Mother knows best, among wild vervet monkeys

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Among vervet monkeys, social learning is strongly influenced by matrilineal family members, according to a study published Apr. 25 in the open access journal *PLoS ONE*.

The authors of the report, led by Erica van de Waal of University of St. Andrews, presented wild vervets with sand-covered grapes and monitored their grape-cleaning behavior to investigate different channels of social learning. Some monkeys cleaned the grapes by rubbing them between their hands or substrate, others peeled the grapes, and some ate the dirty grapes without cleaning them at all. Over time, though, the cleaning behavior converged within matrilines, highlighting the importance of the mother-offspring relationship for social learning.

The experimental design did not allow the researchers to determine if the children were learning from the mother or vice versa, but the authors write that the results suggest that mothers, relative to other dominant individuals, may be particularly strong role models. They also conducted further experiments to show that this is not a strictly genetic effect.

"This result has major implications for the decision rules that underlie social learning and the consequences for the scale on which we may expect to find traditions and cultural evolution in natural populations", says Dr. van de Waal.

More information: van de Waal E, Kru¨ tzen M, Hula J, Goudet J, Bshary R (2012) Similarity in Food Cleaning Techniques within

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Matrilines in Wild Vervet Monkeys. PLoS ONE 7(4): e35694.
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