

It Takes Two to Imitate: Imitation and Anticipation in Social Interaction



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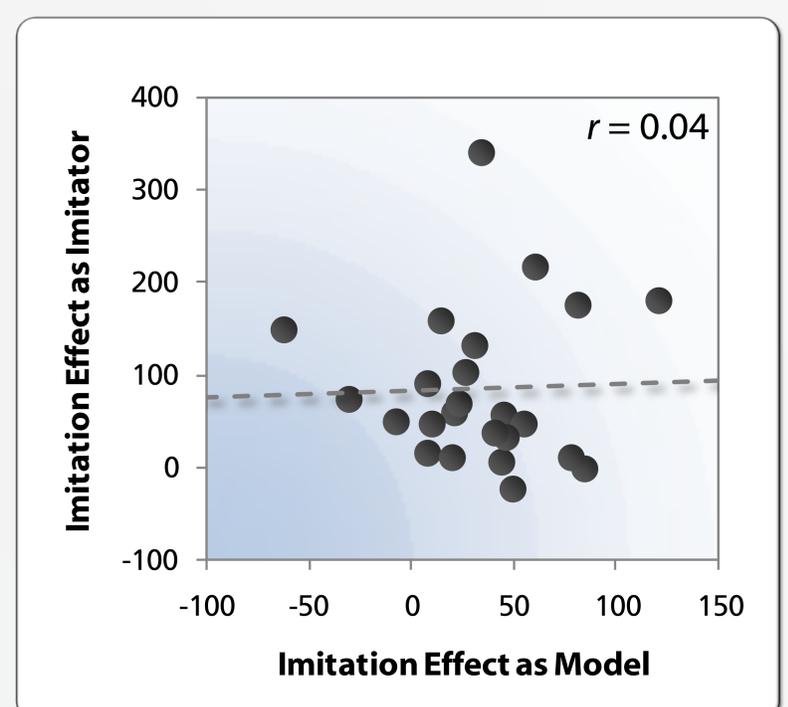
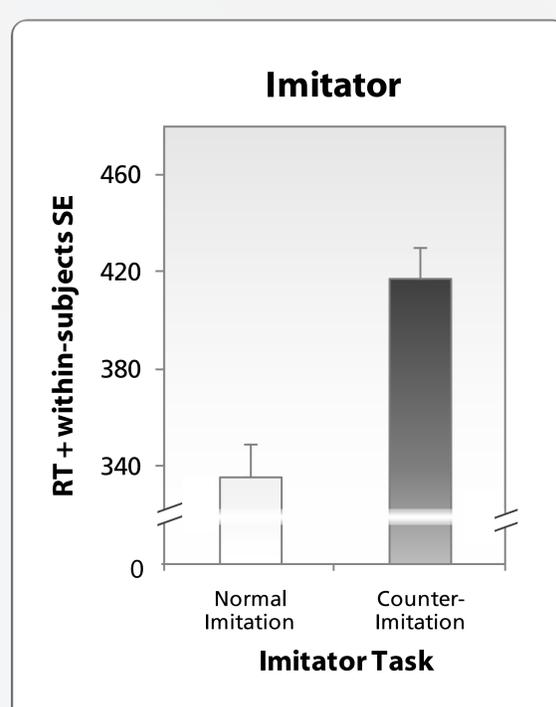
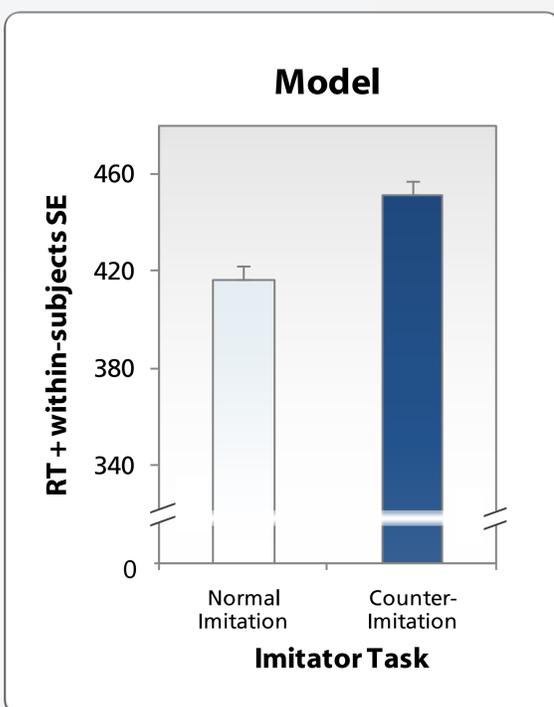
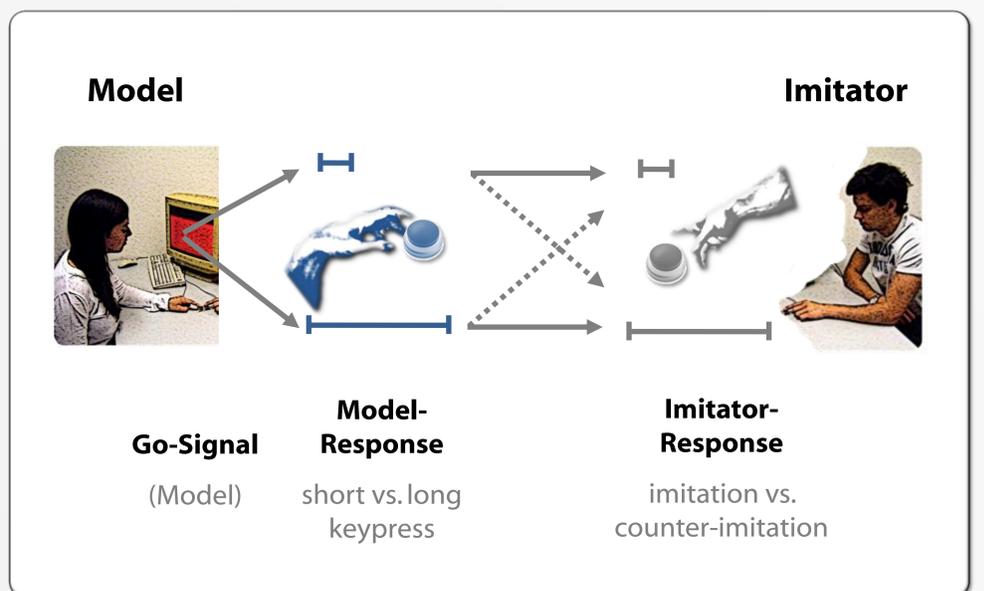
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Background and Method

Imitation is assumed to serve crucial functions in social interaction, including action understanding, empathy, and learning (e.g., Heyes, 2011). Yet all these functions only apply to the imitating observer.

Here, we used a **motor priming paradigm** (Brass et al., 2000) with two participants facing each other. Model actions (short vs. long keypresses) predictably led to imitator actions (**imitation vs. counter-imitation**). Participants ($N = 24$) performed in each role in different experimental blocks. We expected the imitation condition to facilitate responding not only for the imitator but also for the action model.



Conclusions

The present results point toward a distinct function of imitation for the action model: Anticipating to be imitated facilitates the production of one's own motor actions – possibly in a similar way as action effects in the non-social environment do (Kunde, 2001). Specifically, anticipated behavior of social counterparts seems to serve as mental cue to retrieve corresponding motor commands to orchestrate one's own actions.

References

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- Kunde, W. (2001). Response-effect compatibility in manual choice reaction tasks. *Journal of Experimental Psychology: Human Perception and Performance*, *27*, 387-394.