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ICCECIP 2023 CONFERENCE

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5th International Conference on Central European Critical Infrastructure Protection

How digital growth affected school-aged children's online safety?

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What is digital growth?
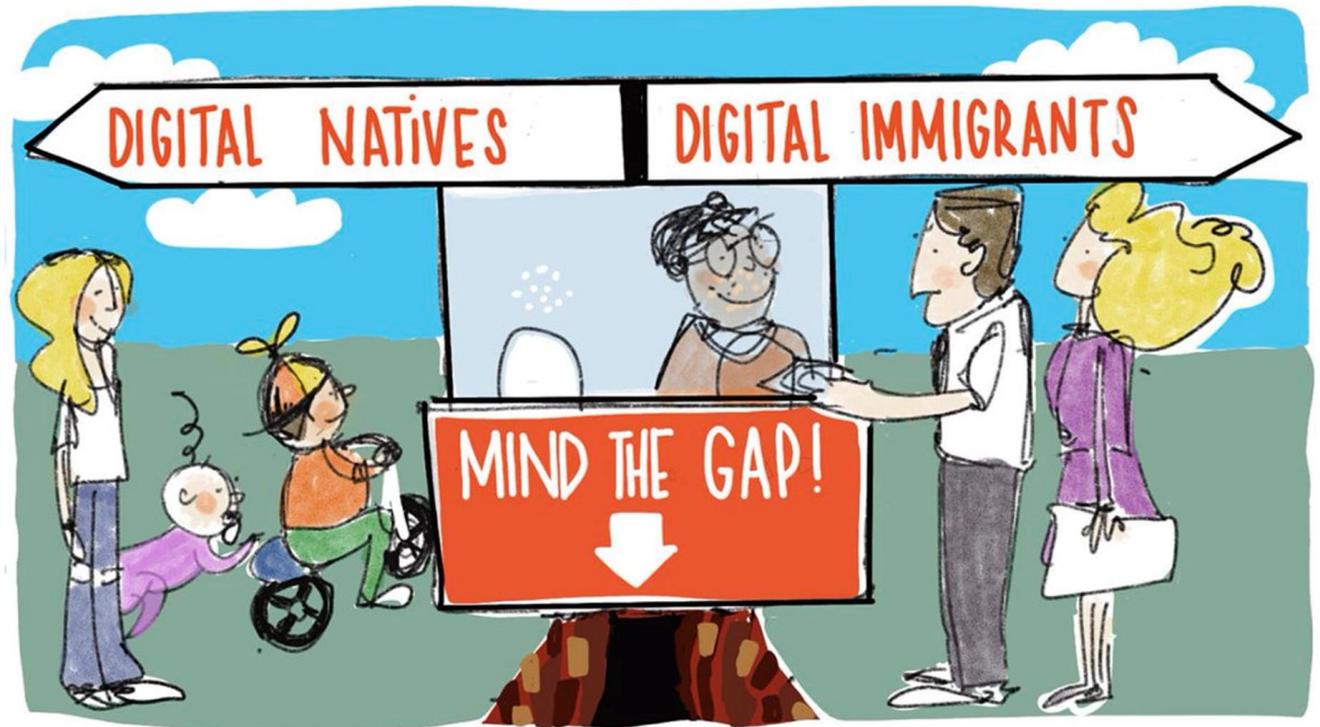
Impact

- increasing accessibility of digital devices and the internet
- more time in front of the screen
- less parental supervision
- growing online threats

Problem of digital natives, digital immigrants by Marc Prensky (2001)

Threats in the 8-16 age group

- inappropriate or dangerous content
- cyberbullying (suicide)
- online predators (online grooming)
- child sexual exploitation (CSE)
- phising/data theft
- online-based shaming (sexting)
- concerns about children's privacy
- misinformation and radicalization
- potential for addiction
- mental or physical health problems (sleep deprivation, TMI – Too Much Information)

Poll on Hungarian children's sources of information on cyber security in 2020

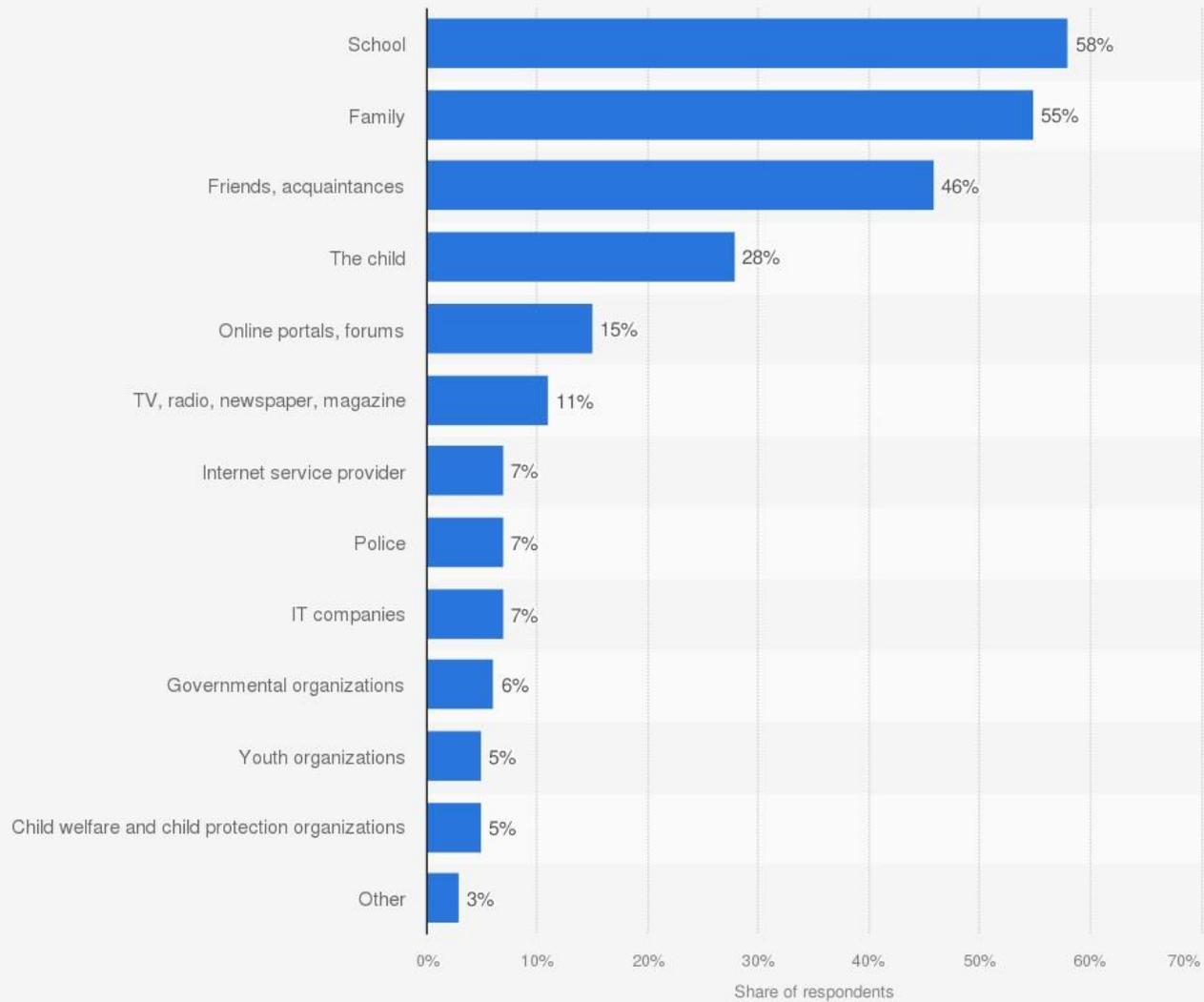| Source	Share of respondents
Parents	82%
School	79%
Friends, classmates	48%
Other relatives	35%
Online portals, forums	10%
TV, radio, newspaper, magazine	10%
Police	9%
IT companies	6%
Internet service provider	5%
Governmental organizations	5%
Youth organizations	5%
Child welfare and child protection organizations	5%
Other	4%

Share of respondents

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„There are two gifts we should have given to our children: one is roots, and the other is wings."

Johann Wolfgang von Goethe

Poll on Hungarian parents' sources of information on cyber security in 2020

Source	Share of respondents
School	58%
Family	55%
Friends, acquaintances	46%
The child	28%
Online portals, forums	15%
TV, radio, newspaper, magazine	11%
Internet service provider	7%
Police	7%
IT companies	7%
Governmental organizations	6%
Youth organizations	5%
Child welfare and child protection organizations	5%
Other	3%

Share of respondents

Sources
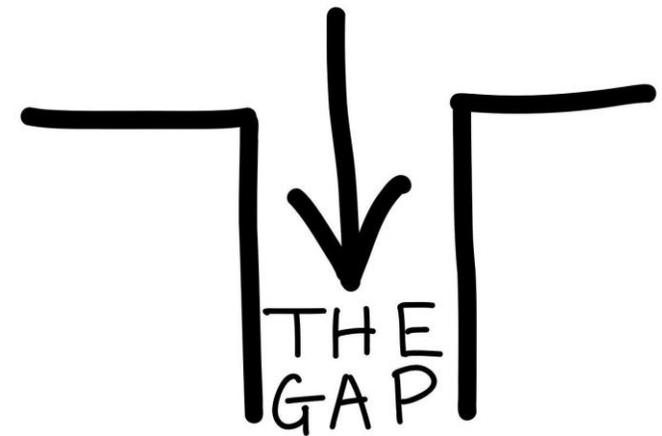National Media and Infocommunications Authority
(Hungary); Psyma
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Additional Information:
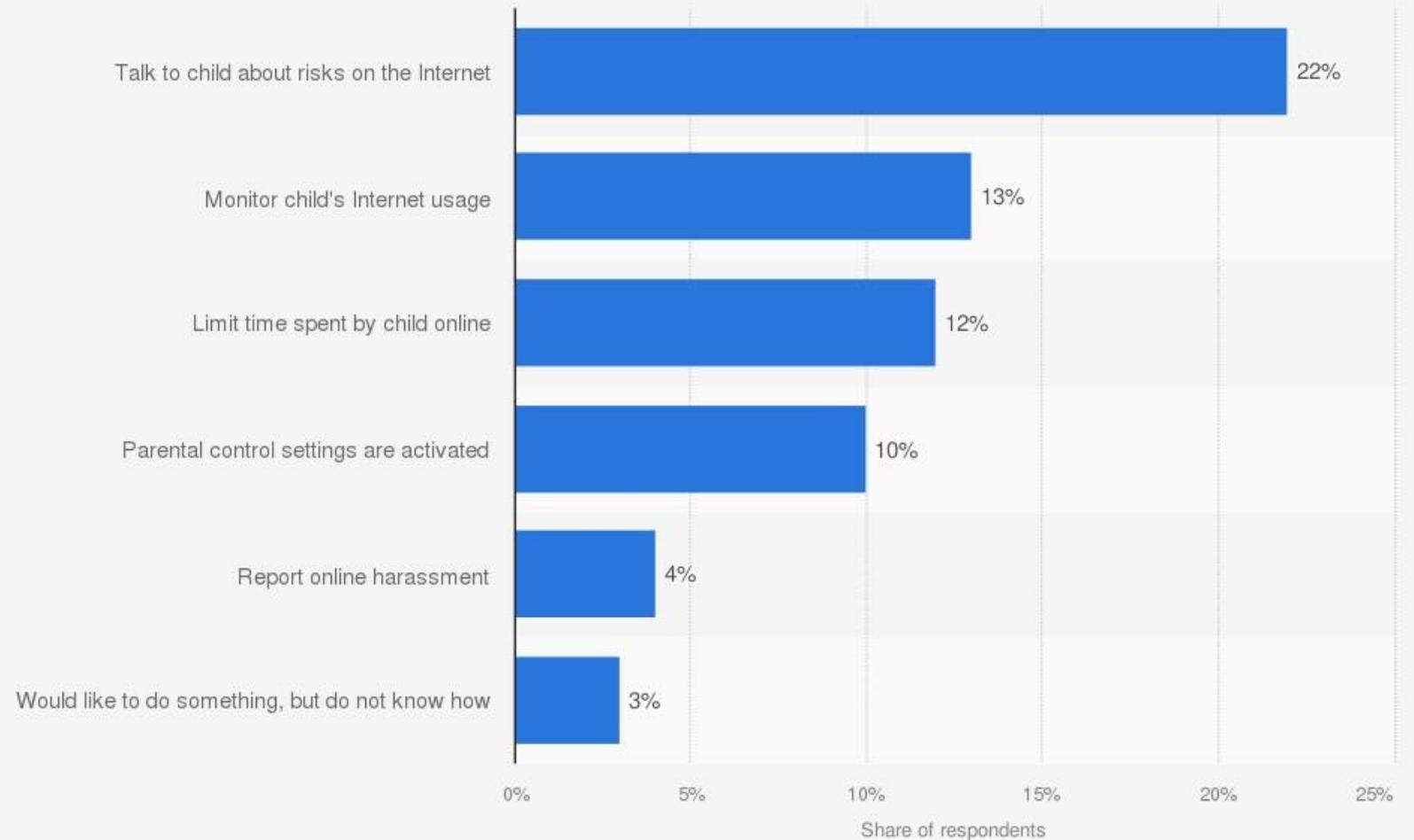Hungary; National Media and Infocommunications Authority (Hungary); Psyma; 2020; Parents whose children use the inter

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Can we narrow this gap?

THE GAP

Our possibilities and duties

What is done in your household to protect children from online harassment?

- Talk to child about risks on the Internet — 22%
- Monitor child's Internet usage — 13%
- Limit time spent by child online — 12%
- Parental control settings are activated — 10%
- Report online harassment — 4%
- Would like to do something, but do not know how — 3%

Share of respondents (0% — 25%)

Source
European Commission
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Additional Information:
Denmark; Kantar TNS; October 2019; 23,420*; 15 years and older; internet user; Face-to-face interview

AI-driven digital parenting

A possible solution? *Maybe!*

- **Define objectives (bridging the awareness gap)**
- **User Research (target audience – both children and parents)**
- Choose AI technology (incorporating NLP, ML, adaptive learning, chatbots and personalization algorythms)
- Data collection plan (baseline assessments of participants' cybersecurity and awareness knowledge)
- Prototype development (with only basic funcionalities)
- User testing (user experience, feedback, improving)
- Full platform development, implementation and continuous improvement
- Research the platfrom's usage (track engagement metrics)
- Effectiveness evaluation (post-assessment of cybersecurity)

Social benefit? Safer childhood?

Thank you for your attention!