



The "digital natives": Risk factors and benefits using digital devices. Qualitative research among primary school pupils of Modena, Parma and Piacenza

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① Background

Children spend more time with media than they do in any other activity an average of > 7 h/day (Rideout, 2010). Media impact is increased significantly with the presence of a bedroom television: viewing increases 1 to 2 hours/day, (Dennison, et al., 2002). When a television is in the bedroom, parents are less able to monitor viewing habits (Rideout, 2010), children participate in fewer activities such as reading and hobbies (Strasburger et al., 2009), and sleep is shortened (Zimmerman, 2008).

TV content showed up frequently in nightmares for 33% of the children, and computer games were associated with nightmares in about 10% of boys and 5% of girls. About 60% of 13-year-olds and 50% of 16-year-olds reported having pleasant dreams related to TV (Van den Bulck, 2004). Chory-Assad and Mastro (2000) sustain that daily video game use is highly correlated with general hostility and anger among adolescents.

In the context of educational processes little is known about the benefits and opportunities, or the risks and challenges, of children's digital technologies use in the primary school age group.

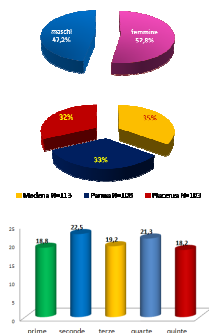
② Method

Objective: The main purpose of this research was explore of children's engagement with digital devices of the age 6 to 11 year old.

Sample: In our research attended 15 classes of three cities: Modena, Parma and Piacenza for a total of 324 students (47.2% male, 52.8% female). Were conducted 30 focus groups with children for a total of 24 hours and 18 minutes of audio recording. The analysis of the transcribed texts was performed with the software MAXqda following the method Computer Assisted Qualitative Data Analysis (CAQDAS).

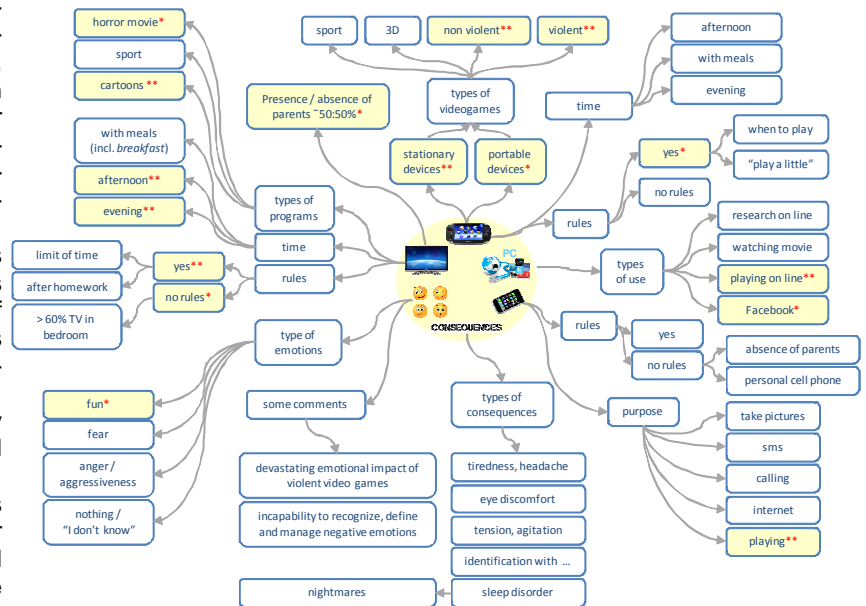
Data base:

- 30 Focus Groups
- 24 h 18' of audio
- 316 pages (Times New Roman 12p, line spacing 1)
- 117 codes
- 7388 coded segments
- Cohen's $k=.79$



③ Results

Fig. 1 - Conceptual Map: Results of qualitative analysis.
Note: * > 50, ** > 100 frequencies of the one code



④ Comments

The analysis showed that the vast majority of children have TV in their bedroom and other electronic devices like PSP (Play Station Portable) or cell phone, which exposes them to the risk of problematic use. Some of the children have reported the experience of nightmares related to violent video games. Not always parents are "present" providing them rules or limits. The future is digital, it can potentially bring great benefits, however, anticipating future problems, we should be prepared to face a risk of compulsive behavior towards digital devices especially when started early.

Some results indicate that it is becoming increasingly imperative to investigate: 1) the use of violent video games by primary school age children, which cannot handle the strong emotions; 2) the presence of nightmares clearly linked to the strong emotional experiences met during the violent videogame; 3) the educational styles adopted by parents, not always aware of the risks of violent video games. These topics should be seriously deepened through the new research designs.

⑤ References

- Chory-Assad, R. & Mastro, D.E. (2000). *Violent videogame use and hostility among high school students and college students*. Paper presented at the NCA, Seattle (WA).
- Dennison, B.A., Erb, T.A., Jenkins, P.L. (2002). Television viewing and television in bedroom associated with overweight risk among low-income preschool children. *Pediatrics*, 109(6): 1028-1035.
- Rideout, V. (2010). *Generation M²: Media in the Lives of 8 to 18 Years Olds*. Menlo Park, CA: Kaiser Family Foundation.
- Strasburger VC, Wilson BJ, Jordan AB (2009). *Children, Adolescents, and the Media*. 2nd ed. Thousand Oaks, CA: Sage.
- Van der Bluck, J. (2004). Media Use and Dreaming: The Relationship Among Television Viewing, Computer Game Play, and Nightmares or Pleasant Dreams. *Dreaming*, Vol 14(1), Mar 2004, 43-49.
- Zimmerman FJ. (2008). *Children's Media Use and Sleep Problems: Issues and Unanswered Questions*. Menlo Park, CA: Kaiser Family Foundation; 2008.