

# Does implicit mentalising involve the representation of others' mental state content? Examining domain-specificity with an adapted Joint Simon task: A registered report

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## Abstract

Implicit mentalising involves the automatic awareness others' perspectives. The Joint Simon task demonstrates this as a Joint Simon Effect (JSE): A spatial compatibility effect is elicited more strongly in a Joint Simon versus an Individual go/no-go task. The JSE may stem from spontaneous action co-representation of a social partner's frame-of-reference, which creates a spatial overlap between stimulus-response location in the Joint (but not Individual) task. However, JSE's domain-specificity is debated. We investigated the potential content of co-representation during task-sharing—typical geometric stimuli were replaced with two coloured sets of animal silhouettes. Each set was assigned to either the participant themselves or their partner. Critically, a surprise image recognition task followed, aiming to identify any partner-driven effects in incidental memory exclusive to the Joint task-sharing condition, versus the Individual condition. Bayesian statistics indicated a robust absence of the key JSE, limiting interpretations of incidental memory findings, with implications regarding JSE's replicability.