The Disclosure Dilemma: How AI Attribution Affects Reactions to Public Health Messages

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Background

- Public communicators are increasingly using AI to create messages for efficiency and scale.
- The public is often skeptical of AI, viewing it as less empathetic and trustworthy than human experts in some cases.
- If AI is to be used, how should it be disclosed, if at all?
  - Immediate disclosure risks undermining message credibility
  - Concealed usage risks brand/source reputation

Hypotheses and Research Questions

- Disclosure of AI usage will *reduce* perceptions of message **credibility**, source **trust**, and source **expertise**.
  - Up-front disclosure will *increase* perceived **transparency**
  - Delayed disclosure will *reduce* perceived **transparency**
- Does type of disclosure ("created" vs. "edited") matter?
- Does late disclosure hurt more than early?
- Does disclosure affect **learning** and **information-seeking**?

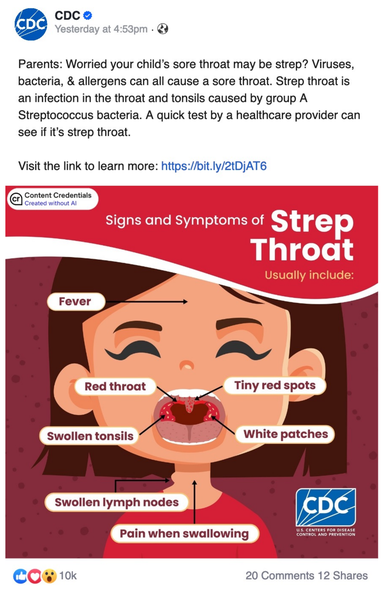
Takeaways

- Ethical disclosure of AI usage undermines message effectiveness:
  - Message is perceived as less credible
  - Recipients learn less from the message (important in public health)
- Later disclosure of AI usage (e.g., via news reporting) hurts the source:
  - Seen as less trustworthy
  - Seen as less transparent than up-front disclosing source
- If AI is used, health communicators must decide whether they will accept reduced effectiveness by disclosing use or risk reputational damage to the institution by concealing it

Methods

- **Design**: An online experiment (N = 1,500 U.S. adults) where participants view four real CDC social media posts, with random assignment of disclosure about AI usage (or not).
- **Conditions**:
  - No Disclosure: (Image with original caption)
  - Denial: "Not created with AI" badge + caption text.
  - AI Generated: "Generated by AI" badge + caption text.
  - Late Disclosure: Participants were told post-exposure that the CDC had been caught using AI without disclosure.
  - If disclosure, manipulate "generated" or "edited" with AI.

Stimuli Examples



Quick Summary

- Does the type, timing, and presence of a *disclosure of AI usage* affect perceptions of public health messages?
- **AI disclosure reduces perceived message credibility, source trustworthiness, and source expertise.**
  - Late disclosure (not included with message) hurts credibility more than disclosure with message.
- Up-front disclosure reduces learning from message
- Trade-off between credibility preservation and effectively transmitting information.

Key Results

Figure 1: AI Disclosure Harms the Message

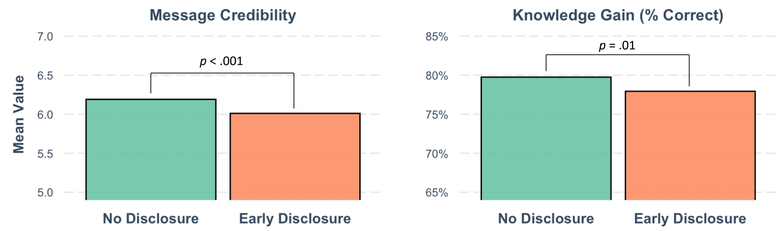
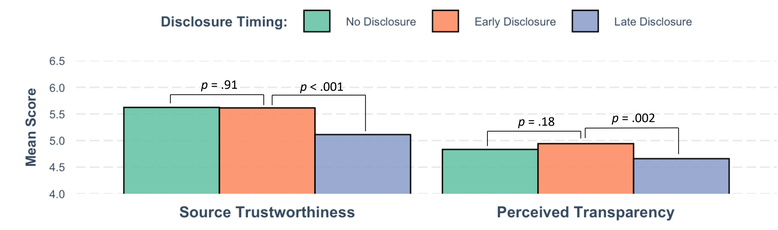


Figure 2: Late Disclosure is Costly to the Source



Key Results

- No difference between "generated" and "edited" wording
- No credibility difference between denial of AI usage vs. no mention (p = .23)
- No effects on *information-seeking* dependent variable

Pre-Registration

Data + Code

Full Paper

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