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February 6, 2024

Dr. Stavroula Koustas
Chief Editor
Nature Human Behavior

Dear Dr. Koustas,

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.

How does communication work in large groups? While vast amounts of research addresses communication between dyads, methodological obstacles have mostly kept scientists from experimentally manipulating how larger groups build up common ground. Our manuscript addresses this issue, reporting on a series of 3 experiments with 11 conditions and 1319 participants, where we examined the effects of varying group size and interaction structure on repeated reference games. 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, 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 Si On Yoon, Abdullah Almaatouq, and Riccardo Fusaroli.

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