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Overreliance on AI in Information-seeking from Video Content

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For many years, the way to get
information was this



Latest AI model



Today, people get information like this:

The screenshot shows a Google search interface with the query "What is the latest AI model?". The search results are filtered by "All" and show a "Key Features of GPT-6 Astra" section. A video snippet from YouTube is highlighted with a blue box, showing a video titled "OpenAI Launches GPT-6 Astra As New AI Model..." with a thumbnail featuring the OpenAI logo and the text "GPT-6 ASTRA".

Google

What is the latest AI model?

AI Mode All Images News Videos Forums Short videos More Tools

Reddit NVIDIA In the world By OpenAI Microsoft Gemini Google Language

AI Overview

The latest flagship artificial intelligence model is [GPT-6 Astra](#), which OpenAI released in September 2026. LLM Gateway +1

Key Features of GPT-6 Astra

- **Intelligence:** It is OpenAI's most advanced and aligned model to date.
- **Capabilities:** It excels at computer use, web browsing, software engineering, and professional workflows.
- **Cybersecurity:** It meets high internal risk thresholds for discovering and exploiting system vulnerabilities. YouTube · Mint +1

Other Recent September 2026 Releases

- **Atria Dawn Preview:** Released by Atria on September 12, 2026.
- **DeepSeek V4.1 Flash:** Released by DeepSeek on September 10, 2026.
- **Qwen3.8 27B:** Released in early September 2026. LLM Gateway

LLM Gateway

New AI Model Releases — September 2026 Timeline

12 new AI models were released in September 2026 so far, from 8 providers. T...

YouTube · Mint

OpenAI Launches GPT-6 Astra As New AI Model...

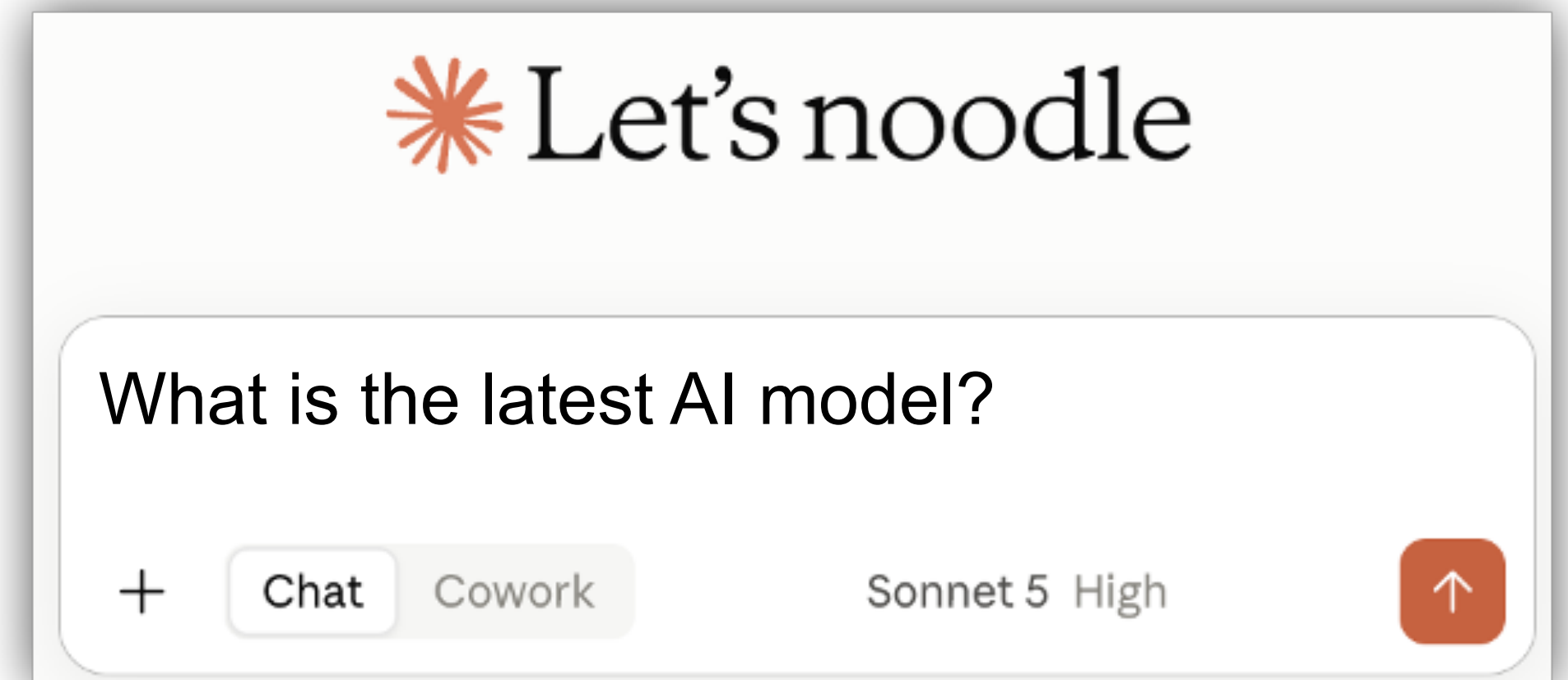
4 Sept 2026 — OpenAI Launches GPT-6 Astra As Ne...

Show all

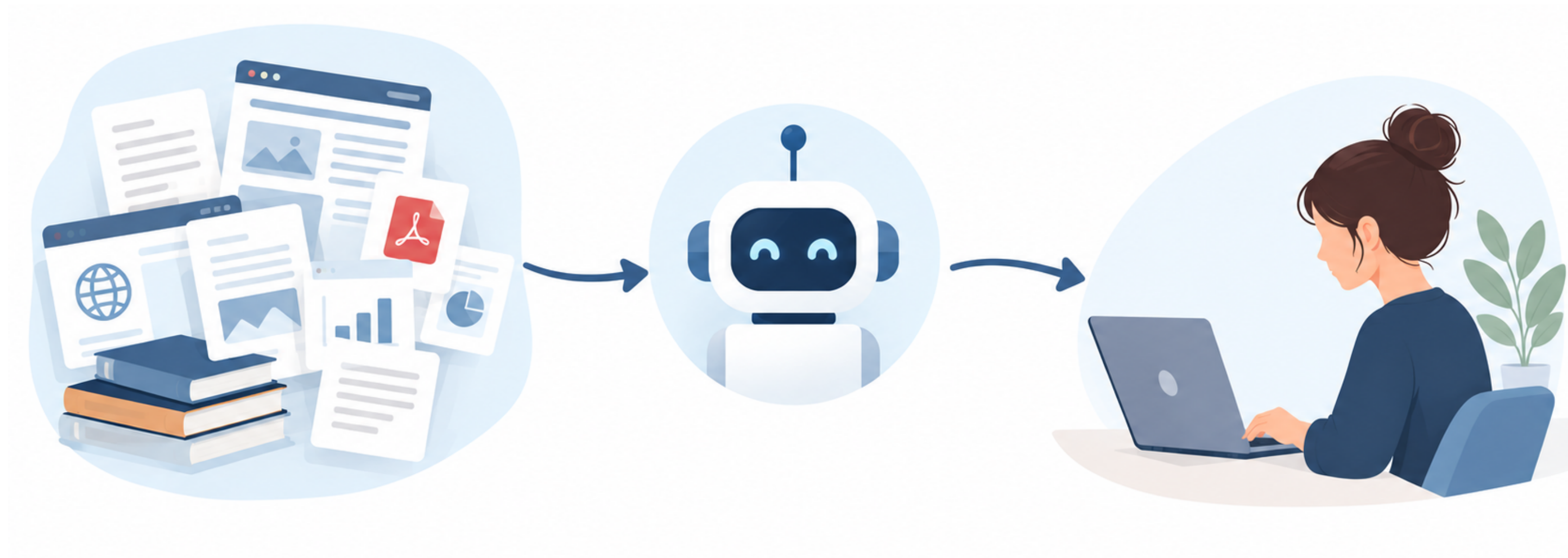
LLMs also process information from videos!

20-30% of users' interactions with AI chatbots are information-seeking

(Does not include AI overview, AI integrate in social media, etc)



AI acts as **intermediary** between source and user



Information seeking in the multimodal setup

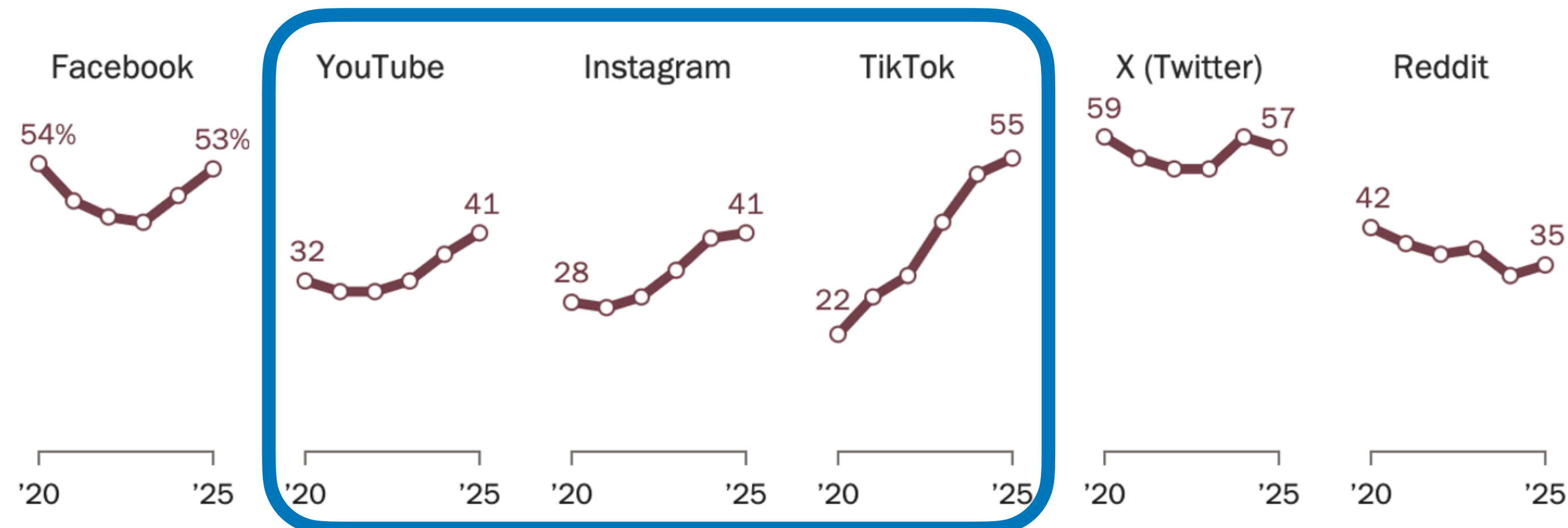
- LLMs can now **process multimodal** content

Information seeking in the multimodal setup

- LLMs can now **process multimodal** content
- People increasingly get information from **video source**, including video platforms

Social media sites by portion of users who regularly get news there

*% of each social media site's users who say they **regularly** get news there*



Information seeking in the multimodal setup

- LLMs can now **process multimodal** content
- People increasingly get information from **video source**, including video platforms
- Videos are **harder to verify** (no Ctrl+F)

Within a video-based information-seeking task:

RQ1: **Does AI assistance improve performance?**

RQ2: **Does overreliance on AI affect
performance when the system provides
deceiving information?**

Experimental Setup

The task is answer factual **questions from videos**:

Louvre Robbery

On which floor of the gallery did the Louvre robbery happen?

Enter your answer



3 topics/rounds: *Louvre Robbery, Olympics, Titan Submarine Implosion*

Q1

How long after the heist was the first suspect arrested? *

Enter your answer

0 / 200 characters

How confident are you in your answer? *

Not confident ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 Very confident

Q2

What did the thieves drop? *

Enter your answer

0 / 200 characters

How confident are you in your answer? *

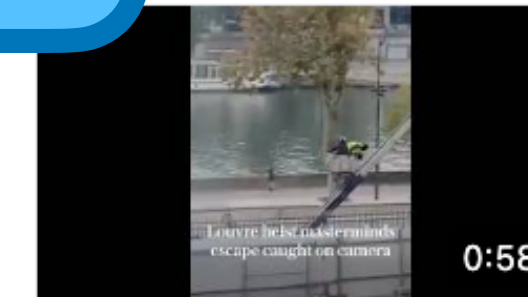
Not confident ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 Very confident

Q3

How many times did they enter from? *

AVAILABLE VIDEOS

3



Louvre heist masterminds' escape...

short



What footage of crime scene reveals about...

short



What to know about the suspects in the Louvr...

short



AI Assistant
Video-aware

Video

EXAMPLE QUESTIONS

Summarize the key points from the videos

What are the main arguments presented?

Compare the different perspectives

What evidence was provided?

Ask about the videos...

Enter to send



Questions

0/3 required

⚠ Please complete all required questions and confidence ratings to submit

Q1

How long after the heist was the first suspect arrested? *

Enter your answer

0 / 200 characters

How confident are you in your answer? *

Not confident

○

○

○

○

○

Very confident

12345

Q2

What did the thieves drop? *

Enter your answer

0 / 200 characters

How confident are you in your answer? *

Not confident

○

○

○

○

○

Very confident

12345

Q3

How did they enter from? *

AVAILABLE VIDEOS

3



Louvre heist masterminds' escape...

short



What footage of crime scene reveals about...

short



What to know about the suspects in the Louvr...

short

3 videos for each topic

AI Assistant
Video-aware

EXAMPLE QUESTIONS

Summarize the key points from the videos

What are the main arguments presented?

Compare the different perspectives

What evidence was provided?

Ask about the videos...

Enter to send



3 questions for each topic (1 per video) + confidence level

Q1

How long after the heist was the first suspect arrested? *

Enter your answer

0 / 200 characters

How confident are you in your answer? *

Not confident

☐

1

☐

2

☐

3

☐

4

☐

5

Very confident

Q2

What did the thieves drop? *

Enter your answer

0 / 200 characters

How confident are you in your answer? *

Not confident

☐

1

☐

2

☐

3

☐

4

☐

5

Very confident

Q3

How did they enter from? *

AVAILABLE VIDEOS

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What footage of crime scene reveals about...

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 AI Assistant
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Enter your answer

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How confident are you in your answer? *

Not confident

☐

☐

☐

☐

☐

12345

Very confident

Q2

What did the thieves drop? *

Enter your answer

0 / 200 characters

How confident are you in your answer? *

Not confident

☐

☐

☐

☐

☐

12345

Very confident

Q3

How many times did they enter from? *

AVAILABLE VIDEOS

3



Louvre heist masterminds' escape...

short



What footage of crime scene reveals about...

short



What to know about the suspects in the Louvr...

short

AI Assistant
Video-aware

Video

EXAMPLE QUESTIONS

Summarize the key points from the videos

What are the main arguments presented?

Compare the different perspectives

What evidence was provided?

Ask about the videos...

Enter to send

AI assistance

Questions

0/3 required

⚠ Please complete all required questions and confidence ratings to submit

Q1

How long after the heist was the first suspect arrested? *

Enter your answer

0 / 200 characters

How confident are you in your answer? *

Not confident

○

1

○

2

○

3

○

4

○

5

Very confident

Q2

What did the thieves drop? *

Enter your answer

0 / 200 characters

How confident are you in your answer? *

Not confident

○

1

○

2

○

3

○

4

○

5

Very confident

Q3

Louvre did they enter from? *

AVAILABLE VIDEOS

3

Louvre heist masterminds' escape caught on camera

0:58

Louvre heist masterminds' escape

short

What footage of crime scene reveals about

0:54

What footage of crime scene reveals about

short

What to know about the suspects in the Louvre

0:45

What to know about the suspects in the Louvre

short

EXAMPLE QUESTIONS

Summarize the key points from the videos

What are the main arguments presented?

Compare the different perspectives

What evidence was provided?

Ask about the videos...

Enter to send

2 setups: short videos (< 1 min), long videos (1-5 min)

10

Experimental conditions

Control (C)



Treatment 1 (T1)



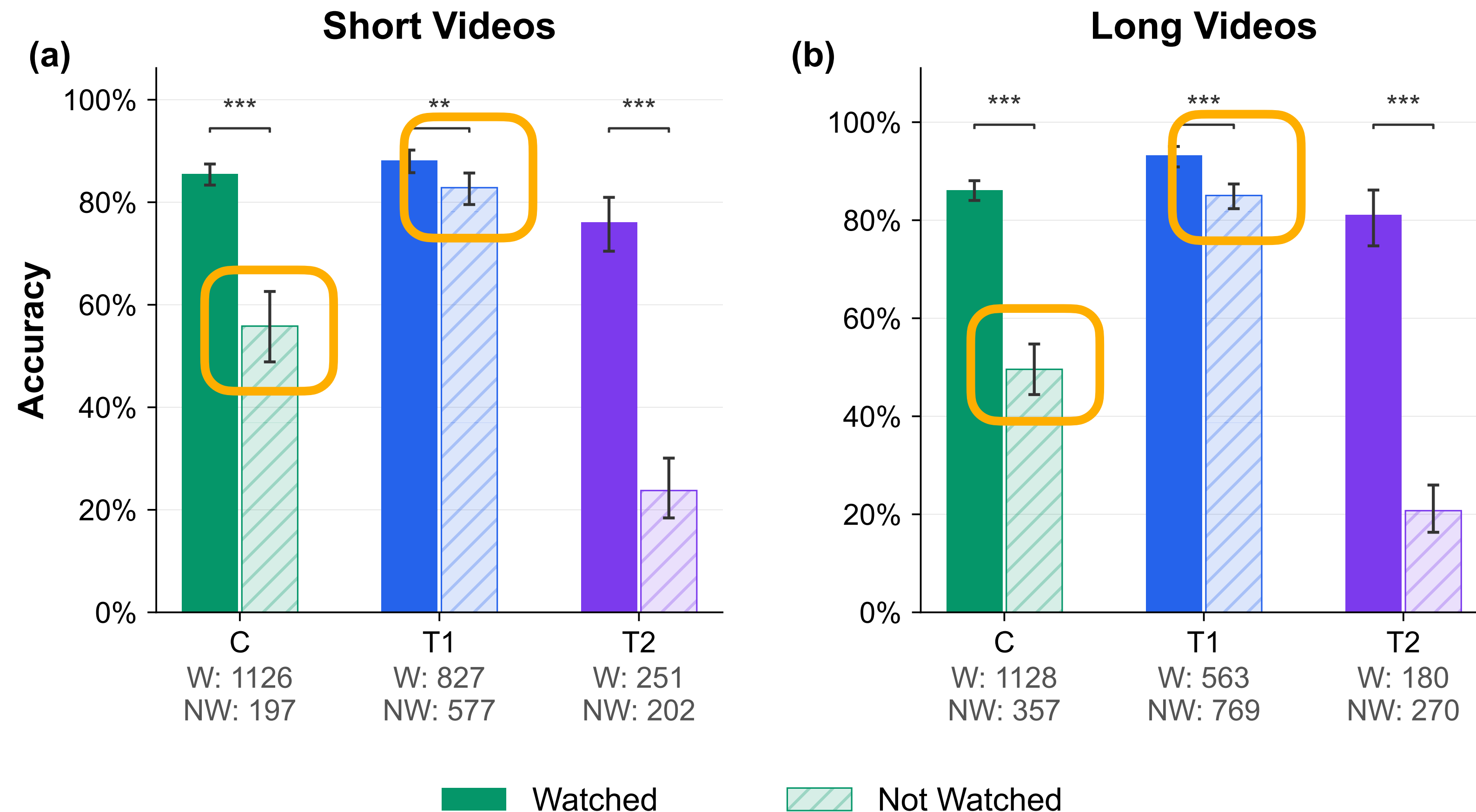
Treatment 2 (T2)



- 900 tot participants
- AI chatbot: Gemini 3 Flash

Results

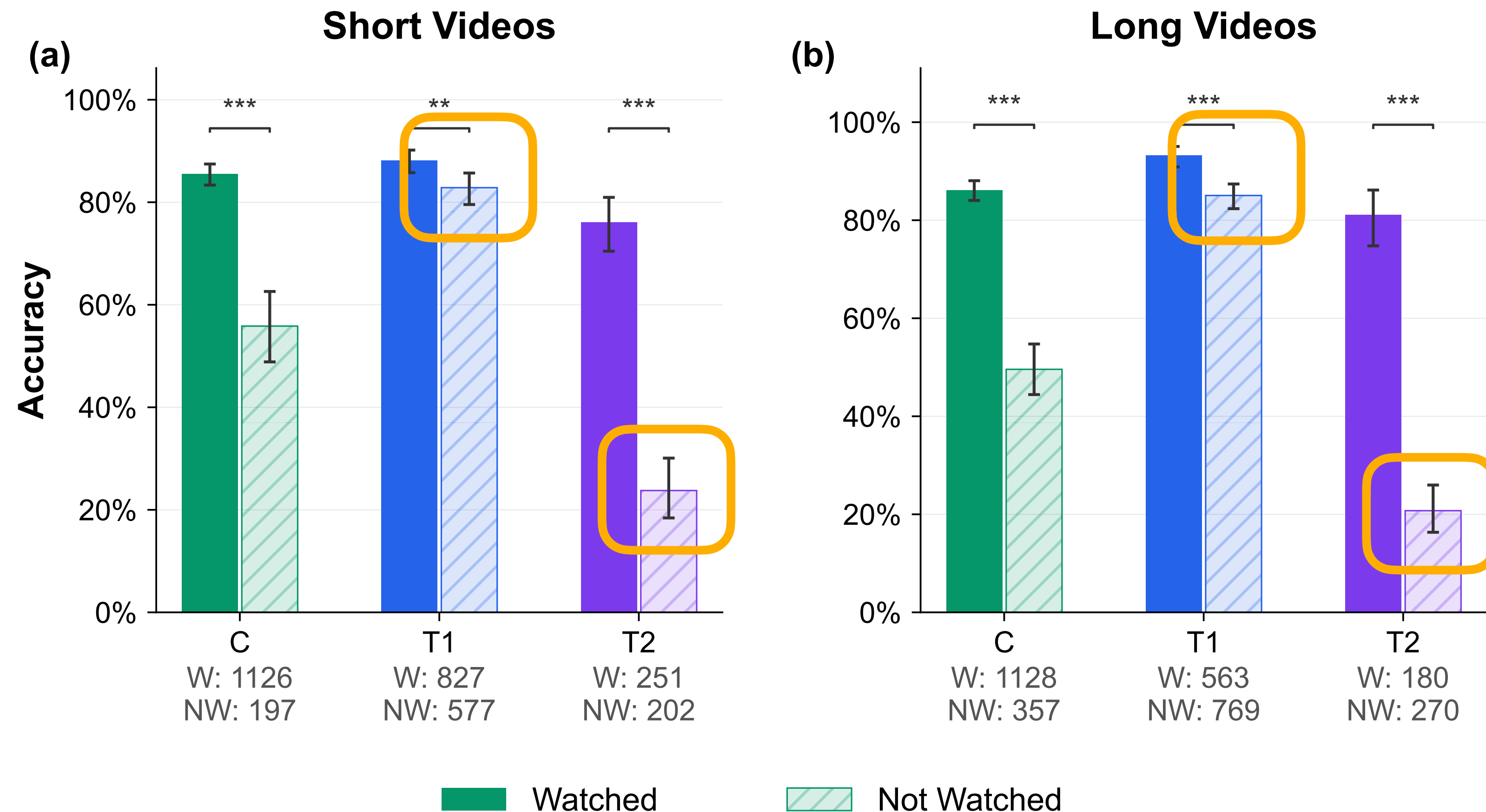
Results on accuracy



- **AI improves accuracy**
when participants do not
watch the video

C: Controlled (🎬) T1: Helpful AI (🎬🤖) T2: Deceiving AI (🎬😈)

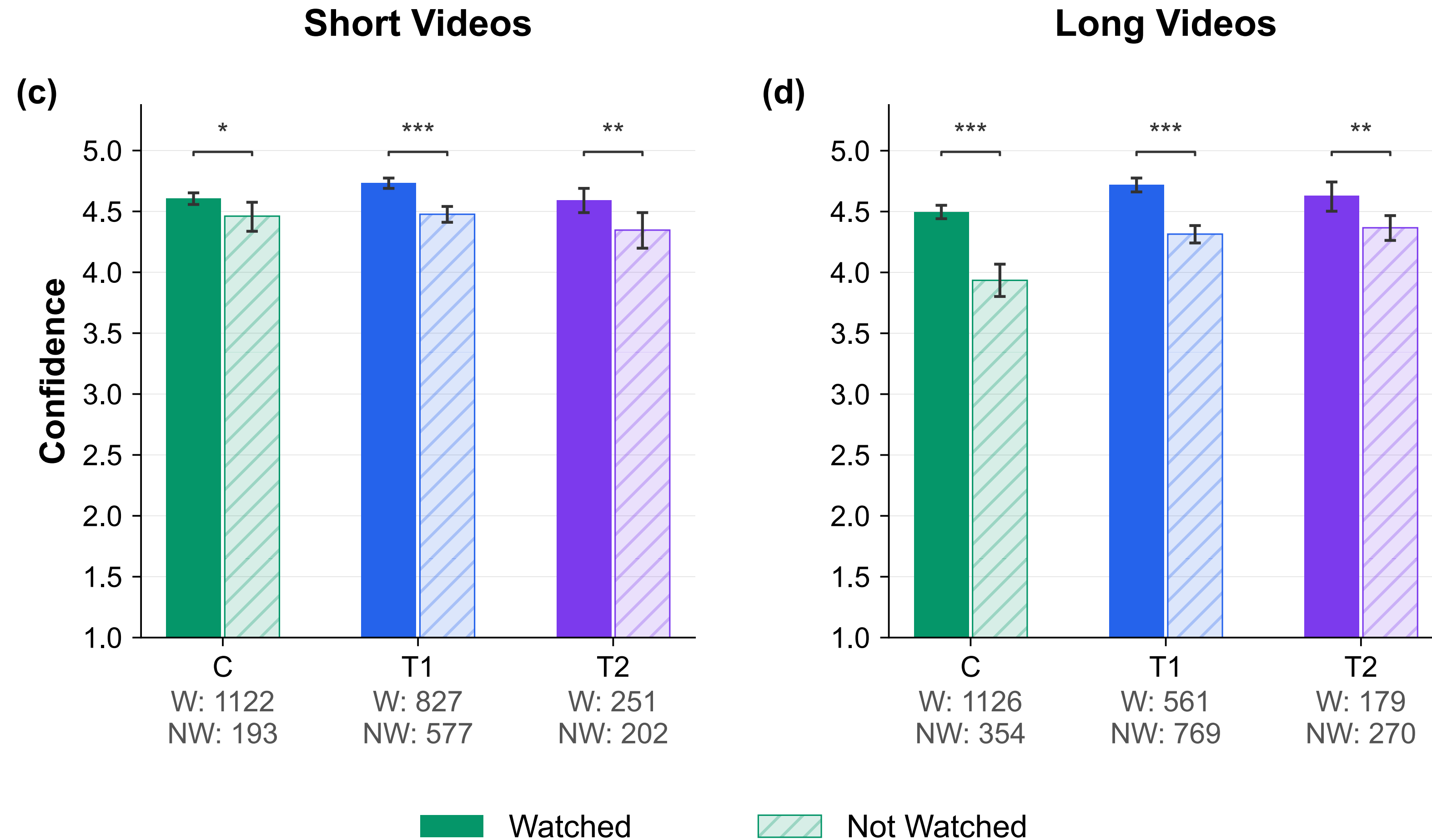
Results on accuracy



- **AI improves accuracy** when participants do not watch the video
- **Participants typically accept** the answers provided by the deceiving AI

C: Controlled (🎬) T1: Helpful AI (🎬🤖) T2: Deceiving AI (🎬😈)

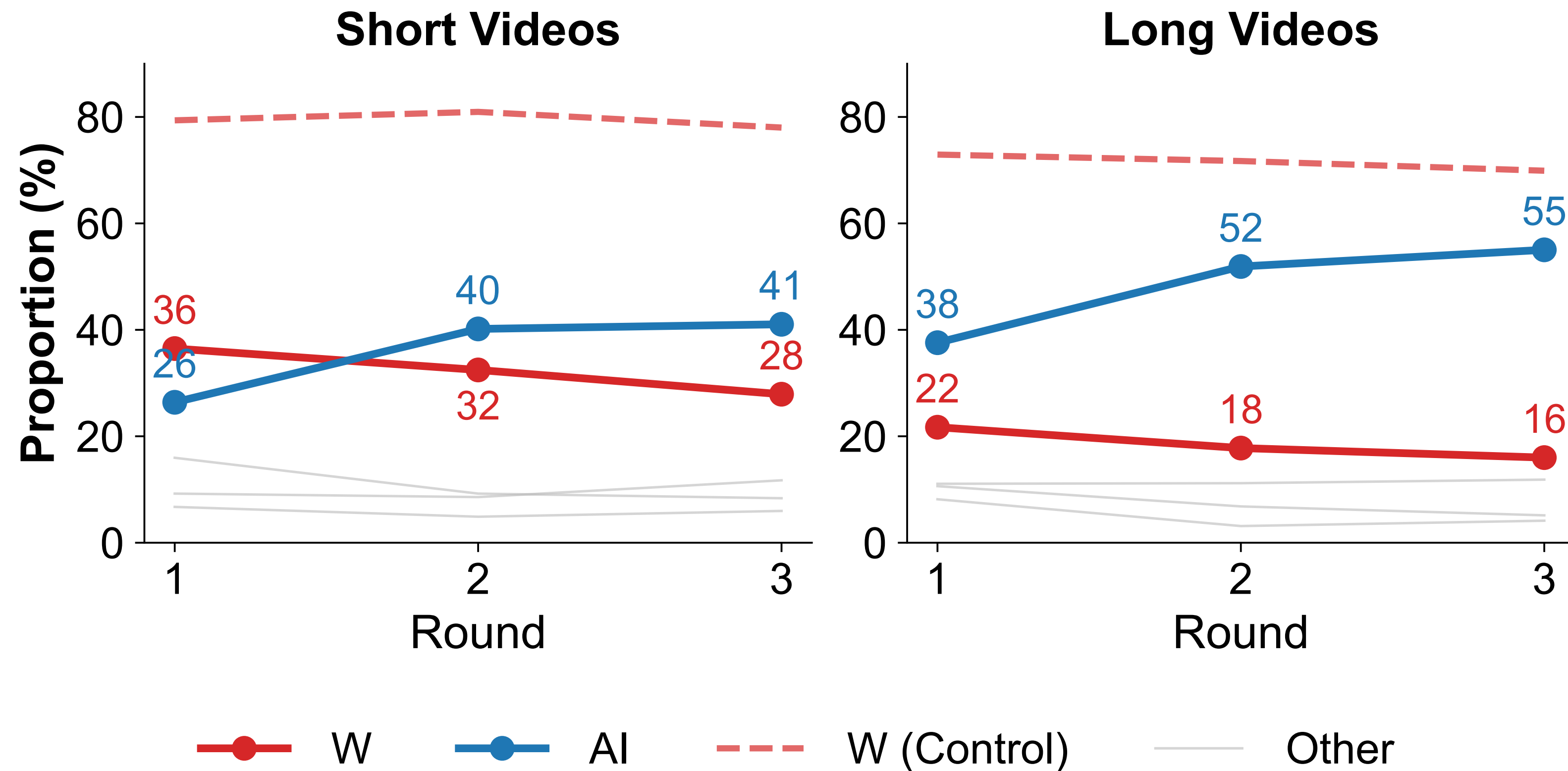
Results on confidence



- Self-reported confidence is relatively **stable and high** (> 4) across all conditions

C: Controlled (🎬) T1: Helpful AI (🎬🤖) T2: Deceiving AI (🎬😈)

Ablation on behavioral patterns



- As rounds progress, participants tend to **watch less video content** and **rely more on AI**
- The trend is exacerbated in the **long video setup**

W: Watched the video segment

AI: Directly querying AI

Findings

RQ1: **Does AI assistance improve performance?**

- Up to +35% **accuracy**
- Up to 25% **time saved**
- Gains are most pronounced as the **information space grows**

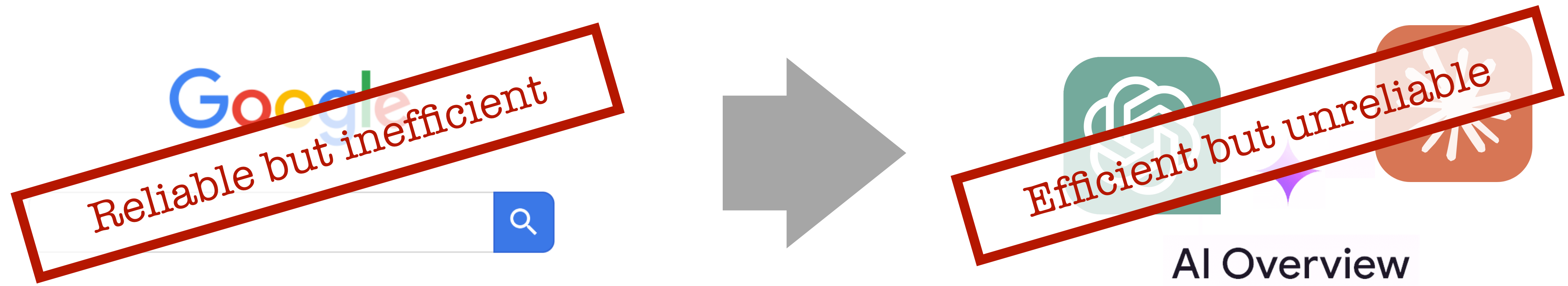
RQ2: **Does overreliance on AI affect performance when the system provides deceiving information?**

- 51% accept deceiving AI **without verifying it**
- This behavior leads to **substantial accuracy drops** (up to -33%)
- Users **struggle to detect when AI-generated outputs are incorrect** (confidence > 4)

Conclusion

AI-mediated information access **improves performance and efficiency.**

However, it leaves **users vulnerable** to hallucinations, biased outputs and manipulation



AI-mediated information access **improves**
performance and efficiency.

However, it leaves **users vulnerable** to
hallucinations, biased outputs and manipulation

Thank you. Questions?