

Dr. Stavroula Kousta  
Editor, *Nature Human and Behavior*

March 20, 2017

Dear Dr. Kousta,

We are writing to submit our manuscript, "A Quantitative Synthesis of Early Language Acquisition Using Meta-Analysis," for consideration as an Article. In the paper, we present 12 meta-analyses of phenomena in language acquisition, with over 700 effect sizes. Meta-analyses allow researchers to assess the evidential value of a set of studies, as well as to address theoretical questions unanswerable by individual studies alone. While the meta-analytic method has been applied widely to individual hypotheses and theories, no work to date has leveraged this method to synthesize an entire *field* of research. To our knowledge, our report provides the first in-depth meta-analysis across an entire domain of psychological research.

Our synthesis describes a first step towards a quantitative, whole-systems perspective on the empirical landscape of language acquisition research, allowing the researcher to assess the evidential value of the entire field, as well as build theories that take into consideration relationships between multiple skills. The phenomena cover a wide range of skills across the hierarchy of representational levels involved in language learning, from infant-directed speech and word segmentation to gaze following and word recognition.

We believe this work will be of interest to a very broad audience, including researchers interested in assessing the replicability of psychological work as well as those interested in big-picture questions about early language development.

As reviewers, we suggest the following colleagues:

- Henry Wellman, Dept. of Psychology, University of Michigan (hmw@umich.edu): He has published a meta-analysis within developmental psychology, on the topic of theory of mind. He has also published broadly on topics related to cognitive development.
- Jenny Saffran, Dept. of Psychology, University of Wisconsin-Madison (jenny.saffran@wisc.edu): Expert on early language acquisition research.
- Patricia Kuhl, Dept. of Speech & Hearing Sciences, University of Washington (pkkuhl@uw.edu): Expert on early language acquisition research.

Thank you for your consideration and please do not hesitate to contact us with any questions or concerns.

Sincerely,  
Molly Lewis (on behalf of all authors)