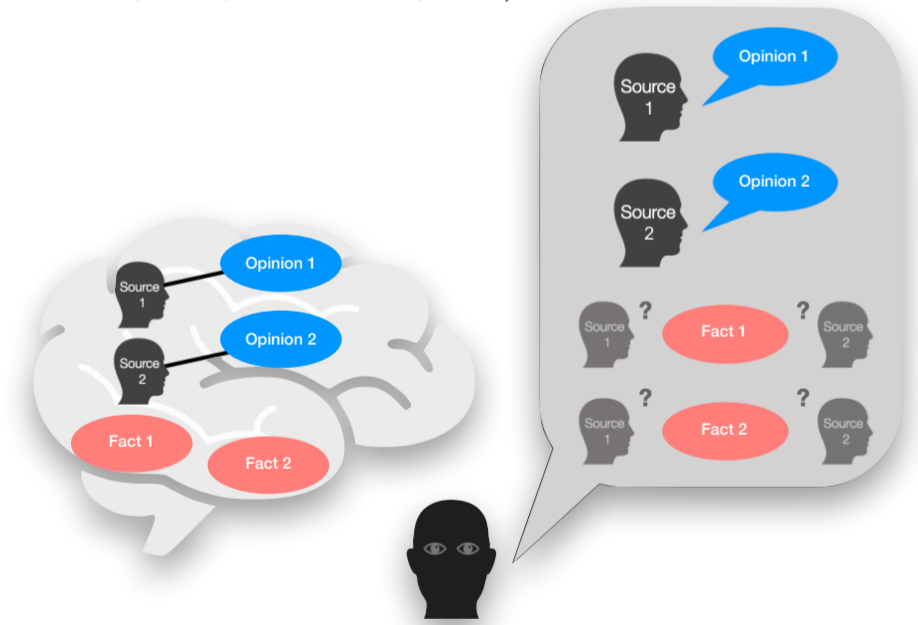
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Introduction

Source memory: the ability to link a claim to its original source

➡ Encoding: sources are linked to claims *(Mitchell and Johnson, 2009)*

- Subjective claims provide more information about the source than do objective claims *(Heiphetz et al., 2014)*

- Claim objectivity may affect the strength of source-claim binding during encoding and source memory accuracy during recall
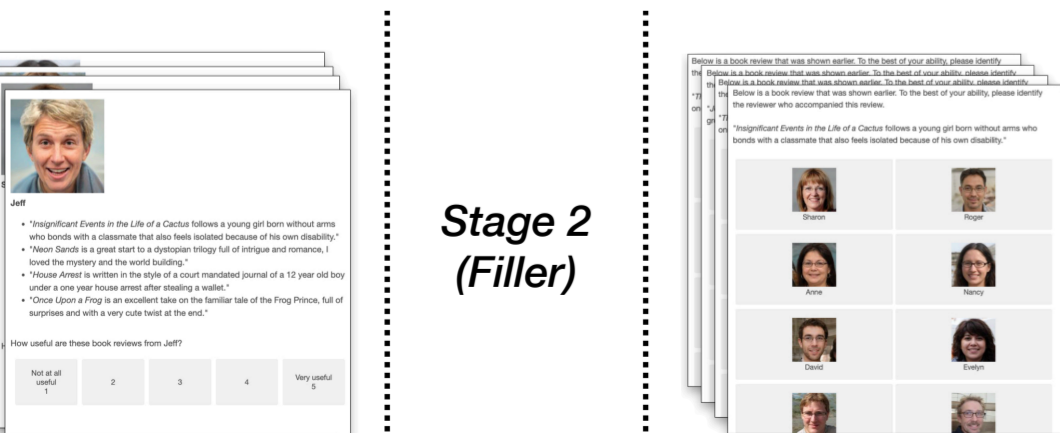

➡ Recall: previously encoded source-claim links are used to identify a claim's source *(Mitchell and Johnson, 2009; Greene et al., 2021)*

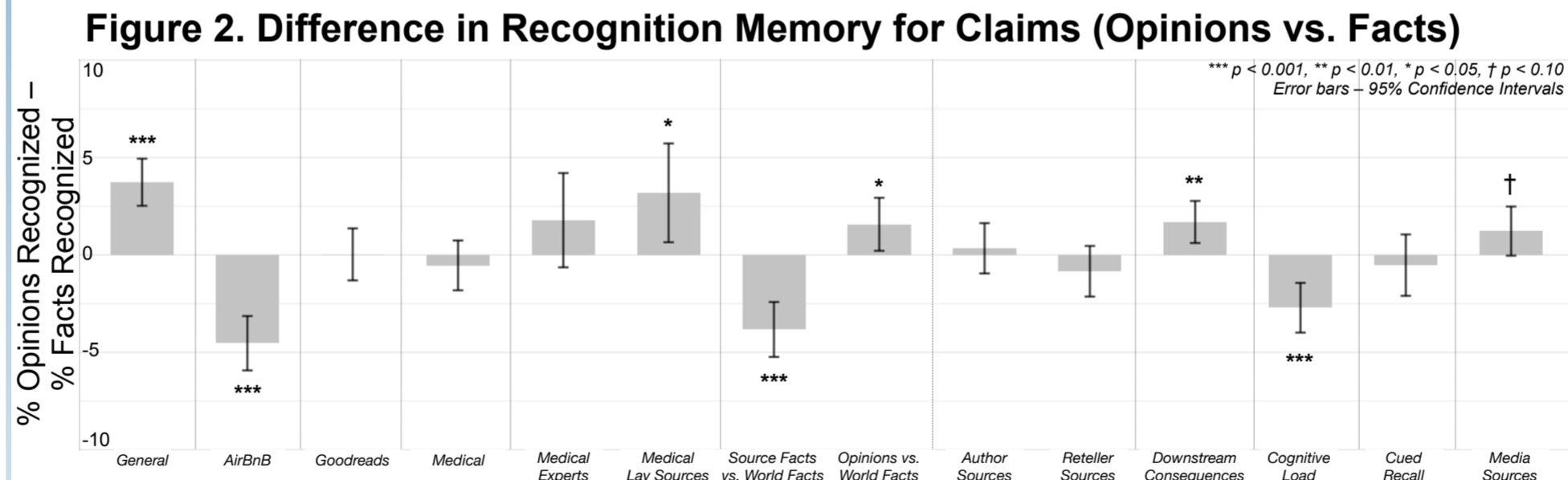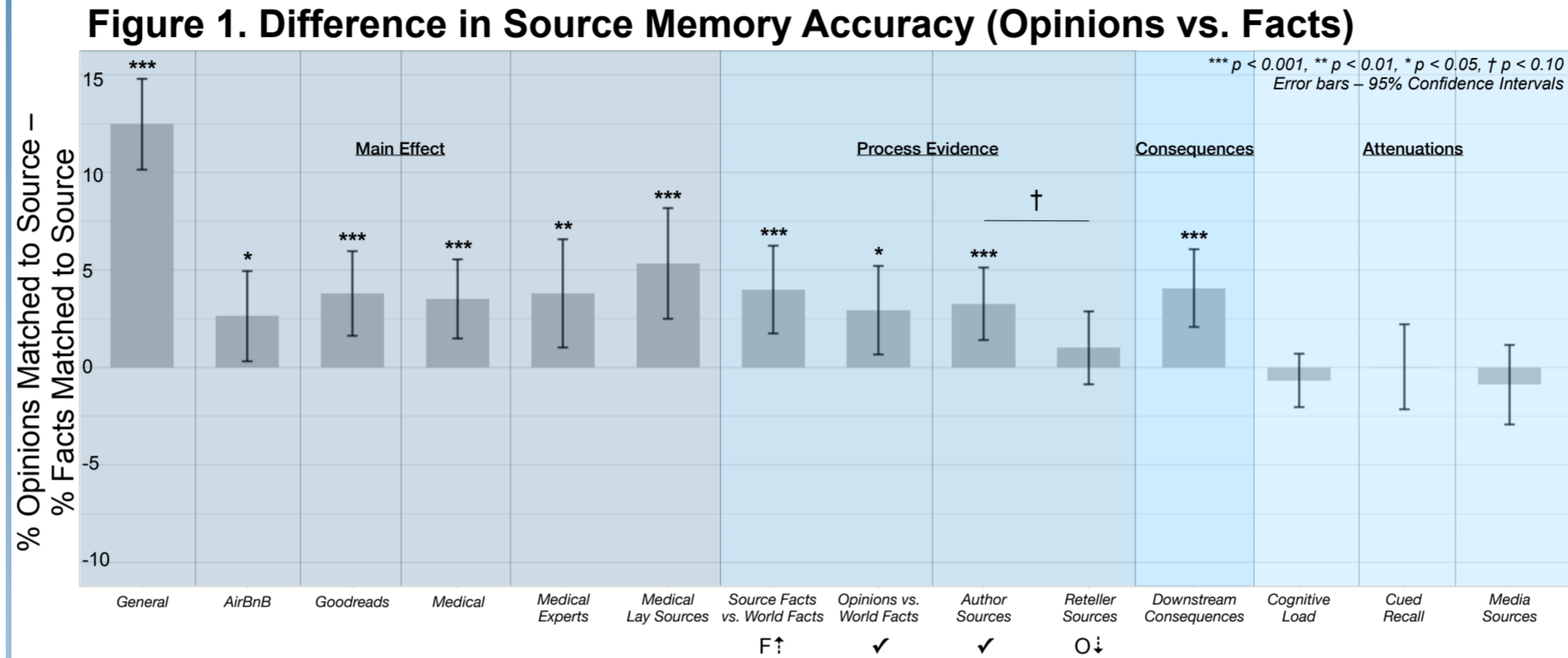## 3-Stage Experimental Design

(Kassam et al., 2009)

Stage 1: Encoding | *Stage 2 (Filler)* | Stage 3: Recall

Results

- Key DV (within-subject): Percentage of opinions correctly attributed to their original sources – Percentage of facts correctly attributed to their original sources

- Main effect: Source memory is more accurate for opinions than for facts (Fig. 1)

Exp 1-3: Main Effect Observed

- Exp 1 *(N=399)* Claims about the world
- Exp 2A *(N=501)* AirBnB rental reviews
- Exp 2B *(N=504)* Goodreads book reviews
- Exp 2C *(N=501)* Medical claims
- Exp 3 *(N=606)* Medical claims - lay sources
  Medical claims - experts

Exp 4-5: Process Evidence

- Exp 4 *(N=403)*
  ✓ Main effect replicated *(Opinions vs. Facts)*
  F⬆ Source memory is more accurate for facts that provide information about a source than for facts about the world

- Exp 5 *(N=1,092)*
  ✓ Main effect replicated *(Sources as authors)*
  O⬇ When sources are not authors of claims, no effect of objectivity on source memory

Exp 6: Downstream Consequences

- Exp 6 *(N=598)* Learning context for previously-seen claims (opinions vs. facts) allows people to **make inferences about source characteristics**

Exp S1-3: Main Effect Attenuated

- Exp S1 *(N=499)* High cognitive load
- Exp S2 *(N=501)* Cued Recall *(vs. Full Recall)*
- Exp S3 *(N=601)* Media sources

Recognition Memory

- No consistent effect of claim objectivity on recognition memory across experiments (Fig. 2)

- Effect of claim objectivity is unique to source memory processes

Figure 1. Difference in Source Memory Accuracy (Opinions vs. Facts)

*** p < 0.001, ** p < 0.01, * p < 0.05, † p < 0.10
Error bars – 95% Confidence Intervals

Figure 2. Difference in Recognition Memory for Claims (Opinions vs. Facts)

*** p < 0.001, ** p < 0.01, * p < 0.05, † p < 0.10
Error bars – 95% Confidence Intervals

Discussion

Source memory has important downstream consequences for

- Perceived accuracy of information *(Fragale & Heath, 2004)*
- Persuasion and consumer choice *(Bettman, 1979; Kumkale & Albaraccín, 2004)*
- Public health behaviors *(Morgan et al., 2020)*
- Aging consumers *(Hashtroudi et al., 1989)*

Our findings indicate that

- Source memory is influenced by claim effects – features of the claims themselves
- Objectivity is an important construct, affecting memory and judgment