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February 5, 2024

Dr. Stavroula Kousta
Chief Editor
Nature Human Behavior

Dear Dr. Kousta,

This submission contains the manuscript "Interaction structure constrains the emergence of conventions in group communication" which we are submitting to Nature Human Behavior for publication.

The manuscript reports on a series of 3 experiments, including 11 experimental conditions across 1319 participants, where we examined the effects of varying group size and interaction structure on repeated reference games. We manipulated several key constraints on the group's interaction, including the amount of feedback that matchers could give to directors and the availability of peer interaction between matchers. We establish that the patterns of increasing accuracy and increasingly efficient utterances that are the hallmarks of two-player repeated reference games hold for 6-player groups even with limited communication channels. Critically, group size and interaction structure modulate performance: we found that smaller groups and groups with less-constrained interaction structures ("thick channels") showed stronger convergence to group-specific conventions than large groups with constrained interaction structures ("thin channels"), which struggled with convention formation.

We believe this paper will be of broad interest to cognitive scientists.

Researchers with relevant expertise and interest who therefore might be appropriate reviewers include

This manuscript is not under review at any other venue. Please let us know if you need any further information in connection with this submission. We look forward to hearing from you regarding the manuscript!

Sincerely,

Veronica Boyce
Robert Hawkins
Noah D. Goodman
Michael C. Frank