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The role of friendship in dynamic group coordination

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Abstract

To fully grasp the underlying behavioral and neural processes of social cognition, it has been argued that interactive experimental paradigms and multi-person neuroimaging are needed. However, few studies have examined group interactions, beyond the dyad, as well as how higher-level social properties map onto coordination dynamics. Here, we investigated the role of friendship in group social coordination, by mapping student social networks, and recruiting groups of participants by manipulating their friendship strength. Participants were tasked with pressing their own individual pressure measuring (force) device to reach a designated target force together in groups of three (two friends, one non-friend), with or without live visual feedback, whilst three-person EEG hyperscanning was employed. Preliminary behavioral results indicate that lack of friendship with the other two participants results in greater force production relative to the other participants. We plan to explore the relationship between the social, behavioral, and neural dynamics.