

Let me answer your health questions!



Framing Health Information:

The Impact of Search Methods and Source Types on User Trust and Satisfaction in the Age of LLMs

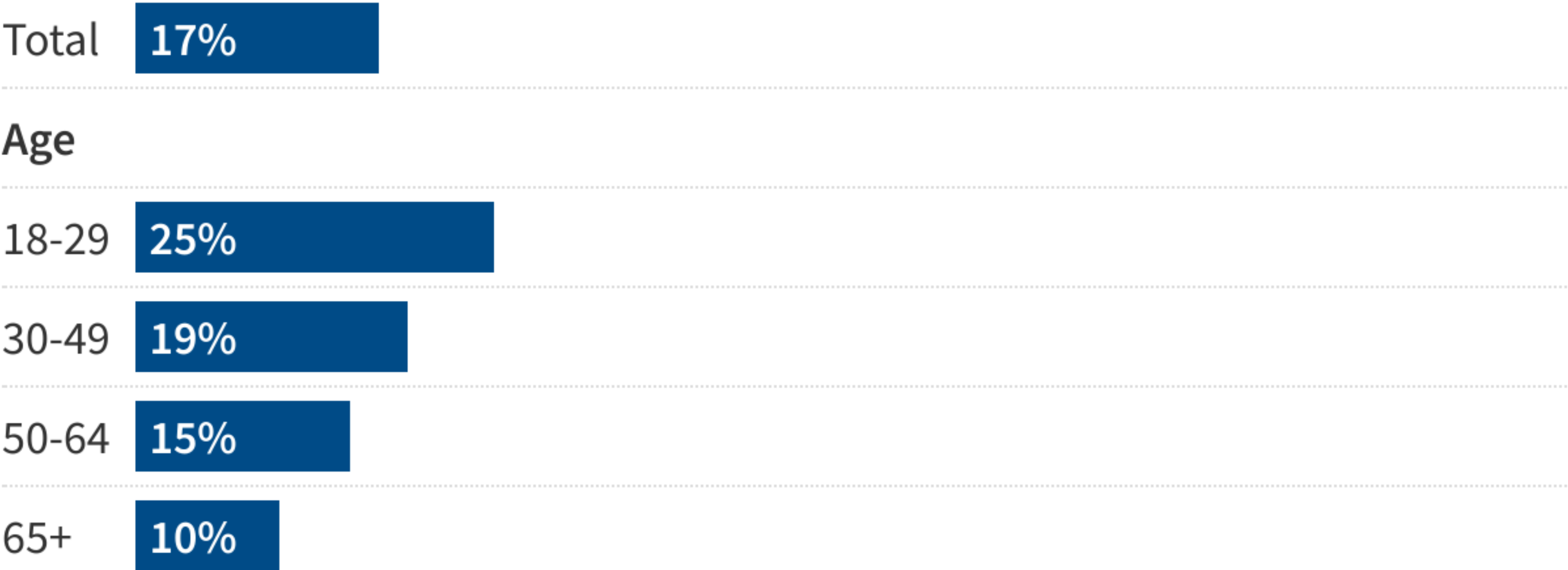
Hye Sun Yun | *Northeastern University*
Timothy Bickmore | *Northeastern University*



Figure 3

One in Six Adults Say They Use AI Chatbots for Health Information and Advice at Least Once a Month

Percent of adults who say they use artificial intelligence, or AI, chatbots such as ChatGPT, Microsoft Copilot, or Google Gemini to find **health information and advice** at least once a month:



Note: See topline for full question wording.

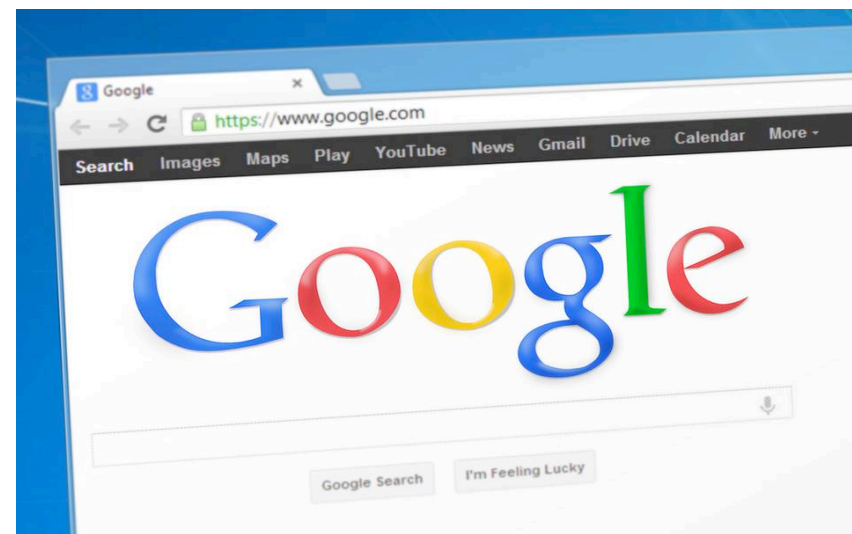
Source: KFF Health Misinformation Tracking Poll (June 3-24, 2024)

Does the mere fact that medical information is obtained from a **chatbot** influence user *trust* and *satisfaction* compared to identical information obtained from a **search engine**?

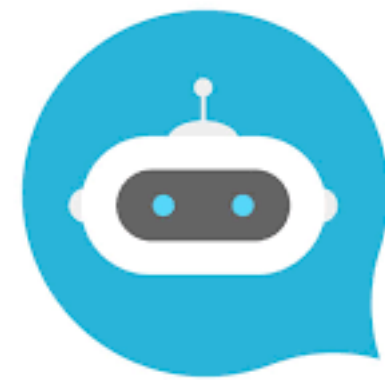
Simulation Videos

For Framing Health Information

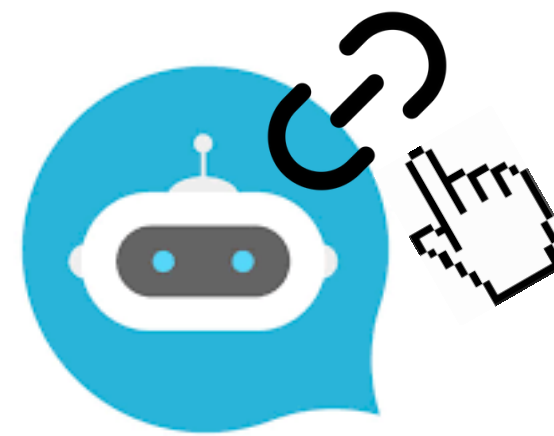
Three Search Methods



search engine



chatbot



chatbot+

Two Source Types



health websites



social media

does taking or - Google Search

google.com/search?q=does-taking-oral-antiviral-treatment-of-paxlovid-really-

Applications Online Shopping Helpful Sites Cloud Storage Wikipedia Tool YouTube

Google

Does taking oral antiviral treatment of Paxlovid really caus

Search Images Videos Shopping Maps

About 105 000 000 results (0.43 seconds)

www.pfizer.com/

Pfizer - Paxlovid FAQs

Developed by Pfizer, Paxlovid is a prescription oral antiviral pill that can be taken at home for the treatment of mild-to-moderate COVID-19 in adults who are at risk....

who.int

Paxlovid

Covid Symptoms

World Health Organization - Paxlovid and COVID

A 5-day oral prescription treatment and contains both nirmatrelvir and ritonavir.

www.cdc.gov

Paxlovid

Center for Disease Control | Paxlovid

Paxlovid is a prescription oral antiviral pill that can be taken at home for the treatment of mild-to-moderate COVID-19.

www.health.com

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Paxlovid and Rebound Effect

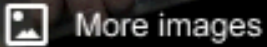

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Questions on Paxlovid

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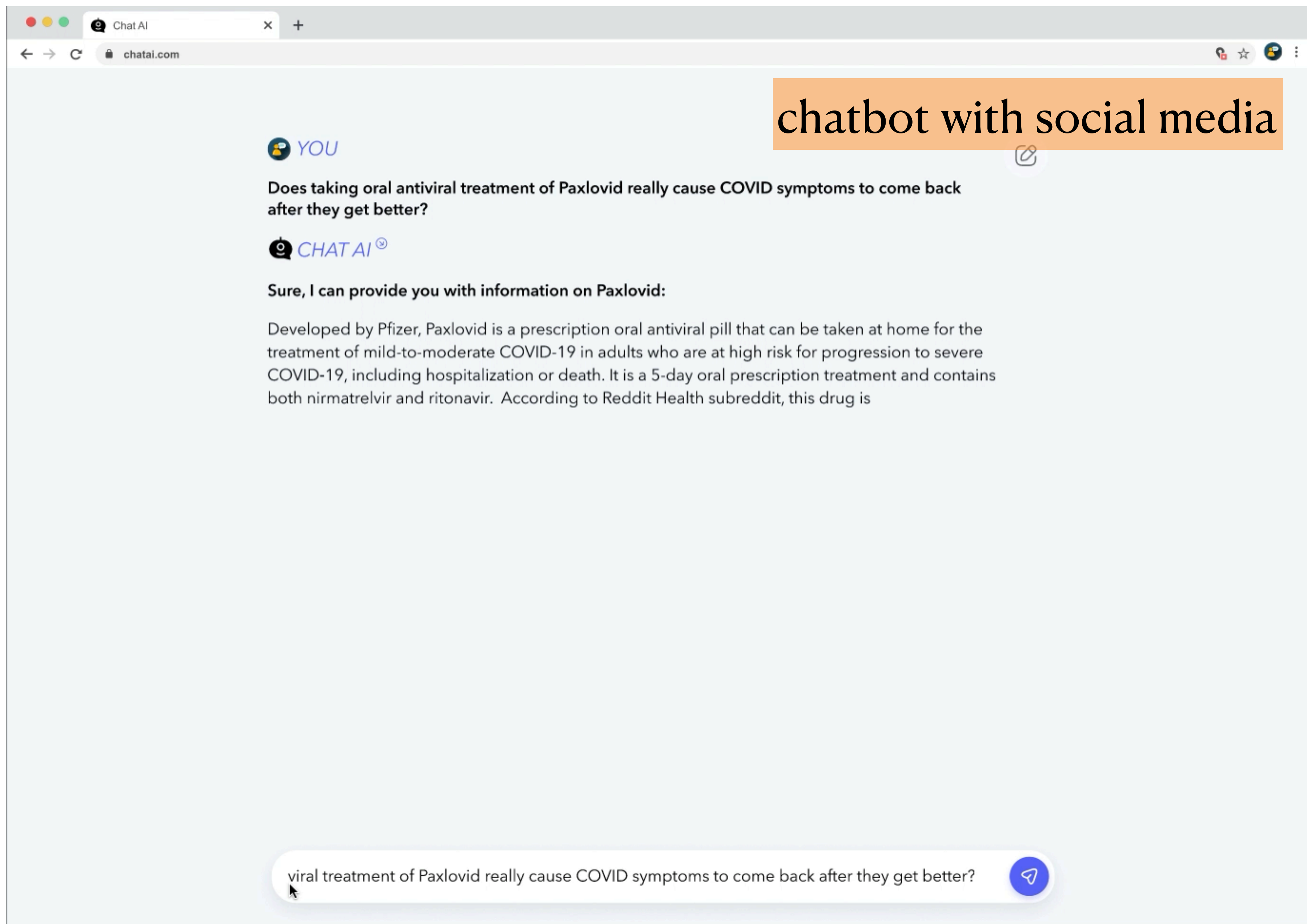


Nirmatrelvir/ritonavir

Nirmatrelvir/ritonavir, sold under the brand name Paxlovid, is a co-packaged medication used as a treatment for COVID-19. It contains the antiviral medications nirmatrelvir and ritonavir and was developed by Pfizer. [Wikipedia](#)

Feedback

search engine with health websites



chatbot with social media

 YOU

Does taking oral antiviral treatment of Paxlovid really cause COVID symptoms to come back after they get better?

 CHAT AI

Sure, I can provide you with information on Paxlovid:

Developed by Pfizer, Paxlovid is a prescription oral antiviral pill that can be taken at home for the treatment of mild-to-moderate COVID-19 in adults who are at high risk for progression to severe COVID-19, including hospitalization or death. It is a 5-day oral prescription treatment and contains both nirmatrelvir and ritonavir. According to Reddit Health subreddit, this drug is

viral treatment of Paxlovid really cause COVID symptoms to come back after they get better?

Chat AI

chatai.com

☆

chatbot+ with social media

YOU

Does taking oral antiviral treatment of Paxlovid really cause COVID symptoms to come back after they get better?

CHAT AI

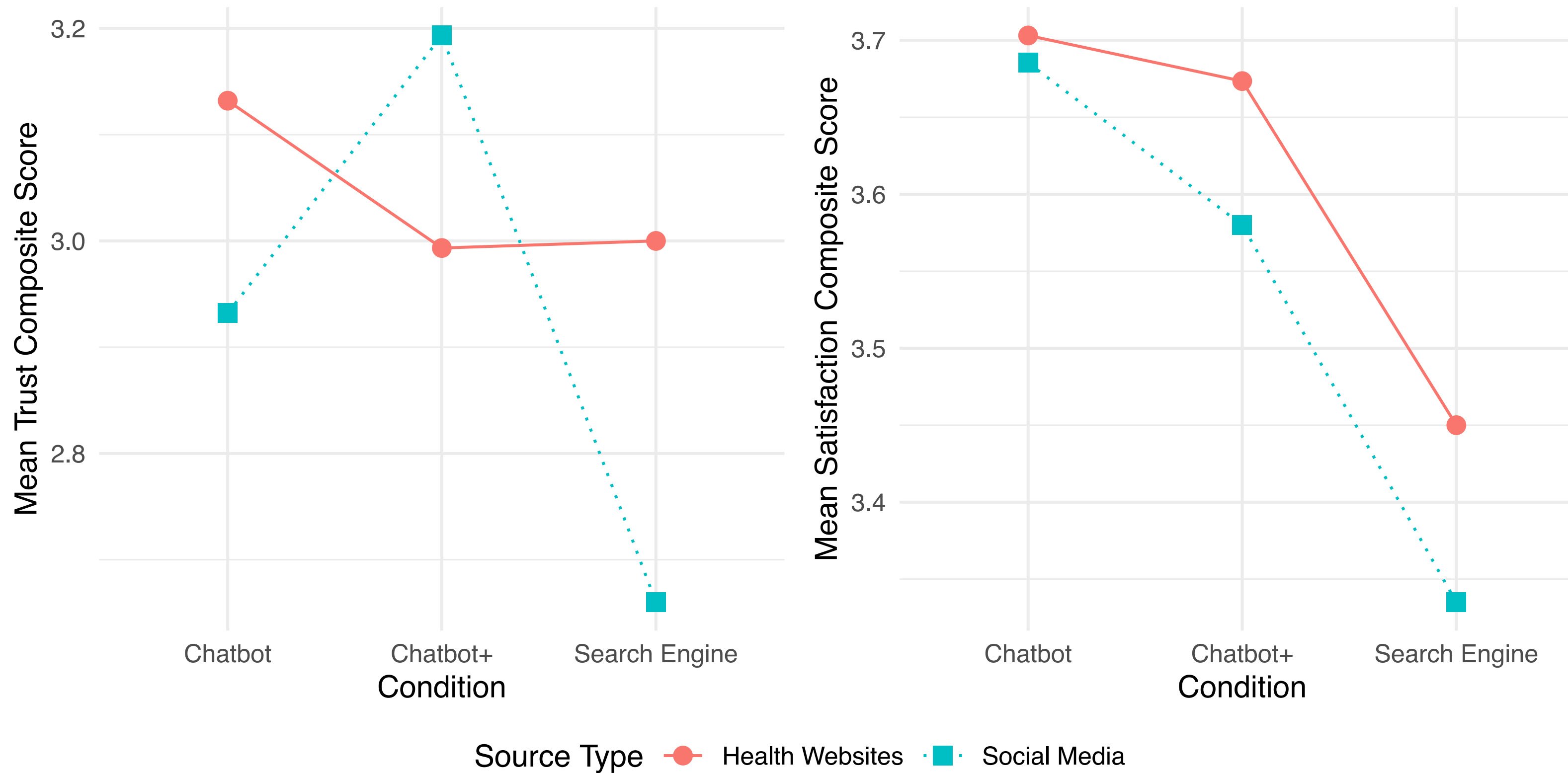
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Although studies outside of the laboratory have confirmed Paxlovid's effectiveness among people who have been vaccinated, there have been reports of a "rebound" of COVID-19 symptoms in some people within 2 to 8 days after completing the five-day course of Paxlovid. Some have reported testing positive again but having no symptoms; others have a recurrence of symptoms. Pfizer had said that in the clinical trial for Paxlovid, several participants appeared to have a rebound in virus levels,

virai treatment of Paxlovid really cause COVID symptoms to come back after they get better?

Survey Results



Trust: {Chatbot, Chatbot+} > Search Engine

Satisfaction: Chatbot > Chatbot+ > Search Engine across both sources.

Diving Deeper...

Themes from Interviews

- **Search Engine:** familiar experience with a rich array of information.
- **Chatbot:** straightforward answers from unclear sources.
- **Chatbot+:** direct answers with opportunities to cross-reference.
- **Effect of source type** on trust can depend on context.

Future Work

Designing Safer & More Transparent Chatbots

- Expand to broader range of health information topics
- Incorporate firsthand, direct interaction with systems
- Design chatbots enhancing source visibility and transparency of how sources were used for answer generation

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