Investigating the development of visual perspective representations in rhesus monkey (Macaca mulatta) infants
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Introduction

- Human children undergo robust ontogenetic shifts in theory of mind capabilities. [1]

_Are humans alone in these developmental shifts in theory of mind, or do other primates show similar changes across infancy?_

- Adult rhesus macaques can represent what others see and know despite failures on false belief tasks. [2,3,4,5]

_Do rhesus monkeys undergo developmental shifts in their understanding of seeing throughout infancy and juvenile years?_

Methods

Subjects: n=240, between 0-60 months old

<table>
<thead>
<tr>
<th>0 – 12 months</th>
<th>12 – 36 months</th>
<th>36 – 60 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected</td>
<td>Unexpected</td>
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</table>

1: Familiarization to reach
2: Familiarization to lemon
3: Test trial, two conditions

Results

- While infants appear to show a different pattern than juvenile rhesus monkeys, observed group and within-cohort differences are non-significant.

<table>
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| Analysis:     | Welch Two Sampled T-test, within cohort and between conditions
| 0-12:         | t(79)=1.6741, p=0.09 n.s. |
| 12-36:        | t(79)=-1.1311, p=0.26 n.s. |
| 36-60:        | t(79)=-0.5006, p=0.61 n.s. |

Conclusions

- Adult rhesus macaques can represent what others see and know despite failures on false belief tasks. [2,3,4,5]

_Do rhesus monkeys undergo developmental shifts in their understanding of seeing throughout infancy and juvenile years?_

**References**


Expected

Unexpected

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