CHAPTER 4

CHILDREN'S TECHNOLOGICAL WORLDS

CHAPTER 4.1

WHY YOUNG CHILDREN DON'T PLAY: PARENTS' ACCOUNTS OF NON-ENGAGEMENT WITH DIGITAL GAMES

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Abstract

Young children increasingly have play experiences that transverse digital and non-digital spaces (Giddings 2014; Kervin, Verenikina and Rivera 2015; Marsh et al. 2016). However, while many children play digital games, many do not. As conversations about children's digital worlds shift from a focus on risks and harm, toward ensuring provision of opportunities for maximizing benefits associated with digital media (Livingstone and Third 2017), there is a need to consider the permissive and restrictive forces acting on these opportunities. This chapter considers the views of parents of young (three- to five-year-old) children who do not play any digital games. Data

was collected through text responses to part of a larger survey about children's digital gaming practices. The reasons parents gave for their children not playing any digital games are presented and discussed. This group of parents construct play in utilitarian terms and digital games, talked about as a form of "screen time", are thought to either displace time away from more beneficial types of play, do not add anything of value to, or actively cause some harm to, children's development. These findings are subsequently contrasted with current early years education frameworks which include the use of technology—for example, digital games—in learning tasks and outcomes. The researchers urge educators and media scholars alike to consider these parental constructions as influential components of the context of children's informal experiences with digital games at home.

Keywords: *children, digital games, video games, screen time, Grounded Theory, mediation*

Introduction

Play affords well established benefits to children's cognitive, emotional, physical and social development (Singer 2013; Verenikina, Harris and Lysaght 2003). Digitally mediated play is a prominent feature of contemporary childhoods (Mavoa, Carter and Gibbs 2017a; Marsh et al. 2015). Rates of digital play in young children vary, but range from 36% of 1-4 year olds in Australia (Brand 2017) to 54% of 3-4 year olds in the United Kingdom who play some form of digital game at times (Ofcom 2015). So, while many children play digital games of some sort, many do not. In this paper, we look at the reasons parents give for their child not playing any digital games. Reasons include those related to parental assessment of the value of digital play, as well as their assessment of their child's ability to play, or interest in digital games.

Digital play offers many of the same opportunities for pleasure and learning as traditional play (Beavis, Muspratt and Thompson 2015; Granic, Lobel and Engels 2014; Marsh et al. 2016; Verenikina and Kervin 2011), and there is often great overlap between children's traditional play and their virtual "gameworlds" (Giddings 2014). Whilst research linking digital gameplay to cognitive, social and emotional outcomes is in its infancy and largely correlational at this stage (though not entirely, see Granic, Lobel and Engels 2014 for a review), there are numerous theoretical links between the design and play of digital games and a range of positive outcomes. Problem-solving, motivation, spatial and social skills are all core to many

contemporary digital games and may well foster skill development that transfers to other settings.

Digital play also often involves practices that provide a unique "segue from childhood forms of play to wider literacies that are relevant in adult spheres" (Apperley 2015, 201). These literacies include skills related to the physical use of technology via gameplay, but they also include broader literacies which are fundamental to participation in online communities and many career paths. Practices such as watching gaming YouTube videos created by other players, use of apps which allow for child generated content such as photo and video upload, and exposure to "chat" features in some online games (for example Minecraft) are also likely to nurture gaming literacy and broader digital citizenship skills (Apperley 2015; Williamson and Facer 2004). Therefore, we can frame "digital exclusion" (Livingstone and Helsper 2007) in relation to digital play as more than a matter of access to technology alone, but crucially as access to, and active participation in, networked civic, cultural and vocational practices (Apperley 2015; Hayes 2008).

Digital inclusion and parent attitudes toward digital games

As parents are ultimately responsible for the provision (and restriction, as is the focus of this paper) of opportunities for engagement with media (Livingstone and Third 2017), examining their attitudes towards varying kinds of media is crucial. Popular discourses surrounding young children's use of "screens" is polarised (Mavoa, Gibbs and Carter 2017) and digital games in particular are prone to being constructed as either overly harmful or radically beneficial (Narine and Grimes 2009). These "contrasting narratives" inform parental beliefs about digital media, and in turn shape children's experiences with media via parental mediation (Kucirkova, Littleton and Kyparissiadis 2017, 1).

Existing research about parent attitudes towards digital games suggests that parents vary in the value they attribute to this form of play. Some studies report both positive and negative perceptions (Bourgonjon et al. 2011; Joan Ganz Cooney Centre 2017; Mavoa, Carter and Gibbs 2017b; Niemyer 2016), while others find more negative associations (Kousari and Mehrabi 2017; Kutner et al. 2008; Wartella et al. 2013).

The link between parental evaluation of digital games and children's opportunities for engagement with them is evident in literature focusing on parental mediation of gaming. Following Nikken and Jansz's (2006) study that examines the ways parents think about and mediate children's digital

play, several authors have consistently found that parents who hold predominantly negative attitudes toward the effects of digital games are more likely to use restrictive mediation strategies such as limiting children's gaming time, and restricting play to certain titles (Eklund and Helmersson Bergmark 2013; Kousari and Mehrabi 2017; Schaan and Melzer 2015; Shin and Huh 2011). Conversely, parents who hold more neutral or positive views are likelier to co-play with their children and to apply fewer restrictions on gaming (Kousari and Mehrabi 2017; Nansen and Jayemanne 2016; Nikken, Jansz and Schouwstra 2007; Schaan and Melzer 2015; Shin and Huh 2011). Age is relevant also—with parents of younger children more likely to use restrictive mediation overall (Eklund and Helmersson Bergmark 2013; Nikken and Jansz 2006).

While the work mentioned above details parental attitudes towards digital games in general, it does not explicitly account for the views of parents of children who do not engage in *any* digital game play. In recognition of the reality that there are many "digital childhoods" (Willett 2017, 325), it is important to consider the contextual factors surrounding the *range* of experiences children have with digital games, including those of children who do not play. Also, while existing literature regarding "digital inclusion" (Livingstone and Helsper 2007, 692) does take into account attitudes toward technology as a potential barrier to inclusion (Deursen and Dijk 2015), it does not consider very young users as a distinct group. This is important because young children's engagement with technologies is heavily determined not by their own agency, but by their parents' decision making (Livingstone and Third 2017; Marsh et al. 2015), and concern about media "effects" tends to be greater for younger children (Holloway, Green, and Livingstone 2013).

Our study provides an analysis of parent accounts of why young children do not play any digital games. We propose that the way some parents construct "play", particularly play that involves a screen-based device, and how they determine what experiences constitute a "good childhood", potentially act as restrictive forces in young children's opportunities for digital play. We report an analysis of responses given to one section of a larger survey about the engagement of Melbourne children with digital games and associated media.

Method

Participants and Procedure

Parents of children aged between three and twelve years living in Metropolitan Melbourne, Australia, completed the survey. The survey was advertised via primary schools and kindergartens, preschools and child-care centres, as well as through social media. The project was approved by the Human Research Ethics Committee of The University of Melbourne, The Victoria Department of Education and Training, and Catholic Education Melbourne. The survey was open between November 2015 and May 2016 (this included the school holiday period when recruitment was paused). Here we report findings from an analysis of one part of this survey. Respondents who answered "no" to the question "does your child play any digital games?" were presented with an open text box and asked to "please write down the main reasons that your child does not play digital games". Sixty-five responses to this question were entered.

Data Analysis

For analysis, responses were transferred into the rich text analysis tool "Saturate.app" (Sillito 2013) and were analysed using a constructionist grounded theory approach (Charmaz 2008). Codes were applied at the sentence level and emerged initially from subject matter (for example, the code "imagination" was given to any response mentioning imagination). On subsequent readings, codes were also applied to categorise the way that responses related to one another, or represented some position on a subject (for example, the code "time displacement" was given to responses that mentioned digital games displacing time away from a range of other pursuits). Multiple codes were attached to individual sentences as required. These codes then formed the basis of the themes we describe below. The first author initially coded all responses, and validity was established via regular meetings between all authors where data and coding were reviewed and discussed in detail.

Results

We will first present some quantitative information from the survey as a way of contextualising the responses reviewed subsequently in detail. A total of 753 completed responses were received to the survey. Respondents were predominantly between 36 and 45 years of age (67% of responses were

from this age range), and most were university educated (75% of the sample). The parents of children who did not play any digital games did not differ, statistically, significantly from those of children who did play digital games, in terms of education (p=.657), however they were statistically significantly more likely to be younger (p=<.001) with parents aged 40 and under more likely to have children who did not play any digital games compared to parents aged 41and over.

Children in this sample who did not play digital games were, statistically, significantly more likely to be in the youngest age group, the three-to-five-year-old children. Within this age group, children three years old were most likely to not play, followed by four-year-olds then five-year-olds. Children in the sample *overall* who did not play any digital games were, statistically, significantly more likely to be girls (p=.014). Although when comparing within age groups, this difference only remained for the six-to-eight-year-old age group (p=.046), but not the nine-to-twelve age group (p=.052) or the three-to-five (p=.475).

Text Analysis: Why Children Don't Play Digital Games

There were two overarching categories of reasons given for non-play: those that gave child-centric reasons (purported lack of interest, ability) and those that gave parent-centric reasons (parental evaluation, choice). In addition to this top-level distinction, six themes emerged through the coding process. These themes are described below. The number of responses falling within each theme are given in brackets after titles, and examples from the responses are provided after each theme description.

Unessential (n=12)

This code was applied to responses which indicated that parents assessed digital games as not offering any enrichment to children's lives or development, beyond that what is offered by more desirable, non-digital forms of play. Some responses did allude to digital games providing some benefit, though of a poorer quality and therefore value, than analogous non-digital experiences. Others alluded to benefits that parents deemed not needed at this particular point in the child's life. In this theme, then, digital games were seen as, at best, redundant and at worst harmful.

> *I don't think they are of any benefit to my child. (Parent of female child aged 4)*

We believe our child's learning is full and complete at this age and stage without the need for digital games. (Parent of female child aged 3)

I don't feel any need for a 4 yr old to play computer games. I prefer outside & imaginary play. She'll have plenty of time when she's older to get computer use/experience. (Parent of female child aged 4)

Displacement (n=22)

The "displacement" code was given to responses that expressed a belief that time is limited and therefore needs to be allocated by parents in ways that maximise opportunities for developmental or educational benefits. Throughout these responses, there are a set of activities suggested as desirable uses of time, and these are presented in contrast to playing digital games (which is an undesirable use of time). The kinds of experiences which parents in this sample talk about as being at risk of displacement by digital games are: those which foster creativity or imagination; those which provide educational value; those which provide opportunities for physical activity or motor development; those which involve being outside or otherwise in contact with nature and the "real world"; and those which support the development of social skills. In most of these responses, digital games are presented as not capable of offering these sorts of outcomes. In some responses however, it is not simply that digital games do not offer potentially valuable experiences, but that other pursuits are more "authentic" and therefore higher quality and more beneficial.

… We are focused on encouraging her imagination and creativity which we feel are hindered by screen time and games. (Parent of female child aged 3)

I do not consider this to be valuable use of her time … I do not believe that it provides authentic problem solving skills or situations. Any "learning" that a game provides can be introduced in more natural and sensory ways than a screen can provide. (Parent of female child aged 3)

I want her out in nature as much as possible and directing and creating her own play. (Parent of female child aged 4)

Age Appropriateness (n=21)

Responses given this category represent the notion that there is an appropriate age for children to be allowed or able to play digital games. The age at which children can play digital games is defined differently by different parents. For those in this group of responses, their own child is

deemed not yet at the age these particular parents see as appropriate for digital gameplay. Eight of the responses with this code stated that the child was "too young" in a standalone manner, without further information given about qualities of the games, or the child. Other responses also mentioned either specific harms associated with digital games, such as "addiction", or mention of activities the child should be doing instead *at their current stage of development* (those described above as desirable uses of time). Two responses indicated that the child would be allowed to play digital games in future, when deemed appropriate by parents.

She is too young. (Parent of female child aged 3)

We do not believe it is appropriate for his age. (Parent of male child aged 4)

I have not introduced him to games and infact [sic] I discourage him in doing so. I believe that young age is to play outside and kids this young do not understand this once they get hooked onto games. (Parent of male child aged 5)

Prohibition (n=10)

These responses specifically mentioned rules for children around digital games, or screen time in general. Some responses stated that children had had no exposure to digital games because of these rules, and therefore did not know what they are. Four responses did provide some qualification for the rules—such as comments about digital games being "addictive" or expression of a belief that children should be doing other activities instead (those described under the code "displacement"). Two responses mention rules about digital games in relation to other screen media use, where digital games were not allowed, but screens for educational purposes, or television, was. One comment mentioned that the child's, presumably older, sibling was allowed to play games but the child being discussed was not.

I don't let him. He does not know of them, and is not exposed to it. (Parent of male child aged 4)

I haven't shown her any games on the iPad. I allow her a small amount of TV on the iPad (iView) but I do not allow her to play games. (Parent of female child aged 3)

I consider her too young yet, although she will watch her brother sometimes on iPad games. For both of them I would not allow IPad game time of more

than 20 mins, as I am not a fan of "screen time". I am happy to allow it in
small amounts when it is educational (e.g Filamundus, Solar2) but I try to
limit it. (Parent of female child aged 4)

Child preference/ability (n=14)

Responses given this code talk about the child not playing digital games
because of the parent's report that the child does not want to, they are not
interested or they are not cognitively or physically able to. It is difficult to
determine, however, in some of these responses how the assessment of the
child's ability or interest has been formed and whether the parent's own
views on the positives and negatives of digital gameplay have impacted their
assessment of the child's interest or ability. Four responses mention a
preference of the child for other screen based activities, and three mention
a preference for other non-screen based activities or types of play.

He's not into them. (Parent of male child aged 4)

He enjoys activities that give a more tangible and tactile experience. (Parent
of male child aged 3)

She is too young to understand games. She is more interested in watching
videos. (Parent of female child aged 3)

Screen time (n=9)

Nine responses mentioned "screen time" in relation to their child not playing
any digital games. In this set of responses, digital games are presented as a
form of "screen time", which is thought to be harmful to children. Two
responses mentioned "screen time" as being something requiring limits,
without saying why limits were needed; others specifically gave reasons
about why "screen time" was undesirable and therefore in need of limiting.
Reasons given were: effects on the brain or behaviour; aggression; and
"screen time" as unnecessary for children or as detracting from more
beneficial experiences. One response mentioned the amount of "screen
time" in educational settings as reason to limit "screen time" at home.

I'm scared about screen time and what it can do to the brain, aggression.
(Parent of female child aged 3)

So much screen time at school we don't like to use it at home. (Parent of
female child aged 5)

We minimise all screen time. She watches no more than an hour of TV a week (usually more like 30min); and what she watches is managed carefully (no ads). We believe the negative of playing games (and even screen) time, outweigh the positives, and that she will be well able to pick up digital skills starting in a few years' time. (Parent of female child aged 5)

Discussion

We have looked specifically at the views of parents who have children who do *not* play digital games. Whilst previous research has considered attitudinal aspects in relation to non-use of the internet (Deursen and Dijk 2015), and parents views of digital game play in general (Jiow, Lim and Lin 2017; Kousari and Mehrabi 2017; Kutner et al. 2008; Nikken and Jansz 2006), we believe that the present study is the first to consider parents' perspectives on non-use of digital games specifically. We have also captured the views of parents of younger children, those aged three- to five-years in particular, than previously considered in both digital inclusion and parental mediation literature.

Our data gives an insight into the views of parents who have children who do not play digital games in relation to the way that *play* is constructed, its role in development, and how digitally mediated play aligns (or rather, does not align) with these constructions. We are also able to present the ways in which this group of parents constructs what digital games *are* and what they *do* or *do not do*, particularly in comparison to "traditional" forms of play, and broader notions of what constitutes "good parenting" and "good childhoods" (Willett 2015). Below, we discuss each of these insights with reference to examples from our data and existing literature.

Play

The responses entered consistently construct play as something beneficial and valued as part of positive child development. However, not all play is equally desirable. "Good" play is constructed in these responses as that which parents assess as positively contributing to some developmental outcome. Examples of "good" play given by parents in this sample include: being outdoors; having contact with nature, and with other people in face-to-face settings; manipulation of concrete objects such as puzzles; and activities that parents assess as involving imagination and creativity. On the other hand, "bad" kinds of play are those which *do not add anything of value* to the development of the child; those that actively *detract* from development via displacement of time away from more valued types of play;

or those that actually *damage the process of development* in some way—by causing changes to the brain or causing aggression, for example. Digital games are constructed by many of the parents in the current study as undesirable for these reasons. In fact, as we shall discuss shortly, it is questionable whether many of the respondents considered digital games as play at all.

This range of comments aligns with "educational and psychological theories" which establish a "temporal taxonomy of development" (Giddings 2014, 39). In this sense, childhood is viewed as the progression through stages of cognitive development and maturation. The fact that almost all of the parents in our overall sample who did not allow digital game play were parents of children aged three- to five-years concurs with the common understanding that younger children are at greater risk of harm from digital devices (Holloway, Green and Livingstone 2013; Kucirkova, Littleton and Kyparissiadis 2017). Parents make decisions about what kinds of play and media are suitable for their children based in part on ideas about what is appropriate developmentally. As Aarsand (2011, 322) notes, this view of childhood, when applied to decisions about media use, posits that "upon reaching certain ages, children are seen as being able to learn, use, and understand different media", making the provision of digital play, for instance, contingent on parental assessment of their child's developmental stage. The responses analysed for the current study, when viewed in relation to rates of digital play amongst young children (Brand 2017; Ofcom 2015), and in comparison to the benefits that other parents associate with digital play (Mavoa, Carter and Gibbs 2017b), indicate that parents differ in the way they assess and make conclusions about the developmental appropriateness of digital games.

The dominance of developmental concerns is evident when considering the views of parents in relation to older children's use of digital games investigated in other studies. While our respondents frequently mentioned the need for free and creative play (albeit of the right kind), and development of fine motor skills, parents of older children talk about the need for time to be spent on schoolwork (Jiow, Lim and Lin 2017; Kousari and Mehrabi 2017; Kutner et al. 2008), organised sports (as opposed to free, self-directed play) (Jiow, Lim and Lin 2017) or concerns to do with the content of digital games, risky contact with strangers online, or representation of values that do not align with the family's (Jiow, Lim and Lin 2017; Kousari and Mehrabi 2017; Kutner et al. 2008). Nevertheless, there is some crossover between these groups. Both mention addiction (Eklund and Helmersson Bergmark 2013; Jiow, Lim and Lin 2017), aggression (Kousari and Mehrabi

2017), and overall physical activity levels being reduced due to digital gameplay (Kutner et al. 2008).

The responses reviewed in this study consistently constructed play as instrumental. In this sense play should actively contribute to a child's development in order to be valued. Even when not linked directly to "educational" value, parents in this group construct play itself as a means to some developmental ends (creativity, imagination, or some un-named outcome) rather than a legitimate use of time for pleasure or enjoyment. The responses given the code "unessential" highlight the dominance of this perspective on play, and indeed use of time in early childhood in general. Enjoyment, pleasure or fun are not mentioned in this particular set of responses. It may not be the case that parents see little value in children's pleasure, but that when asked about their parenting decisions in relation to one particular possible use of time, educational and cognitive outcomes are what comes to mind as necessary to include in their explanations.

Narine and Grimes (2009, 230) note the dominance of this "productive" valuing of play in broader discourses about contemporary childhoods. They lament that "the privileging of purposive play results in the systematic omission of the possibility that children's play has value on its own as a source of pleasure and leisure". Glenn et al.'s (2013) study of how children themselves see play, including play with digital games, suggests that children do not prescribe such functionality to play. Instead, the children aged seven to nine-years who participated in their focus groups talked about play as a use of time "where the means is more important than the ends" (190). Further research regarding young children's (particularly those aged three to five) own construction of digital play would provide a complimentary perspective to those of parents.

Digital Games

Digital games are constructed in this group of parents as primarily a form of "screen time" rather than a form of "play". Sobel et al. (2017) also note that parents in their study about Pokémon Go, while valuing the physical activity and social aspects of the game, talked about it as "still screen time" (1489). So even when problematic aspects are accounted for, fear of "screens" permeates parental construal of digital games. This is in contrast to findings where children's perspectives have been considered. Gee, Siyahhan and Cirell (2017) note that young children in their study "frequently talked about gaming in relation to other, non-digital play activities (e.g., imaginative play)" (2).

Many parents in our sample wrote about digital games in terms that gave precedence to medium rather than activity. Some parents specifically gave "screen time", particularly too much of it, as the reason that their child did not play digital games. "Screen time" was constructed in these responses as potentially damaging to development and therefore digital games were positioned as primarily antagonistic to "good childhood". While some parents indicated that screen time was acceptable in small doses, or when used for explicitly educational purposes, others talked about it in relation to harm to "brains" or the cause of aggression or poor behavior. Additionally, our results indicate that, for some parents, not all screen time is created equal. While all parents included in the current analysis shared the fact that they had children who did not play any digital games, some mentioned that they did allow the child to watch television, use FaceTime or take photos using an iPad.

So, for some parents, concern about digital games goes beyond their primary construction as a form of "screen time". The most frequently mentioned concern associated with digital games in particular in the responses was their perceived inherent "addictiveness". Some parents recounted personal experience with "addiction" to games, some used examples of a child's poor behavior on cessation of play as evidence for "addiction", and others simply stated in a matter-of-fact manner that digital games are "addictive". This view of digital games as pathologically alluring has long been a feature of popular and political discourse (Messenger Davies 2010) and has been noted in other recent studies of parent perceptions of digital games (Eklund and Helmersson Bergmark 2013; Mavoa, Carter, and Gibbs 2017b; Sobel et al. 2017).

In addition to this kind of direct effect of digital games, there was also the construction of digital games as not providing "creative", "imaginative", "self-directed", "beneficial" experiences, thereby, as we discussed earlier, displacing time away from pursuits that do fulfill these functions. It should be noted, however, that this view is not universal. Indeed, many parents do see some digital games as offering opportunities for creative and imaginative play (Marsh et al. 2015). Our own study of responses to another part of the current survey showed that many respondents saw the game Minecraft as particularly well-suited to creative and imaginative play (Mavoa, Carter and Gibbs 2017b).

The degree to which digital games provide educational value was also questioned by some parents in our sample. Two expressed open skepticism about claims that such games can be of educational value, and others that they felt the educational value offered by digital games was more appropriately provided by other activities. In this way, these parents

acknowledged one kind of purported benefit of digital play, but had personally assessed these claims of benefits as inaccurate, or not enough to tip their cost-benefit analysis in favour of allowing their young children to play.

Implications

We have shown that some parents construct play, childhood and digital games in ways that mean that they do not "mix" in "ideal childhoods". While it would be too strong to suggest that the children of these parents are somehow disadvantaged by this, it is perhaps less of a stretch to propose that such constructions may present a point of conflict with current and emerging early education and primary school curricula and pedagogies. Digital technologies, including digital games, are now a common feature of early years and primary education, with Australia having a relatively high number of primary schools adopting a one-on-one iPad component to classroom practices (Softlink 2015). The Victorian Early Years Learning and Development Framework says that children should "use digital technologies and multimedia resources to communicate, play and learn" (Victorian Department of Education and Training 2016, 22).

Given the place of digital technology in early years education, and the links between home use and attainment of formal education outcomes (Neumann 2014), educators should consider the wide ranging and complex ways that parents think about such technologies. As we have seen, considering attitudes in relation to digital gaming is particularly fruitful given the optimism and concern surrounding young children's play with them. Likewise, scholars interested in understanding the permissive and restrictive forces acting upon young children's digital inclusion should also include the views of parents of children who do not engage with specific digital technologies.

Limitations

Our sample consisted largely of University educated parents, and this reduces the extent to which our findings can be generalised to other populations as issues of class are likely to be highly relevant to views on digital gaming (Nikken and Jansz 2006; Willett 2015). Also, as this was an online survey, requiring parents to enter answers into text boxes, there is the possibility that answers given were not as "deep", or nuanced as if we had collected information by way of semi-structured interviews or some other means. Our survey was not longitudinal; however, it would be valuable to

track how individual parent attitudes toward digital gaming change over time. Lastly, we have only sought the perspectives of parents here, but there is a need to hear how young children themselves think and talk about play using digital devices.

Conclusion

As young children increasingly have play experiences across both digital and non-digital spaces, research must also consider how parent, and wider community, beliefs and attitudes shape children's 21st century play. The current study adds an explicit account of some of the beliefs that parents have about digital games. We have detailed six themes that emerged from parent responses to a survey question asking them why their child does not play any digital games. These six themes demonstrate how some parents construct digital games as incompatible with the kinds of childhoods they wish to provide for their own children. We have also shown how, for this group of parents, play is talked about in terms of its contribution to healthy development. Digital play is not perceived to fulfil this role sufficiently and is therefore seen as either expendable or something to be specifically avoided. Furthermore, we have shown how digital games are constructed primarily in relation to the device that they are played on rather than for their ludic properties.

This information is relevant both to scholars interested in the permissive and restrictive forces acting on children's digital inclusion (in this case via gameplay), as well as educators interested in links between home experience with digital games and use of these games in pre-school and early primary settings.

Reference List

Aarsand, Pål. 2011. "Parenting and Digital Games." *Journal of Children and Media* 5 (3): 318–33.
    https://doi.org/10.1080/17482798.2011.584382.
Apperley, Thomas. 2015. "The Right to Play." In *Video Game Policy: Production, Distribution, and Consumption*, Steven Conway and Jennifer deWinter, eds., 193–205. Routledge Advances in Game Studies. London: Routledge.

Beavis, Catherine, Sandy Muspratt, and Roberta Thompson. 2015. "'Computer Games Can Get Your Brain Working': Student Experience and Perceptions of Digital Games in the Classroom." *Learning, Media and Technology* 40 (1): 21–42. https://doi.org/10.1080/17439884.2014.904339.

Bourgonjon, Jeroen, Martin Valcke, Ronald Soetaert, Bram de Wever, and Tammy Schellens. 2011. "Parental Acceptance of Digital Game-Based Learning." *Computers & Education* 57 (1): 1434–44. https://doi.org/10.1016/j.compedu.2010.12.012.

Brand, Jeffrey. 2017. "Digital-Australia-2018-DA18-Final.Pdf." http://www.igea.net/wp-content/uploads/2017/07/Digital-Australia-2018-DA18-Final.pdf.

Charmaz, K. 2008. "Constructionism and the Grounded Theory Method." In *Handbook of Constructionist Reserach*, J Holstein and J Gubrium, eds., 397–412. New York: The Guilford Press.

Deursen, Alexander J. A. M. van, and Jan A. G. M. van Dijk. 2015. "Toward a Multifaceted Model of Internet Access for Understanding Digital Divides: An Empirical Investigation." *The Information Society* 31 (5): 379–91. https://doi.org/10.1080/01972243.2015.1069770.

Eklund, Lina, and Karin Helmersson Bergmark. 2013. "Parental Mediation of Digital Gaming and Internet Use." Paper presented at *The 8th International Conference on the Foundations of Digital Games*, *Crete, Greece, May 14-17, 2013*. http://www.diva-portal.org/smash/record.jsf?pid=diva2:622130.

Gee, Elisabeth, Sinem Siyahhan, and Anna Montana Cirell. 2017. "Video Gaming as Digital Media, Play, and Family Routine: Implications for Understanding Video Gaming and Learning in Family Contexts." *Learning, Media and Technology* 42 (4): 468-482. https://doi.org/10.1080/17439884.2016.1205600.

Giddings, Seth. 2014. *Gameworlds: Virtual Media and Children's Everyday Play*. New York; London: Bloomsbury. http://www.bloomsbury.com/uk/gameworlds-9781623568023/.

Glenn, Nicole M., Camilla J. Knight, Nicholas L. Holt, and John C. Spence. 2013. "Meanings of Play among Children." *Childhood* 20 (2): 185–99. https://doi.org/10.1177/0907568212454751.

Granic, Isabela, Adam Lobel, and Rutger C. M. E. Engels. 2014. "The Benefits of Playing Video Games." *The American Psychologist*, no. 1: 66.

Hayes, Elisabeth. 2008. "Girls, Gaming and Trajectories of IT Expertise." In *Beyond Barbie and Mortal Kombat: New Perspectives on Gender and*

Gaming, Yasmin B. Kafai, Carrie Heeter, Jill Denner, and Jennifer Sun, eds., 217–31. Cambridge, MA, USA: MIT Press.

Holloway, Donnell, Lelia Green, and Sonia Livingstone. 2013. "Zero to Eight: Young Children and Their Internet Use." EU Kids Online. London: LSE. http://eprints.lse.ac.uk/52630/1/Zero_to_eight.pdf.

Jiow, Hee Jhee, Sun Sun Lim, and Julian Lin. 2017. "Level Up! Refreshing Parental Mediation Theory for Our Digital Media Landscape." *Communication Theory* 27 (3): 309–28.
https://doi.org/10.1111/comt.12109.

Joan Ganz Cooney Centre. 2017. "Joan Ganz Cooney Center—Infographic: Parents on How Digital Games Affect Family Life." May 26, 2017. http://www.joanganzcooneycenter.org/2017/05/26/infographic-parents-on-how-digital-games-affect-family-life/.

Kervin, Lisa, Irina Verenikina, and Maria Rivera. 2015. "Collaborative Onscreen and Offscreen Play: Examining Meaning-Making Complexities—Digital Culture & Education." *Digital Culture & Education* 7 (2): 228–39.

Kousari, Masoud, and Meghdad Mehrabi. 2017. "Parental Mediation of Children's Video Game Experiences: Iranian Parents' Strategies of Mediation." *IAU International Journal of Social Sciences* 7 (1): 1–14.

Kucirkova, Natalia, Karen Littleton, and Antonios Kyparissiadis. 2017. "The Influence of Children's Gender and Age on Children's Use of Digital Media at Home." *British Journal of Educational Technology* 49 (3): 545-559. https://doi.org/10.1111/bjet.12543.

Kutner, Lawrence A., Cheryl K. Olson, Dorothy E. Warner, and Sarah M. Hertzog. 2008. "Parents' and Sons' Perspectives on Video Game Play: A Qualitative Study." *Journal of Adolescent Research* 23 (1): 76–96. https://doi.org/10.1177/0743558407310721.

Livingstone, Sonia, and Ellen Helsper. 2007. "Gradations in Digital Inclusion: Children, Young People and the Digital Divide." *New Media & Society* 9 (4): 671–96. https://doi.org/10.1177/1461444807080335.

Livingstone, Sonia, and Amanda Third. 2017. "Children and Young People's Rights in the Digital Age: An Emerging Agenda." *New Media & Society* 19 (5): 657-670.
https://doi-org.ezp.lib.unimelb.edu.au/10.1177%2F1461444816686318 .

Marsh, Jackie, Lydia Plowman, D Yamada-Rice, J Bishop, J Lahmar, F Scott, A Davenport, et al. 2015. "Exploring Play and Creativity in Pre-Schoolers' Use of Apps: Final Project Report."
http://techandplay.org/reports/TAP_Final_Report.pdf.

Marsh, Jackie, Lydia Plowman, Dylan Yamada-Rice, Julia Bishop, and Fiona Scott. 2016. "Digital Play: A New Classification." *Early Years* 36 (3): 242–53. https://doi.org/10.1080/09575146.2016.1167675.

Mavoa, Jane, Marcus Carter, and Martin Gibbs. 2017a. "Children and Minecraft: A Survey of Children's Digital Play." *New Media & Society*, December, 1461444817745320. https://doi.org/10.1177/1461444817745320.

Mavoa, Jane, Marcus Carter, and Martin R. Gibbs. 2017b. "Beyond Addiction: Positive and Negative Parent Perceptions of Minecraft Play." In *Proceedings of the 2017 Annual Symposium on Computer-Human Interaction in Play*, 171-181. Amsterdam, The Netherlands: ACM Press. https://doi.org/10.1145/3116595.3116638.

Mavoa, Jane, Martin Gibbs, and Marcus Carter. 2017. "Constructing the Young Child Media User in Australia: A Discourse Analysis of Facebook Comments." *Journal of Children and Media* 11 (3): 1–17. https://doi.org/10.1080/17482798.2017.1308400.

Messenger Davies, Máire. 2010. *Children, Media and Culture*. *Issues in Cultural and Media Studies*. Maidenhead, England; New York: Open University Press.

Nansen, Bjorn, and Darshana Jayemanne. 2016. "Infants, Interfaces, and Intermediation: Digital Parenting and the Production of 'IPad Baby' Videos on YouTube." *Journal of Broadcasting & Electronic Media* 60 (4): 587–603. https://doi.org/10.1080/08838151.2016.1234475.

Narine, Neil, and Sara M. Grimes. 2009. "The Turbulent Rise of the 'Child Gamer': Public Fears and Corporate Promises in Cinematic and Promotional Depictions of Children's Digital Play." *Communication, Culture & Critique* 2 (3): 319–38. https://doi.org/10.1111/j.1753-9137.2009.01040.x.

Neumann, Michelle M. 2014. "An Examination of Touch Screen Tablets and Emergent Literacy in Australian Pre-School Children." *Australian Journal of Education* 58 (2): 109–22. https://doi.org/10.1177/0004944114523368.

Niemyer, D. 2016. "Four Employed, Middle-Class, Suburban Mothers' Understanding and Acceptance of the Learning Potential of Videogames." Doctor of Education, Texas: Sam Houston State University. https://search.proquest.com/openview/efdceb5ee9a12963ddcca7a4ef009089/1?pq-origsite=gscholar&cbl=18750&diss=y.

Nikken, Peter, and Jeroen Jansz. 2006. "Parental Mediation of Children's Videogame Playing: A Comparison of the Reports by Parents and Children." *Learning, Media and Technology* 31 (2): 181–202. https://doi.org/10.1080/17439880600756803.

Nikken, Peter, Jeroen Jansz, and Sanneke Schouwstra. 2007. "Parents' Interest in Videogame Ratings and Content Descriptors in Relation to Game Mediation." *European Journal of Communication* 22 (3): 315–36. https://doi.org/10.1177/0267323107079684.

Ofcom. 2015. "Children and Parents: Media Use and Attitudes Report 2015." 2015. http://stakeholders.ofcom.org.uk/market-data-research/other/research-publications/childrens/children-parents-nov-15/.

Schaan, Violetta K., and André Melzer. 2015. "Parental Mediation of Children's Television and Video Game Use in Germany: Active and Embedded in Family Processes." *Journal of Children and Media* 9 (1): 58–76. https://doi.org/10.1080/17482798.2015.997108.

Shin, Wonsun, and Jisu Huh. 2011. "Parental Mediation of Teenagers' Video Game Playing: Antecedents and Consequences." *New Media & Society* 13 (6): 945–62. https://doi.org/10.1177/1461444810388025.

Sillito, Jonathan. 2013. *Saturate*. http://www.saturateapp.com/.

Singer, Elly. 2013. "Play and Playfulness, Basic Features of Early Childhood Education." *European Early Childhood Education Research Journal* 21 (2): 172–84. https://doi.org/10.1080/1350293X.2013.789198.

Sobel, Kiley, Arpita Bhattacharya, Alexis Hiniker, Jin Ha Lee, Julie A. Kientz, and Jason C. Yip. 2017. "It Wasn'T Really About the PokéMon: Parents' Perspectives on a Location-Based Mobile Game." In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, 1483–1496. CHI '17. New York, NY, USA: ACM. https://doi.org/10.1145/3025453.3025761.

Softlink. 2015. "2015_Softlink_ANZ_School_Library_Survey_Report.Pdf." 2015. https://www.softlinkint.com/assets/img/banners/2015_Softlink_ANZ_School_Library_Survey_Report.pdf.

Verenikina, Irina, Pauline Harris, and Pauline Lysaght. 2003. "Child's Play: Computer Games, Theories of Play and Children's Development." In *Proceedings of the International Federation for Information Processing Working Group 3.5 Open Conference on Young Children and Learning Technologies - Volume 34*, 99–106. CRPIT '03. Darlinghurst, Australia, Australia: Australian Computer Society, Inc. http://dl.acm.org/citation.cfm?id=1082060.1082076.

Verenikina, Irina, and Lisa Kervin. 2011. "IPads Digital Play and Preschoolers." *He Kupu: The Word* 2 (5): 4–19.

Victorian Department of Education and Training. 2016. "Victorian Early Years Learning and Development Framework." 2016.

http://www.education.vic.gov.au:80/childhood/providers/edcare/Pages/veyladf.aspx?Redirect=1.

Wartella, Ellen A., Victoria Rideout, Alexis R. Lauricella, and Sabrina Connell. 2013. "*Parenting in the age of digital technology.*" Report for the Center on Media and Human Development School of Communication. Northwestern University.
http://static1.1.sqspcdn.com/static/f/1083077/22839022/1370380073813/PARENTING_IN_THE_AGE_OF_DIGITAL_TECHNOLOGY.pdf?token=3HkzrInvrS3G4EAF0tEBqdpb0RA%3D.

Willett, Rebekah. 2015. "The Discursive Construction of 'Good Parenting' and Digital Media—the Case of Children's Virtual World Games." *Media, Culture & Society*, 37 (7): 1060-1075.
https://doi.org/10.1177/0163443715591666.

Willet, Rebekah. 2017. "'Friending Someone Means Just Adding Them to Your Friends List, Not Much Else': Children's Casual Practices in Virtual World Games." *Convergence* 23 (3): 325–40.
https://doi.org/10.1177/1354856515599513.

Williamson, Ben, and Keri Facer. 2004. "More Than 'Just a Game': The Implications for Schools of Children's Computer Games Communities." *Education, Communication & Information* 4 (2/3): 255–70.
https://doi.org/10.1080/14636310412331304708.