EPRA
Vienna University Workshop

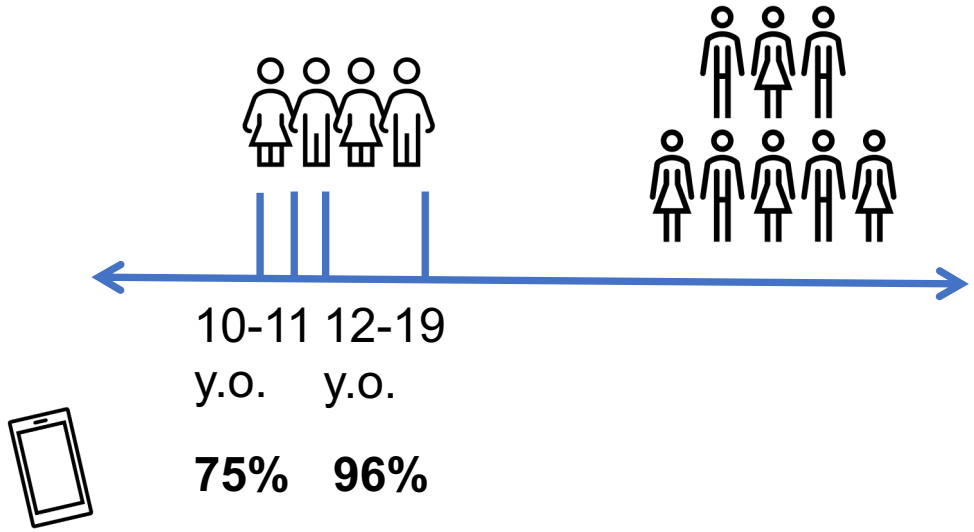
Evidence Based Regulation - Youth Engagement in the Digital Environment

Dr. Anja Stevic
Advertising and Media Psychology Research Group
Department of Communication
University of Vienna

Research and Policy Partnership
EPRA & Comms Policy Collaborative
University of Vienna

24 November 2021

Relevance



The most used applications on smartphones are **social media networking sites,** 89% of reported usage rates.

Sources: Gfk, 2018; JIM-Studie, 2020; Global Web Index, 2019; Tenzer, 2020

Overview of presentation and studies

- **Study 1. Nighttime smartphone use among children and early adolescents**

  - 29% of teens keep their smartphone in bed
  - 36% check their smartphone at least once at night (Common Sense Media, 2019)
  - Sleep deficit or frequent sleep interruptions could result in negative outcomes

  → difficulties with **sustained attention** during the day (Dahl, 1996)
  → children's **school performance** might suffer

Overview of presentation and studies

- **Study 2. Phubbing behaviors among late adolescents**

  - **Phubbing** → a situation when a person starts using their smartphone, while interacting with other people in real-life situations
  - During face-to-face interactions → almost constant **smartphone interruptions**
  - 85% of smartphone owners indicate using smartphones while talking to friends or family (Richter, 2018)

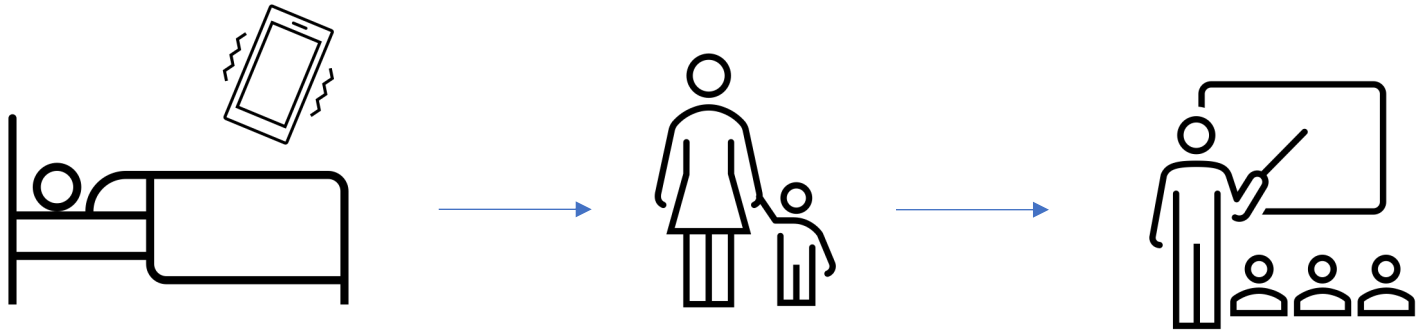
Overview of presentation and studies

- **Study 3. Reflective smartphone disengagement**
  - One of the projects in AdMe Research Group is developing a scale for smartphone disengagement
  - Efforts to disconnect from smartphone → attitudes and behaviors of disengagament in certain situations

Matthes, J., Karsay, K., Hirsch, M., Stevic, A., & Schmuck, D. (2021). Reflective smartphone disengagement: Conceptualization, measurement, and validation. *Computers in Human Behavior*.

Study 1: Nighttime smartphone use

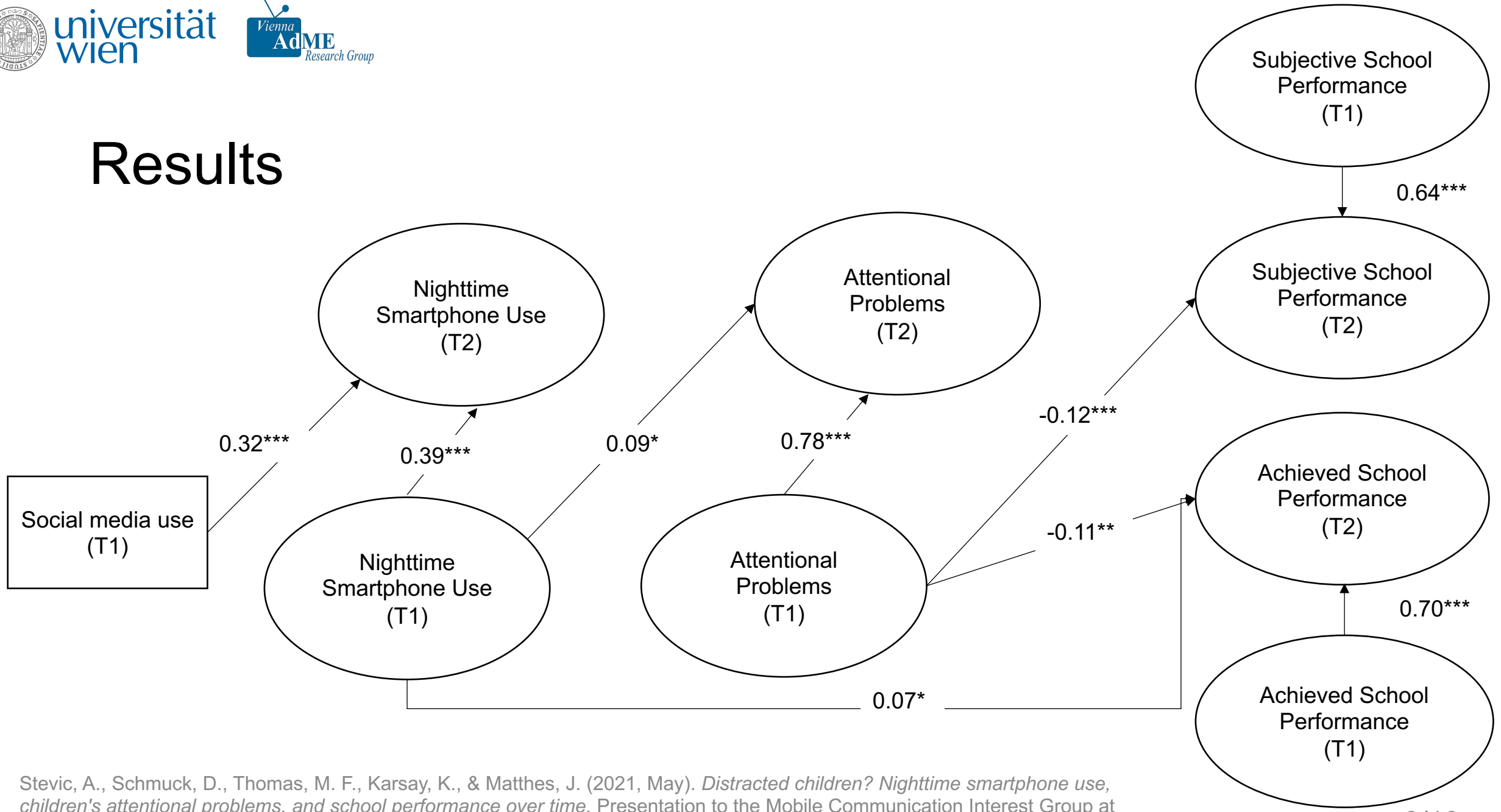
- Longitudinal study with parent-child pairs
- Parents‘ reports of children‘s attentional problems
- Children‘s reports of subjective and graded school performance



Method

- **Two-wave panel survey** in Germany (**four-month interval)**
- **Quota-sampling** based on parents' age and gender collected by polling institute
- **Children between 10 and 14 years** who possessed a **smartphone** and had used a **SNS** on their smartphone
- N_{T2} = **384 parent-child dyads**

Results



Stevic, A., Schmuck, D., Thomas, M. F., Karsay, K., & Matthes, J. (2021, May). *Distracted children? Nighttime smartphone use, children's attentional problems, and school performance over time.* Presentation to the Mobile Communication Interest Group at the (virtual) 71st annual conference of the International Communication Association (ICA), May 27-31.

Discussion

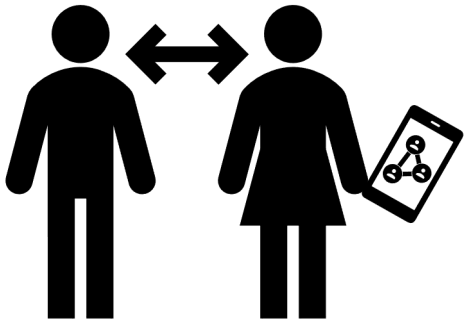
- **Children's nighttime smartphone use** increased their **attentional problems** over time → in line with previous cross-sectional parent-reported findings
  - This result suggests that postponed and impaired sleep is harmful to children's cognitive development after 4 months
- Parent-reported children's **attentional problems** negatively predicted **school performance**
  - Slightly stronger effect on subjective than on achieved school performance; children's own competence beliefs are more sensitive to parent-reports than to teacher-given grades
- Using the **smartphone** at **night** was **related to higher school performance**
  - One reason could be that children use smartphones at night for talking and chatting about school-related content and topics (e.g., Gikas & Grant, 2013)

Implications for regulation

- **Parents** could ensure **optimal (nighttime) smartphone use** and provide effective home learning environments for children and adolescents → having easily **accessible intervention programs** that help parents gain knowledge of how to monitor and regulate children's smartphone use
- **Teachers/educators** could make children aware of the negative consequences of nighttime smartphone use → intervention programs for children that help them gain **digital literacy skills** specific for online contexts should be designed and implemented through schools.

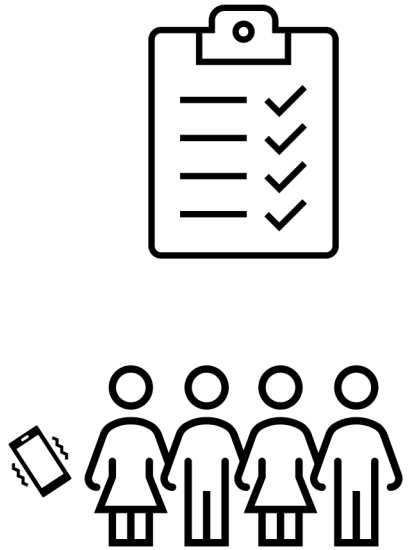
Study 2: Phubbing among adolescents

- Longitudinal study with late adolescents
- Adolescents‘ reports of own and others smartphone use in social presence

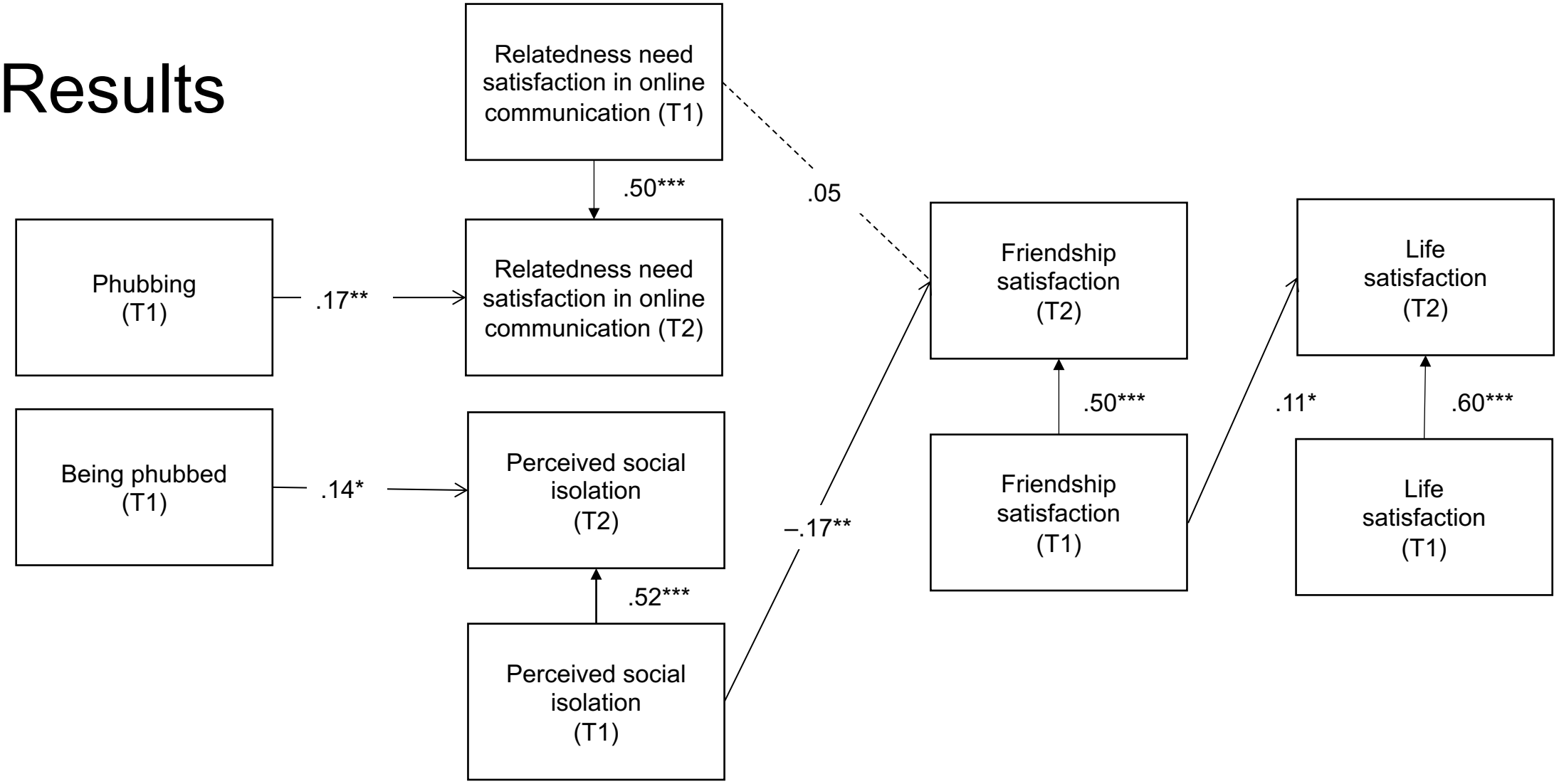


Method

- **Two-wave panel survey** in Germany (N_{T2} = **294**)
- **Two-month interval**
- **Adolescents between 16 and 19 years,** who possessed a **smartphone** and had used a **SNS** on their smartphone



Results


Relatedness need satisfaction in online communication (T1)
.50***
.05
Phubbing (T1)
.17**
Relatedness need satisfaction in online communication (T2)
Friendship satisfaction (T2)
Life satisfaction (T2)
.50***
.11*
.60***
Being phubbed (T1)
.14*
Perceived social isolation (T2)
Friendship satisfaction (T1)
Life satisfaction (T1)
−.17**
.52***
Perceived social isolation (T1)

Discussion

- Adolescents might engage in **phubbing** others because they may receive **social gratification** from their online contacts instead of their face-to-face partners
- Relatedness need satisfaction in online communication is not sufficient for friendship satisfaction over time, suggesting that face-to-face communication matters more
- In line with the **ostracism** theory (Williams, 2009), being with friends who frequently use smartphones might be one of the reasons why adolescents feel isolated and less satisfied in their relationships

Implications for regulation

- Raising awareness about the mobile etiquette for social situations
  → through digital literacy programs in schools
- Increase focus on digital well-being (Vanden Abeele, 2020) and disconnection from devices
- Positive outcomes of sharing screens and co-use of smartphones in youth and parent-child pairs (Floegel et al., 2021)

Study 3: Reflective smartphone disengagement in youth

- Sample of 16 to 20 year olds

Table 1. *Correlations*

		M(SD)	Min	Max	1	2	3
1	Reflective Smartphone Disengagement	3.73 (0.86)	1	5	1		
2	Nomophobia	2.61 (0.98)	1	5	-.19***	1	
3	Self-reflection	3.59 (0.88)	1	5	.23***	.15***	1

Note. $N = 760$, $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$.

Matthes, J., Karsay, K., Hirsch, M., Stevic, A., & Schmuck, D. (2021). Reflective smartphone disengagement: Conceptualization, measurement, and validation. *Computers in Human Behavior*.

Future research outlook

- Focus on individual social media use and content → benefits and risks
- Device requires attention → regulate or decrease attention given to the social media and/or smartphones
- Research on causes and implications of disengagement processes → taking a break from device or certain applications and disconnecting intentionally, switching applications or limiting time spent on applications

Conclusion

- Understanding benefits and risks of social media and mobile devices remains one of the most important challenges and continues to be a long-term research goal
- At times when digital technologies overtake most of individuals' daily time, the main objective is to understand and **ensure optimal use** that contributes to well-being

Thank you for your online attention!

anja.stevic@univie.ac.at

References

- Cain, N., & Gradisar, M. (2010). Electronic media use and sleep in school-aged children and adolescents: A review. *Sleep Medicine*, *11*(8), 735–742. https://doi.org/10.1016/j.sleep.2010.02.006
- Common Sense Media (2019). *The new normal: How devices affect daily life.* Common Sense Media. Retrieved from https://www.commonsensemedia.org/the-new-normal-infographic
- Gikas, J., & Grant, M. M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones & social media. *The Internet and Higher Education*, *19*, 18-26.
- Dahl, R. E. (1996). The impact of inadequate sleep on children's daytime cognitive function. Seminars in Pediatric Neurology 3(1), 44–50. https://doi.org/10.1016/S1071-9091(96)80028-3
- Floegel, D., Elias, N., & Lemish, D. (2021). Young Childrens Mobile Device Use in Public Places: Immersion, Distraction, and Co-Use. *Studies in Media and Communication*, *9*(1), 30-40.
- Richter, F. (2018). America's smartphone addiction. Retrieved from https://www.statista.com/chart/12403/smartphone-addiction/
- Vanden Abeele, M. M. (2020). Digital wellbeing as a dynamic construct. *Communication Theory*. https://doi.org/10.1093/ct/qtaa024
- Williams, K. D. (2009). Ostracism: A temporal need-threat model. *Advances In Experimental Social Psychology*, 41, 275-314.