The King Louie Effect: Overimitation is related to social traits
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Background
Studies of imitation during infancy and childhood have revealed two seemingly contradictory findings: On some tasks, infants and children selectively imitate the actions of others. On other tasks, however, infants and children imitate faithfully, or overimitate, the actions of others, even to the extent of copying unnecessary steps in an action sequence.

Method
**Participants:** 37 infants tested at 12 and 15 months.

**Selective and Faithful imitation:** Adapted from Brugger et al. 2007. Each infant observed 4 trials of a 2-step sequence. For half of the trials the first step was necessary in order to perform the second step. For the other half of the trials the first step was unnecessary to perform the second step.

**Coding**
Videos were coded for first actions copied. Interrater reliability: 96.43% at 12 months and 98.21% at 15 months.

**Results**

**R1.** At both ages infants were significantly more likely to copy the first action in the necessary condition than in the unnecessary condition.

**R2.** Selective imitation significantly decreased from 12 to 15 months. The number of first actions copied in the unnecessary condition increased from 12 to 15 months, $\chi^2(1) = 6.55, p<.05$.

**R3.** Surgency was positively related with the total number of first actions copied at 15 months, $r_{pb}=0.436, p<.05$. A significant difference was found between high surgency infants and low surgency infants.

**R4.** No relation was found between surgency and selective imitation.

**Conclusions**
- The shift from copying selectively to copying faithfully takes place earlier than previously thought, namely between 12 and 15 months, and around the same age at which infants begin to share goals and intentions.
- Some infants are more motivated than others to interact socially with other people and create shared experiences, leading them to copy the actions of others even when those actions are unnecessary.