

Does television make children uncreative?

EXPLANATORY HYPOTHESES AND SELECTED STUDIES

Heike vom Orde

The article gives an overview of hypotheses and international studies on the question of whether television makes children uncreative.

Creativity is a deep-seated ideal in public awareness nowadays, whereas 100 years ago the term was totally unheard-of (Preiser, 2006, p. 51). In contrast to imagination, which is not measurable, creativity is scientifically observable and methodically analysable. Creativity (synonymous with terms such as “divergent”, “inventive” or “productive thinking”) is characterised by novelty, suitability and social acceptance. The research distinguishes between creative people, products and processes. The results of developmental psychology studies suggest that creativity is dependent, inter alia, on age – that is why young children are, in most cases, extraordinarily creative (Böhme-Dürr, 1990, p. 219 ff.).

For many, television is not the first choice medium for fostering creativity. As early as the end of the 1980s, Böhme-Dürr’s survey of 313 adults in Germany established that more people believed it was rather the computer and print media that were stimulating with regard to creativity (ibid., 1990, p. 234).

This evaluation has changed little since then, as more recent investigations suggest (see miniKIM, 2013, Ill. 1). Some popular science writers even argue that television has specifically negative effects on the creativity and imagination of children (e.g. Winn, 1979).

Preiser, Siegfried (2006). *Kreativität*. In Karl Schweizer (ed.), *Leistung und Leistungsdiagnostik* (p. 51-67). Berlin: Springer.

Böhme-Dürr, Karin (1990). *Einflusslose Videotexte und kreative Hacker? Der Einfluss von Fernsehen und Computern auf die Kreativität von Kindern und Jugendlichen*. In Ernest Hess-Lüttich & Roland Posner (ed.), *Code-Wechsel. Texte im Medienvergleich* (p. 217-241). Opladen: VS Verlag für Sozialwissenschaften.

Medienpädagogischer Forschungsverbund Südwest (2013). *miniKIM 2012. Kleinkinder und Medien. Basisuntersuchung zum Medienumgang 2- bis 5-Jähriger in Deutschland*. Stuttgart: mpfs.

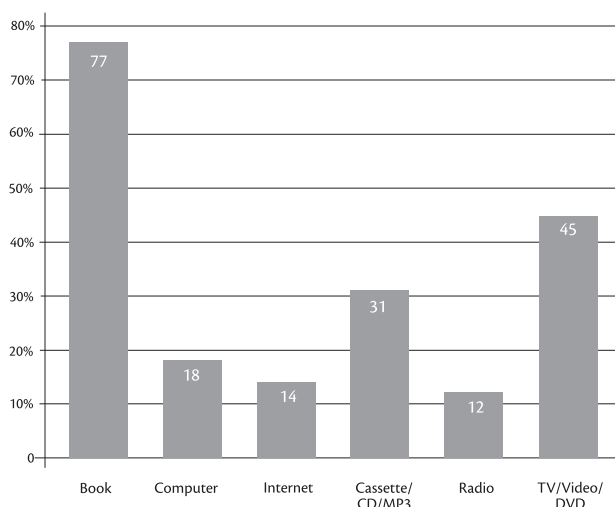
Winn, Marie (1979). *Die Droge im Wohnzimmer*. Reinbek: Rowohlt.

CREATIVITY AND IMAGINATION

In research into children’s and youth media the concepts “creativity” and “imagination” are to some extent used interchangeably, although they relate to different phenomena. There are, though, close connections between children’s imaginary play and creativity in particular: associative thinking plays a significant role in both cases, and research results indicate that complex imaginary play can potentially foster creativity in the long term (see Singer & Singer, 1990). Based on

how available studies operationalise creativity and imagination, Valkenburg, in her review of the current status of research (2001, p. 122), distinguishes between findings on the imaginary play, daydreams and creativity of children, investigated in the context of television use by children.

Research on the topic area “children, imagination/creativity and television” began in the 1950s, developed in the 1970s, and peaked in the studies published in the 1980s and early 1990s. With the increasing importance of interactive media in childhood, the proportion of studies on the influence of computer and video games and the Internet on the creativity of growing children has increased since the turn of the millennium (see Calvert & Valkenburg, 2013).



Ill. 1: The importance of media in fostering the imagination of children (according to information provided by the main carers), in percent

Source: miniKIM study 2013. Base: all main carers of children 2-5 years, n = 632

Singer, Dorothy & Singer, Jerome (1990). *The house of make-believe*. Cambridge: Harvard University Press.

Valkenburg, Patti (2001). *Television and the child's developing imagination*. In Dorothy Singer et al. (ed.), *Handbook of children and the media* (p. 121-134). Thousand Oaks: Sage.

Calvert, Sandra & Valkenburg, Patti (2013). *The influence of television, video, games, and the Internet on children's imagination and creativity*. In Marjorie Taylor (ed.), *Oxford handbook of the development of imagination* (p. 438-450). Oxford: Oxford University Press.

HYPOTHESES ON THE INFLUENCE OF TV ON CHILDREN'S CREATIVITY

Scholarly opinions differ on to what extent television fosters or inhibits children's and young people's creativity. Calvert and Valkenburg distinguish between the following explanatory hypotheses (2013, p. 440 ff.): **Reduction hypothesis:** In the available research thus far, the majority of experts argue that television in general and programmes with violent content in particular can inhibit or even negatively influence children's creativity (e.g. MacBeth, 1996, p. 167; Valkenburg, 1999, p. 652). Primarily, 5 variants of this hypothesis are represented in the literature, whereby the reduction effect on children's creativity is ascribed either to the structural or content features of television.

- **Displacement hypothesis:** According to this view, the reduction effect of television on creativity is linked to the popularity of the medium among children. The time spent on watching television is at the expense of active and creative recreational activities (e.g. MacBeth, 1996; Vandewater, 2006).
- **Passivity hypothesis:** Here, television is seen as a "simple" medium that demands only minor intellectual effort in its reception. The child merely passively consumes the fantasies others have created. His/her own imagination and creativity become stunted by this, and the inclination for imaginary play decreases. There is no empirical proof

for this hypothesis (see Valkenburg, 1999, p. 657).

- **Rapid placing hypothesis:** Here, the reduction effect is ascribed to the rapid speed of presentation. While watching television, the child is confronted with images that, due to their rapid succession, must be processed immediately, leaving no time for reflection or creative reworking. In the opinion of supporters of this hypothesis, this puts excessive cognitive demands on the child and leads to hyperactivity and shortened attention span. There are, however, no studies that empirically prove this theory (ibid.).
- **Arousal hypothesis:** Here, too, the argument is that television promotes hyperactivity and impulsive behaviour. However, it is not the structural features of television that are seen as responsible for this, rather the programmes that contain scenes of action and violence. These are alleged to promote physically active and impulsive behavioural orientations that impede sequential thinking and planning, which in turn are the prerequisites for creative processes. So far, this claim has not been empirically verified (ibid., p. 658).
- **Visualisation hypothesis:** According to this explanatory approach, when watching television (as opposed to reading print media or listening to the radio) the fixation on the visually presented information dispenses with the necessity of generating inner images via one's own thinking or imagination. The creative ability to transform external information into inner ideas is stunted by the pre-determined images. Although this hypothesis has not yet been directly investigated, it is indirectly supported by available comparative media studies (see Valkenburg & Beentjes, 1997, p. 35).

Stimulation hypothesis: Representatives of this theory are of the opinion that programme content, in particular

in formats that are designed to stimulate the recipients' creative processes, enrich the inventive and productive abilities of children (e.g. Anderson et al., 2001). As a result, television provides growing children with a variety of ideas, characters and themes that they can actively appropriate and that they can fall back on in daydreams, imaginary play or in creative-inventive activities (e.g. Götz, 2003). Symbolic processing of television experiences in children's imaginations is extraordinarily multi-faceted and creative (see Neuß, 1999, p. 114 ff.). It extends from the engagement with children's action-oriented topics (Bachmair, 1994), to the egocentric-magical experience of the world, to forms of distancing from contentious media experiences. Children imagine themselves in the role of their favourite (television) heroes or heroines, deal with a variety of everyday problems with the aid of television experiences, and use language, but also other television symbols, to establish communication and community with other children. According to Neuß, as soon as adults notice that children are referring to television content with their creative games, fantasies and associations, they mostly write off this childlike activity as "imitation": "If adults (parents and teachers) are unable to interpret television-related expressions of fantasy as the kids' own fantasy achievement, this is a situation that is less ascribable to the kids themselves than to adults' ingrained interpretation pattern that 'television harms fantasy.'" (Neuß, 2003, p. 26 f.)

MacBeth, Tannis (1996). *Indirect effects of television: creativity, persistence, school achievement, and participation in other activities*. In Tannis MacBeth (ed.), *Tuning in to young viewers. Social science perspectives on television* (p. 149-220). Thousand Oaks: Sage.

Valkenburg, Patti (1999). *Television and creativity*. In Mark Runco & Steven Pritzker (ed.), *Encyclopedia of creativity: Volume II* (p. 651-658). San Diego: Academic Press.

Vandewater, Elizabeth A., Bickham, David & Lee, June (2006). *Time well spent? Relating television use to children's free-time activities*. *Pediatrics*, 117(2), 181-191.

Valkenburg, Patti & Beentjes, Johannes (1997). *Children's creative imagination in response to radio and television stories*. *Journal of Communication*, 47(2), 21-38.

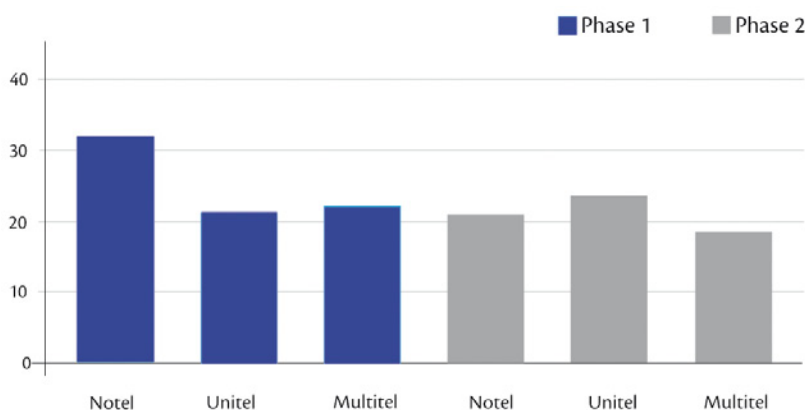
Anderson, Daniel, Huston, Aletha, Schmitt, Kelly, Linebarger, Deborah & Wright, John (2001). *Early childhood television viewing and adolescent behavior: The recontact study*. Boston: Blackwell.

Götz, Maya, Lemish, Dafna, Aidman, Amy & Moon, Heysung (2003). *The role of media in children's make-believe world*. *TelevIZion*, 16(1), 28-39.

Neuß, Norbert (1999). *Symbolische Verarbeitung von Fernseherlebnissen in Kinderzeichnungen. Eine empirische Studie mit Vorschulkindern*. Munich: Kopaed.

Bachmair, Ben (1994). *Handlungsleitende Themen – Schlüssel zur Bedeutung der bewegten Bilder für Kinder*. In Christine Feil et al. (eds.), *Handbuch Medienziehung im Kindergarten* (p. 171-184). Opladen: Leske und Budrich.

Neuß, Norbert (2003). *Gaps for fantasy in children's films – Television and the aesthetic of reception*. *TelevIZion*, 16(1), 22-27.



Ill. 2: Creativity of children measured before (phase 1) and after introduction of television (phase 2) in the "Notel" study

RESULTS OF SELECTED STUDIES

Results for the displacement and visualisation hypothesis

One of the most cited studies on this topic is the quasi-experiment by MacBeth (summary in MacBeth, 1996). In 1973 MacBeth and her colleagues discovered a small community on the US-American-Canadian border which could not receive television programmes because of technical problems with transmission. This place, "Notel" (for "no television") was compared to the communities "Multitel" (able to receive one Canadian and 3 US TV stations) and "Unitel" (only able to receive one Canadian programme provider). The places were very similar to one another in terms of their population structure and infrastructure. Two years after the start of the study the "Notel" inhabitants were then able to receive one TV station, the inhabitants of "Unitel" 2, and the "Multitel" population were able to receive 4 stations, as before. The behaviour of the inhabitants of all 3 communities was studied in 1973 and 1975.

The most striking result regarding the development of creativity (which was evaluated beforehand in vari-

ous tests as divergent thinking) was that the "Notel" children, who at the start showed higher values than the comparison groups, performed significantly worse after television was introduced than before it was introduced. At both points of measurement the "Unitel" and "Multitel" children were less creative than the "Notel" children in the first survey (see Ill. 2; *ibid.*, p. 153).

The author's explanation for this is the indirect effect of television on children's creativity: there is no indication that after television was introduced the "Notel" children would have consumed significantly more or other TV content than the children in the other 2 comparison groups. What actually distinguished the children who performed well in the creativity tasks was that in their free time they took part in more community and sports activities, read more books and listened more to the radio. The analysis results for the adult population also corresponded to this, for they similarly demonstrated a higher level of creativity during the period without television. However, the "fall" in creativity among the "Notel" adults was not as dramatic as it was among the children. MacBeth's explanation for this is that once the capacity for flexible and creative thinking has been

acquired, it is not lost so easily (*ibid.*, p. 156).

Valkenburg and Beentjes, *inter alia*, investigated the visualisation hypothesis in a comparative media study (1997). In an experiment with 64 children from 2 age groups (7-8 and 9-10 years old) the children each had to finish telling an interrupted story, the beginnings of which were presented once as video and once as radio story. As they did this, an assessment was made of how many novel ideas the children's continuations contained that were not present in the initial story. To exclude the possibility that the originality of the story could be down to the children having a faulty capacity for remembering the audio content (fault-memory hypothesis), the children were played the radio story twice. As some studies had already shown previously (e.g. Greenfield, Farrar & Beagles-Roos, 1986; Greenfield & Beagles-Roos, 1988), it was demonstrated that the ingenuity of ideas was higher for the creative completion of the radio story than it was after the reception of the video. This difference with regard to the medium was only apparent, however, among the older children, whereas among the younger children there were no apparent differentials. This result is explained by the authors as a difference in the cognitive development stage.

Results for the stimulation hypothesis

The stimulation hypothesis assumes a positive relation between the use of TV content which stimulates creativity and the inventive output of children. This was analysed using some educational programmes for children that aim to foster creativity and are designed to do this. To date, the programmes that have been most intensively analysed with regard to this are *Mister Rogers' Neighborhood* and *Sesame Street* (see Cole, 2003; Rogge, 2003).

In the recontact study (Anderson et al., 2001) the authors were able to demonstrate that young people who in childhood were regular recipients of these formats are more active in the creative and artistic field in comparison to children of the same age. This was measured by using a test on creative imagination ("alternate uses of an object test") as well as by the frequency of participation in creative activities (art, music and journalism courses, etc.). Significantly positive correlations were found between young people who frequently watched *Mister Rogers' Neighborhood* as 5-year-olds and the creativity indicators that were measured.

Maya Götz has demonstrated in her qualitative multinational studies how television content and characters as media traces are echoed in the imaginations of children, and has identified gender differences here (see Götz, 2006, 2014.) It is mostly visual media that shape the inner images of growing children. Children's drawings prove how creatively they appropriate media stories: children always absorb only portions of these stories, such as the setting or individual media objects, and they adapt these to their desired plot. Stories are re-imagined and extended (see Götz, 2006, p. 399 ff.). While the girls in the

study integrated media traces into their daydreams more rarely and less clearly, the boys frequently imagined they were heroes or took "real (male) friends" with them into their fantasy worlds.

Children's creativity is, according to Götz, particularly comprehensive and pronounced when children appropriate media content and transform it into fantasies through which they can feel strong and powerful. The symbolic material of media can, in her view, contribute to children imagining they are unique, respected and loved for their own sake, as well as to them being able to balance out experiences of everyday criticism. In this way, media can contribute to the psychological health of growing children (see Götz, 2014, p. 417).

Greenfield, Patricia, Farrar, Dorathea & Beagles-Roos, Jessica (1986). Is the medium the message? Journal of Applied Developmental Psychology, 7(3), 201-218.

Greenfield, Patricia & Beagles-Roos, Jessica (1988). Radio versus television. Journal of Communication, 38(2), 71-92.

Cole, Charlotte (2003). Imagine that! The importance of Sesame Street co-productions around the world. TelevIZion, 16(1), 45-48.

Rogge, Jan-Uwe (2003). Fantasy, emotion and cognition in Germany's "Sesame Street". Notes on the framework stories. TelevIZion 16(1), 49-55.

Götz, Maya (2006). Mit Pokémon in Harry Potters Welt. München: kopaed.

Götz, Maya (2014). TV-hero(in)es of boys and girls. Reception studies of favorite characters. Frankfurt: Peter Lang.

SO DOES TV MAKE CHILDREN UNCREATIVE?

The sweepingly negative image of television as a medium that stunts creativity or destroys imagination has to date not been proven by the available research. The available studies on the reduction hypothesis are actually unable to provide any significant causal explanations for the results on children's TV consumption and their creative output,

but they predominantly assume negative effects.

One of the criticisms Valkenburg (1999, p. 658) makes is that the majority of available studies are based on too simplistic an assumption of the effect of television content input on the creative output of children. Furthermore, variables such as gender, socio-economic status and how far the child is disposed to creative activities or imaginative play are not included in the explanatory approaches, and they are neglected by many studies. Studies on fostering creativity, e.g. the results of an experimental study by Rubenstein (2000), furthermore indicate that it is not the **medium** (in this study television vs. print) but the quality of the creativity-stimulating **content** that plays the decisive role in fostering the creativity of growing children.

The predominantly qualitative studies on the stimulation hypothesis make clear that television – like other media – has enough stories that children can integrate as symbolic material into their imaginations. That not only helps them act out unresolved everyday problems in their imagination during reception. Television can give growing children's imagination a more concrete shape, thereby also fostering children's aesthetic competence which is then reflected as a media trace in their games, drawings or their own media products (see Mikos, 2001, p. 90). Media-pedagogical initiatives, such as the "One Minutes jr." network by UNICEF, which create a space for growing children's creative media activity, are based on this finding. ■

Heike vom Orde, M.A. (IZI)

Rubenstein, Dorothy (2000). Stimulating children's creativity and curiosity. Does content and medium matter? Journal of creative behavior, 34(1), 1-17.

Mikos, Lothar (2001). Fern-Sehen. Bausteine zu einer Rezeptionsästhetik des Fernsehens. Berlin: Vistas.

"One Minutes jr."-network. Available at [www.http://www.theoneminutesjr.org](http://www.theoneminutesjr.org) [08.07.14]