The Significance of Sleep In Infants
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Introduction
-Sleep is essential to sustaining human life.
-It is especially essential, as it serves as a supporting agent in motor development and the consolidation of new memories.
The two major phases of sleep are rapid eye movement (REM) and non-rapid eye movement (non-REM).

Question
How is infant sleep affected by the motor skill acquisition of learning to sit?

Methods
-A commercial baby camera known as Nanit was distributed to all participants.
-Data was recorded the day before the motor milestone acquisition, the day of, and the day after.
-Data was coded with a program known as Datavyu and reliability coded for validity by a different coder within the lab.

Results
-The sample size was too small for inferential statistics.

REM vs. Non-REM

<table>
<thead>
<tr>
<th>Subject</th>
<th>Gender</th>
<th>Age at sit</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>F</td>
<td>165</td>
</tr>
<tr>
<td>8</td>
<td>F</td>
<td>194</td>
</tr>
<tr>
<td>9</td>
<td>M</td>
<td>216</td>
</tr>
<tr>
<td>12</td>
<td>F</td>
<td>187</td>
</tr>
<tr>
<td>23</td>
<td>M</td>
<td>187</td>
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</tbody>
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REb is considered to be the more active sleep.
Typically encompasses small movements, sometimes paired with vocalization.
Last a minimum of 5 minutes.

Non-REM is considered to be a more "calm" sleep.
Movements are minimum but are not unexpected.
Last a minimum of 10 minutes.

Conclusion
-Non-REM: The highest duration of time spent in non-REM is on the night before sitting onset. The duration of time takes a deep decline as we approach the night of onset. And during the night after, we see the duration of time in non-REM increase but not to its original amount.
-REM: Throughout the graph we can see an evident increase across all three nights. The most prominent increase is during the day before and during the onset.

Significance
-The data supports the theory that REM is closely associated with changes in the brain, perhaps due to memory consolidation (Cao et al., 2020).
-In other words, an increase in REM should be closely associated with motor skill acquisition such as sitting because the skill is new.
-This is evident in the nights during and after the onset.

Participants

Acknowledgements
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