



Children's data and privacy online Growing up in a digital age

Sonia Livingstone, Mariya Stoilova and Rishita Nandagiri

Department of Media and Communications

London School of Economics and Political Science

@Livingstone_S @Mariya_Stoilova @Rishie_

#ChildPrivacyOnline www.myprivacy.uk



Growing up in a digital age means . . .

- Encountering continual technological innovation which brings new risks and opportunities, and which is becoming ever more complex
- Being (often) pioneers of the new, ready to learn and experiment, often ahead of parents and other adults, but still concerned about privacy

Lots of things now, you can't get any further without giving your information. Like you don't really get a choice."

(Boy, Y9, Scotland)

I think it's all really overwhelming when it comes to things like the internet."

(Girl, Y9, Wales)





- Privacy is "neither a right to secrecy nor a right to control, but a right to appropriate flow of personal information" (Helen Nissenbaum)
- Privacy is both a means and an end, valued in itself and also vital for autonomy, identity, security, participation and wellbeing
- We exercise privacy within specific contexts for action and interaction, by establishing norms for visibility, surveillance, consent and redress
- Privacy is inherently relational and, so, often contested and unequal in practice among individuals and between individuals and institutions

In an age of datafication, privacy is being reconfigured – in its meaning, management and consequences

Insofar as privacy is managed through data protection regulation . . .

- Achieving a holistic approach to children's "best interests" depends on managing the balance between protection and participation online
- Challenges of age-verification (who is a child and how old?) impede efforts to respect children's "evolving capacity"
- Institutional and commercial data protection regimes may enable or infringe privacy when systems work as intended, also infringing it when breaches occur

 Research on children's data and privacy online must draw on expertise about (i) childhood and child development, (ii) law and regulation and (iii) technological innovation, design and markets



Since children are little consulted about data and privacy online, we ask:

- How do children understand, value and negotiate their privacy online?
- What capabilities or vulnerabilities shape children's navigation of the digital environment?
- What evidence gaps regarding children's data and privacy online impede the development of policy and practice?
- What are the implications of children's understanding and practices for the realisation of their rights by relevant stakeholders?



Our approach



We mapped the data ecology in terms of three privacy contexts, each prioritising one of three types of data

Interpersonal privacy

Data given

Data 'given off' (observed)

Inferences (by others)

Institutional privacy

Data given

Data traces (records)

Inferred data (analytics)

Commercial privacy

Data given

Data traces (metadata)

Inferred data (profiling)

Then we conducted a systematic mapping of the available evidence

| | Interpersonal privacy | Institutional and commercial privacy |
|--------------------------|---|--|
| 5- to 7 years (little | Developing sense of ownership, agency and fairness | Broadly trusting of everyone, with low risk awareness |
| evidence) | Poor at following rules, keeping secrets, anticipating consequences | Few privacy strategies (close the app, call a parent) |
| 8- to 11 years | Some understanding of risks but struggle to identify them in practice | Gaps in ability to decide what to trust, to identify adverts or grasp T&Cs |
| (some evidence) | Generally trusting but rule- following not always internalised | Interactive learning helps awareness and practice |
| 12- to 17 years | Online - a valued personal space yet may turn to parents for help | Privacy tactics for identity management but not for data flows |
| (most evidence) | Weigh risks, but influenced by immediate benefits | Aware of profiling + breaches, but low efficacy, low concern for the future |

Our child-centred qualitative methods

- A series of workshop methods were developed, piloted, revised and conducted in schools in London, Essex, the Midlands, Wales, Scotland
- 28 mixed-gender focus groups were held, lasting 173 minutes on average, with 169 children aged 11-12 (Year 7), 13-14 (Year 9) and 15-16 (Year 11)
- We also held two focus groups and two interviews with teachers, one focus group with parents and 15 childparent paired interviews





Focus group activities included . . .

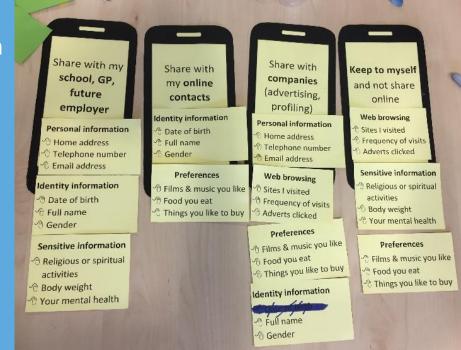
1. What apps and sites did you use last week?



2. Have you heard this word? (introduced one by one)



3. Who can see / who do you share your data with?



Our findings



Children primarily engage with apps and services for the general public



Whatever their actions, they certainly care about their privacy online

all the kids nant prevacy

gove tun to guess Me.

How can 1 have better pring than I have now? things about Must 1 stop using social media

Where is my data stored

Keep my Info Private

Information should be private to you only.

Children are struggling to grasp the relation between privacy and data

- At first they thought we were asking about e-safety though they have heard of Cambridge Analytica and data breaches, so they know there's more to it
- They sense or are working out that everything they do online may be tracked and recorded for whatever purposes – and they are outraged!

Terminology misleads – they must give 'consent'; businesses want their personal data; what's deleted isn't gone; private means friends can't see but others can!



But as we get older, the app stuff gets old as well, so no one will really use it [our data].

There's probably going to be new social apps, and then people will stop using the old ones.

Why keep irrelevant old data?

I think if it stayed on there for longer than two years, I think it should just come off because there's no point.

Well, certain things can get, like, dated over time.

It matters that children first learn about interpersonal privacy

Extending interpersonal understandings to institutional and commercial contexts leads to misunderstandings:

- They assimilate talk of data to familiar e-safety messages, not grasping the institutional and commercial motivates behind today's complex data ecology
- Children talk of "the people" at Instagram, or a friend's father in the tech industry, assuming the company will act as would someone they know
- Because they are offended that "others" collect their "private" data, they
 assume that those others would feel it improper to keep or share their data
- They have learned that they are unimportant children in whom random adults show little interest, so they assume their data is equally unimportant
- They expect the tactics, workarounds and deceptions which protect their privacy from friends or parents also to work with companies (e.g. giving a false name or age, or searching "incognito" or switching devices)

When you put 'other' it makes it hard for them to realise who you actually are. If you put 'male' you're halving the probability they can find it's you.

If I'm trying out a site but I think it's dodgy, then I put a random name in.

Privacy tactics are common

I check on Snapchat if I'm on Ghost Mode or not...
And on maps, I sometimes check that people can't see if I'm at home.

I have two accounts.
One's my personal account where it's on private. I have another account where it's
Open.

Children focus on data they know they give, not that taken or inferred

| The internet thinks I am older am. It also thinks I am called am not (sometimes) That doesn't it know about you? What way School I go too Where my family live. | d Something | |
|--|-------------|-----------------------|
| am not (sometimes) | d Something | |
| that descrit is know about you? | | |
| That doesn't it know about you? What Way School I go too There my family live | | |
| What why School I go too There my family I'v | | |
| What My School I go too | | AND STREET AND STREET |
| O TO CIVE. | | X |
| Nhat I am interested | | |
| | | |

Children delight in their agency but are reluctantly aware of their limits

- Their confidence is grounded in trusted social relationships they are figuring out the digital world with friends, learning from parents, school, the news
- They are highly moral they talk of what's fair, what's right, and they protest at business practices which use their personal data in unaccountable ways
- But at a certain point in each focus group, children recognised their powerlessness; and then their talk became swiftly dystopian



Companies shouldn't really be poking through your contacts. Because there might be some sensitive information in there.

I just don't want anyone else to have access to what I'm doing with my computer. It seems weird and wrong.

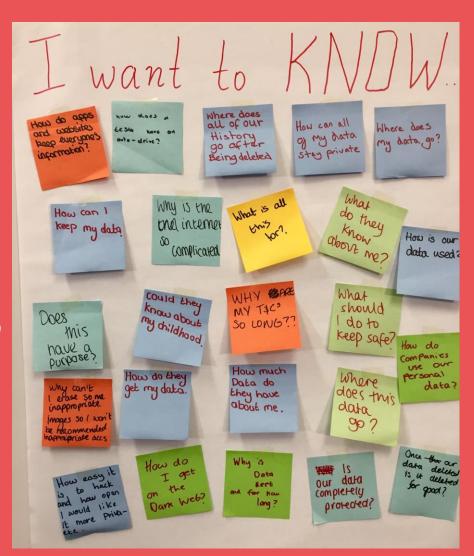
It's none of their business!

Your information is specifically yours. Like your full name, mental health ... so you should be able to choose who knows and who doesn't.

I don't think it's right, you did something and then regretted it ... it's unfair to be kept against you.

Understanding grows with experience but there's no "magic" age of capacity

- We met knowledgeable 11 year olds and confused 16 year olds, for understanding depends on many factors beyond age
- Grasping "where your data goes" is a moving target because technology, regulation and social practices all evolve and innovate
- Even by 16 years old, few could map the global data ecology beyond the screen or "behind the scenes"
- Still, there are broad trends younger children are more trusting, older ones are becoming cynical



If you share where you go regularly, people could find out where you do go ...they could try and find you and wait for you there.

If you try to apply for a job and you put something on the internet and it comes back.

Only esafety risks seem really truly real

If you click on the location of the image... you can see exactly where they were when they took this photo. It's really, really creepy

How's somebody going to use your dental records against you? Fingerprints as well...

Parents are confused and concerned

Although children often turn to their parents for guidance about their privacy online, parents feel ill-prepared: most trust the school and government, fewer trust companies

"What are these big corporations going to do with all that data and how are they going to manipulate me or anyone, or anyone else's life in the future? I can't really educate my child on that because we don't know."

"There are some parents who don't realise the impact of this and other parents who just don't care. As soon as you put it in the hands of parents you then create an imbalance."

"Our kids are the sort of guinea pig generation. We don't know what the consequences are going to be."

"What does the government do with SATS results and all the data that the teachers are collecting. Where does it go, where is it flogged onto."

"They aren't all going to be responsible, and why should they be? They are kids. They should be allowed to have innocence ..."



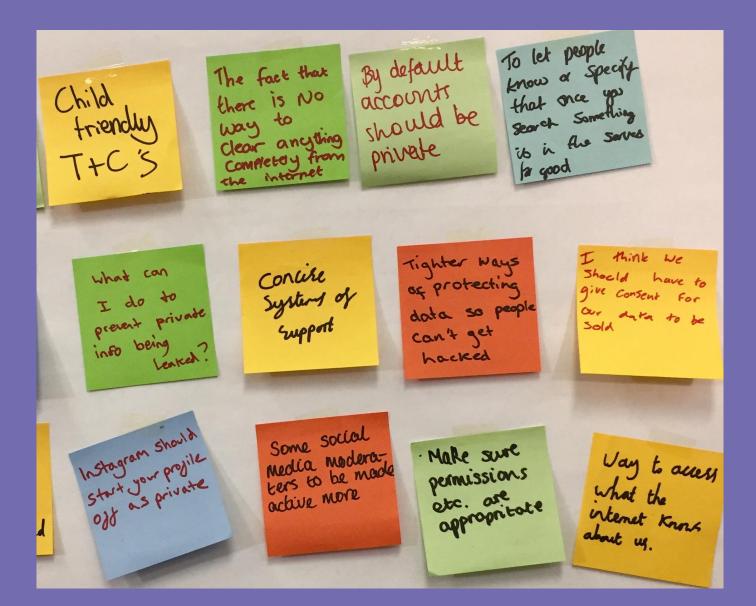
Teachers focus mostly on what works in teaching, and safeguarding

- Keeping up with students, and limiting their responsibilities for life beyond school, is a priority: "We're playing catch up because they're so advanced."
- Accounts of digital literacy generally positioned privacy within e-safety (i.e. in interpersonal terms); little on the data economy or digital infrastructure.
- Lots of talk about GDPR-compliance, but trust too: "I would've thought the fact that it's a school-based software, this is all been properly regulated."
- More broadly, teachers are as concerned as any: "In terms of companies collecting data on students, that for me is a massive grey area."

Implications for children's privacy



Children want a lot of changes . . .



How can stakeholders protect children's data and privacy online?

- Distinguish privacy in interpersonal, institutional and commercial contexts,
 and ensure policies are context-appropriate and clearly comprehensible
- Child-rights-respecting policies must promote autonomy, balance protection and participation, and prevent discrimination and other harms
- Sustained media (data, digital, critical) literacy is vital from an early age in school curricula and teacher training - but it's not a "silver bullet" solution
- Support children by supporting parents, schools and the organisations who work with families and vulnerable children
- Regulate for privacy-by-design and by-default, and provide child-friendly age-appropriate mechanisms for protection, complaint and remedy
- Sustain a robust evidence base to fill key gaps (e.g. include younger children), evaluate the effectiveness of interventions, and consult children!

See our toolkit at www.myprivacy.uk

- This is designed for young people aged 11-16 years old
- The aim is to improve young people's understanding of their data and privacy online
- The resources meet key criteria (freely available, good quality, no installation or sign up)
- They were reviewed by our youth juries (years 8 & 10)
- The toolkit includes guidance and resources for parents and educators



Online privacy: what's the issue? We share a lot about ourselves online, why does it matter?



Who has my data? Sometimes apps collect information that's unexpected. See what apps collect about you and how.



Who is tracking me? Who gets your data and how do they use it?



What are my rights? As a child, you are entitled to extra protection. See what rights you have.



What can go wrong? Things might sometimes go in unexpected directions. See what might go wrong - now or in the future.



What do children ask for? We spoke to many children across the country. See what questions and suggestions they have.



How to protect my privacy? There are a lot of things you can do to protect your privacy. Find out more.



Where to get help? This is where you can report problems and seek help from trained professionals.



Watch and play Privacy can be fun! Watch some videos and play games.





Read more about our research at

www.lse.ac.uk/media-and-communications/research/research-projects/childprivacyonline

@Livingstone_S @Mariya_Stoilova @Rishie_
#ChildPrivacyOnline www.myprivacy.uk







