## Talk or act?

Effects of screen availability vs. effects of parental mediation style on children's problematic media use

PD Dr. Paula Bleckmann, PD Dr. Thomas Mößle

**EUSPR Conference "Changing Behaviour without Talking:** automatic processes and the regulation of behaviour"

23rd October, Ljubljana



Germany



#### 1. Introduction:

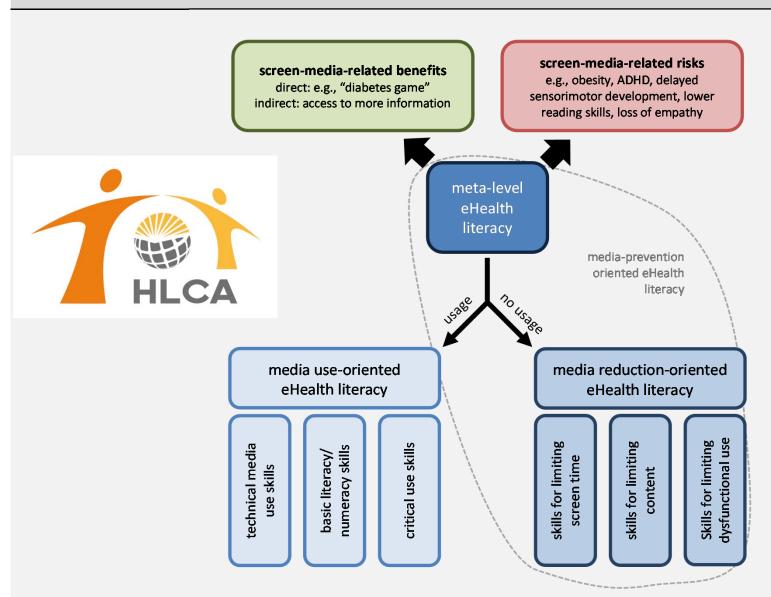
- a) eHealth Literacy
- b) Problematic media effects
- c) Dimensions of problematic media use
- d) Measures of parental mediation
- 2. Method
- 3. Results
- 4. Discussion

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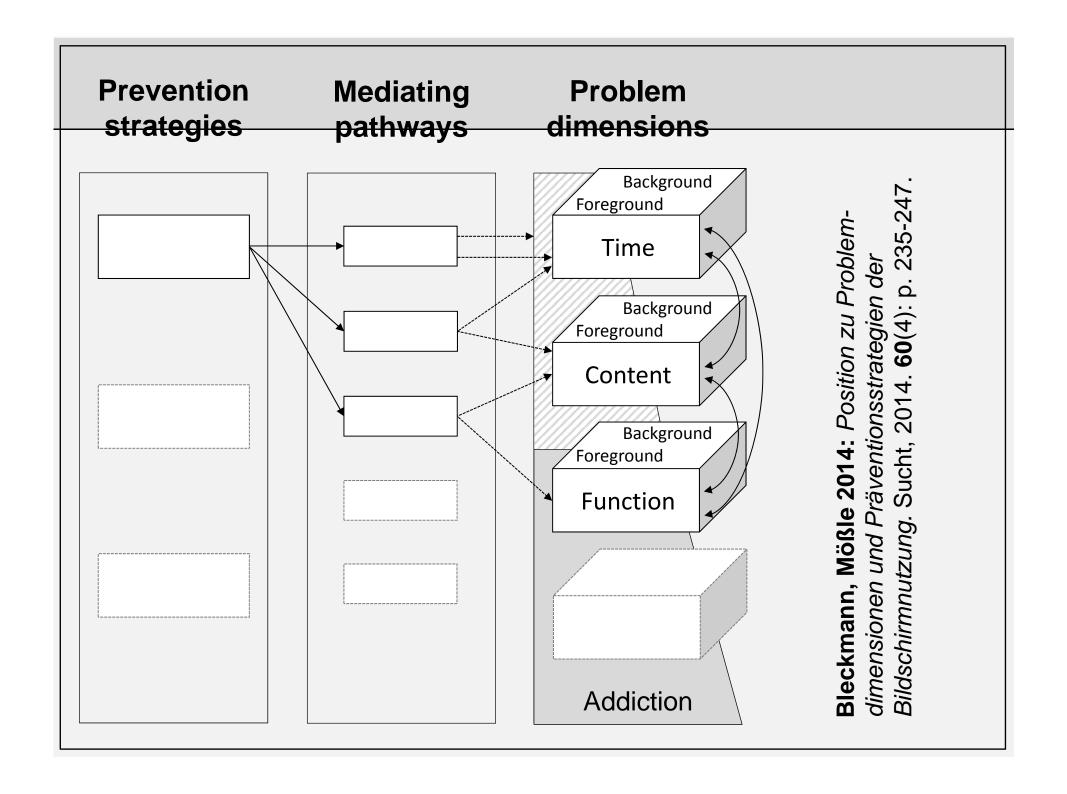




## Widened concept of eHealth literacy



Conceptual clarification in Health Literacy in Childhood and Adolescence consortium



## Effects of problematic screen media use under discussion

#### Overweight and Obesity

(Brettschneider et al., 2006; Danielsen et al., 2011; Epstein et al., 2011; Kautiainen et al., 2005; Laurson et al., 2008; Marshall et al., 2004; Stettler et al., 2004; Tremblay & Willms, 2003; van Egmond-Fröhlich et al., 2007)

Lower academic achievement (school and university level)

(Razel, 2001; Anderson et al., 2001; Hancox et al., 2005; Zimmerman & Christakis, 2005; Mößle et al., 2007; Ennemoser & Schneider, 2009; Mößle et al., 2010; Baier & Pfeiffer, 2011)

Conspicuous Social and Communicative Behaviour and Aggression

(Anderson & Bushman, 2001; Bushman & Huesmann, 2006; Anderson et al., 2010; Slater et al., 2003; von Salisch et al., 2007; Zimmerman et al. 2005; Anderson et al., 2008; Gentile & Gentile, 2008; Hopf et al., 2008; Möller & Krahé, 2009; Krahé & Möller, 2010)

Internet Gaming Disorder, other Cyber Disorders

(te Wildt, 2004; Spitzer, 2005; Bergmann & Hüther, 2006; Grüsser, & Thalemann, 2006; Griffiths, 2007; Wölfling et al., 2008; Wölfling & Müller, 2008; Batthyány & Pritz, 2009; Wessel et al., 2009; Müller, et al., 2011).

Background media exposure and parent-child interaction

(Kirkorian et al., 2009; Ward, 1999; Christakis et al., 2009, Radesky 2015)





## Parental mediation of children's media use – commonly used three-dimensional constructs

#### Two dimensions in common

- A) Active/instructive mediation Parents talk to child about the media content, be it TV or video gaming or Internet. BUT: there's positive and negative active mediation depending on whether parents critizise or support violent/pornographic media messages, the latter leading to more acceptance of problematic content.
- B) Restrictive mediation Parents set up and enforce rules to limit media time and content BUT: For adolescents, this is related to less positive attitudes towards parents and more positive attitudes toward the restricted content, in this case violence (Nathanson 2003) and is related to higher risk of internet addiction (cf. Mücken 2002)
- → There is no consistent evidence that active or restrictive mediation are effective in preventing problematic use

One additional dimension which varies between authors:

- C) co-viewing TV (Valkenburg et al 1999)/co-playing video games (Nikken Jansz, 2006) OR unlimited use (Barkin et al, 2006), OR technical limitation and monitoring (Livingstone and Helsper 2008).
- → evidence that this type of parental mediation is related to higher risks of problematic screen media use in children

Ineffective or counterproductive parental mediation. So how about the effects of screen availability compared to that?

## **METHOD**







#### Sample Description

The *Berlin Longitudinal Study Media* is a four-year longitudinal study with 1 208 school children representative of the (federal) state of Berlin, Germany (3<sup>rd</sup> to 6<sup>th</sup> grade).

	t1	t2	t3	t4	t5
	N (%)				
Classes	47 (100%)	40 (100%)	44 (100%)	44 (94%)	44 (94%)
Teachers	47 (100%)	39 (98%)	39 (98%)	40 (91%)	41 (93%)
Parents	828 (88%)		686 (82%)	594 (72%)	571 (71%)
Students	943 (84 %)	846 (88 %)	835 (87 %)	827 (83 %)	806 (79 %)
Age ( <i>M</i> )	8;11	9;6	10;5	11;5	12;5



### **Sample Characteristics**

Percent male: 52%

Children from immigrant communities: 28%

**Educational background** 

Lower: 13%

Medium: 33%

Higher: 54%

Prosperity Index

Q1: 20%

Q2: 20%

Q3: 20%

Q4: 20.2%

Q5: 19.8%

### Parental Monitoring of Children's Media Use

- 3 items per medium (TV/video games/Internet) on a 4-point scale (always, most of the time, rarely, never)
- "In my home there are clear rules which shows I may watch on TV/video games I may play/sites I may visit on the Internet and which I am not allowed"
- My parents want to know which shows I watch/games I play/sites I visit
- 3. We have clear rules concerning the time I may spend watching TV/playing video games/surfing the Internet

Parental monitoring calculated as a sum of active and restrictive items (none, low, medium, high)



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## **RESULTS**





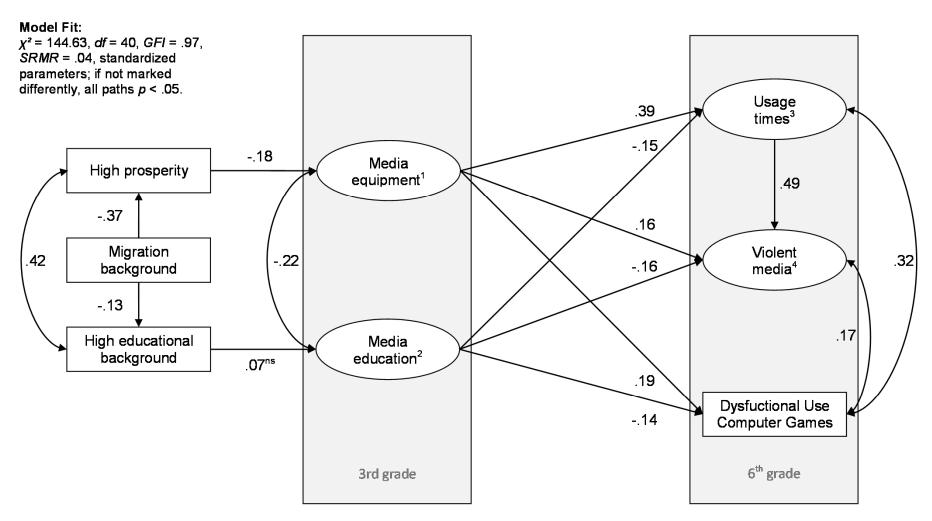
## **Descriptive Statistics**

	3rd grade	6th grade
TV in childrens' bedroom	47%	59%
Game Console in childrens' bedroom	42%	62%
Parental Media Education (Monitoring) (high)	35%	34%
TV times (index)	1.71 (1.02)	2.29 (1.05)
Computer Game times (index)	1.05 (0.97)	1.47(1.00)
Violent content TV (16/18)	52%	70%
Violent Content (Computer Games) (16/18)	37%	46%
Dysfunctional Computer Game Use ("(fairly) agree")		12%

Index TV usage times: 0 = I don't watch television", 1 = I 1hour", 2 = I 1 + 2 hours", 3 = I 2 + 3 hours", 4 = I 3 hours".

Index wöchentlicher Mediennutzung<sub>TV</sub> =  $\frac{5 \times \text{Weekday}_{\text{TV}} + 2 \times \text{Weekend}_{\text{TV}}}{7}$ 

# Structural Equation Model with longitudinal data



Note. <sup>1</sup> TV:  $\lambda$  = .77, Game Console:  $\lambda$  = .76. <sup>2</sup> TV:  $\lambda$  = .79, Game Console:  $\lambda$  = .83. <sup>3</sup> TV:  $\lambda$  = .59, Game Console:  $\lambda$  = .76. <sup>4</sup> TV:  $\lambda$  = .62, Game Console:  $\lambda$  = .72.

## **DISCUSSION**





## **Study limitations**

- Sample includes only Berlin, not nationally representative
- Technical restrictions were not recorded, are currently fast increasing, especially for smartphones
- Items used for parental monitoring assessment differ from those of other authors
- "outdated" results? Screen availability in the bedroom loses importance with the increase of mobile devices esp. Smartphones





## "Today is bring your favourite toy day"







#### talk AND act

 Reducing screen availability is a promising prevention strategy in the family setting, esp. reducing screen time.



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- This strategy may face resitance
- a) from media industry
- b) from parental convenience
- c) From peer pressure among children.





#### talk AND act

- Reducing screen availability is a promising prevention strategy in the family setting, esp. reducing screen time.
- This strategy may face resitance
- a) from media industry
- b) from parental convenience
- c) From peer pressure among children.
- Parental mediation strategies alone without reducing availability have been shown NOT to work for TV (Nathanson 2002 for TV, Mitchell 2003 for Internet)
- Best combined: lower screen availability, make rules and talk to the child about media experiences.





#### References

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### Thank you for your attention!

#### Team "Media Effects Studies" KFN

PD Dr. Thomas Mößle (Dipl.- Dr. Paula Bleckmann (Dipl.-Biologin)

Nadine Jukschat (M.A.



Dr. Florian Rehbein (Dipl.-Psych.) Eva-Maria Zenses (Dipl.-Kontaktdaten Psych.)

#### PD Dr. Paula Bleckmann, and PD Dr. Thomas Mößle,

Kriminologisches Forschungsinstitut Niedersachsen (KFN)
Lützerodestraße 9
30161 Hannover

Paula.Bleckmann@kfn.de; Thomas.Moessle@kfn.de





# It sure made me think, but did it make me change my habits?







#### Talk or act? Talk AND act!

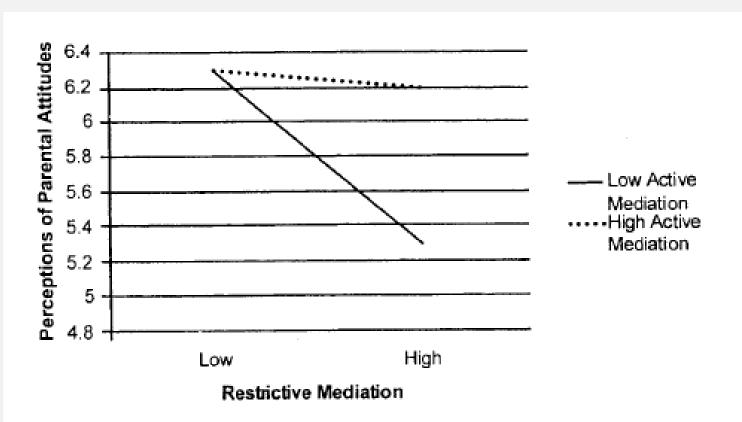


Figure 1. The interactive effects of active and restrictive mediation on perceptions of parental attitudes.

#### Nathanson 2002 unintended effects



