

Youth and digital media

Course: Youth Development 2021

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Overview

- Developmental context of online behavior
- EU Kids Online project
- Internet access
- Online activities
- Digital skills
- Negative experiences online
- Looking at sexual images and sexting
- Harmful online content
- Excessive internet use
- Conclusions

Online risks and opportunities: the developmental perspective

- **Children's and adolescents' usage of the internet is associated with their developmental needs (Subrahmanyam & Smahel, 2011)**
- Identity development
- Sexuality and intimacy
- Friendships and relationships
- Well-being and health issues

- We need the developmental perspective if we look what children do online.

How are digital media used in the context of youth development?

Are digital media supporting the development?

Are digital media dangerous for youth?

Online risks and opportunities: the developmental perspective

- Children are not passive recipients of the online content but they co-construct the online world (Greenfield, Subrahmanyam, & Smahel, 2006)
- They are co-creators of the online world
- Same experience might be risky, but it could also fulfill children's developmental needs – such as meeting online strangers
- Media typically focus only on the online risks and the danger, but they do not mention the positives and the natural developmental needs of children

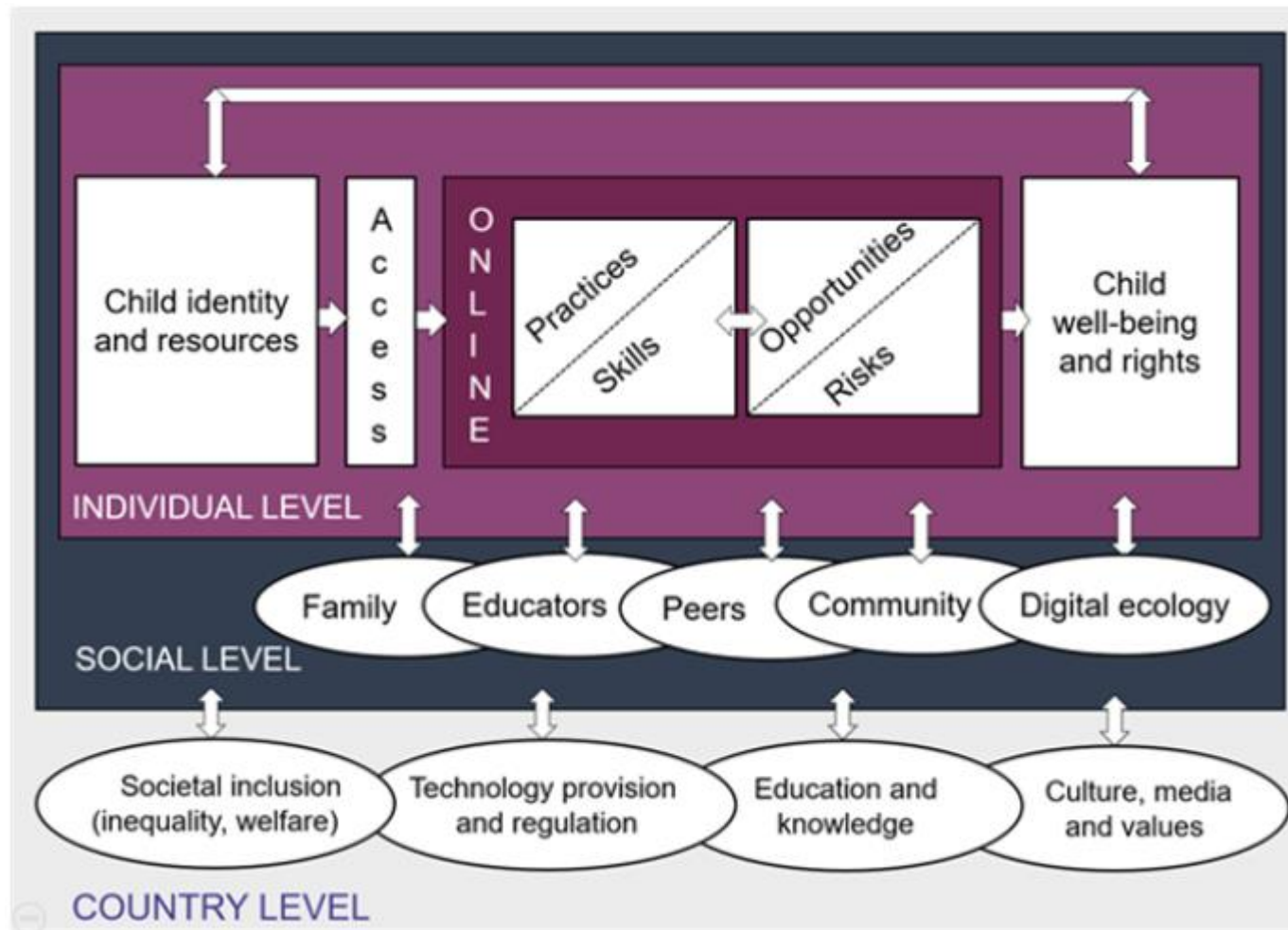
About EU Kids Online survey

- Data from EU Kids Online surveys:
 - data collected in 25 countries in 2010
 - data collected in 19 countries from 9/2017- 8/2019
- Representative samples of 1000+ children
- Data collected by random walk in households or in preselected schools (quota sampling of schools) + Online panel (France)
- Children 9 to 17 years (here mostly **9 – 16 years** or **12 - 16**)
- EU Kids Online report:

Smahel, D., Machackova, H., Mascheroni, G., Dedkova, L., Staksrud, E., Ólafsson, K., Livingstone, S., and Hasebrink, U. (2020). EU Kids Online 2020: Survey results from 19 countries. EU Kids Online. <https://doi.org/10.21953/lse.47fdeqj01of0>



EU Kids Online theoretical model



Livingstone, S., Mascheroni, G., & Staksrud, E. (2018). European research on children's internet use: Assessing the past and anticipating the future. *New Media & Society*, 20(3), 1103–22.
<https://doi.org/10.1177/1461444816685930>

Internet access

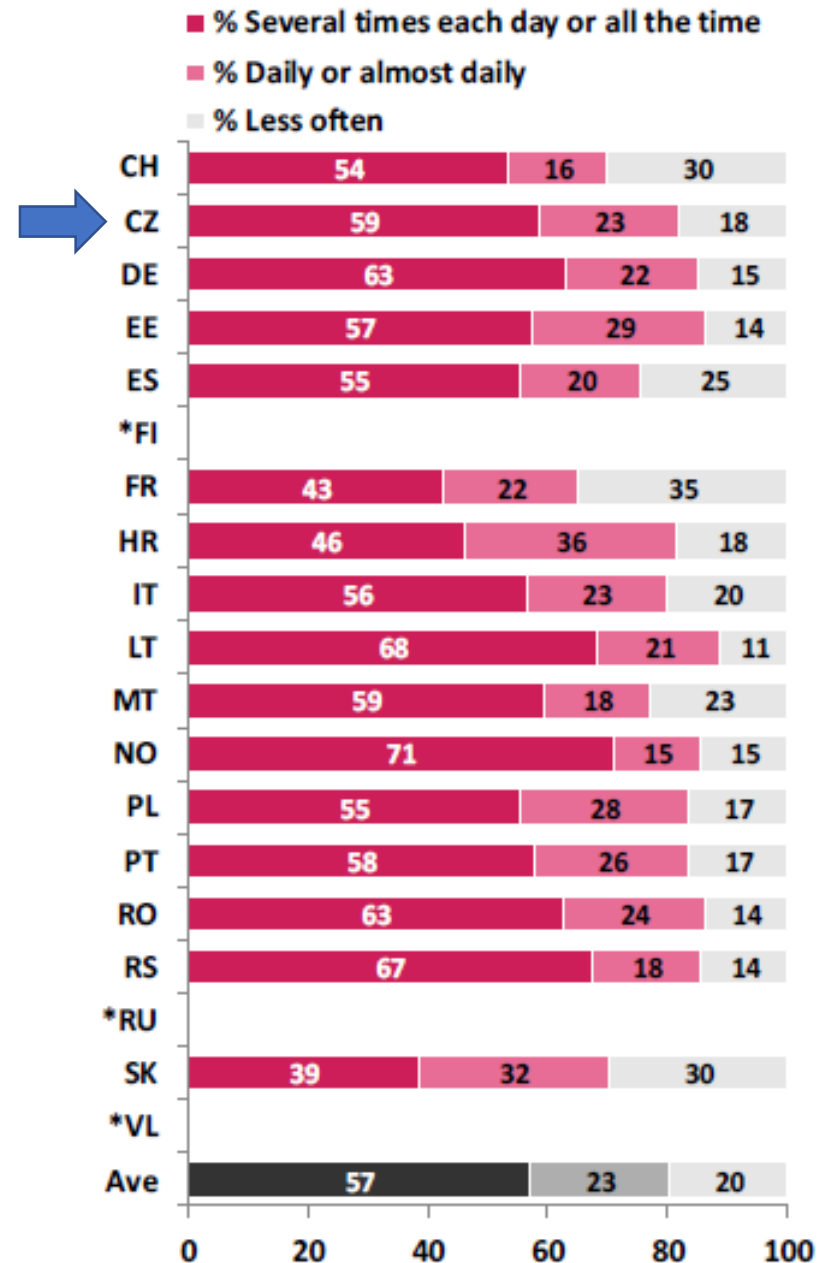
- How often do you go online or use the internet using the following devices?
- In 2010, the number of children going online from their mobile phones ranged from 31% in Norway to only 2% of children in Romania.
- In 8 years, the percentage of children using a smartphone to access the internet in all comparable countries has increased substantially, rising from 31% to 85% in Norway and from 2% to 84% in Romania.



	Smartphone or mobile phone	Desktop computer, laptop or notebook	Tablet
CH	70	26	20
CZ	82	43	18
DE	85	46	16
EE	87	41	16
ES	76	29	28
*FI	–	–	–
FR	65	41	31
HR	82	52	17
IT	80	39	20
LT	89	66	20
MT	77	58	43
NO	86	44	33
PL	83	40	14
PT	84	37	27
RO	86	41	19
RS	86	40	15
*RU	–	–	–
SK	70	43	24
*VL	–	–	–
Ave	80	43	22

Frequency of smartphone access

- How often do you go online or use the internet using the following devices? A mobile phone or smartphone.
- In most countries, girls are more likely to access the internet from their smartphones several times a day than boys (6-12%)– the higher difference between boys and girls being in Malta (11%) and Norway (12%)



Daily Online activities



	Watched video clips	Listened to music online	Communicated with family or friends	Visited a social networking site	Played online games	Used the internet for schoolwork	Browsed for things to buy or to see what things cost	Looked for news online
CH	58	63	47	54	36	21	17	20
CZ	73	68	70	66	44	20	27	19
DE	49	45	14	42	34	20	8	9
EE	79	66	71	56	43	28	13	22
ES	58	64	70	38	48	44	23	19
*FI	-	-	-	-	-	-	-	-
FR	46	57	48	41	42	29	13	18
HR	52	64	60	58	40	34	20	18
IT	55	47	74	54	28	35	16	14
LT	82	72	63	61	71	46	16	39
MT	79	72	68	46	54	35	31	17
NO	71	68	65	56	43	41	15	19
PL	70	65	63	48	36	16	24	15
PT	75	76	72	67	47	25	18	25
RO	77	76	77	49	60	37	41	21
RS	80	81	68	73	55	18	23	12
*RU	-	-	-	-	-	-	-	-
SK	43	55	46	62	27	42	17	19
*VL	-	-	-	-	-	-	-	-
Ave	65	65	61	54	44	31	20	19

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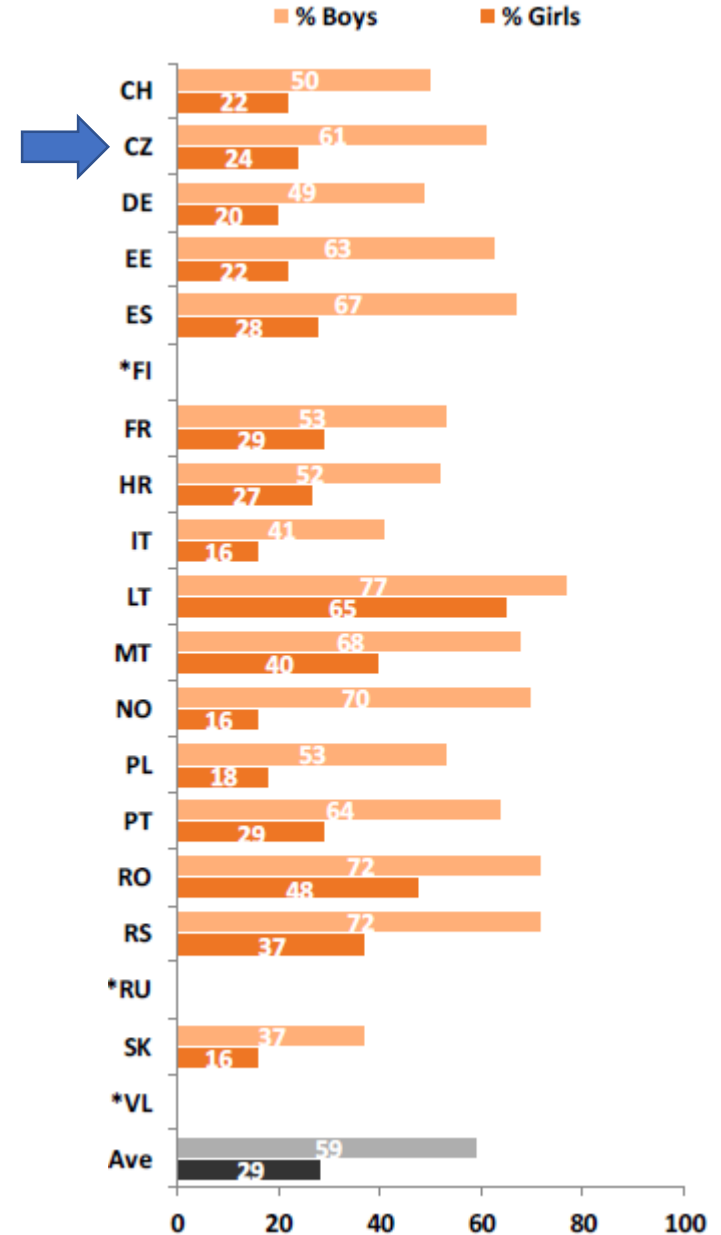
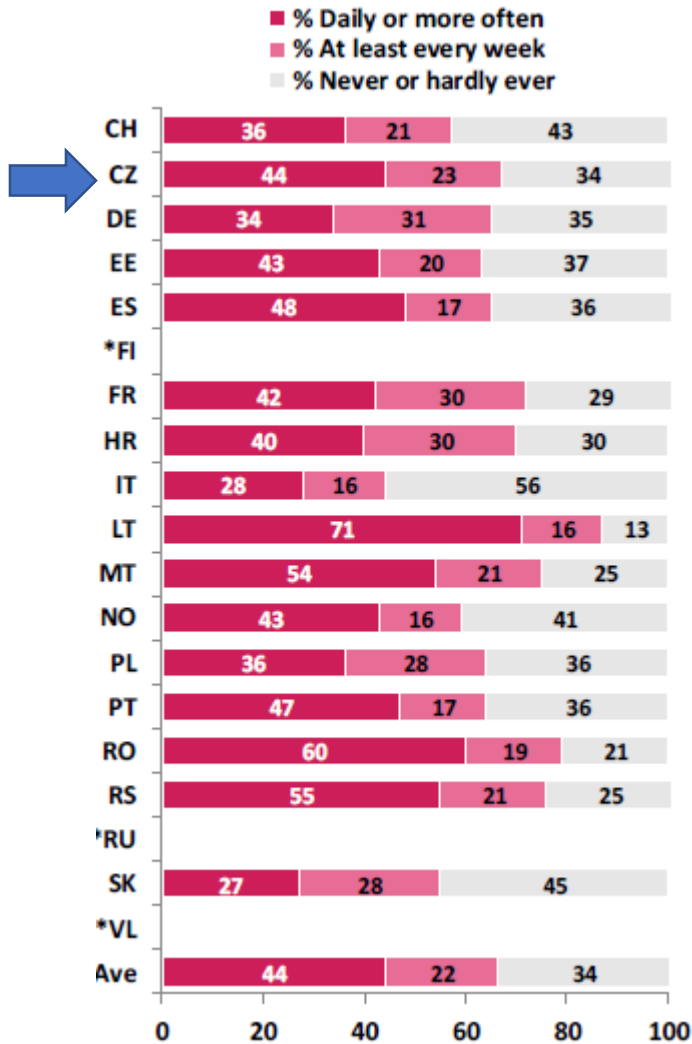
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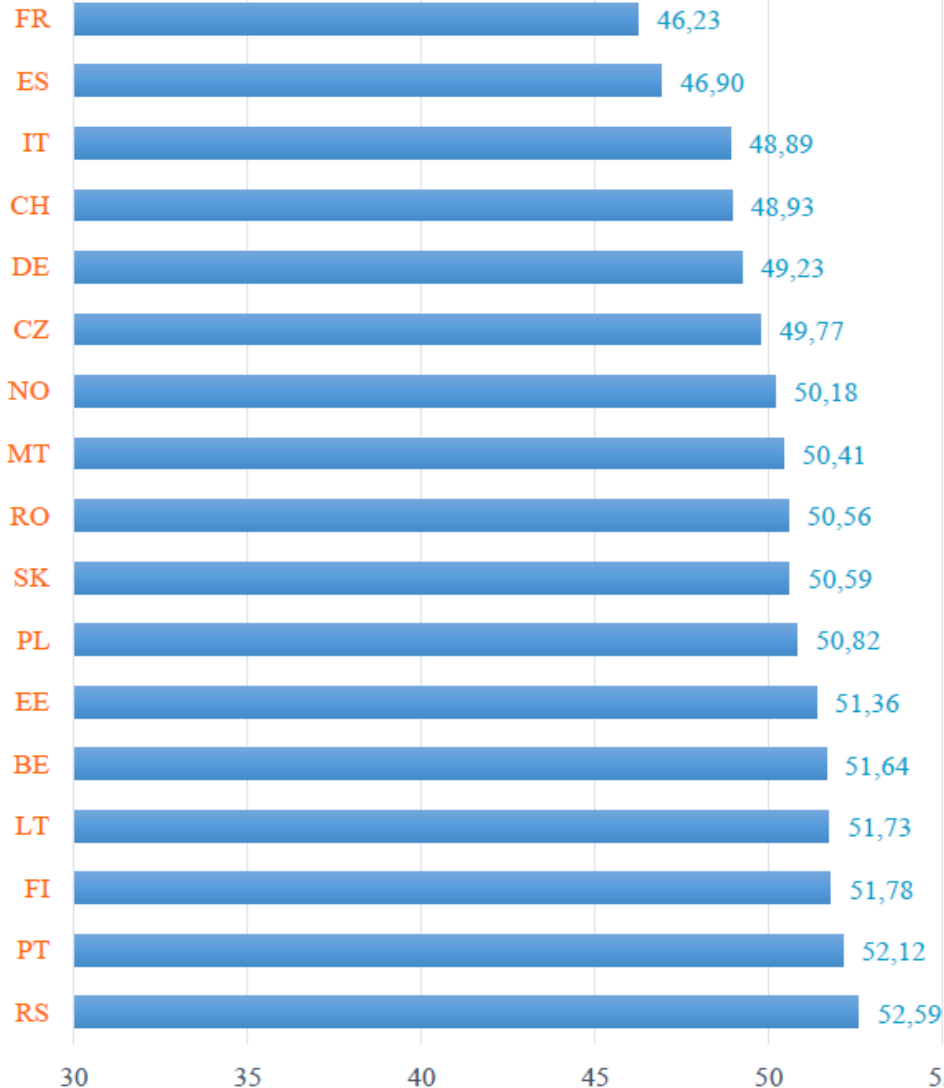


Frequency of playing online games, by country



Digital skills (12 – 16 years)

Figure 3. T-SCORE RANKING OF COUNTRIES



Mascheroni, G., Cino, D., Mikuška, J., Lacko, D., & Šmahel, D. (2020). 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. KU Leuven, Leuven: ySKILLS.

Digital skills (12 – 16 years)

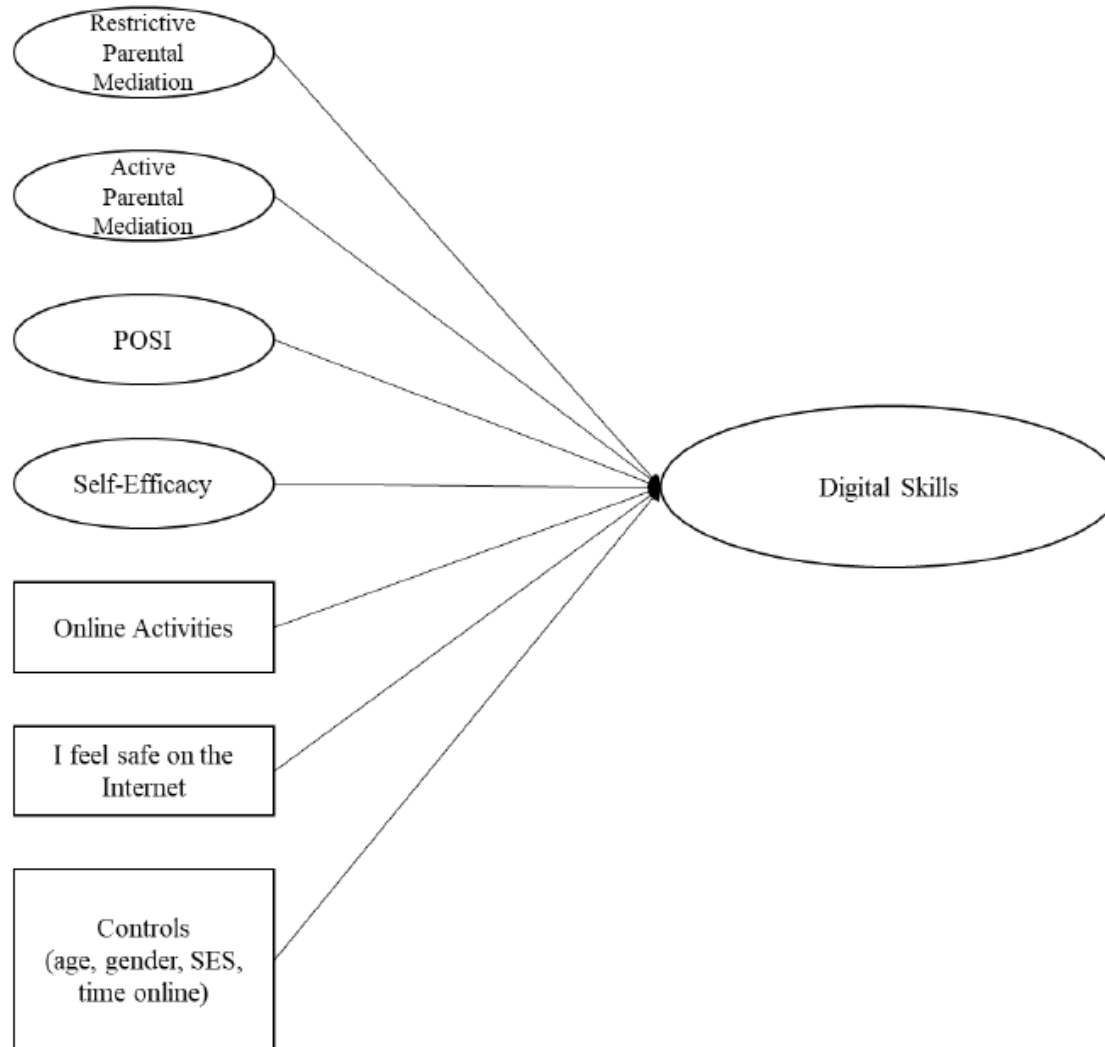
Table 1.

STATISTICALLY SIGNIFICANT COUNTRY DIFFERENCES

	T	FR	ES	IT	CH	DE	CZ	NO	MT	RO	SK	PL	EE	BE	LT	FI	PT	RS	
RS	52.59	.64	.57	.37	.37	.34	.28	.24	.22	.20	.20	.18							
PT	52.12	.59	.52	.32	.32	.29	.24	.19	.17	.16	.15	.13							
FI	51.78	.55	.49	.29	.28	.25	.20	.16	.14										
LT	51.73	.55	.48	.28	.28	.25	.20	.16											
BE	51.64	.54	.47	.28	.27	.24	.19	.15											
EE	51.36	.51	.45	.25	.24	.21	.16												
PL	50.82	.46	.39	.19	.19	.16											•	•	
SK	50.59	.44	.37	.17													•	•	
RO	50.56	.43	.37														•	•	
MT	50.41	.42	.35														•	•	•
NO	50.18	.39	.33														•	•	•
CZ	49.77	.35	.29														•	•	•
DE	49.23	.30	.23														•	•	•
CH	48.93	.27	.20														•	•	•
IT	48.89	.27	.20														•	•	•
ES	46.90			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FR	46.23			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Note: Country level means estimated using alignment method and converted into T-scores;
 • indicates a statistically significant difference in digital skills at a $p < 0.05$ level. Values above the diagonal represent Cohen's d s of the differences between countries.

The antecedents of digital skills



The antecedents of digital skills

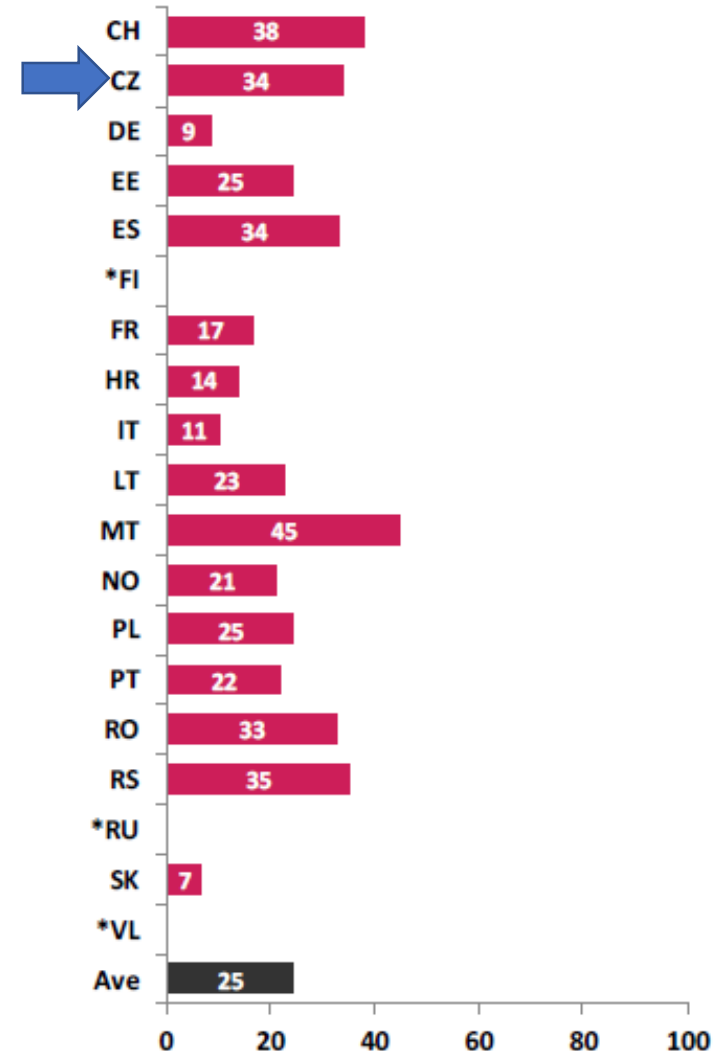
Table 2.		COMPARISON OF PREDICTORS OF DIGITAL SKILLS ACROSS COUNTRIES							
	Constr.	BE	CZ	EE	FI	FR	DE	IT	LT
Age	-.246	-.043	-.060	-.047	-.037	-.049	-.051	-.037	-.041
Female	-.133	-.097	-.118	-.092	-.087	-.095	-.094	-.073	-.078
Weekday online	.295	.082	.109	.076	.070	.091	.066	.064	.064
SES	.033 ^{ns}	.016 ^{ns}	.019 ^{ns}	.015 ^{ns}	.014 ^{ns}	.016 ^{ns}	.016 ^{ns}	.012 ^{ns}	.013 ^{ns}
Restrictive	-.318	-.384	-.438	-.551	-.424	-.365	-.480	-.463	-.491
Active	.097	.075	.089	.076	.080	.083	.059	.059	.061
POSI	.054	.053	.052	.050	.050	.057	.059	.051	.047
Self-efficacy	.308	.296	.272	.240	.300	.283	.251	.202	.166
Online activities	.053	.214	.218	.181	.220	.263	.210	.162	.170
Feel safe^a	.101	.118	.148	.104	.099	.124	.109	.106	.095
<i>R</i> ²		.313	.522	.667	.413	.446	.592	.410	.427



Table 2. continued		COMPARISON OF PREDICTORS OF DIGITAL SKILLS ACROSS COUNTRIES							
	MT	NO	PL	PT	RO	RS	SK	ES	CH
Age	-.040	-.059	-.040	-.045	-.036	-.054	-.032	-.043	-.038
Female	-.086	-.114	-.077	-.088	-.062	-.103	-.062	-.098	-.101
Weekday online	.084	.082	.076	.092	.067	.096	.046	.097	.081
SES	.015 ^{ns}	.019 ^{ns}	.013 ^{ns}	.016 ^{ns}	.010 ^{ns}	.017 ^{ns}	.010 ^{ns}	.016 ^{ns}	.016 ^{ns}
Restrictive	-.356	-.411	-.470	-.348	-.456	-.465	-.488	-.348	-.356
Active	.087	.089	.078	.080	.064	.092	.055	.102	.088
POSI	.051	.055	.049	.057	.035	.065	.038	.068	.058
Self-efficacy	.290	.300	.242	.282	.212	.291	.161	.267	.256
Online activities	.200	.210	.161	.204	.183	.180	.144	.203	.199
Feel safe^a	.110	.111	.112	.124	.092	.146	.081	.138	.137
<i>R</i> ²	.371	.453	.397	.449	.461	.554	.365	.471	.437

Overall negative online experiences

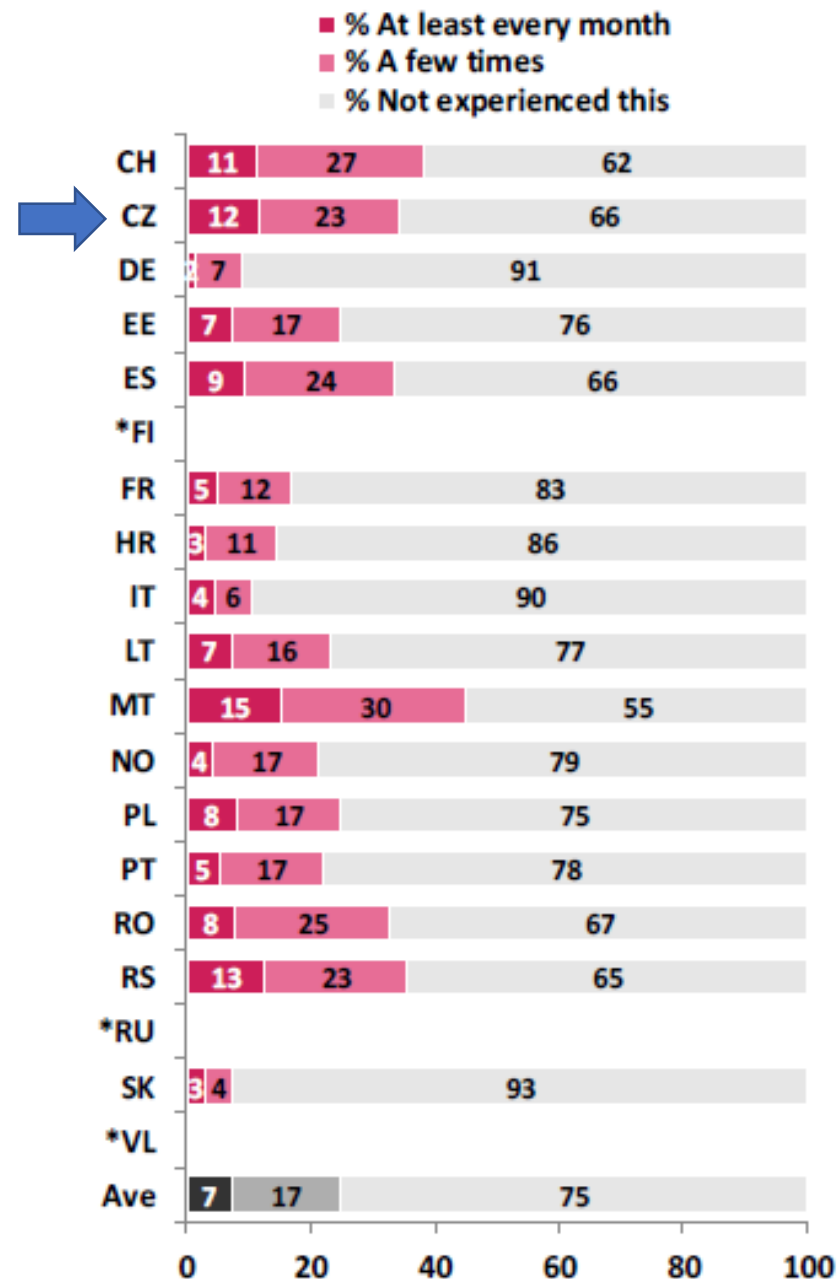
- In the PAST YEAR, has anything EVER happened online that bothered or upset you in some way (e.g., made you feel upset, uncomfortable, scared or that you shouldn't have seen it)?
- Broad range of bothering experiences:
 - being exposed to online sexual content
 - aggressive content
 - other types of unwanted content
 - inappropriate contacts
 - online harassment and bullying
 - hacking
 - sharing personal information
 - damage to reputation
 - viruses, spam, pop-ups, and online advertisements
 - online by technical problems (internet not working or slow)



Percentage of children who answered yes.

Frequency of negative online experiences in the past year

- In the PAST YEAR, how often did this happen? [In the PAST YEAR, has anything EVER happened online that bothered or upset you in some way.]



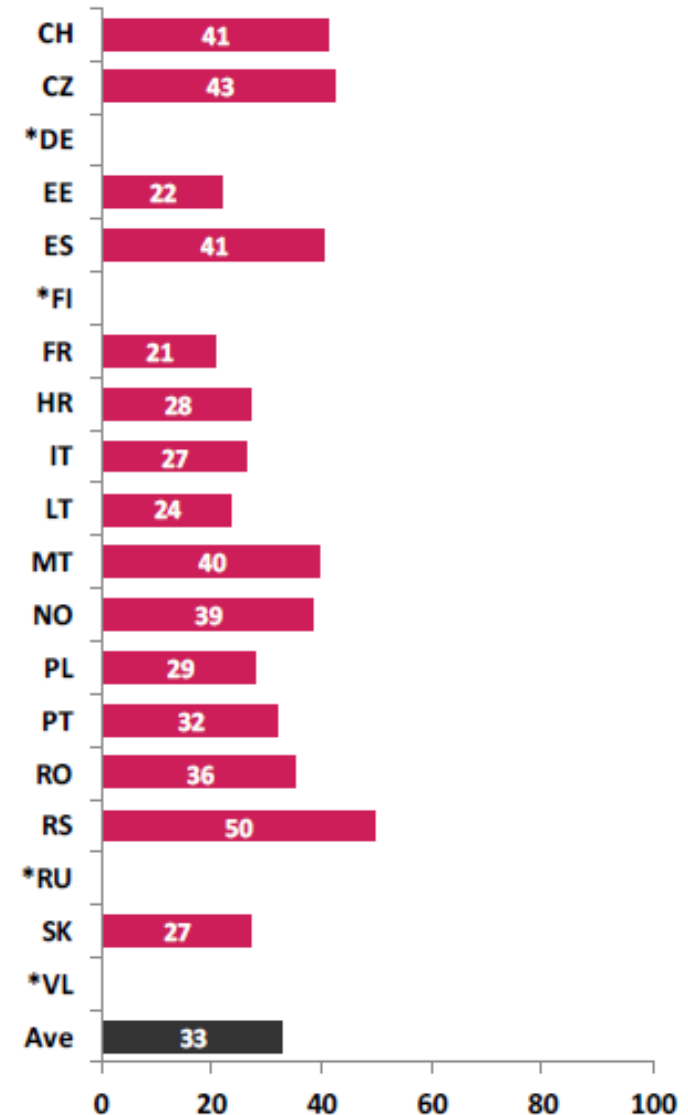
Seeing sexual images & sexting

Is seeing sexual images and sexting supporting the youths development?

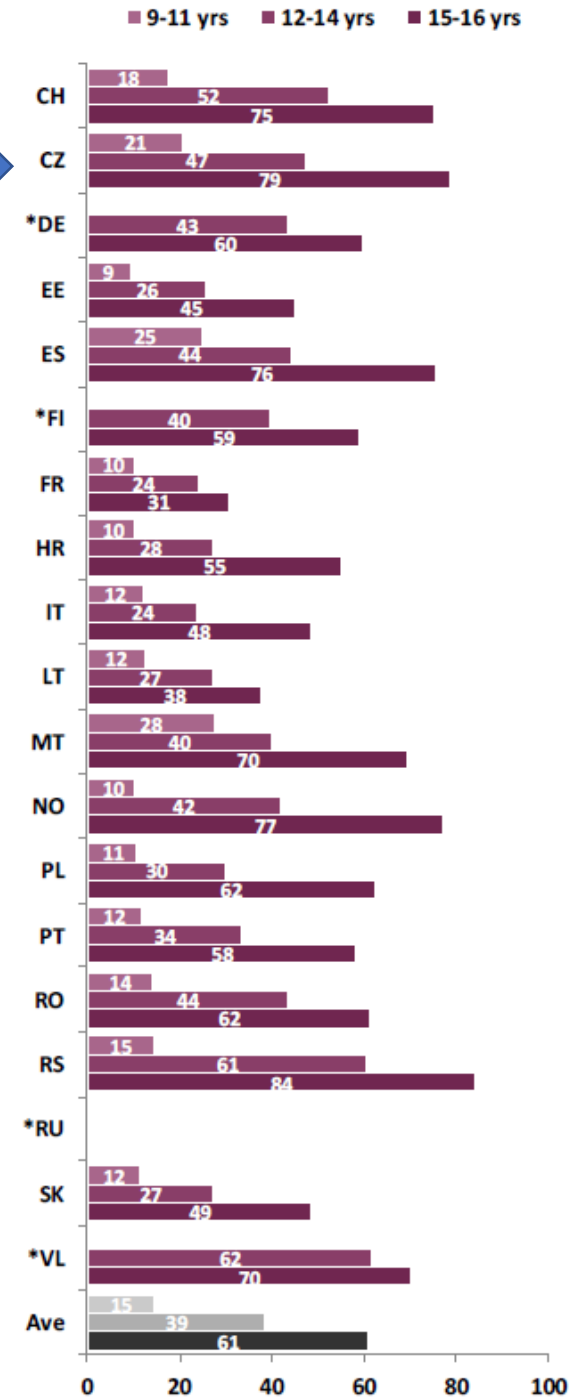
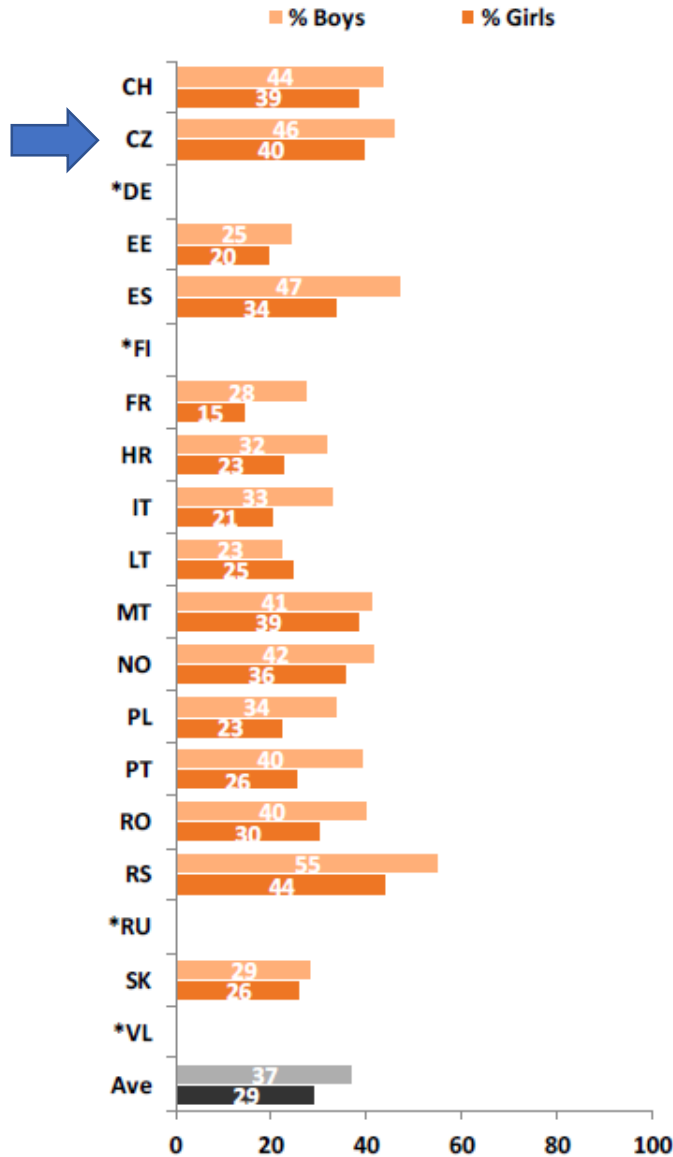
Is it rather dangerous?

Seeing sexual images (9 – 16)

- In the PAST YEAR, you have seen lots of different images – pictures, photos, videos. Sometimes, these images might be obviously sexual, e.g., they may show people naked or people having sex. You might never have seen anything like this, or you may have seen something like this on a mobile phone, in a magazine, on the TV, on a DVD or on the internet. The next few questions ask you about things like this.

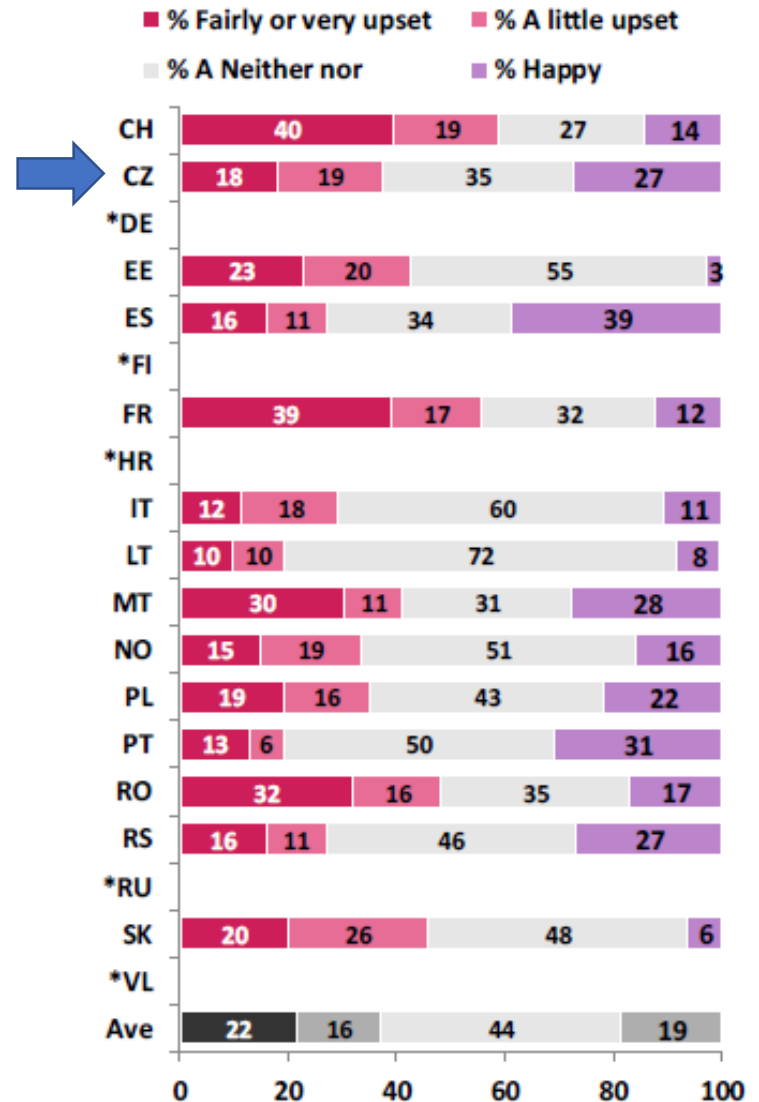


Seeing sexual images

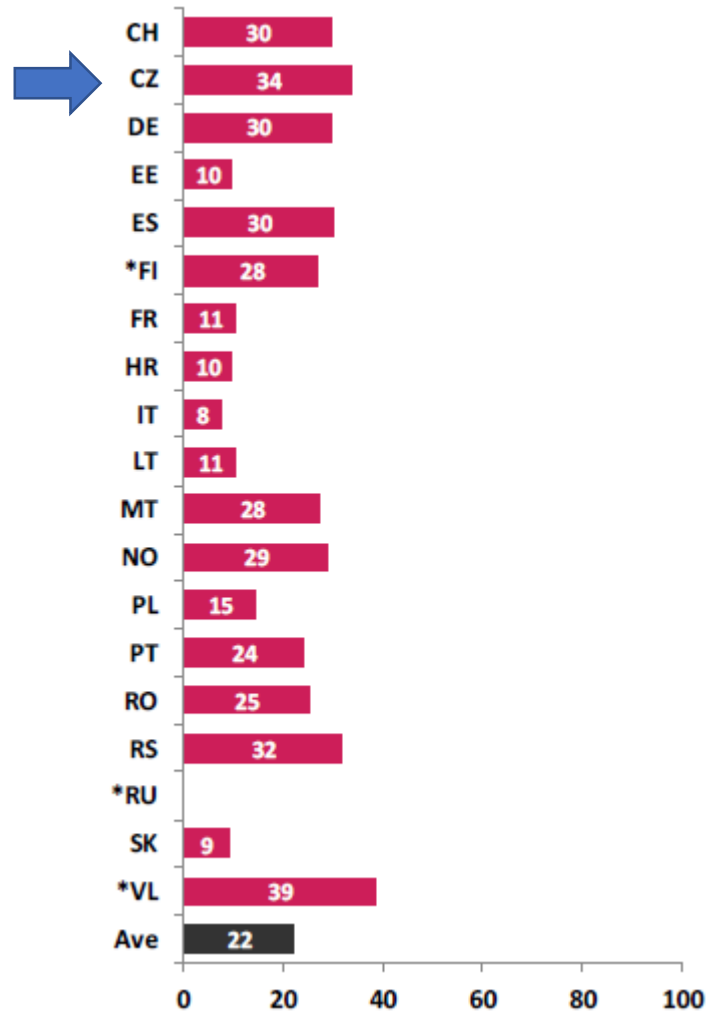


Reactions to seeing sexual images

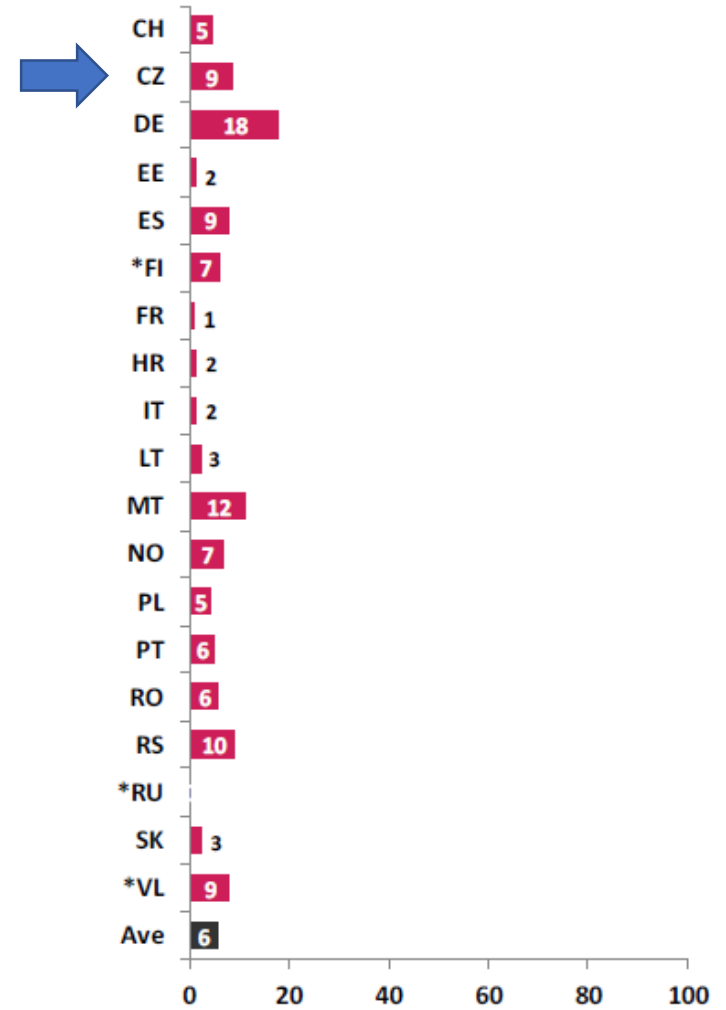
- Thinking of the LAST TIME you have seen images of this kind, how did you feel about it?



Sexting



In the PAST YEAR, have you EVER RECEIVED any sexual messages? This could be words, pictures or videos.



In the PAST YEAR, how often, if ever, have you SENT or POSTED any sexual MESSAGES (words, pictures or videos) in the following ways?

Harmful content

- In the PAST YEAR, have you seen online content or online discussions where people talk about or show any of these things?
 - Ways of physically harming or hurting themselves
 - Ways of committing suicide
 - Ways to be very thin
 - Hate messages that attack certain groups or individuals
 - Their experiences of taking drugs
 - Gory or violent images

Harmful content

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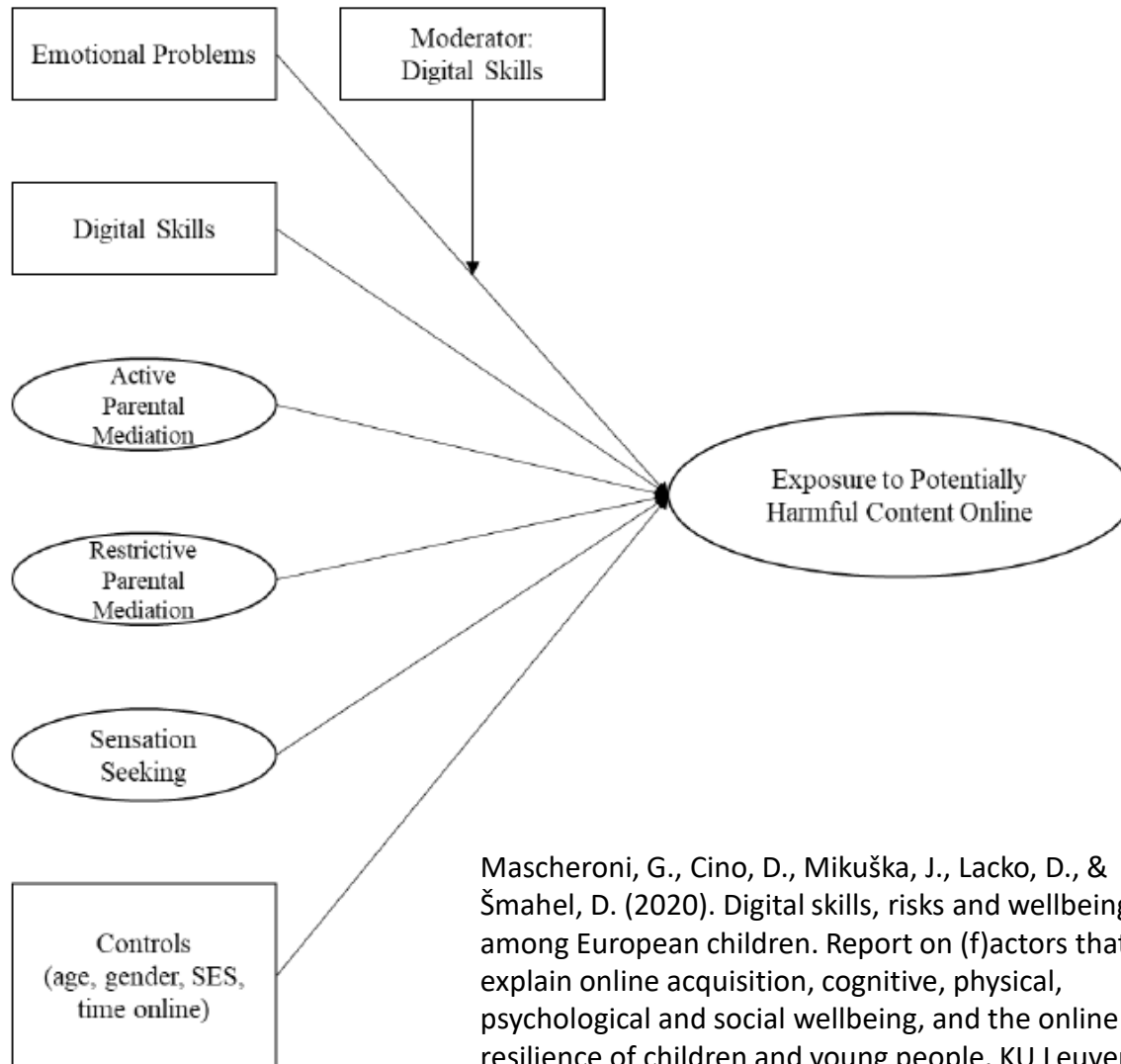
Interdisciplinary
Research Team
on Internet and Society



	Ways of physically harming or hurting themselves	Ways of committing suicide	Ways to be very thin	Hate messages that attack certain groups or individuals	Their experiences of taking drugs	Gory or violent images
CH	9	5	8	13	14	10
CZ	18	10	17	25	15	17
DE	2	2	3	4	3	6
EE	7	5	10	14	7	5
ES	8	7	6	17	13	14
*FI	18	8	10	17	10	11
FR	7	4	9	8	6	7
HR	9	6	9	11	7	11
IT	4	4	6	10	7	12
*LT	-	-	-	-	-	-
MT	10	12	12	18	12	15
NO	8	5	12	16	8	9
PL	19	19	32	48	21	28
PT	10	9	12	17	13	15
RO	8	12	12	18	13	18
RS	18	11	17	24	16	23
*RU	16	8	25	24	11	17
SK	2	2	5	8	4	6
*VL	11	8	9	20	16	16
Ave	10	8	12	17	11	13



Harmful content



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Harmful content

Table 5. PREDICTORS OF EXPOSURE TO POTENTIALLY HARMFUL CONTENT ONLINE									
	Constr.	BE	CZ	EE	FI	FR	DE	IT	LT
Active parental mediation	-.064***	-.044***	-.044***	-.044***	-.049***	-.038***	-.044***	-.040***	-.053***
Restrictive parental mediation	.091***	.101***	.103***	.103***	.129***	.067***	.118***	.082***	.120***
Sensation-seeking	.399***	.441***	.390***	.378***	.456***	.424***	.491***	.402***	.433***
Digital skills	.149***	.138***	.143***	.150***	.151***	.126***	.191***	.165***	.177***
Emotional problems	.267***	.284***	.252***	.220***	.286***	.213***	.253***	.203***	.295***
Emo x DS	.124***	.098***	.089***	.081***	.105***	.085***	.091***	.086***	.113***
Age	X	.201***	.213***	.175**	.156***	.028	.566***	.206***	.217**
Female	X	.134**	.183***	.204***	.220***	.048	.282***	.106*	.070
Weekday online	X	.010	.190***	.190***	.051	.110*	-.221*	-.019	.003
SES	X	-.129**	-.036	.016	-.048	-.011	-.020	.079	-.102
R ²		.348	.508	.375	.546	.359	.401	.378	.311

Note: Constr. = Constrained set of unstandardised coefficients. X = Control variables were not constrained to equality. Country-specific coefficients are all standardised. *** p<0.001, ** p<0.01, * p<0.05.

Table 5. Continued PREDICTORS OF EXPOSURE TO POTENTIALLY HARMFUL CONTENT ONLINE									
	MT	NO	PL	PT	RO	RS	SK	ES	CH
Active parental mediation	-.045***	-.044***	-.047***	-.042***	-.048***	-.048***	-.050***	-.051***	-.045***
Restrictive parental mediation	.077***	.070***	.090***	.057***	.172***	.090***	.105***	.058***	.058***
Sensation-seeking	.352***	.346***	.358***	.411***	.389***	.428***	.488***	.406***	.321***
Digital skills	.120***	.127***	.137***	.126***	.136***	.123***	.170***	.140***	.138***
Emotional problems	.244***	.246***	.230***	.224	.241***	.252***	.218***	.220***	.217***
Emo x DS	.089***	.077***	.089***	.075***	.100***	.079***	.081***	.088***	.079***
Age	.241***	.338***	.156**	.221***	.230***	.256***	.125*	.279***	.220***
Female	-.020	.231***	.122*	.210***	-.085	.161***	.153**	.203***	.154**
Weekday online	.076	.154**	-.024	.045	.041	.084	-.078	.073**	.084
SES	-.023	.037	-.134**	-.005	-.091	-.101*	.077	-.069**	-.053
R ²	.378	.439	.284	.362	.458	.454	.362	.490	.338

Discussion: **What to do with harmful content?**

- Children are exposed online to both, positive and negative content – it is important how they cope with the negative one
- The exposure to harmful content is associated with children's emotional problems, sensation seeking
- Effects of parental mediation are low. Making restrictions does not work!
- We should teach children about different kinds of content and teach them how to evaluate the quality of the content

Excessive internet use / Online addiction

Does addiction on the internet exist?

Excessive internet use

- Excessive internet use is associated with individual characteristics, such as emotional problems, poor self-esteem, neuroticism, high novelty seeking, problematic offline behaviour, etc. (Cao & Su's, 2007; Ko, 2006)
- How many children are at risk of excessive internet use in different countries
- What is the development from 2010 to 2018
- Associations of excessive internet use

Griffiths (2000) six components

Saliency, when the activity becomes the most important thing in an individual's life;

Mood change, or euphoria, subjective experiences are significantly affected by the activity;

Tolerance, the process of requiring continually higher doses of the activity to achieve the original sensations;

Withdrawal symptoms, negative feelings and sensations which occur when unable to perform the activity

Conflict, usually with the individuals closest social surroundings (family), i.e. significant decrease in school results or dropping out;

Relapse and reinstatement, the tendency to return to the damaging activity even after periods of relative control.

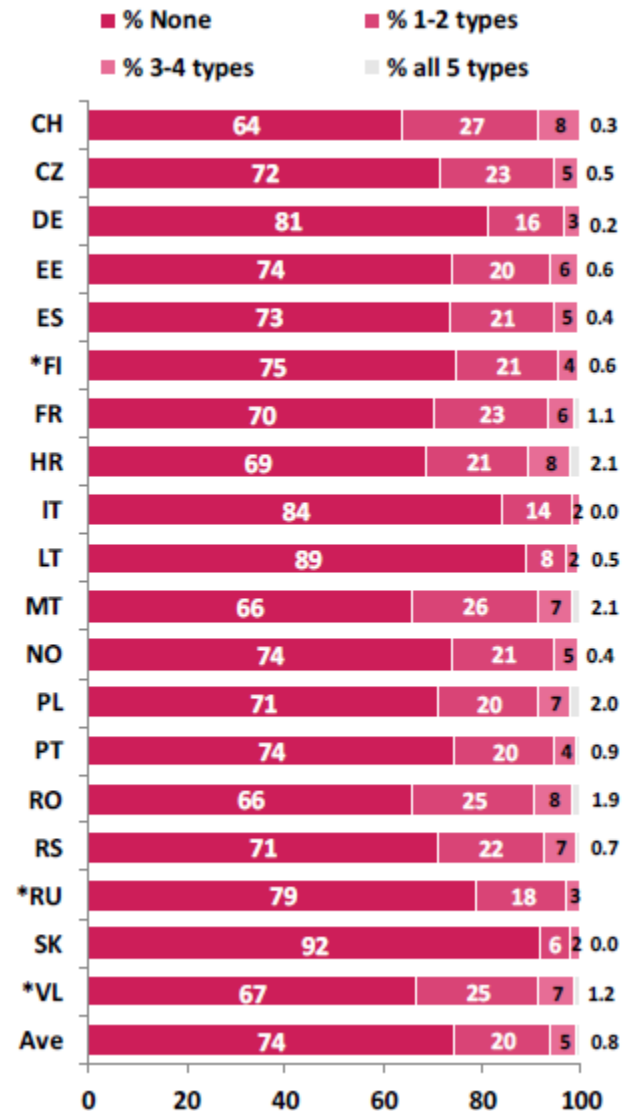
Excessive internet use



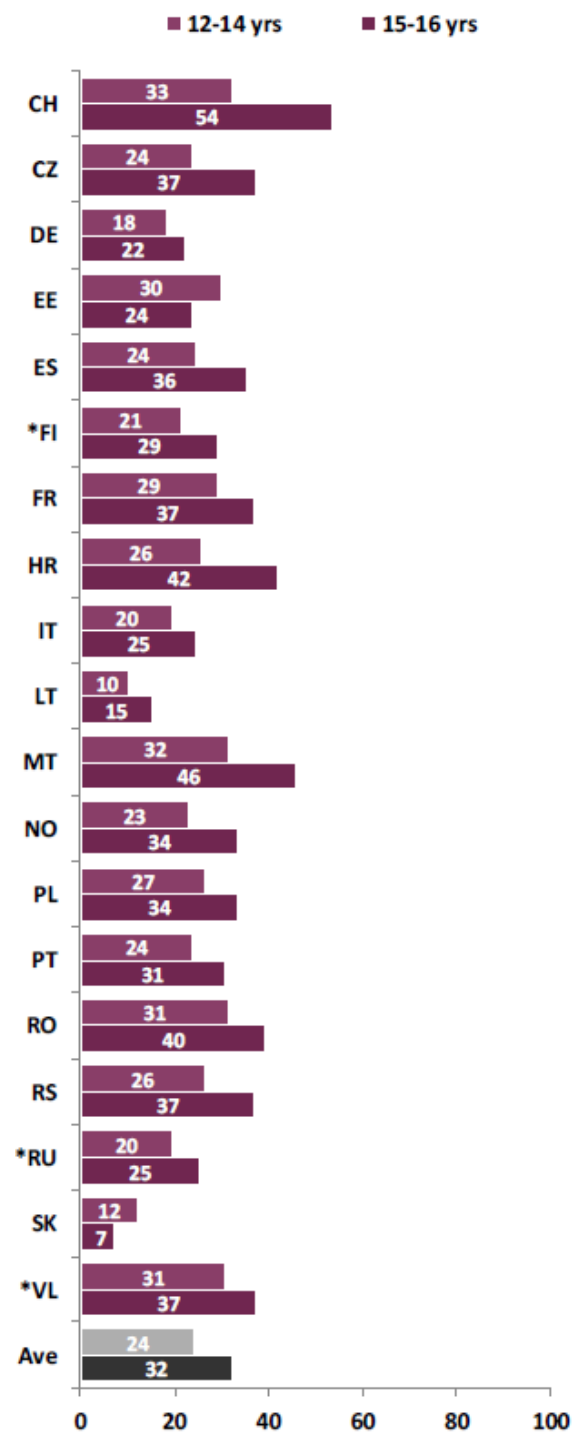
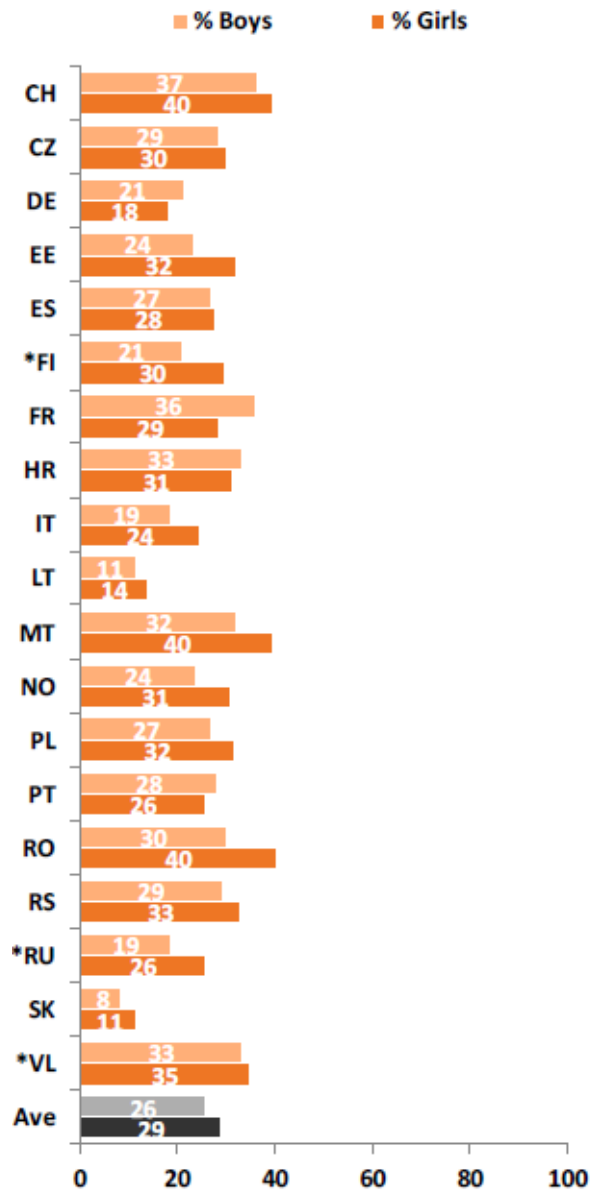
	I have gone without eating or sleeping because of the internet	I have felt bothered when I cannot be on the internet	I have caught myself using the internet although I'm not really interested	I have spent less time than I should with either family, friends or doing schoolwork because of the time I spent on the internet	I have tried unsuccessfully to spend less time on the internet
CH	4	13	14	17	14
CZ	4	8	14	9	13
DE	1	10	8	7	7
EE	4	5	15	11	14
ES	2	9	11	13	10
*FI	4	6	11	15	10
FR	5	16	8	19	7
HR	5	19	15	17	13
IT	0	5	5	9	5
LT	2	3	5	7	4
MT	6	12	13	19	20
NO	4	8	12	16	9
PL	6	17	16	12	10
PT	3	11	15	10	8
RO	11	13	11	14	15
RS	4	10	11	18	12
*RU	1	6	12	6	9
SK	1	3	5	4	5
*VL	5	11	15	21	18
Ave	4	10	11	13	10

Excessive internet use

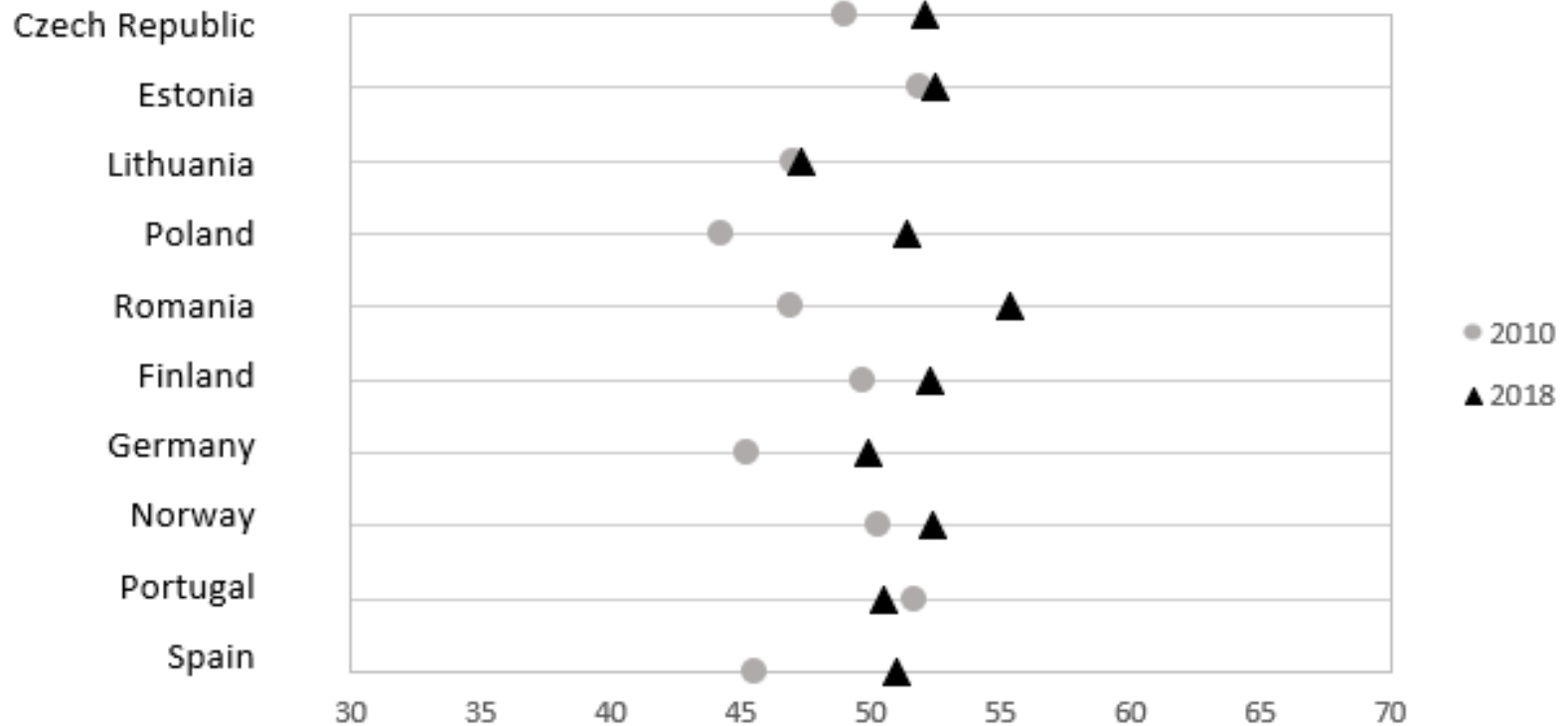
Factor present = **children answered daily or weekly** to the relevant item



Excessive internet use: children who experienced at least one criterion of excessive internet use, by gender and age



Excessive internet use: comparison 2010 x 2018



Discussion: the developmental perspective

- Access and usage: children have internet in mobile phones – they can communicate even more with their friends
- Communication with friends and romantic partners (both offline and online) is in line with children's developmental needs
- Looking at sexual images and sexting as part of adolescents' sexual development
- Gaming and SNS: environments for social relationships
- We should teach children how to behave in a safe way both offline and online

General conclusions

- Online and offline worlds are interconnected and children use technology in line with their development
- Current technologies allow children to be more and more co-creators of the online world (use SNS, create videos etc.)
- Many online activities can be beneficial for children's development but might be also risky
- Children should learn how to avoid online risks and how to cope with risks if they experience them
- Cross-culture differences!

Thank you for your attention

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