Individual factors of expected and unexpected sexting and the subsequent feelings:
A nationally representative study in adolescents

Michaela Šaradín Lebedíková, Rubén Olveira Araujo, David Šmahel, Kaveri Subrahmanyam

Co-funded by the European Union

MINISTRY OF EDUCATION, YOUTH AND SPORTS

DigiWELL

MUNI FSS

Interdisciplinary Research Team on Internet and Society

Adolescents and sexting

- 20% of adolescents send sexts & 30% recieve them (Mori et al., 2022)

- Adolescents experience **range of positive** and **negative feelings** after sexting:
  - Gender differences
  - Type of sexting / other individual characteristics?

- Current research has shortcomings:
  - Most research is qualitative – we lack robust associations
  - There is a need for sex positive approach

Towards explanation of short-term media effects
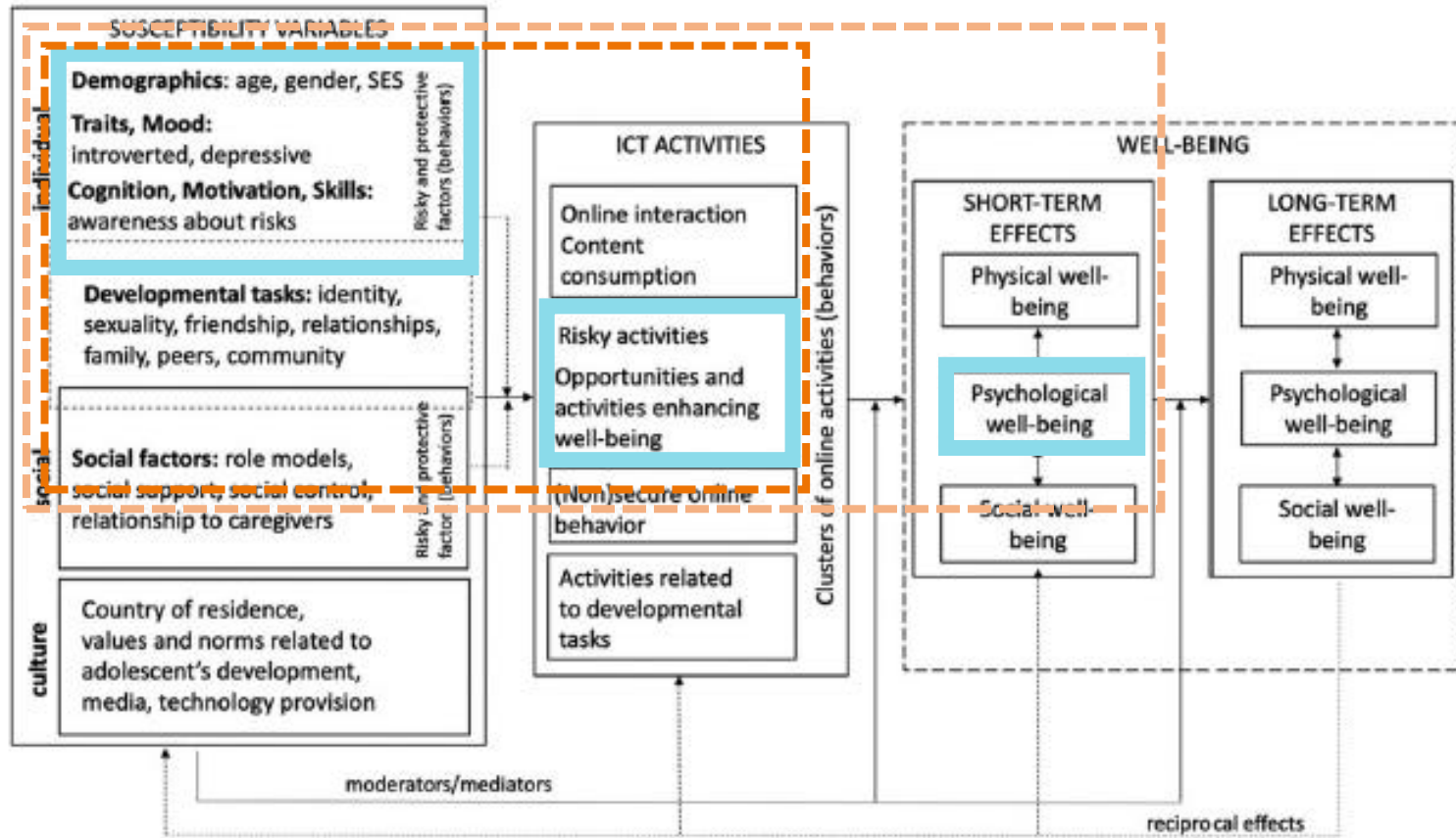
The integrative model of ICT effects on adolescents' well-being (iMEW; Smahel et al., 2022)

Methodology

- Nationally representative sample, logistic regression
  - Czech adolescents (11 – 16 years old, 50% girls)
  - N = 2,500

(RQ1) What is the association between **depression, loneliness, self-esteem, happiness, sensation seeking, age** and **gender** & **three types of sexting behavior** (expected and unexpected receiving and sending)?

(RQ2) What is the role of **individual factors** in **feeling happy** and **upset** after the **tree types of sexting behavior**?
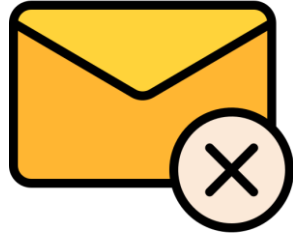
Main findings
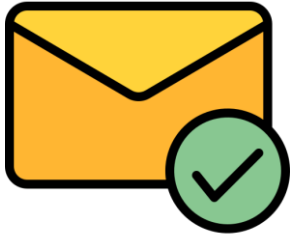
4.5%
receive expected sext at least monthly

4.5%
receive unexpected sext at least monthly
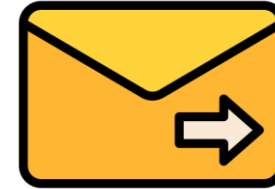
92.1%
never sent a sext

2.7% send sexts at least monthly

Main findings

DigiWELL
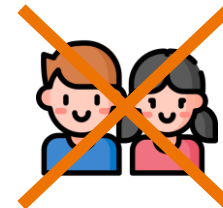
Similar individual factors predict all three sexting behaviors

+

Age

Sensation seeking

Loneliness

-

Happiness
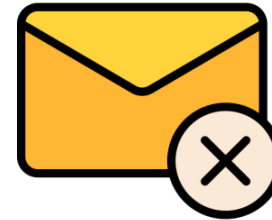
Main findings

32% boys happy at least monthly (22% girls)

44% girls upset at least monthly (23% boys)

27% happy and 34% upset at least monthly
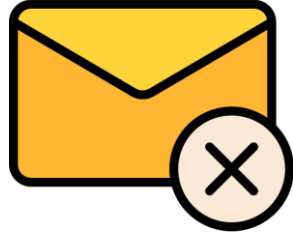
15% boys happy at least monthly (7% girls)

53% girls upset at least monthly (36% boys)

10% happy and 45% upset at least monthly
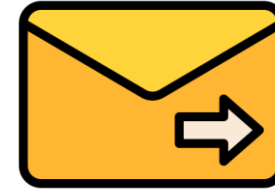
30% boys happy at least monthly (40% girls)

20% girls upset at least monthly (17% boys)

35% happy and 18% upset at least monthly
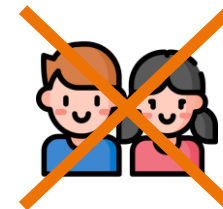
Main findings

That does not hold for feelings...

+ age, gender, sensation seeking

- happiness, depression

+ gender, sensation seeking

- happiness

No associations with feeling happy after sending.

Almost no significant associations with feeling upset.
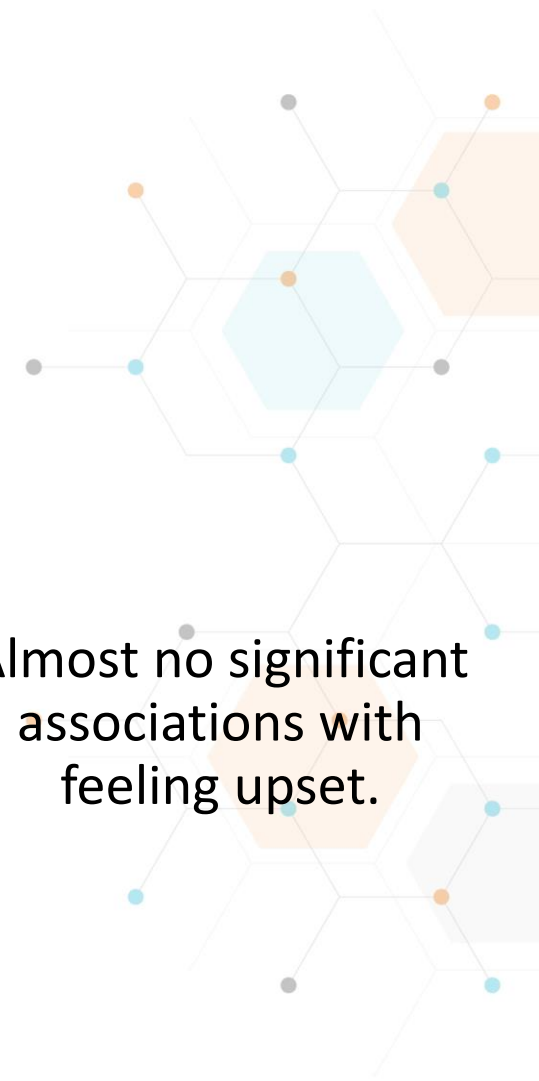
Future directions & limitations
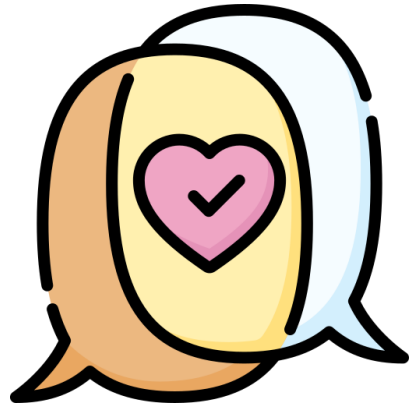
- Consensual vs. non-consensual receiving: **expectedness**
- Role of other factors in feelings: **contextual** + **motivations**
- **Short-term** effects and **long-term effects**

https://linktr.ee/michaela.lebedikova
m.lebedikova@mail.muni.cz

The author of icons is Flaticon.

Table 2.

Frequencies of different sexting behaviors by gender

		Girls		Boys		Total		X^2
Sexting expected[a]	Never	1009	84.4%	1010	84.9%	2019	84.7%	
	Less than once a month	132	11.0%	127	10.7%	259	10.9%	0.119
	At least monthly	55	4.6%	53	4.5%	108	4.5%	
Sexting unexpected[b]	Never	951	79.6%	992	83.6%	1943	81.6%	
	Less than once a month	176	14.7%	154	12.9%	330	13.9%	9.557**
	At least monthly	68	5.7%	40	3.4%	108	4.5%	
Sexting sent[c]	Never	1132	92.5%	1119	91.7%	2251	92.1%	
	Less than once a month	64	5.2%	62	5.1%	126	5.2%	1.906
	At least monthly	28	2.3%	39	3.2%	67	2.7%	

Notes. $*p < .05$, $** p < .01$, $*** p < .001$

a. $N = 2,386$; b. $N = 2,381$; c. $N = 2,444$.

Table 3.

Logistic regression for psychological variables related to sexting behaviors

	Sexting expected				Sexting unexpected				Sexting sent			
	B (SE)	P	OR	95% CI	B (SE)	P	OR	95% CI	B (SE)	P	OR	95% CI
Intercept	-6.878 (0.726)	<.001	0.001		-7.047 (0.694)	<.001	0.001		-8.653 (0.977)	<.001	0.001	
Age	0.233 (0.037)	<.001	1.262	[1.175 - 1.356]	0.277 (0.035)	<.001	1.319	[1.232 - 1.413]	0.310 (0.051)	<.001	1.363	[1.234 - 1.507]
Gender (M)	0.151 (0.122)	.215	1.163	[0.916 - 1.476]	-0.074 (0.115)	.531	0.929	[0.741 - 1.164]	0.375 (0.164)	**.022**	1.455	[1.055 - 2.006]
Depression	0.296 (0.099)	**.003**	1.344	[1.106 - 1.633]	0.414 (0.035)	<.001	1.513	[1.257 - 1.820]	0.198 (0.130)	.126	1.219	[0.946 - 1.572]
Loneliness	0.262 (0.083)	**.002**	1.299	[1.104 - 1.529]	0.171 (0.078)	**.029**	1.186	[1.017- 1.383]	0.394 (0.110)	<.001	1.483	[1.195 - 1.840]
Self-esteem	0.161 (0.109)	.139	1.174	[0.949 - 1.453]	0.019 (0.104)	.853	1.003	[0.831- 1.250]	0.099 (0.141)	.482	1.104	[0.837 - 1.456]
Happiness	-0.271 (0.092)	**.003**	0.763	[0.638 - 0.913]	-0.267 (0.089)	**.003**	0.765	[0.643 - 0.911]	-0.430 (0.115)	<.001	0.651	[0.519 - 0.816]
Sensation seeking	0.363 (0.068)	<.001	1.438	[1.259 - 1.641]	0.348 (0.064)	<.001	1.416	[1.250 - 1.605]	0.562 (0.094)	<.001	1.754	[1.460 − 2.107]
	Cox & Snell R^2	Nagelkerke R^2		X^2	Cox & Snell R^2	Nagelkerke R^2		X^2	Cox & Snell R^2	Nagelkerke R^2		X^2
Model fit	.08	.13		189.786	.11	.17		261.255	.07	.17		186.024

Notes. β = Estimate coefficient, SE = Standard Error, P = P value, OR = Odds Ratio, CI = Confident Interval; M = Male.

MUNI
FSS

Table 4.

Frequencies of feelings after different sexting behaviors by gender

		Happy[d]						X^2	Upset[e]							X^2
		Girls		Boys		Total			Girls		Boys		Total			
Sexting expected[a]	Never	91	51.7%	62	36.9%	153	44.5%		29	16.4%	52	30.2%	81	23.2%		
	Less than once a month	47	26.7%	53	31.5%	100	29.1%	8.148*	70	39.5%	80	46.5%	150	43.0%		19.367***
	At least monthly	38	21.6%	53	31.5%	91	26.5%		78	44.1%	40	23.3%	118	33.8%		
Sexting unexpected[b]	Never	164	71.3%	104	56.8%	268	64.9%		40	17.2%	45	24.2%	85	20.3%		
	Less than once a month	51	22.2%	52	28.4%	103	24.9%	11.674**	69	29.6%	75	40.3%	144	34.4%		13.143***
	At least monthly	15	6.5%	27	14.8%	42	10.2%		124	53.2%	66	35.5%	190	45.3%		
Sexting sent[c]	Never	32	28.6%	25	19.7%	57	23.8%		41	35.7%	46	36.2%	87	36.0%		
	Less than once a month	47	42.0%	52	40.9%	99	41.4%	3.667	52	45.2%	60	47.2%	112	46.3%		0.288
	At least monthly	33	29.5%	50	39.4%	83	34.7%		22	19.1%	21	16.5%	43	17.8%		

Notes. *$p < .05$, ** $p < .01$, *** $p < .001$.

ad. $N = 344$; ae. $N = 349$; bd. $N = 413$; be. $N = 419$; ce. $N = 239$; cd. $N = 242$.

Table 5. *Logistic regression for psychological variables related to feelings after sexting behaviors*

Sexting expected

	Happy[a]				Upset[b]			
	β (SE)	P	OR	95% CI	B (SE)	P	OR	95% CI
Intercept	-0.519 (1.417)	.714	0.590		2.803 (1.641)	.088	16.490	
Age	0.210 (0.078)	**.007**	1.234	[1.059 - 1.438]	-0.124 (0.088)	.160	0.884	[0.743 - 1.050]
Gender (M)	0.660 (0.240)	**.006**	1.936	[1.209 - 3.009]	-0.654 (0.275)	**.017**	0.520	[0.303 - 0.890]
Depression	-0.546 (0.191)	**.004**	0.579	[0.399 - 0.842]	0.181 (0.214)	.399	1.198	[0.788 - 1.822]
Loneliness	0.282 (0.157)	.073	1.325	[0.974 - 1.804]	0.144 (0.177)	.520	1.121	[0.792 - 1.585]
Self-esteem	0.198 (0.224)	.376	1.220	[0.786 - 1.892]	0.037 (0.248)	.880	1.038	[0.638 - 1.689]
Happiness	-0.649 (0.194)	< .001	0.523	[0.357 - 0.765]	-0.181 (0.212)	.392	0.834	[0.551 - 1.263]
Sensation seeking	0.284 (0.140)	**.042**	1.329	[1.011 - 1.747]	-0.126 (0.157)	.421	0.881	[0.648 - 1.119]
	Cox & Snell R^2	Nagelkerke R^2	X^2		Cox & Snell R^2	Nagelkerke R^2	X^2	
Model fit	.11	.15	39.729***		.05	.08	17.911*	

Sexting unexpected

	Happy[c]				Upset[d]			
	β (SE)	P	OR	95% CI	B (SE)	P	OR	95% CI
Intercept	0.112 (1.331)	.933	1.118		1.617 (1.574)	.096	13.694	
Age	-0.026 (0.071)	.715	0.974	[0.847 - 1.121]	-0.099 (0.084)	.241	0.906	[0.768 - 1.069]
Gender (M)	0.691 (0.223)	**.002**	1.966	[1.290 - 3.089]	-0.407 (0.255)	.111	0.666	[0.404 - 1.098]
Depression	-0.275 (0.165)	.097	0.760	[0.549 - 1.051]	-0.166 (0.188)	.377	0.847	[0.585 - 1.225]
Loneliness	0.241 (0.139)	.083	1.272	[0.969 - 1.669]	0.272 (0.158)	.085	1.313	[0.964 - 1.790]
Self-esteem	0.234 (0.198)	.237	1.264	[0.867 - 1.863]	0.074 (0.226)	.743	1.077	[0.691 - 1.679]
Happiness	-0.370 (0.163)	**.024**	0.691	[0.501 - 0.952]	-0.028 (0.190)	.882	0.972	[0.670 - 1.411]
Sensation seeking	0.279 (0.124)	**.024**	1.322	[1.037 - 1.687]	-0.118 (0.142)	.407	0.889	[0.672 - 1.175]
	Cox & Snell R^2	Nagelkerke R^2	X^2		Cox & Snell R^2	Nagelkerke R^2	X^2	
Model fit	.06	.08	24.286***		.02	.03	9.075	

Study 2 – individual variables' association with feelings after sexting

Sexting sent

	Happy[e]				Upset[f]			
	β (SE)	P	OR	95% CI	B (SE)	P	OR	95% CI
Intercept	-2.372 (1.879)	.207	0.093		1.521 (1.707)	.373	4.575	
Age	0.124 (0.102)	.222	1.132	[0.928 - 1.382]	-0.031 (0.093)	.741	0.970	[0.809 - 1.163]
Gender (M)	0.390 (0.338)	.249	1.477	[0.761 - 2.865]	0.378 (0.304)	.213	1.459	[0.805 - 2.645]
Depression	0.078 (0.258)	.763	1.081	[0.652 - 1.792]	-0.097 (0.231)	.675	0.908	[0.577 - 1.427]
Loneliness	0.031 (0.219)	.886	1.032	[0.672 - 1.583]	0.516 (0.202)	**.011**	1.675	[1.126 – 2.491]
Self-esteem	0.580 (0.298)	.052	1.786	[0.995 – 3.206]	0.204 (0.261)	.434	1.227	[0.735 – 2.048]
Happiness	-0.299 (0.230)	.073	0.742	[0.473 - 1.164]	-0.496 (0.215)	**.021**	0.609	[0.399 - 0.929]
Sensation seeking	0.353 (0.197)	.102	1.424	[0.967 - 2.096]	-0.073 (0.185)	.658	0.929	[0.646 - 1.136]
	Cox & Snell R^2	Nagelkerke R^2		X^2	Cox & Snell R^2	Nagelkerke R^2		X^2
Model fit	.05	.08		12.965	.08	.11		19.990**

Notes. β = Estimate coefficient, SE = Standard Error, P = P value, OR = Odds Ratio, CI = Confident Interval; M = Male.

a. N = 344; b. N = 349; c. N = 413; d. N = 419; e. N = 239; f. N = 242.

MUNI
FSS