Digital Play: The challenge of researching young children's Internet use

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Abstract

Children’s Internet use is rapidly changing. Tweens’ (9–12) usage patterns now resemble those of teenagers five to six years ago, and younger children’s (5–8) usage is approaching that of tweens. Primary school aged children are increasingly engaging in virtual worlds with social network functions (game sites such as Club Penguin, Minecraft or Webkinz). These digital public spaces carry with them opportunities as well as risk. With policy resources often targeting high school children, there is a need to map the benefits, risks and competencies associated with these trends, and develop recommendations for parents and policy makers. This paper analyses the ethical challenges posed in a new research project funded by the Australian Research Council titled *Digital Play: Social network sites and the well-being of young children*.

Key words: New Media, games, cultural studies, ethics and law, children
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Introduction
The research discussed in this paper addresses issues relating to the repositioning of young children (5–12) as online social networkers, via children’s virtual worlds. These virtual worlds, which are interactive simulated environments embedded with social network functions, connect young children to the pleasures and benefits of online play, as well as the possibility of risk. Such risks include: overt and covert bullying; access to violent or other ‘adult’ content; meeting online contacts offline; the misuse of personal data; and the ‘normalisation’ of copyright infringement or the creation of harmful or risky content themselves. The pleasures and benefits young children derive from online play include the educational, social and recreational advantages of playing and chatting online.

Most research regarding minors’ Internet use is concerned with teenagers (Livingstone et al 2011; Green et al 2011). This focus on teenagers reflects the previously large gap between teens’ usage rates and children’s usage rates. Teenagers are also easy to recruit and more researchable than younger children, who need more protracted and specialised research methods (Staksrud et al 2007). Nonetheless, Australian children are established and active Internet users with 79.1 per cent of five to eight year olds, and 96 per cent of nine to eleven year olds accessing the Internet (ABS 2012). These younger children are joining virtual worlds such as Minecraft, Club Penguin and Webkinz and using the social communication functions within these virtual worlds. These functions range from text and graphical icons to sound and visual gestures, and have varying levels of safety embedded in them.

That [Star Stable] is actually a pretty good website. It’s not like Club Penguin, I used to go on Club Penguin all the time. […] But it’s [Star Stable] quite good, the moderation and the safety settings on that. (Sarah 2013)

Children often play with known friends from school, maintaining existing friendship groups, but also interact with people they may not know offline. Minimal research is published to date about the skills and abilities of these children with regard to handling risk in virtual worlds. However, security software company AVG’s digital diaries research project, conducted in 2011, found that 60 per cent of Internet-connected children aged between six and nine play in ‘virtual worlds’ (or game sites with ‘chat’ functions) (eMarketer 2011).
Beginning this year, this Discovery Early Career Researcher (DECRA) project (2014–2016) will need to navigate a number of ethical challenges researchers needed to successfully engage in virtual ethnographic research into children’s domestic consumption of the Internet. This paper outlines current market research practices within children’s virtual worlds, and discusses the disjuncture between academic ethical standards and market research ethical standards. It argues that existing academic ethical standards regarding virtual ethnography within children’s virtual worlds is influenced by an aversion to the possible dangers children face online, often denying academic engagement. At the same time, however, leading-edge market research and data mining is occurring in these digital public spaces. What is needed, therefore, is more dynamic and up-to-date ethical guidelines and standards that reflect the concerns and questions that arise from primary school children’s rapid uptake of the Internet.

**Background**

Primary school aged children experience an additional set of risks from those expected by their parents, or discussed in research literature about teenagers. My own discussions with children indicate that some children seem less resilient (due to their age) and become distressed when things go wrong: when friends and siblings misuse their online profiles; and when they encounter virtual losses (games being hijacked or ruined, or losing virtual currency).

Once because I was on *Minecraft* then one of my friends, because I was playing with a group of people, then when I told them I was going to leave the server. I did, but then one of my friends said he’d leave the server, but really all he did was change his gamer tag and he changed his skin to look exactly like mine. I had a gorilla skin so then he ended up saying bad stuff to all my friends who were online with me. Then all my friends ended up banning me from being able to play with them for two weeks. (Peter 2013)

Nansen et al also found additional risks such as interpersonal relationship issues and concerns about young children’s ‘competence to negotiate online commercial content’ (2012: 204). Other studies also question whether children this age are developmentally ready or have the critical skills needed to keep them safe when they play and interact within virtual worlds (Bauman and Tantum 2009; Ey and Cupit 2011).
While it is assumed that most primary school aged children engage in casual online games as part of their daily play routines, while teens use the internet to maintain social relationships, there is some crossover. A quarter of children aged between eight and thirteen are on Facebook and a fifth use Instagram (Di Stefano 2013), with others using Skype to maintain their friendship groups.

When I go on Instagram, I put basically fashion on there to get more followers. […] I go on the Internet to Google fashion and then I, like, try and find some to put on there. (Kira 2013)

I just watch videos [YouTube] and talk to my friends, not on Facebook – on Skype. I think it is better because you can actually talk to them, not just type into them. You can type, but you can talk to them. (Kim 2013)

There are also many educational, social, and creative opportunities for young children. For instance, a school in Stockholm has introduced Minecraft lessons in a city planning project (Gee 2013). Social media may also give introverted children ‘a place where they can be social without the energy “zap” [or anxiety] that often accompanies in-person encounters’ (Fonseca 2013). Marsh (2010) suggests that virtual worlds also offer young children similar play opportunities to ‘offline’ play. This includes ‘fantasy play, socio-dramatic play, ritualized play, games with rules and what might be called “rough and tumble” play’ (Tuukkanen et al 2012: 195). As emergent Internet users young children are able to acquire digital literacies and learn digital etiquette, while at the same time engage in fantasy play where they can ‘construct, reconstruct and perform identities’ (Tuukkanen et al 2012: 195).

The Department of Broadband, Communications and Digital Economy (DBCDE) and the Australian Law Reform Commission (ALRC) recognise the continuing importance of research-informed policy to protect the interests of children (DBCDE 2012: 106; ALRC 2012: 226). The DBCDE’s Convergence Review gives significant assurances that there is no intention to introduce additional regulation for user-generated material. However, evidence-based research indicates that children are most bothered by other children’s online behaviours (or child-generated content) (Green et al 2011; Livingstone et al 2011). This is not to say that child-generated content needs to be subject to formal classification and regulation. Rather, the social and behavioural issues associated with this bothersome user-generated content need to be addressed through evidenced-based research, public education and debate. What is needed,
therefore, is research that investigates the ways in which child-generated content can upset or bother some children online, and not others. This includes exploring the relationship between children’s offline and online friendship groups.

*Digital Play* will address the challenge of researching children’s Internet usage by using a combined-method research approach. The project parallels a conventional qualitative approach (face-to-face audience ethnography) with online ethnography (virtual ethnography). This mixed-method research approach (further described later) will help resolve the problem of place and context when carrying out qualitative Internet research. The combination of face-to-face and virtual ethnography means that the research will be located within the two sites where children’s domestic consumption of the Internet simultaneously occurs, the physical home and the virtual game – with the aim of examining the way each configures and reframes the other.

**Market research in children’s virtual worlds**

The Internet and digital technologies makes less distinct conventional boundaries between the private and public sphere. Thus, children’s presence in the digital public sphere challenges the notion of childhood as being separate and protected from the wider world.

Whereas children have historically been excluded from directly participating in most aspects of the public sphere – from voting to mass media production – the Internet now offers users of all ages and ability a variety of opportunities for participation in the collaborative construction of a highly-fragmented, yet wide-reaching, digital public sphere. (Grimes 2008: 66–7)

Teens and children, in particular, have taken to the opportunity to engage in the digital public sphere with great enthusiasm. At the same time, this enthusiasm for the digital public sphere brings with it a number of challenges for their families as well as the research community. Despite the vastness of the Internet, a large proportion of the time primary school aged children spend online is spent immersed in ‘virtual worlds’. Given that ‘the number of children’s sites with no advertising or branding is almost negligible’ (Grimes 2008: 67) this immersion in commercially orientated websites makes possible a developing relationship between commercial organisations and children (67). Grimes 2008 suggests that

Every day, children enter into complex relationships with the adults who create and manage profit-driven online spaces directed at kids. These include business
relationships, consumer relationships, and legal relationships, most of which occur ‘behind-the-screen’ of seemingly entertainment oriented spaces. (67)

Hence, while children enjoy hours of online entertainment and social interaction within communities of interest, a large function of these sites function as opportunities for branding and market research – where children’s personal information and opinions are gathered (Kapur 1999; Montgomery 2000; Steeves 2006). The move towards Australian children’s use of multiple Internet-connected devices such as iPads, iPods and smartphones (Newspoll 2011) no doubt increases the opportunities for commercial entities to carry out data mining and sharing.

The US Federal Trade Commission has established a Children's Online Privacy Protection Act (COPPA), which specifically deals with the collection of children under thirteen’s personal information, and requires operators of websites or online services to, among other things, provide notice that they are collecting children’s personal information, and collect verifiable parental consent (COPPA 2000). While Australia considered introducing an Act similar to COPPA (Australian Law Reform Commission 2009) it does not have a child-specific Act or set of guidelines. New Australian guidelines, the Australian Privacy Principles (APP), came into force from March 2014. These principles replace the Information Privacy Principles (IPPs), as well as the National Privacy Principles (NPPs) (Office of the Australian Information Commissioner 2014). The guidelines state that organisations that collect personal information need to take ‘reasonable steps’ to make sure that individuals are informed:

1.3 At or before the time (or, if that is not practicable, as soon as practicable after) an organisation collects personal information about an individual from the individual, the organisation must take reasonable steps to ensure that the individual is aware of:
   a. the identity of the organisation and how to contact it; and
   b. the fact that he or she is able to gain access to the information; and
   c. the purposes for which the information is collected; and
   d. the organisations (or the types of organisations) to which the organisation usually discloses information of that kind; and
   e. any law that requires the particular information to be collected; and
f. the main consequences (if any) for the individual if all or part of the information is not provided. (Office of the Australian Information Commissioner 2014)

These requirements (COPPA and APP) are typically covered by the use of privacy policies and permissions within children’s apps and websites. However, children and their parents’ ability (or willingness) to negotiate privacy policies and permissions are also questionable. The use of multiple devices with different operating systems complicates the security and safety of children’s Internet use (Holloway et al 2013: 19) and Terms of Service contracts are often hard to locate and consist ‘of lengthy texts (ranging between three and twelve single-spaced printed pages)’ (Grimes 2008: 75), adding additional problems relating to market research ethics and participant rights. A 2012 analysis carried out by the Federal Trade Commission in the US regarding privacy disclosure and information collection and sharing practices within children’s apps found that:

nearly 60% (235) of the apps reviewed transmitted device ID to the developer or, more commonly, an advertising network, analytics company, or other third party […] while] only 20% (81) of the apps reviewed disclosed any information about the app’s privacy practices. (Mohapatra and Hasty 2012: 6)

In addition, those companies which do disclose their data collecting practices warn users that their user experience will be restricted if they do opt out, thus making any opt-out option a less attractive choice. For example, Disney’s Club Penguin, currently one of the most popular children’s virtual worlds, provides a comprehensive privacy policy with full disclosure of the comprehensive list of the types of information Disney collects. This includes location information, all information from children’s message chats and public forums, all registration and transaction information, as well as information ‘you provide to use when you use our sites and applications on third party sites or platforms’ (The Walt Disney Company 2013). Data collected is shared within the ‘Walt Disney Family of Companies’ and with other third parties (The Walt Disney Company 2013). Children or their parents are given a choice to opt out of Disney’s information collection and sharing activities. However, this usually results in a less-than-optimal playing experience for the young user.

Please be aware that, if you do not allow us to collect personal information from you, we may not be able to deliver certain products and services to you, and some of our services may not be able to take account of your interests and preferences, (The Walt Disney Company 2013)
Contemporary childhood has undergone a profound transformation, where children’s play and social interaction is migrating to the digital realm with ‘a move towards child generated content and children’s online communities’ (Grimes 2008: 85). Industry has taken note of these changes, creating many opportunities for children to play and socialise online. At the same time as industry is creating opportunities for children’s cultural participation online they are, however, gathering vast amounts of user/child information, either surreptitiously or with the consent of parents or children – who recognise that opting out of data collection and sharing practices may diminish the user experience.

**Academic research in children’s virtual worlds**

In order to give thoughtful consideration to children’s voices and actions the *Digital Play* research will be positioned in both the physical and virtual realm. Face-to-face audience ethnography will encompass the wider contexts and constraints of children’s online practices. However, one of its limitations is the possible impact the researcher’s presence has on altering the participants’ actions and behaviours. Virtual ethnography will capture peer-to-peer virtual interactions in an in-depth manner. Nonetheless, when using virtual ethnography only, there tends to be a lack of ‘offstage’ [or real world] context that is difficult to account for (Paech 2009). Using both research locales will help overcome or minimise the limitations of both methods and give added occasions for data triangulation.

One problem, however, is that ethical standards relating to virtual ethnography with children are particularly sensitive and debate is ongoing. The concerns range from issues relating to confidentiality and anonymity ‘to more serious concerns about the consequences of encouraging children to engage with adults entering their environment’ (Schuck et al 2010: 241). In contrast to the large amount of market research being carried out within children’s virtual worlds, Australian researchers are finding it increasingly difficult to acquire permission to research children’s virtual worlds from a variety of gatekeepers involved, including university ethics committees or educational ethics institutions.

The National Health and Medical Research Council (NHMRC) is currently undergoing a review of its National Ethics Application Form (NEAF) and tackles ‘complex and sensitive issues such as participant consent, patient safety and welfare, privacy and disclosure, and the scientific merit of research proposals’. As with medical science, new communications
research possibilities are opening up that have never existed before. Young children’s engagement with the Internet is increasing and is spreading to children in younger and younger age groups. With the help of touch screen technologies and a myriad of preschool apps, toddlers and preschoolers are also taking to the Internet in much greater numbers (Holloway et al 2013).

There are the usual concerns about confidentiality, anonymity and informed consent when carrying out ‘virtual ethnography’ with child participants. Arguments against gaining informed consent from both children and their parents range from the claim that participants in children’s virtual worlds already use pseudonyms and are thus already anonymous (Löfberg 2003) to the opinion that children’s virtual worlds are in themselves digital public spaces and need not be subject to consent guidelines (Sveningsson 2001). However, there could still be some difficulty in determining what is a ‘public space’ and what is a ‘private space’ even within children’s virtual worlds (Löfberg 2003). For example, it is relatively easy to distinguish the transition from public to private spaces when informants move to private chat rooms. What is less easy to distinguish is children’s understanding of the differences between public and private spaces on the Internet – and the appreciation that (as with commercial research) communications in virtual public spaces can be subject to surveillance and recording.

Another reason for the reluctance to approve the practice of virtual ethnography within children’s virtual worlds is a fear about the dangers children could face online. Turvey (2011) argues that the various ‘high profile cases of online grooming or virtual bullying of children reported quite regularly in the media […]’ perpetuates a culture of fear and adversity to risk amongst educational establishments’ (107) and, I would argue, to some degree university ethics committees. On the other hand, it could be said that this ‘culture of fear and adversity’, where research ethics decisions are affected by an aversion to the dangers children face online, shows little courage or concern on the part of ethics decision makers for those children who may be exposed to online risk.

The virtual ethnography being carried out for the Digital Play project safeguards confidentiality, anonymity and informed consent for both children and their parents by working with small groups of children who are known to each other. Children who play together in a specific virtual world will be invited to participate in the virtual ethnography.
The virtual ethnography will not take place until the researcher has spoken to the children and their parent(s) and gained informed consent from all involved. When the virtual ethnography gets underway, the researcher will be readily identified within the children’s virtual games through the use of a prearranged ‘researcher’ avatar. The researcher will also be required to gain a ‘working with children’ licence.

**Conclusion**

Research about primary school aged children’s Internet use poses some methodological challenges (Livingstone and Haddon 2008). Less developed reading and writing skills make younger children less able to engage in traditional survey-based data collection, either online or via pencil and paper. As a result, most research in this area involves face-to-face qualitative research, usually child-centred. These methods do help to generate a deeper understanding of children’s perspectives and empowers children in cultural contexts where there are multiple stakeholders – parental, educational and commercial – who often hold disparate opinions about the benefits and/or risks involved in children’s digital play. The *Digital Play* project plans to address the challenge of researching children’s Internet consumption by using an innovative, face-to-face, child-centred research approach (Holloway and Green 2013) along with a virtual ethnography. The face-to-face interviews may include children drawing aspects of their games while talking to the interviewer, carrying out child-lead, side-by-side computer tours or the child (as expert) teaching the interviewer their favourite game while answering interviewer inquiries about the game. These moves will help resolve the problem of place and context when carrying out qualitative Internet research by utilising a face-to-face, child-centred audience ethnography combined with an online ethnography (virtual ethnography).

The use of virtual ethnography, especially with children, poses some ethical concerns. These range from issues relating to confidentiality and anonymity, to ‘concerns about the consequences of encouraging children to engage with adults entering their environment’ (Schuck et al 2010: 241). Equally, it could be argued that the existing safety features embedded in children’s virtual worlds already conceal children’s identities, and ensures anonymity and privacy – and that research into children’s virtual worlds need not be conditional on informed consent because virtual ethnographies operate in digital public spaces.
At the same time that academic research regarding children’s digital worlds is being restricted or denied, usually because of an aversion to being implicated in the dangers children face online or unresolved issues concerning confidentiality, anonymity and informed consent, sophisticated market research and data mining within children’s virtual worlds is occurring (Chung and Grimes 2006). Thus, while young children’s real life play and social interactions are being watched from a distance by their parents, teachers and the occasional researcher, their online play and social interaction is subject only to commercial surveillance, data mining and data sharing on a very large scale.

Thus, in light of the ongoing data collection by commercial entities, ethical research committees’ disquiet about issues concerning anonymity and confidentiality appear to be insignificant. Researchers can always make sure ‘artefacts are deidentified though this may prove difficult in a minority of instances’ (Schuck et al 2010: 241). In addition to this children are already in digital public spaces and have chosen to make their data accessible. On the other hand, however, ‘ethical expectations of researchers are far higher’ (Schuck et al 2010: 241).

The research agenda regarding children’s engagement with the Internet needs to bridge the divide between the inevitable rise in young children’s adoption of new web-based technologies and the moral line-in-the-sand, which effectively prevents qualitative online research on the part of the academic research community. On one hand, ethical unease about anonymity and privacy seem to be trivial due to existing privacy practices within children’s virtual worlds – as well as researchers’ practice of deidentifying identity in a minority of cases where identity is possibly recognisable. In addition to this, children are already in public spaces producing content they have chosen to make public. However, simply accessing content without due diligence regarding children’s confidentiality and anonymity – via an ethics committee – will lessen the integrity of academic research. What is needed, therefore, is

a more dynamic ethical relativism, which is reflexive to the issues thrown up by the fast developing world of web-based communication technologies. (Turvey 2006: 111)
In the case of market research, where children’s information is mined and shared by a variety of commercial entities, it is recommended that there be ongoing discussions with device designers to ensure the incorporation of default privacy protections within the design of PCs, tablets and smartphones. Discussion is also needed with software designers to provide simple opt-out choices for children and parents – as well as the delivery of ‘greater transparency regarding how data is collected, collated, used and shared’ (Holloway et al 2013: 5). What is also needed is for online service providers to review ‘their user consent policies and responsibilities to “take-down” information in a wide range of circumstances. This includes confidential, risky and erroneous information inadvertently posted by minors – as well as parental postings’ (Holloway et al 2013: 6).
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