Rational imitation (Gergely, Bekkering, & Király, 2002)
- infants selectively copy outcomes
- the most effective action is used
- actions that are more effort, more complex, or less effective are replaced

Motor resonance (Paulus, Hunnius, Vissers, & Bekkering, 2011)
- activation of action plans in the infant’s motor repertoire

Infants by 6 months: able to detect goal-directed actions; until 12 months: do not demonstrate rational imitation. (Woodward, 1998; Zmyj, Daum, & Aschersleben, 2009)

These proposals suggest that:
younger infants copy actions, older infants copy outcomes.

Methods
Paradigm adapted from Meltzoff’s (1988) deferred imitation study.
Each of the two objects presented were paired with a specific action.

For the wooden object the experimenter performed a pointing action to reach the outcome: make the vertical part touch the horizontal one.

For the plastic egg the experimenter used a pincer grip to hold the egg and reach the outcome: shake it to make it sound.

Coding definitions sensitive to different types of infants’ actions:

<table>
<thead>
<tr>
<th>Plastic egg</th>
<th>Wooden object</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same action as experimenter</td>
<td>Pincer grip</td>
</tr>
<tr>
<td>Easier action</td>
<td>Partial pincer grip</td>
</tr>
<tr>
<td>Very easy action</td>
<td>Palmar grasp</td>
</tr>
<tr>
<td>Outcome</td>
<td>Shaking</td>
</tr>
</tbody>
</table>

Results

8-month-olds copy the outcome more often than the specific action

What did they copy?

Even if the actions performed by the experimenter were part of the infants’ motor repertoire, they used a much simpler version

Which action did they use to copy the outcome?