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Hwanseok Song

Brian Lamb School of Communication



Dr. Song's website

Song, H., & Gyamfi, P. A. (2025). How Values Guide Trust: The Multiple Roles of Science-Related Value Predispositions in Shaping Trustworthiness and Trust in Scientific Authorities. *Science Communication*. https://doi.org/10.1177/10755470251376575



Original Research

How Values Guide Trust: The Multiple Roles of Science-Related Value Predispositions in Shaping Trustworthiness and Trust in Scientific Authorities

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Sage

Hwanseok Song[1] and Prince Adu Gyamfi[1]

Abstract

Guided by literature suggesting that value similarity shapes trust in scientific authorities managing technological risks, we examined how science-related values affect trust formation. Our experiment found that individual value orientations moderated the effects of scientific authorities' value displays. They also affected how people weigh ability, benevolence, and integrity to establish trust. Individuals with high deference to scientific authority judged power-oriented authorities more favorably and drew less on benevolence and integrity dimensions than did those low in deference. Those with higher technocratic beliefs rated universalism-oriented authorities as higher in benevolence and weighted this dimension more heavily in trust judgments.

Keywords

trust, trustworthiness, values, deference to scientific authority

Sue Lim

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Dr. Lim's website

Lim, S., Schmälzle, R., & Bente, G. (2025). Artificial social influence via human-embodied AI agent interaction in immersive virtual reality (VR): Effects of similarity-matching during health conversations. *Computers in Human Behavior: Artificial Humans*, *5*, 100172. https://doi.org/10.1016/j.chbah.2025.100172

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Artificial social influence via human-embodied AI agent interaction in immersive virtual reality (VR): Effects of similarity-matching during health conversations

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Artificial social influence
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ABSTRACT

Interactions with artificial intelligence (AI) based agents can positively influence human behavior and judgment. However, studies to date focus on text-based conversational agents (CA) with limited embodiment, restricting our understanding of how social influence principles, such as physical similarity, apply to AI agents (i.e., artificial social influence). We address this gap by leveraging latest advances in AI (large language models) and combining them with immersive virtual reality (VR). Specifically, we built VR-ECAs, or embodied conversational agents that can engage in turn-taking conversations with humans about health-related topics in a virtual environment. Then we manipulated interpersonal similarity via gender matching and examined its effects on biobehavioral (i.e., gaze), social (e.g., agent likeability), and behavioral outcomes (i.e., healthy snack selection). We observed an interaction effect between agent and participant gender on biobehavioral outcomes: discussing health with opposite-gender agents tended to enhance gaze duration, with the effect stronger for male participants compared to their female counterparts. A similar directional pattern was observed for healthy snack selection. In addition, female participants liked the VR-ECAs more than their male counterparts, regardless of the VR-ECAs' gender. Finally, participants experienced greater presence while conversing with embodied agents than chatting with text-only agents. Overall, our findings highlight embodiment as a crucial factor of AI's influence on human behavior, and our paradigm enables new experimental research at the intersection of social influence, human-AI communication, and immersive virtual reality (VR).

Torsten Reimer & Juan Pablo Loaiza-Ramírez

Communication and Cognition Lab

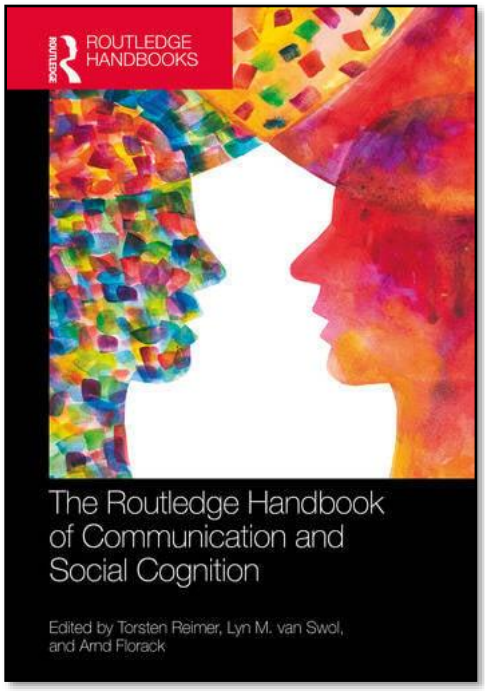
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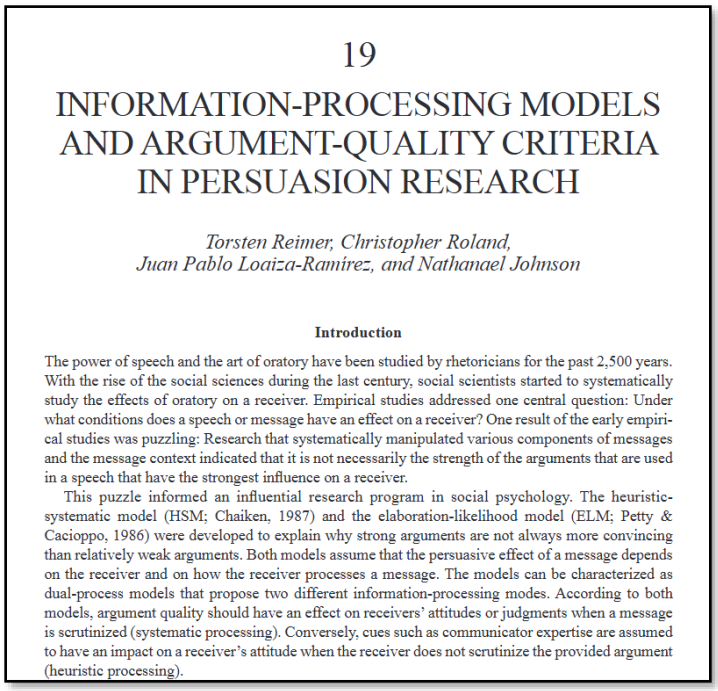


Dr. Reimer's website & Loaiza-Ramírez's website

Reimer, T., Roland, C., Loaiza-Ramírez, J. P., & Johnson, N. (2026). Information-processing models and argument-quality criteria in persuasion research. In T. Reimer, L. M. van Swol, & A. Florack (Eds.), *The Routledge Handbook of Communication and Social Cognition* (pp. 216–231). Routledge. https://www.routledge.com/The-Routledge-Handbook-of-Communication-and-Social-Cognition/Reimer-vanSwol-Florack/p/book/9781032533780







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INFORMATION-PROCESSING MODELS AND ARGUMENT-QUALITY CRITERIA IN PERSUASION RESEARCH

Torsten Reimer, Christopher Roland, Juan Pablo Loaiza-Ramírez, and Nathanael Johnson

Introduction

The power of speech and the art of oratory have been studied by rhetoricians for the past 2,500 years. With the rise of the social sciences during the last century, social scientists started to systematically study the effects of oratory on a receiver. Empirical studies addressed one central question: Under what conditions does a speech or message have an effect on a receiver? One result of the early empirical studies was puzzling: Research that systematically manipulated various components of messages and the message context indicated that it is not necessarily the strength of the arguments that are used in a speech that have the strongest influence on a receiver.

This puzzle informed an influential research program in social psychology. The heuristic-systematic model (HSM; Chaiken, 1987) and the elaboration-likelihood model (ELM; Petty & Cacioppo, 1986) were developed to explain why strong arguments are not always more convincing than relatively weak arguments. Both models assume that the persuasive effect of a message depends on the receiver and on how the receiver processes a message. The models can be characterized as dual-process models that propose two different information-processing modes. According to both models, argument quality should have an effect on receivers' attitudes or judgments when a message is scrutinized (systematic processing). Conversely, cues such as communicator expertise are assumed to have an impact on a receiver's attitude when the receiver does not scrutinize the provided argument (heuristic processing).