Trusting the machine:

Epistemic trust and anthropomorphism in generative artificial intelligence

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MOTIVATION: Generative artificial intelligence (GenAI) has become popular for its ability to produce fluent, seemingly credible content. But how does its perceived humanness affect how much we trust what it says? We tested whether anthropomorphism affects:

- Trust in the Al as an author
- Trust in **the content** it produces
- And how these two trust pathways interconnect

METHOD:

Study 1: Agent vignette & avatars + blog post (n = 259)







Study 2: Interactive chatbot + blog post (n = 144)

Anthropomorphism Manipulations

- Agent description / image (Study 1)
- Chatbot emotional responsiveness (Study 2)

Measures

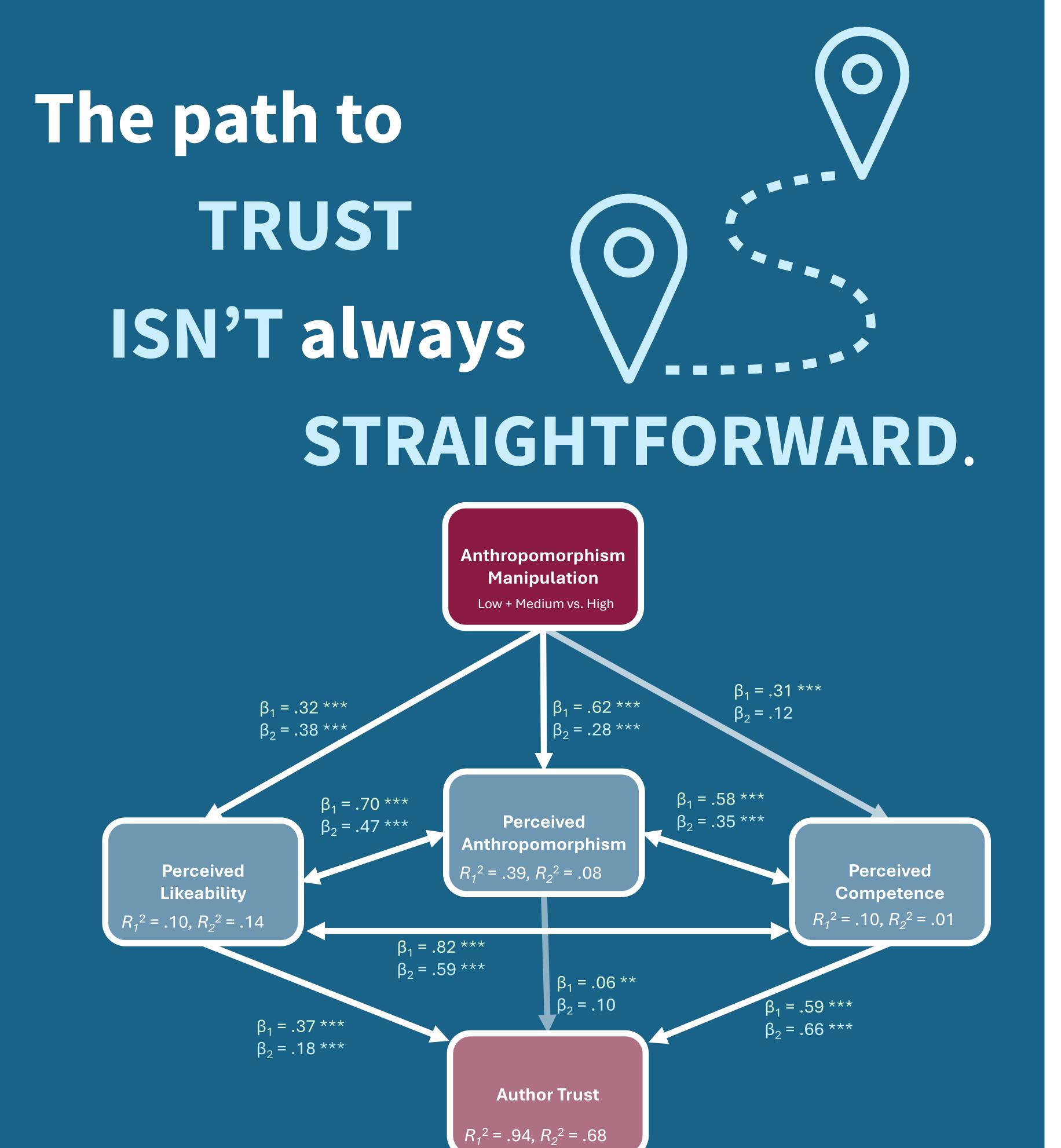
- METI (Author Trust; Hendriks et al., 2015)
- Message Credibility (Content Trust; Appelman & Sundar,2016)
- Behavioural intentions novel items (Author & Content Trust)
- Godspeed Instrument (Anthropomorphism, Likeability, Competence; Bartneck et al., 2009))

TAKEAWAYS:

- People don't necessarily trust AI content just because an AI author seems human.
- But when they trust the AI author, they trust the content more
- Anthropomorphism influences trust of the source rather than the message directly.

THE NUANCE:

- The "trust boost" of anthropomorphism is indirect
- Trust in AI content may not be easily manipulated
- It's filtered through the perceptions of the agent
- Trust effects vary with prior content & GenAl experience



 $\beta_1 = .68 ***$

 $\beta_2 = .52 ***$

Content Trust

 $R_1^2 = .57, R_2^2 = .31$

 $\beta_2 = .21 *$

Perceived

Writing Quality

Designing GenAl for epistemic trust means shaping the user's perception of the messenger —

— not just the message.

 $\beta_2 = .28 ***$

How frequently one

consumes related

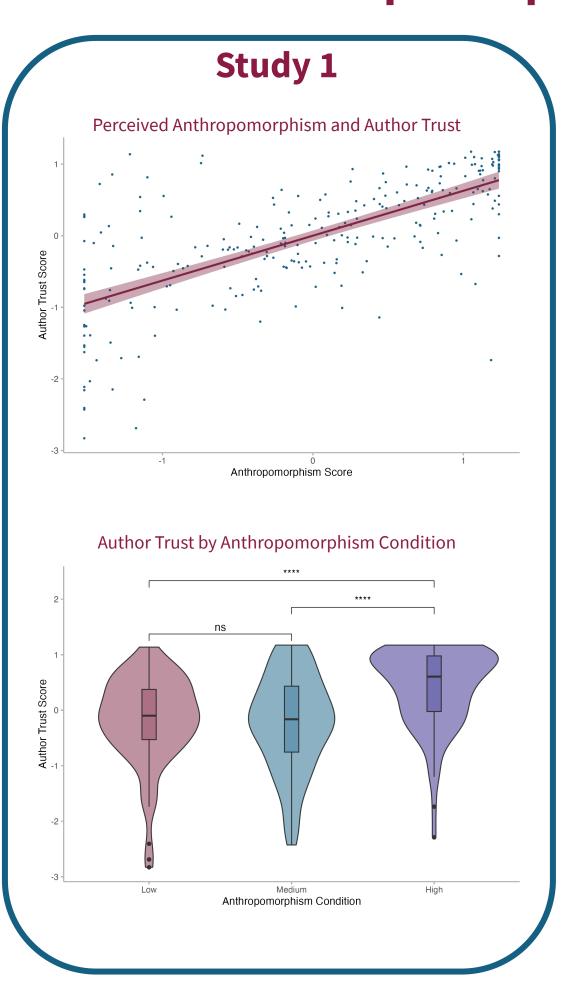
content

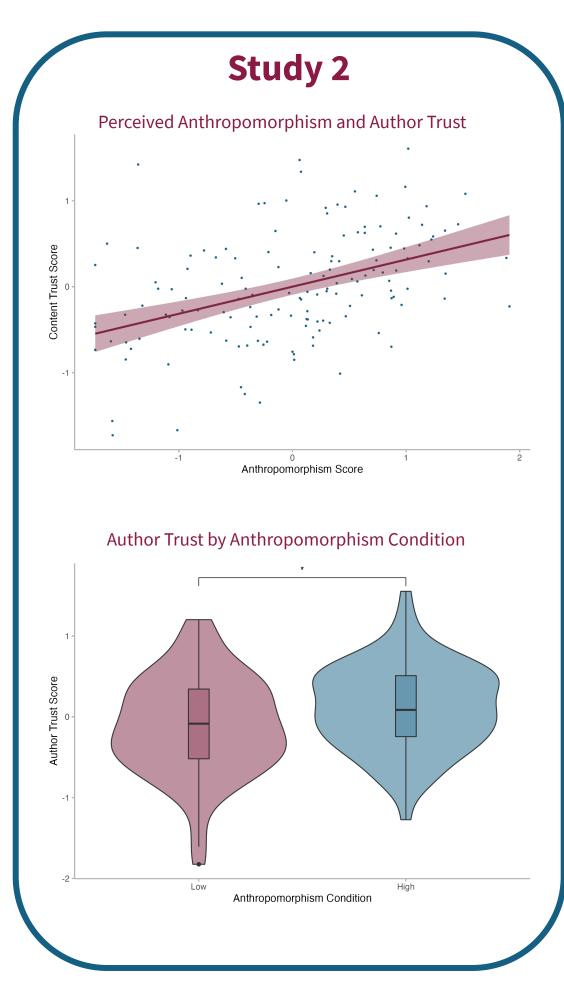


··· References and more...

Significance: * p < .05, ** p < .01, *** p < .001

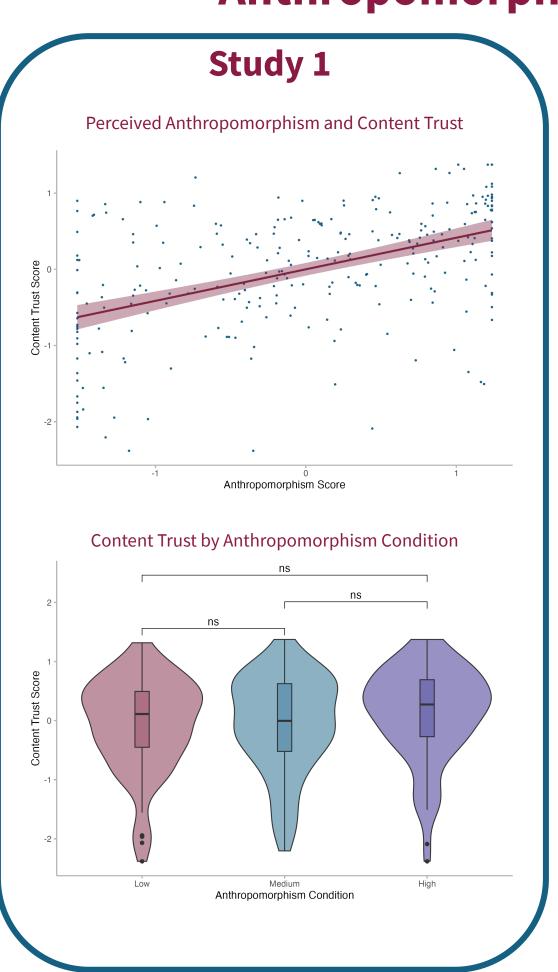
Anthropomorphism ← **Author Trust**

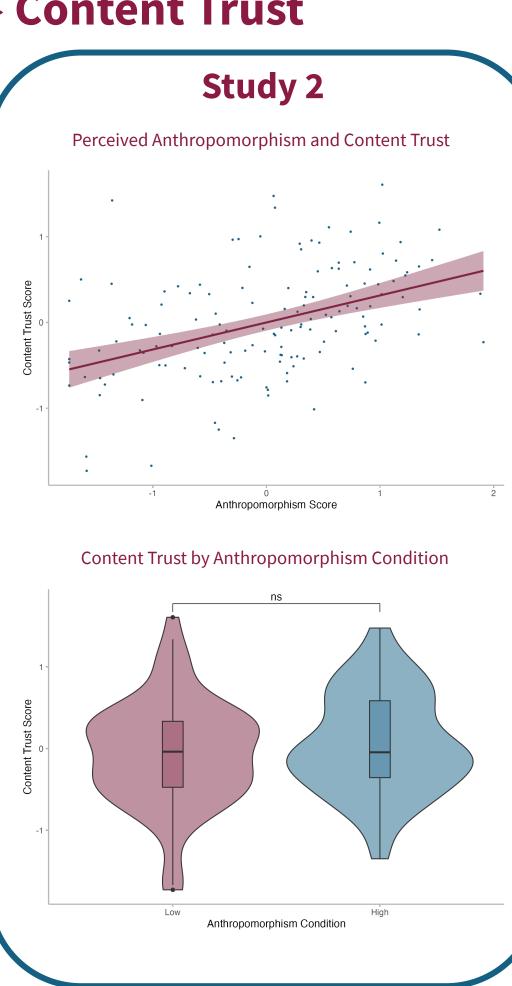




- Strong Correlation $(r_1 = .70^{***}, r_2 = .44^{***})$
- Direct effect of manipulation in Study 2 (d = 0.40, p = .017)

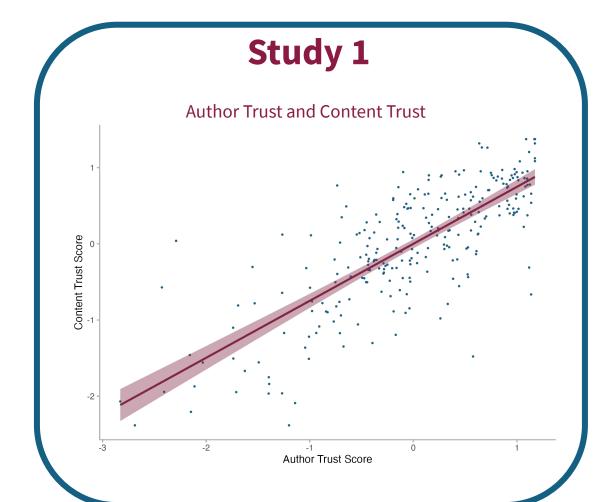
Anthropomorphism ←→ **Content Trust**

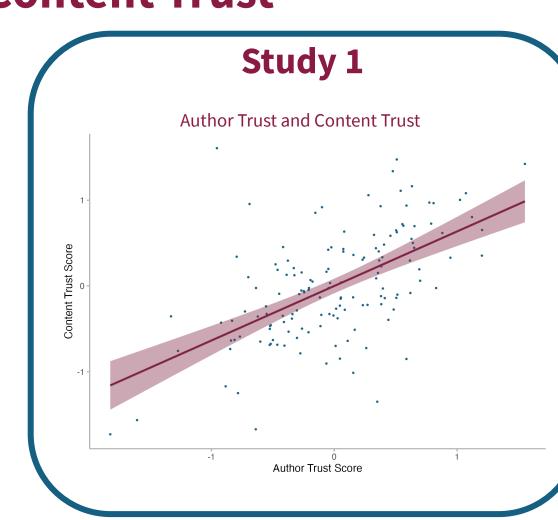




- Moderate Correlation $(r_1 = .49^{***}, r_2 = .43^{***})$
- No direct causal effects from manipulation

Author Trust ←→ Content Trust





Significant positive correlation $(r_1 = .78^{***}; r_2 = .58^{***})$

