







## **SCREEN ORIGINS**

'There's good and bad': Smartphone and tablet computer use and prenatal attachment

How and why devices are used in pregnancy can influence feelings of closeness with baby Seeking pregnancy information online and via Apps can enhance bond with baby

However, device use can increase worry and distract parents when used without a clear purpose

## **IN A NUTSHELL**

The findings indicate that using devices as a tool for specific pregnancy purposes may serve to enhance prenatal attachment, whereas general device use may disrupt connectedness to the foetus.

The relationship between a parent and their baby during pregnancy (prenatal attachment) is important, as feeling close to the baby in pregnancy typically leads to a better parent-child relationship after birth, as well as better outcomes in the child's future. As devices, such as smartphones and tablet computers, are increasingly being used by families, this study aimed to explore how device use influences parents' thoughts, feelings and behaviours towards their baby in pregnancy. Interviews of 27 pregnant women were conducted between July-September 2019<sup>1</sup>.

25%

perceived negative influences of device on prenatal attachment due to:

- o distracting them from thinking about baby when used without a clear purpose, and
- o increasing anxiety and fear when reading adverse pregnancy-related outcomes.
  - "You have such easy access to all these... different illnesses and things that can go wrong, that I wouldn't have even known about if I hadn't been able to get online."

50%

perceived positive influences of device use on prenatal attachment due to:

- o accessing pregnancy-related Apps and online resources to better picture their baby in utero, and
- o playing music for baby which enhanced feelings of closeness and connection.
  - "I had the baby Apps on my phone so I'd be able to track...developmentally what stage she was at in my stomach. So that made me feel a bit closer."

## THE EVIDENCE

This data was collected as part of the ORIGINS nested sub-project SCREEN ORIGINS. Interviewed participants were mothers aged between 25-40 years (mean 33 years), with 60% having completed a bachelor or postgraduate qualification. The majority (85%) of women were employed and 55% were having their first child.

The ORIGINS Project is a prospective, longitudinal birth cohort, recruiting 10,000 pregnant women and their partners antenatally and following each family over a 5-year period. Comprehensive data and biological samples are collected from the participants at up to 15 different time points, from the first antenatal clinic visit. ORIGINS is creating a major research platform, consisting of an extensive databank and biobank<sup>2</sup>.

## **IMPACT**

THESE
FINDINGS WILL
INFORM
GUIDELINES ON
DEVICE USE
DURING
PREGNANCY TO
OPTIMISE
PARENT-CHILD
ATTACHMENT

- 1. Hood, R., Zabatiero, J., Silva, D., Zubrick, S. R., & Straker, L. (2022). 'There's good and bad': Parent perspectives on the influence of the mobile touch screen device use on prenatal attachment. *Ergonomics*. https://doi.org/10.1080/00140139.2022.2041734
- Silva, D. T., Hagemann. E., Davis, J. A., Gibson, L. Y., Srinivasjois, R., Palmer, D. J., Colvin, L., Tan, J., & Prescott, S. (2020). Introducing the ORIGINS project: A community-based interventional birth cohort. *Reviews on Environmental Health*, 35(3), 281-293. https://doi.org/10.1515/reveh-2020-0057

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