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How Partner Schemas Shape the Emergence of Synchrony in Collaborative

Action: A Time-Series Comparison of Human and AI Instructions

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Abstract

Beliefs or assumptions about a partner can either facilitate or hinder cooperation. Synchrony that promotes cooperation is influenced by impressions of the partner. Previous studies have suggested that this emerges with partners for whom relationship formation is expected. However, it remains unclear whether synchrony occurs without such expectations, or how schemas about others influence this process. This study compared interactions with a human partner, for whom both expectations of relationship formation and synchrony abilities were assumed, and with an AI partner, for whom neither was assumed, to examine whether expectations based on human or AI schemas facilitate synchrony. Although synchrony frequency did not differ between conditions, reaction times decreased across trials, with greater reductions in the human condition. These findings suggest that action model adjustment for synchrony occurs even without expectations of relationship formation, whereas expectations of relationship formation may facilitate synchrony more strongly than expectations of a partner's abilities.