

# IS EARLY MOBILE PHONE OWNERSHIP SHAPING CHILD DEVELOPMENT? A LONGITUDINAL STUDY OF WELLBEING AMONG ADOLESCENT GIRLS AND BOYS IN IRELAND

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# Is Early Mobile Phone Ownership Shaping Child Development? A longitudinal study of wellbeing among adolescent girls and boys in Ireland<sup>1</sup>

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## INTRODUCTION

Children are increasingly getting access to mobile phones at young ages, and commentators argue that these trends are having an adverse impact on children's wellbeing and development. However, the evidence underpinning these claims is often limited, with a lack of robust analysis and data. The ubiquity of mobile phone technology allows it to have a potentially unprecedented impact on children's development. It can easily cross into school and home settings; it is difficult for parents and teachers to supervise and monitor usage, as it accompanies the child throughout the day; and, consequently, the frequency of engagement with mobile phone technology is likely to be far higher for than other forms of technology. We use detailed data on 8,500 children in Ireland to examine whether there is an association between early mobile phone ownership and socio-emotional outcomes.

How does mobile phone ownership impact on children? Earlier research from other countries, while limited in scale and scope, has suggested that mobile phone use may have negative effects on interpersonal relationships, wider social and leisure activities and lead to excessive or problematic phone usage for a minority of children. Previous research has also shown that children in Ireland who have mobile phones at the age of 9 fare less well in terms of their academic achievement in both reading and maths as they move into adolescence. But does early phone ownership have costs in terms of other child outcomes?

## DATA AND METHODS

Using data on 8,500 9-year-old children in Ireland from Growing Up in Ireland, we examine how children with longer or shorter periods of mobile phone ownership score in terms of their wellbeing. The children were first surveyed in 2007/2008, and followed up again at the age of 13 in 2011/2012. At 9 years, 40% of children state that they own a mobile phone. Given the date of the first survey, most of these phones were probably relatively basic

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<sup>1</sup> This Bulletin summarises the findings from Dempsey, S., Lyons, S. and McCoy S., 2020, Early Mobile Phone Ownership: Influencing the wellbeing of girls and boys in Ireland?, *Journal of Children and Media*, online 10 February 2020, <https://doi.org/10.1080/17482798.2020.1725902>. This research was supported by the ESRI's Programme of Research in Communications, which is in turn funded by contributions from Ireland's Department of Communications, Climate Action and Environment and the Commission on Communications Regulation (ComReg).

models rather than smart phones. To examine socio-emotional development, the analysis focused on the Piers-Harris “self-concept” scale. This scale captures how children feel about themselves in areas like physical appearance, anxiety, behaviour, happiness and popularity. We also examined the Strengths and Difficulties Questionnaire (SDQ), a measure of psychological adjustment, reported by parents for each child. This measure includes ratings across areas like emotional symptoms, conduct, hyperactivity and peer relationships. Given how well each child scored across each of these domains at age 9, we can see if those who received phones later than age 9 fared better or worse at age 13 than those who already had phones at age 9. Children’s access to mobile phones is also influenced by their family and school characteristics, with more highly educated parents and higher income families less likely to provide phones at this young age. Children attending more socially disadvantaged schools are more likely to have phones, all else being equal. We therefore take account of these other characteristics of children who receive phones in looking at how early ownership shapes children’s socio-emotional development. We are cautious in making claims about causality, but the use of rich longitudinal data means the analysis overcomes many of the limitations of earlier research.

## **RESULTS**

On the overall measures of self-concept and psychological adjustment, we find no relationship between early mobile phone ownership and children’s socio-emotional development. However, there is evidence that girls who receive mobile phones earlier fare less well in terms of their behavioural adjustment and their academic self-concept. These findings suggest that girls may be aware of a negative impact of mobile phone usage on their cognitive skills development, but boys are not. It may also reflect differences in the way in which girls and boys use mobile phones, and a potentially more detrimental impact of excessive or problematic mobile phone use on girls’ wellbeing. While mobile phone ownership creates greater opportunities for peer interaction, perhaps it also creates greater opportunities for peer comparison, which may impact negatively on girls’ development. The challenge for policymakers and society more generally is how to maximise the potential of digital technologies for education and other purposes, while mitigating any negative effects from access, particularly for children.

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