Digital skills, risks and wellbeing among European children: Report on (f)actors that explain online acquisition, cognitive, physical, psychological and social wellbeing, and the online resilience of children and young people

# Details

## Year

2020

## DOI

https://doi.org/10.5281/zenodo.5226902

## Issued

2020

## Language

English

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## Type

Report and working paper

## Topics

* Social mediation
* Internet usage, practices and engagement
* Literacy and skills
* Wellbeing
* Risks and harms
* Access, inequalities and vulnerabilities

## Sample

12- to 16-year-olds (n=13,138, 50% female, mean age = 13.93, SD = 1.37) from 17 European countries (part of the EU Kids Online 2020 dataset)

## Implications For Stakeholders About

Researchers

# Abstract

This report is based on further analysis of the EU Kids Online data collected across 19 European countries in 2017–19 (Smahel et al., 2020), and aims to identify the antecedents and consequences of digital skills among children. More specifically, in Section 3, "The antecedents of digital skills", we tested the relationship between individual characteristics (age and gender), social characteristics (socioeconomic status [SES] and parental mediation), country characteristics, information and communications technology (ICT) use and skills. In Section 4, "The consequences of digital skills", we examined the relations between skills, risks and opportunities. The report is aimed at outlining gaps in the evidence base and in our current knowledge of digital skills acquisition, in order to inform future research in this area.

# Outcome

Comparing children’s digital skills across Europe
- First, our findings do not indicate clear-cut differences with respect to the North–South digital divide. Instead, country differences in children’s digital skills were small. On the one hand, children from Southern European countries (France, Spain and Italy) reported the lowest scores of digital skills, while on the other hand, Serbian and Portuguese children outscored their peers in Northern European countries.
- Gender differences are only statistically significant in four countries – Belgium (Flanders), the Czech Republic, Norway and Serbia – where boys reported higher levels of digital skills than girls. While our findings are consistent with previous research showing that boys use technology more and thus have more opportunities to develop related skills, we should not underestimate that our analysis is based on self-reported skills. It may well be the case that boys tend to overestimate their abilities with digital technology and the internet, echoing a common-sense belief that boys are more naturally inclined than girls to like and be better at using technology.
- In most of the countries, except Belgium (Flanders), older children reported higher levels of skills than younger children.
Antecedents of digital skills
- The strongest and most common predictors of digital skills across the countries were self-efficacy, number of online activities children engage in, preference for online social interactions, and feeling safe on the internet.
- Restrictive parental mediation is also significant in all the countries, but it predicts digital skills negatively everywhere. In other words, when parents limit the time children spend on the internet, and the activities they do online, children score lower on digital skills. Perhaps surprisingly, instead, the positive influence of active parental mediation on children’s digital skills is small.
- Children who engage in more online activities – including communication, entertainment, education, etc. – also seem to develop more skills. In fact, the number of online activities predicted digital skills positively in all the countries except for Poland.
- Self-efficacy – measured by children’s confidence in their ability to solve problems in daily life – influences digital skills in all the countries to some extent, although the reasons why may vary. On the one hand, this finding suggests that when children feel self-confident, this may positively reflect on their digital abilities. On the other hand, it may simply mean that more self-confident children tend to positively rate their digital skills.
- While the relationship between digital skills and children’s online activities, or the practices of parental mediation they receive, has been investigated in prior studies, we also explored whether preference for online social interaction (POSI) and feeling safe on the internet influence the acquisition of digital skills.
- POSI is a positive predictor, suggesting that children who find it easier to express themselves online may actually benefit from this usage to develop skills relevant to the digital environment they feel more at ease in.
- Feeling safe online is a positive predictor in all the countries except for France, Italy and Slovakia. It can be argued that the more children familiarise themselves with the online environment and the more they feel safe online, the better knowledge and understanding of the internet they would gain, supporting their acquisition of digital skills.
- Other variables usually considered in research on the antecedents of digital skills among children, such as age, gender, average time spent online on a weekday and SES, do not predict digital skills equally across countries, and nor are these relationships consistently statistically significant.
Consequences of digital skills
- Looking at the association between specific types of digital skills (including operational, informational, social and content creation skills) and digital engagement, online information-seeking activities are significantly associated with information navigation skills, emotional problems, active parental mediation and sensation-seeking.
- Communication and other social activities are, in turn, mostly associated with restrictive parental mediation (negatively), sensation-seeking and informational digital skills.
- Social digital skills are not statistically significant predictors of online communication activities in most of the countries.
- Higher levels of digital skills are associated with more exposure to risky and potentially harmful online content, including racist and discriminatory content, self-harm and pro-anorexia content, etc. This suggests that the more skilled children who explore the internet to a greater extent may be more likely to encounter risks. However, digital skills can also help children prevent risks from translating into harm.
- Digital skills also shape the relationship between emotional problems and exposure to potentially harmful online content: when children who suffer from emotional problems also have higher digital skills, they are more likely to be exposed to potentially harmful online content. Digital skills, in other words, increase the likelihood that children with emotional problems encounter risky content online.