

Parental perceptions and mediation of children's digital game play at home: A qualitative study

Willem Oosting (MSc)

Eindhoven Univ. of Technology
w.oosting@tue.nl
+31 (0)40 247 5205

W.A. IJsselsteijn (PhD)

Eindhoven Univ. of Technology
w.a.ijsselsteijn@tue.nl
+31 (0)40 247 4455

Y.A.W. de Kort (PhD)

Eindhoven Univ. of Technology
y.a.w.d.kort@tue.nl
+31 (0)40 247 5754

ABSTRACT

The current paper presents a first qualitative study into the motivations and perceptions that underlie parental strategies in dealing with children's digital game play, also known as parental mediation. Focus groups of 12 parents of gaming children, and contextual inquiry at the homes of 8 parents and 8 children were applied to identify parental attitudes towards digital games, their information needs, and their mediation strategies. Results indicate that parents hold fairly nuanced views of the effects of digital games, acknowledging potential positive effects on cognitive and social skills. Parental mediation, however, was mostly based on the concern that time spent gaming could not be spent exercising, studying, or socializing with family and friends. Also, continued exposure to violent content was seen as potentially desensitizing children towards real-world violence. Based on these concerns, most parents chose a restrictive strategy of digital game mediation, i.e., limiting play time and/or prohibiting game content. Parents also indicated a clear need for better quality information regarding the content of the game and its potential positive and negative effects.

Author Keywords

Parental mediation, digital games, gaming, family, children, PEGI rating.

ACM Classification Keywords

HCI: Design, Human factors

INTRODUCTION

During the seventies Atari's *Pong* was the first digital game that received attention other than from enthusiastic pioneers in R&D labs. Coin operated video game machines featuring *Pong* appeared in bars and cafés and soon children were willing to spend time and dime in fully equipped arcade

halls. This caused some worried parents to buy television connected game consoles to duplicate the thrill of the arcades but to do so within the protected environment of the home [6]. This can be considered one of the first acts of parental mediation on children's digital game behavior.

Today, the great majority of children in North America, Europe and south-east Asia (in particular South Korea and Japan) play digital games. In the UK, according to a BBC study [11], 100% of 6-10 year olds play digital games, and 97% of 11-15 year olds. And with 82% gamers in the 16-24 year old cohort, they are still a sizeable majority. In the US, a study by the Kaiser Family Foundation [12] found that 63% of 11-14 year olds play digital games on a typical day. Similarly, in Canada, recent market research shows that 88% of parents with children aged 6 to 17 report that their children are playing digital games [4]. In fact, digital game play is such a mainstream activity for contemporary young adolescents that the total absence of such activities is regarded by some as a social risk indicator [2].

Although many of today's parents are avid gamers themselves, the majority have grown up in a time when digital games were not ubiquitous. The increased sophistication and availability of gaming technology, and the diversification of game content, both over-the-counter and online, stretches many parents' abilities to fully understand and guide their children's media choices and consumption patterns. Moreover, in contrast to parental mediation of television viewing, where passive social co-viewing is the most frequently encountered method [5], digital games require a much more active participation on the part of the parent in order to understand the game's narrative structure and gameplay development. At the same time, popular media coverage is mixed at best about the potential effects that digital games may have on the young. Publicity around violent and sexually explicit content in games such as *Grand Theft Auto* or *Rule of Rose* have influenced the public debate on the effects of games, and may have similarly influenced parental perceptions.

Market research, predominantly initiated by the game industry itself, demonstrates that the majority of parents take an active interest in their children's game consumption patterns. Survey results of ESA [3] indicate that 91% of parents are present at the time a game is purchased or rented, and 86% of children receive their parents'

permission before purchasing or renting a game. However, these numbers may also partly reflect a parental concern about the children's spending behavior. Similarly, the most recent Nielsen/ISFE report [7] states that many parents actively engage in co-play with their children, for a variety of reasons, including spending a fun time together, and, to a lesser extent, the ability to monitor what a child is playing. Although these market research studies provide valuable data on demographics, game-usage, and parental involvement at points of purchase, the drawback of such survey studies is that they provide relatively little insight into the parents' value systems (norms, beliefs), their knowledge and understanding of games (information needs), and the relevant social contextual influences (e.g., role of parents, family, peers, teachers) that is behind these numbers. Moreover, the parents included in both the ESA and ISFE samples were all gamers themselves, thereby limiting the representativeness of the sample.

A more representative and comprehensive internet survey was reported by Nikken and colleagues [8, 9, 10]. In an effort to validate the Pan European Game Information (PEGI) system classification, they investigated digital game ownership and usage, beliefs about game effects, parents' need for information and acts of parental mediation, both from parental and children's perspectives. The data showed that mediation acts reported by both parents and children can be clustered in three types of strategies [9]: 'restrictive mediation' (setting time limits or not allowing certain games to be bought or played), 'active mediation' (discussing or explaining aspects of the game's content) and 'co-playing' (playing the game together, but without elaborate discussion). This clustering is similar to the categories commonly used to describe parental mediation of television [13]. The results also illustrated that many parents would like to remain informed about the content of a game, and its approved age rating, in line with the kinds of age ratings and content warnings provided by the PEGI (in Europe) or ESRB (in the US) rating systems [10].

The current paper sets out to further investigate the motivations behind particular patterns of parental mediation. We believe that a more qualitative approach is required to complement existing survey data, in order to obtain a deeper insight into parents' perceptions, concerns, and motivations regarding digital games. Such research serves multiple purposes. First, insights born from in-depth interviews will help signal concrete information needs of parents, beyond reflections on currently available rating systems, which could subsequently be addressed by educators and legislators. Secondly, this research has the potential to provide input towards a richer conceptualization of parental mediation; one that is embedded in the larger socio-cultural landscape that shapes media perceptions. Finally, it allows us to test assumptions about potential parental concerns, fuelled by heated debates in the popular media, regarding negative consequences of gameplay.

In the current paper, we will report a study using two qualitative methods, i.e., focus groups and contextual inquiries, to gain a rich insight into the salient issues that parents deal with regarding digital game mediation. The following questions were taken as a point of departure:

- What effects of gaming do parents perceive?
- What kind of mediation strategies are applied and why?
- What information needs do parents have with regard to the digital games their children play?

METHOD

Focus Groups

A focus group is a discussion technique where participants in an interactive group setting are encouraged to discuss amongst themselves about a particular topic. A moderator is present to provide thematic guidance and to pose probing questions on issues that need further exploration. Three focus group sessions were organized with 12 parents of gamers in total. Participants were randomly invited from a database, contacted via a snowball technique, or recruited directly during public family events at the university. The groups had a mixed composition in terms of age (ranging from 30 to 57 and one 80-year-old outlier) and a fairly balanced male/female ratio. A full range of education levels was represented however, in contrast to earlier large scale survey work [3, 7], most parents rarely played digital games. Their children's ages ranged from 4 to 19 years and gaming frequencies varied from half an hour per week to 3 hours each day.

The three focus group sessions were structured around statements to which participants agreed or disagreed (blind to others' opinions) after which they could discuss their answers. Statements in the first discussion session focused more generally on parenting styles and family norms and values. The second part of the focus group was directed at eliciting discussions about digital gaming within the family, parental mediation, and game purchase.

Contextual Inquiries

Contextual inquiry, as part of user-centred design, involves collecting detailed information about a particular application in its natural context of use (e.g., home, workplace). The researcher typically stays in the background and observes while the participant is asked to engage in their normal routine or process with respect to the technology under study. Six contextual inquiries (16 participants: 8 parents and 8 gaming children) were organized at their private homes. Recruitment flyers were distributed via schools, gaming events, and via shops. Six families participated: two full families, consisting of both parents and 2 children and four mother/son dyads. The 2 fathers, 6 mothers; ages ranged from 43 to 48 years. They

were all fairly well educated (bachelors level, except for one) but played few to no digital games themselves. The children's (7 male, 1 female) ages ranged from 10 to 17 years old. Game frequencies varied from 'a couple of times a week' to 'each day' with game session duration varying from 1 to 3 hours per session.

The interviewer made an appointment with families to visit their homes on a date and time when the children usually played games. During the visit both parents and children were interviewed. In addition, children were asked to show the researcher how they would typically play a game while the interviewer switched his role to "apprentice" of the child, observing the child's actions, tools, context and interactions with other family members. The interview with the parent(s) centered on the positive and negative effects of digital gaming they perceived, whether and why they needed to guide their children, what they knew about digital games, how they decided which games were appropriate and how their children responded to their actions. The children's interview topics involved: when and why they started playing digital games, what games they liked most/least and why, how they decided on which game to play, whether they ever had hardware or software problems and how they solved them, whether they also played with others and how they felt about their parents' digital game mediation strategies. To conclude the session, the researcher summarized the most important findings and both parents and children had the opportunity to evaluate and talk freely about additional issues they thought to be of interest.

Both focus group and contextual inquiry sessions were digitally recorded (video and audio), transcribed and analyzed using ATLAS.ti v.5.2.

RESULTS

From the focus groups and contextual inquiries we learned that in general, parents hold fairly nuanced views regarding digital gaming. Parents generally look upon games as modern entertainment.

"It's of this time ... everyone does it, ... they are entertained by it." (female, 38)¹

Parents perceived several positive effects of gaming. These vary from implicit developmental effects on perceptual and cognitive systems to explicit educational effects on calculation and language skills. The fact that games are fun and relaxing was not missed either.

"Brains are being stimulated by games." (male, 53)

"We deliberately searched games which really taught them how to calculate." (male, 57)

¹ All citations are translated from Dutch

"I noticed it being very relaxing for them ... it is a totally different world." (male, 53).

Parents thought of games as safe (anonymous/virtual) environments to develop real life skills in such as 3d spatial insight into dynamics, language and social/organizational skills.

"Language, working in a collective where agreements have to be made, chatting in English to organize. My son plays in a completely simulated world where he can learn a lot." (male, 51)

Additionally, parents added development of computer/technology skills to the list of positive effects along with stimulation of children's social life, both within the confines of the game as well as outside of it.

"They keep using new technology ... the fact that one can attach the PS3 to the internet so that one can play with remote others, the kind of technology that they can communicate without seeing someone visually, they use it while playing." (female, 46)

"When they are at school ... it provides something to talk about." (male, 48) "Like we used to talk about soccer pictures they now talk about games." (male, 46)

Restrictive mediation

Despite their positive attitude, mediation strategies were largely motivated by perceived negative effects. The most frequently applied mediation strategy was restrictive, both in terms of time and content. Excessive game play is not so much perceived as a problem in and of itself, but it keeps children from other activities. Parents fear for school results and substitution of physical exercise. Additionally, parents do not approve of their children withdrawing from social activities and are afraid that their children might become lazy and less creative since games provide them with a very easy form of entertainment. Moreover, the direct and short term reinforcement structure in games might not help their children in learning to overcome real world problems which often have a long term character.

"There is no more time for other things, for sports or contacts ... it substitutes physical activity." (male, 57)

"One switches oneself off from society, one is doing one's own thing and the rest is not of any interest." (male, 80)

The most mentioned reason for parents to actually ban a game(type) completely was their fear of a potential numbing effects by violent games.

"One might argue that children see it as a game, but when they are presented with bombs and grenades each and every day, all day long, they might start to think that it's normal!" (male, 73)

Many parents also restrict their children's game locations (with internet) to the living room where they are able to monitor the games, and gaming can become more social.

"We have chosen a policy to place that thing in the living room, so that they will not withdraw fully into their bedrooms. It is, so to speak, a family event. It happens in public." (male, 53)

Parents often experience fierce resistance when they try to stop their children while they are gaming. To keep counterarguments to a minimum they make agreements beforehand and use alarm clocks. Additionally they apply some leniency and give early warnings to make the intrusion less sudden.

"He is not able to restrain himself creating dramatic scenes, ... the game has to be finished when he plays a one." (female, 45)

"I think it is more frustrating when an adult determines [the time limit] than when the computer does." (female, 41)

The negotiation process parents go through with their children changes as the child grows up, from simply not allowing or not buying games, to discouraging overly impulsive or unsuitable purchases.

"Long discussions are held about what game they want, if they actually want to buy it now or wait a bit longer, where they are buying it etc. It usually is a negotiation process like whether they are serious about it, because usually it is an impulse. Something they want it now while in a couple of days they want another game. ... to make sure it is not just a nine days' wonder." (male, 53)

Active mediation

Active mediation (e.g., discussing the game's content) was not frequently encountered. Parents engage in conversation mostly out of curiosity to know what their children are actually doing, or what they have been playing at a friend's house. It is not hard to get children to talk about this since they are generally eager to boast about their in-game achievements. These conversations also provide parents with the opportunity to put game content into perspective.

"Sometimes I tell them: 'but it is not real, you know?' I say that to stress the difference between fantasy and reality." (female, 52)

Co-play

Parents rarely co-play with their children. When they do, this is usually in response to a direct request of the child. Parents usually only engage in a game when it can be done quickly (e.g., in between chores) and when games have a low entry barrier. Competitive games tend to boost

children's self-confidence, since they usually beat the parent.

"Playing a shooter one has to steer with one controller and shoot with the other and I do not even know where I am. ... I would like more games to exist where I ... Take the Wii for example, much more fun because one can for instance play tennis against each other." (male, 53)

"Especially race games we have to do together. Also my daughter and son play these together, but only race games ... he wants to show me he is faster than I am." (male, 53)

Parental need for information about games

Importantly, parents acknowledge to have little knowledge about games. It is not uncommon that children know more about the games, or computer technology in general, than do their parents.

"No, I am an empty head when it comes to that." (male, 57)

"We are being educated, because he knows exactly how it works." (female, 38)

This can be partially explained by the speed with which new games are introduced, and the dynamic preferences of their children, who are strongly influenced by their peers.

"During a certain period in their life they first play this game and it is very interesting, However, a little later one hears nothing about it anymore. Like: The world was full of The Sims, now hear nothing about it. We had Habbo Hotel, Runescape and now it's 1601." (male, 53)

Parents actively explore for game information. They consult various sources before going to the shop because they feel overwhelmed there and do not always trust the salesperson's information. Parents search for information on the internet and in magazines but, like their children, value their peers' opinions most of all. Therefore they mainly consult their acquaintances and parents of their children's friends when they need to decide on game purchases.

Informative systems like PEGI are used, but only as a very global guidance because they feel such a 'one-size-fits-all' advice doesn't do justice to the unique nature of each individual child. Moreover, the exact meaning of the labels sometimes causes confusion among both parents and children.

"Sometimes a child cannot understand what happens and the story is way too complicated. [although according to the rating the game was suitable for his/her age]" (female, 30)

DISCUSSION

Parents of children that play digital games have a number of concerns regarding their children's use of games that motivate them to restrict access to certain game content, and/or limit the time children are allowed to play. In our study, this kind of restrictive mediation was by far the most frequent, whereas other forms of mediation (active mediation; co-play) were hardly observed or reported. This is in contrast to other studies [9] where a much more balanced distribution was found between the various parental mediation styles. This may be in part due to the fact that the parents in our sample were generally not gamers themselves. Despite the fact that parents were aware of many potential developmental and educational benefits of digital games, their accounts did not generally reflect a proactive attitude in offering their children a varied and constructive set of games. Exceptions to this are the educational games that are offered to children in the youngest age group.

Parents clearly expressed a need for more comprehensive information than what is available from a retailer's sales pitch, the basic descriptions on the back of a game's DVD box, or from its PEGI rating. Parents want to do justice to the child's unique characteristics and tend to turn to their peers for relevant information. Although PEGI (or ESRB) are a good starting point as a guideline for parents, these systems rely heavily on ratings of inappropriate audio-visual scenes in a game, rather than the nature of its interactive gameplay. There certainly appears to be scope for a more comprehensive informational tool that reflects an inclusive approach to game selection (i.e., not only negative advice). Such a tool could potentially serve parents in making better informed decisions. However, more research is needed to establish specifically what kind of information parents would need in order to make appropriate decisions in guiding their children's digital game consumption.

Digital games have come a long way since the era of *Pong*. They are technologically advanced, ubiquitously available, and have become a mainstream entertainment option, eagerly consumed by the great majority of children who have access to them. Today, parental mediation of digital games is a complicated balancing act between respecting a child's needs and wishes, and the parent's own norms, beliefs and knowledge about games, but also influenced by more general views on what is regarded to be 'healthy' behavior. Two issues that remained relatively unexplored are whether, and to what extent, parental generational properties and general parenting styles (i.e., authoritarian, authoritative, permissive, or neglectful [1]) contribute to the choice and implementation of parental mediation strategies. This is an issue we would like explore in future studies on this topic.

ACKNOWLEDGMENTS

The work reported here has been supported by the EU Games@Large project (part of the IST – Networked Audio-Visual Systems and Home Platforms program).

REFERENCES

1. Baumrind, D., Parental disciplinary patterns and social competence in children. *Youth and Society*, 9 (1978), 238-276.
2. Durkin, K., Game playing and adolescents' development. In: P. Vorderer and J. Bryant (eds), *Playing Video Games: Motives, Responses, and Consequences*. Mahwah, NJ: Lawrence Erlbaum Ass. (2006)
3. Entertainment Software Association (ESA). *Essential facts about the computer and videogame industry 2008: Sales, Demographic and Usage Data*. http://www.theesa.com/facts/pdfs/ESA_EF_2008.pdf
4. Entertainment Software Association Canada (ESAC), *Essential facts about the Canadian computer and videogame industry. 2007 Sales, Demographics and Usage Data*. http://www.theesa.ca/pdf/esa_e.pdf
5. Koolstra, C.M. and Lucassen, N., Viewing behavior of children and TV guidance by parents: A comparison of parent and child reports. *Communications* 29 (2004), 179-198.
6. Mitchell, E., The dynamics of family interaction around home video games. *Personal Computers and the Family*, Haworth Press (1985), 121-135.
7. Nielsen Interactive Entertainment/ International Software Federation Europe (ISFE). *Video gamers in Europe*. (2008). <http://www.isfe-eu.org/>
8. Nikken, P., *Computerspellen in het Gezin*. [Video Games in the Family] NICAM Dossiers, Drukkerij Imprimo, Bussum, (2003).
9. Nikken, P. and Janz, J. Parental mediation of children's videogame playing: A comparison of the reports by parents and children. *Learning, Media and Technology* 31, 2 (2006), 181-202.
10. Nikken, P., Jansz, J. and Schouwstra, S., Parents' interest in videogame ratings and content descriptors in relation to game mediation. *European Journal of Communication* 22, 3 (2007), 315-336.
11. Pratchett, R., *Gamers in the UK – Digital play digital lifestyles*. BBC (2005). http://open.bbc.co.uk/newmediaresearch/files/BBC_UK_Games_Research_2005.pdf
12. Roberts, D.F., Foehr, U.G. and Rideout, V., *Generation M: Media in the Lives of 8–18 Year-Olds*. Kaiser Family Foundation, (2005). <http://www.kff.org/entmedia/upload/Generation-M-Media-in-the-Lives-of-8-18-Year-olds-Report.pdf>
13. Valkenburg, P.M., Krccmar, M., Peeters, A.L., & Marseille, N.M., Developing a scale to assess three styles of television mediation: "Instructive mediation", "restrictive mediation", and "social coviewing". *Journal of Broadcasting and Electronic Media* 43, 1 (1999), 52-66.

