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The Editor, *Developmental Science* June 9th, 2021

Dear Editor,

We would like to submit our manuscript, "A longitudinal analysis of the social information in infants' naturalistic visual experience" as a Research Article in *Developmental Science*.

While the field has documented striking changes in the social information that infants' see across development, the generalizability of these findings has been hard to establish due to the significant cost of manual annotations. Here, we analyze the SAYCam dataset—a large, longitudinal dataset of infant egocentric visual experience from 6 to 32 months of age—using an open-source pose detection model (OpenPose) that detects the body, face, and hand key points of all individuals in an image. These detailed, automated annotations allow us to analyze the entirety of the dataset (>40 million frames).

In contrast to prior work, we find a much higher proportion of hands in view than previously reported, suggesting that in-lab vs. at-home experience may have somewhat different social statistics. We also find evidence for substantial variation in the social information in view across different locations (e.g., kitchen vs. living room), with consistent patterns within individual children. Finally, we also find that the faces, hands, and people in the infant view become gradually smaller across development, suggesting that children's evolving mobility may be a driving factor in how they see the faces and hands of their social partners. These findings thus deepen our understanding of changes in the social information available to infants, and call for future work to understand the generalizability of these findings across diverse populations. In service of this goal, we have made all of our data and code publicly accessible.

Thank you for your consideration of this work for publication in *Developmental Science*. Please do not hesitate to contact us for any further information. We look forward to hearing from you.

Sincerely,

Bria L. Long, George Kachergis, Ketan Agrawal, & Michael C. Frank