

Media use

Introduction

Both the range of electronic media and the options for their use have been consistently on the rise in recent years. Today, children and adolescents grow up with digital technology and use it for leisure activities, communication and information acquisition (Gleich 2013; MPFS 2014).

From a health perspective, the use of electronic media is not inherently problematic (Finne, Bucksch 2014; Giedd 2012). It is rather the content as well as the nature and duration of the use that are important (Finne, Bucksch 2014; Schlack 2013). Excessive media use is associated, for example, with deficiencies in motor, cognitive and linguistic development, aggressive behaviour (as a result of playing violent interactive games) or a reduction in sleeping and recovery times (Schlack 2013). Furthermore, physical inactivity and malnutrition associated with excessive media use are considered to be risk factors for obesity (Strasburger 2011; Manz et al. 2014).

Indicator

For the assessment of media use, in KiGGS Wave 1 adolescents aged between 11 and 17 were asked how much time they spent using the following media per day on average: “TV/video”, “Computer/Internet”, “Games console”, “Mobile phone”, with the following response options: “None at all”, “Up to 1 hour”, “Up to 2 hours”, “Up to 3 hours”, “Up to 4 hours”, “More than 4 hours”.

The tables show the proportion of adolescents who spend more than two hours per day using the respective media, stratified by sex, age and social status.

Key results

- ▶ In total, 33.8 % of 11 to 17 year-old adolescents watch TV or video devices for more than 2 hours per day. The respective percentages for “Computer/Internet”, “Games console” and “Mobile phone” are 26.7 %, 6.8 % und 17.3 %.
- ▶ Boys watch TV and use games consoles more frequently, while girls use mobile phones more frequently. Beyond this, there are no significant differences between the sexes.
- ▶ Time spent using electronic media per day increases with age.
- ▶ Adolescents with low social status spend significantly more time using electronic media than adolescents with high social status.

Conclusion

The results of KiGGS Wave 1 show that a large proportion of adolescents aged between 11 and 17 spend more than two hours per day using various electronic media (TV/video: 33.8 %, computer/Internet: 26.7 %, games console: 6.8 %, mobile phone: 17.3 %). Boys use TV/video devices and games consoles more frequently, while girls use mobile phones more frequently. Computers and Internet, however, are used by both sexes with almost the same frequency.

The results also show that the time spent using the various types of electronic media each day increases with age for both sexes. The only exception is games consoles, which are used by younger girls more than by older girls. These results are largely conform to those from the representative JIM Study carried out by the Pedagogical Media Research Centre Southwest (Medienpädagogischer Forschungsverbund Südwest; mpfs) in 2011 and 2012 (MPFS 2013). However, in contrast to KiGGS Wave 1, a higher daily use of games consoles as well as computers and Internet was observed in the JIM Study. The latter can presumably be explained by the fact that Internet use via smartphone was not assessed in the KiGGS study.

With regard to social differences, it was demonstrated that adolescents with low social status use the media surveyed in KiGGS Wave 1 significantly more often than adolescents with high social status. Similar trends were also observed in the KiGGS baseline study, which was carried out from 2003 to 2006 (Lampert et al. 2007). and a school-based British longitudinal study, in which 5,863 pupils participated over the course of 5 years (Brodersen et al. 2007).

The findings from KiGGS Wave 1 indicate that the use of electronic media forms a considerable part of the daily activities of most adolescents. It should therefore be ensured that other leisure activities are not neglected because of this (Schlack 2013).

Furthermore, both children and adolescents should be educated in the matter of media literacy. This includes strengthening the age-appropriate, independent and creative use of various forms of media as well as a critical approach to its content (Baacke 1997; Treumann et al. 2007).

Note: A detailed description of the study as well as explanations on the method are available on the KiGGS study website www.kiggs-studie.de, and in Lange et al. (2014).

Further results regarding the association between media consumption and health in childhood and adolescence can be found in Manz et al. (2014) and Schlack et al. (2016).

Literature

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Table 1
Frequency of use of electronic media among 11 to 17-year-old girls by age and social status

	TV/Video (more than 2 hrs a day)		Computer/Internet (more than 2 hrs a day)		Games console (more than 2 hrs a day)		Mobile phone (more than 2 hrs a day)	
	%	(95%-CI)	%	(95%-CI)	%	(95%-CI)	%	(95%-CI)
Girls	30.3	(27.7–33.1)	26.7	(24.0–29.6)	1.4	(0.9–2.2)	22.8	(20.0–25.8)
Age								
11–13 Years	22.9	(19.4–26.9)	12.7	(9.9–16.1)	2.1	(1.1–3.7)	12.2	(9.6–15.4)
14–17 Years	35.8	(32.0–39.7)	37.2	(33.1–41.4)	0.9	(0.4–1.9)	30.6	(26.7–34.8)
Social status								
Low	40.4	(32.1–49.3)	33.6	(27.1–40.8)	1.6	(0.6–4.5)	29.6	(22.5–37.8)
Middle	30.6	(27.9–33.5)	27.4	(24.2–30.8)	1.5	(0.8–2.7)	23.4	(20.3–26.9)
High	17.5	(14.5–20.9)	15.6	(12.3–19.5)	0.3	(0.1–1.4)	13.4	(10.2–17.4)
Total (girls and boys)	33.8	(31.8–35.8)	26.7	(24.7–28.8)	6.8	(5.8–8.0)	17.3	(15.4–19.4)

Table 2
Frequency of use of electronic media among 11 to 17-year-old boys by age and social status

	TV/Video (more than 2 hrs a day)		Computer/Internet (more than 2 hrs a day)		Games console (more than 2 hrs a day)		Mobile phone (more than 2 hrs a day)	
	%	(95%-CI)	%	(95%-CI)	%	(95%-CI)	%	(95%-CI)
Boys	37.2	(34.5–39.9)	26.6	(24.0–29.5)	12.1	(10.4–14.1)	12.0	(10.1–14.2)
Age								
11–13 Years	27.7	(24.0–31.9)	14.1	(11.1–17.8)	9.3	(7.0–12.3)	6.0	(4.0–9.0)
14–17 Years	44.4	(40.7–48.2)	36.2	(32.2–40.4)	14.3	(11.9–17.1)	16.5	(13.8–19.7)
Social status								
Low	41.5	(34.4–49.0)	32.7	(25.7–40.6)	16.3	(11.6–22.4)	17.4	(12.2–24.2)
Middle	39.9	(36.7–43.2)	25.8	(22.8–29.1)	12.4	(10.3–14.9)	10.4	(8.4–13.0)
High	22.0	(18.9–25.5)	19.3	(15.9–23.3)	5.0	(3.3–7.4)	7.2	(5.1–10.1)
Total (girls and boys)	33.8	(31.8–35.8)	26.7	(24.7–28.8)	6.8	(5.8–8.0)	17.3	(15.4–19.4)

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