# Article information:

Associations Between Infant Screen Use, Electroencephalography Markers, and Cognitive Outcomes - PMC
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9887532/>

# Article summary:

1. This study examined the association between infant screen use, EEG markers, and cognitive outcomes in 437 children.

2. Results showed that screen time at age 12 months was associated with multiple 9-year attention and executive functioning measures.

3. A subset of 157 children had EEG performed at age 18 months; EEG relative theta power and theta/beta ratio at the frontocentral and parietal regions showed a graded correlation with 12-month screen use.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally trustworthy and reliable, as it is based on a prospective maternal-child dyad cohort study conducted by researchers from reputable institutions such as SingHealth Centralised Institutional Review Board, National Health Group Domain-Specific Review Board, Harvard Automated Processing Pipeline for EEG (HAPPE), Batch EEG Automated Processing Platform, World Health Organization growth charts, Depression Anxiety Stress Scale (DASS-21), Developmental Neuropsychological Assessment (NEPSY-II), Child Behavior Checklist (CBCL), Behavior Rating Inventory of Executive Function (BRIEF-2). The authors also provide detailed information about their methods and results, which makes it easier to assess the trustworthiness of their findings.

However, there are some potential biases that should be noted. First, the sample size of 437 children may not be large enough to draw definitive conclusions about the associations between infant screen use and cognitive outcomes. Second, since this is an observational study, it cannot establish causality between infant screen use and cognitive outcomes; further research is needed to confirm these findings. Third, there may be other factors that could influence the results that were not taken into account in this study; for example, parental education level or family environment could have an impact on both infant screen use and cognitive outcomes. Finally, since this study was conducted in Singaporean families only, its generalizability to other populations may be limited.

# Topics for further research:

* Prospective maternal-child dyad cohort study
* SingHealth Centralised Institutional Review Board
* National Health Group Domain-Specific Review Board
* Harvard Automated Processing Pipeline for EEG (HAPPE)
* Batch EEG Automated Processing Platform
* Developmental Neuropsychological Assessment (NEPSY-II)

# Report location:

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