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Proceedings of the Annual Meeting of the Cognitive Science Society

Title

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Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 48(0)

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Publication Date

2026

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Peer reviewed

Gesturing Negation: Integrating Multimodal Information

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Abstract

Human face-to-face communication encompasses more than just words and it has repeatedly been shown that the presence of multimodality (in the form of gesture-speech pairings) can facilitate comprehension under increased processing demands. Despite its frequent use in practically every language in the world, one instance of increased processing demands might be negation—which has repeatedly been shown to elicit processing difficulties. Thus, we investigated the *multimodality for compensation* account, which posits that negation would specifically benefit from the presence of multimodal information. In three preregistered experiments, we compared compatible pairings of gesture and speech to incompatible (Experiment 1) and unimodal ones (Experiments 2 and 3). Contrary to our initial hypothesis, affirmative information seemed to benefit more from the presence of multimodality than negative information. Two possible explanations for the results will be discussed; namely, the proportion of compatibility and the possible processing demands imposed by redundant information from emblematic gestures.