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Mother-Offspring Proximity Maintenance in Wild Bornean Orangutans (*Pongo pygmaeus wurmbii*)

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With a semi-solitary social organization, interactions between orangutans are infrequent, but still complex. Mother-offspring pairs are the basic social unit in orangutan social organization. The distance between a mother and offspring decreases in the presence of males compared to when the pair is alone or with a non-related female. In order to investigate who is responsible for this change in distance, we collected behavioral data on wild orangutans in Gunung Palung National Park, West Kalimantan, from May 2018-April 2019. We employed the Hinde Index as a measure of proximity maintenance. The Hinde Index is a ratio calculated from the number of approaches and leaves between two individuals. We found that for 97% of days (N=30) the offspring was responsible for proximity maintenance. There was no difference in the Hinde Index when mother-offspring pairs were alone compared to in the presence of a male (N_{alone} =29, N_{male} =10, t = 0.917, df = 14.878, p-value = 0.374). However, controlling for individual variation by analyzing the data on a per follow basis, we found that proximity became more mother-maintained when males were present for 6 out of 7 follows, but this difference was not significant (N=7, t = 0.029, df = 6, p-value = 0.489).

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