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Towards a participatory netnography: collaborating with children in virtual worlds research

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The new sociology of childhood has encouraged social researchers to incorporate children in as much of the research process as possible. However, whilst some success has been achieved within traditional ethnographic studies, netnography has been slow to make this a reality. This article discusses the previous online research into children's virtual worlds, which has rarely incorporated young children into the data collection or research analysis processes. The opportunity for researchers to use participatory approaches to collaborating with their child participants and collecting online data is limited due to ethical constraints. The ethical challenges of conducting netnography are compounded by a lack of clear policy about researching with children online. The issues of informed consent, the protection of children's identities and the private versus public debate about the nature of the Internet have made conducting online research an ethical minefield. In many cases children's voices have been excluded altogether, and researchers' experiences within virtual worlds have been minimal. This article discusses all these issues, impacting online researchers' ability to obtain ethics approval and conduct a participatory netnography with children. This article also explains the authors' current netnography of investigating children's use of virtual worlds. The ethical challenges of conducting a netnography and using a participatory approach to including children during the data collection process, is described. Whilst it can be challenging in overcoming the ethical barriers to conducting a participatory netnography, the authors describe one case in which their first child participant successfully captured some of their own online data. The collection of this data and the discussion that ensued, demonstrated the value of child participation in the data collection and analysis process.

Introduction

The new sociology of childhood has supported the importance of child participation in research claiming that "we no longer have to defend the involvement of children in research" (Darbyshire et al, 2006, p. 468). Previously children were viewed as either passive receivers of culture, from a sociological viewpoint, or as developing along predetermined biological pathways, from a psychological perspective. In this sense, the notion of children actively participating or being given any sense of 'agency' within the research process was not thought of (Czymoniewicz-Klippel, 2009; Darbyshire et al, 2006; Prout and James, 1997). However, children's participation within ethnography is still limited. Darbyshire et al state:

> We are, however, at an important juncture in the development of participatory research approaches with children. We maintain that there is now a broad general agreement among researchers and scholars that such approaches are both theoretically and methodologically valuable and legitimate (2006, p. 468).

Participatory research, which aims to involve participants within the research design and implementation stages (Khanlou and Peter, 2005), has had some success in traditional ethnographic studies (Abebe, 2009; Evans, 2012; Kellet, 2005, 2011; Levy and Thompson, 2015). However, online ethnographers have had difficulty overcoming the ethical challenges of conducting netnography within children's virtual worlds, particularly netnography with an element of participatory research.

Virtual worlds, according to Bell are "a synchronous, persistent network of people, represented as avatars, facilitated by networked computers" (2008, p. 2). Examples of popular virtual worlds played by children, include: *Minecraft, Club Penguin, Neopets,* and *Star Stable*. These spaces are persistent in that they cannot be paused, and continue to exist after a user has logged out.

This article will background the ethical and methodological issues of implementing a participatory netnography with children online. The authors' current project of researching young children's use of virtual worlds including the methods used, and the ethical issues they had to be overcome, are also described in this article. The trials faced by the authors demonstrate the changing landscape of online ethnography and the emerging challenges faced by netnographers when conducting Internet research, and particularly with children in virtual worlds.

Childhood studies

Article 12 (respect for the views of the child) of the *Participation* section of the *United Nations Convention on the Rights of the Child* (UNICEF, 2014), claims that children have the right to participate in and freely express their views about matters affecting them. This has been one of the most profound shifts in changing views of children and childhood, which has particularly had an impact in the social research (Shier, 2001).

Pufall and Unsworth state that the new paradigm of childhood "argues for acknowledgement of the agency of children in shaping the form that 'childhood' takes as a structural element within society […]" (2004, p. 29). Thus, children should not be considered as passive objects, but should be given the resources and autonomy to actively contribute to aspects of society that are most important to them. They should thus be given more opportunities to express their ideas and concerns and to have their opinions heard. Sociological research with children is one field in which this has become a reality. Dona states:

> Recently, under aspirations for social inclusion, empowerment and social change, children have begun to be involved not simply as respondents but also in other capacities and at different stages of the research process itself: setting the agenda, choosing topics of investigation, collecting information, interpreting and disseminating findings, and acting upon them (2006, p. 23).

Children are considered active agents who are increasingly contributing and participating within research that concerns their everyday lives (Darbyshire et al, 2006; Dona, 2006; Evans, 2012; Kellet, 2011; Levy and Thompson, 2015; Prout and James, 1990; Pufall and Unsworth, 2004). Prout and James state:

> Children are and must be seen as active in the construction and determination of their own social lives, the lives of those around them and of the societies in which they live (1997, p. 8).

Ethnography, according to Prout and James is a "particularly useful methodology for the study of childhood" (1997, p. 8). Ethnographic methods allow "children a more direct voice and participation in the production of sociological data than is usually possible through experimental or survey styles of research" (Prout and James, 1997, p.8).

Mary Kellet (2005, 2011) also advocates for empowering children to have more autonomy during the research process. In her book *How to Develop Children as Researchers* she states that: "the key to a better understanding of children and childhood is children themselves—as active researchers" (2005, p.3). This useful resource has been written for young children, and instructs them about how to carry out traditional ethnographic research.

The participatory approach that has been used in ethnography, has given children greater autonomy and agency to actively contribute their ideas and experiences to better understand their situation within various contexts (Abebe, 2009; Evans, 2012; Kellet, 2011; Levy and Thompson, 2015).

Participatory research

Participatory research has become a popular approach within the field of the social sciences, which "combines research, education and action", to actively involve community groups or organisations into the research process (Khanlou and Peter, 2005, p. 2334). Khanlou and Peter state:

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> People in the community or workplace control the entire research process, including identifying the problem to be studied. In participatory research, researchers can be community or workplace members. Participatory research entails the mobilization of people and enhanced awareness of their abilities and resources (2005, p. 2334).

Thus a problem is identified and the research team aims to investigate the issue from the perspective of the people affected by the problem. It also aims to empower participants with the knowledge and tools to improve the problem.

In Evan's (2012) ethnographic study of Bhutanese refugees in Nepal, she used a participatory research approach to involve her young participants in every stage of the research process. Evans initially observed the Bhutanese refugees in their camps to gain a better understanding of their "most pressing concerns" (2012, p. 175), and then began to conduct training sessions to help six male and seven female refugees (researchers) aged 14-17 years old to conduct their own research (Evans, 2012, p. 176). Research assistants, who had previously been a part of the Bhutanese Refugee Camp Forum, supported the young researchers in their projects. The research methods used by the children included drama, art and other written works, and they also participated in interviews with Evans, who collected both qualitative and quantitative data (2012, p. 176). The participatory research methods aimed to empower participants by helping them to better understand their own situation and give them the tools to create change (Evans, 2012, p. 170).

To instigate change, Evans arranged for the child researchers to meet with journalists and agencies to discuss their ideas, and the research assistants helped the children to present their findings to community leaders and refugee organisations (2012, p. 177). One of the child researchers even wrote an article on the experience titled: *Effects of Child Research on Researchers*. This article examined the benefits the child participants had gained from taking part in the research project. These benefits included: "making new friends, building confidence and public-speaking skills, improved knowledge of children's rights, more respect from community members and enhanced communication skills" (Evans, 2012, p. 177).

Evans' field research at the refugee camp, which lasted three months, helped to develop a deeper understanding of the refugees' everyday lives. The children were also empowered to become researchers and were given the tools to better communicate their situation to adult leaders. The collaboration of adult researcher with child "researchers" was an approach utilised by Levy and Thompson (2015) in their investigation of young boys' attitudes towards reading.

Levy and Thompson's (2015) study involved grade one boys (5-6 year olds) partnered with grade seven boys (11-12 year olds) from three South Yorkshire combined schools. The researchers collaborated with the older boys to construct activities that would engage the younger children in talking about their learning-to-read experiences. The researchers also instructed the older children about how to use a flip camera that the older and younger boys could use to create an instructional film explaining to parents and teachers the "factors that influenced children's engagement with reading" (Levy and Thompson, 2015, p. 142). The older boys in the study took a directive role in collaborating with the younger boys, but were not treated as co-researchers by Levy and Thompson. At the end of the six-month investigative period, the researchers edited the footage the children had captured, and developed it into a DVD that was viewed by the child participants, their teachers and parents (Levy and Thompson, 2015, p. 143).

The collaboration was successful in that the younger boys were able to openly discuss their reading difficulties with the older boys, who were able to share their own reading experiences and development. Levy and Thompson state:

> This meant that they were able to understand and empathise with many aspects of the younger children's lives and experiences. The presentation of an empathetic and playful approach meant that these boys were able to communicate with the younger children on a level that suggested that a sense of genuine 'shared understanding' existed between the boys (2015, p. 147).

Levy and Thompson state that the research also helped the 11 to 12-year-old boys to develop "and use a wide range of sophisticated communication skills and strategies in order to encourage the younger

children to talk about their views and experiences" (2015, p. 147). The children also learnt research methods such as how to use a flip camera to capture footage, and how to interview their partner about their reading experiences (Levy and Thompson, 2015, p. 142).

It is through these participatory research methods that children were given authority and agency, and were empowered with the resources to develop skills that they could use in their everyday lives. Both Evans' and Levy and Thompson's studies successfully involved the active participation of children in ethnographic research. In contrast, participatory research with children in online world ethnographies has been minimal to non-existent. Whilst netnography may use similar methods to a traditional ethnography, its implementation is characterised by its own set of practices and ethics.

Netnography

Ethnography has always been a "geographic project, traditionally involving practices of dwelling in physical locations, mapping and understanding the practices within these locations, and retreating to spaces to write research reports" (Leander and McKim, 2003, p. 213). Leander and McKim state:

> Imagining where the ethnographer would go in terms of Internet research suggests an expansion or revision of social situation to include locations that are not physical settings as we have typically thought them to be (2003, p. 213).

Online ethnography or netnography is an emerging methodology of ethnography that seeks to understand various online societies, cultures and communities through participant and observational research. Kozinets states:

> Netnography is participant-observational research based in online fieldwork. It uses computer-mediated communications as a source of data to arrive at the ethnographic understanding and representation of a culture or communal phenomenon (2010, p. 60).

Netnography has received some criticism about its ethical and practical implementation (Denzin, 1999; Lugosi, 2006; Lysloff, 2003; Murthy, 2008; Shaap, 2002; Sharf, 1999). However, it has provided the methodology, and the methods for researching the range of virtual environments, which inhabit the Internet (Hine, 2000; Kozinets, 2010).

The various methods of netnography include those used in a traditional ethnography such as: "interviews, descriptive statistics, archival data collection, extended historical case analysis, and videography", as well as many other methods (Kozinets, 2010, p. 60). Online ethnographers, or netnographers, will use many of these methods either separately or in conjunction as they observe and participate within the online research field.

Participation within virtual worlds is one of the most important aspects of conducting a netnography. Participatory activities include: reading messages, following links, posting comments, emailing, and participating in various community activities (Kozinets, 2010, p.96). Kozinets explains that participation in online communities should be "active and visible to other community members" and that the netnographer should be involved in at least some online activities (2010, p. 96). Whilst the data collected may be of a different form, the netnographer still participates within the online realm as an ethnographer would participate in the offline research environment.

Whilst these shared communities may be located within the virtual realm, they are very real to those who participate in their social and cultural networks. Thereby, in order for netnographers to understand virtual communities and their users, they too must participate in these spaces.

Online research

Whilst netnography encourages researchers to participate and observe within the virtual realm, very few researchers studying children's virtual worlds have done so. In addition, of the studies researching

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children's virtual worlds, and children's experiences within these spaces, very few involve children as participants in the research process.

In Kafai's (2008) study, children's virtual world play was observed and filmed in real time, however child participation during the data collection and analysis processes was overlooked. Kafai's study of the children's virtual world *Whyville* included filming her 20 child participants with two video cameras as children played both online (and offline, whilst in the same classroom) (2008, p. 4). Thus Kafai and her team did not participate within the virtual world themselves and instead relied on the footage of children's play to analyse their data. Whilst children's participation in the virtual world was of prime importance, children's participation within the research project was overlooked.

In Marsh's (2010) study, children completed an online survey about their game play in virtual worlds, and participated in face-to-face semi-structured interviews and focus group discussions, to further explain their activities. Whilst the data was analysed by Marsh, children's opinions were still expressed and taken into consideration when analysing the research data. However, children were also not involved in conducting any research themselves.

In contrast, Black (2010) and Black, Korobkova and Epler's (2014) studies examined the affordances of children's virtual worlds. The researchers themselves conducted an online examination of these worlds. The study did not involve children in either the data collection or the analysis processes.

The above studies, whilst trying to understand children's experiences of virtual worlds or the affordances of children's virtual worlds, did not use participatory research approaches to involving children in the research processes. The ethical implications informing or limiting their studies were not described so it is unclear if ethics was a factor.

Nonetheless, children's participation was still considered important in understanding children's use of virtual worlds in Kafai (2008) and Marsh's (2010) research. However, in Black (2010) and Black Korobkova and Epler's (2014) research they may have had their own experiences in virtual worlds, but did not involve or consult children about their experiences at any stage of the research process. In contrast to this lack of participation, Wernholm and Vigmo's study (2015) involved their child participants in both the data collection and analysis stages of their research in *Minecraft*.

Wernholm and Vigmo's (2015) research into children's knowledge making dialogues in *Minecraft* empowered their three participants with the resources to capture their own data. Whilst only one participant was able to use the software (FRAPS) to capture online data in *Minecraft*, they were given full control to choose the data they recorded. All three children also used Skype to communicate with each other as they played, which was also recorded by FRAPS (Wernholm and Vigmo, 2015, p. 236).

At the end of the data collection period, all three participants assisted the researchers to interpret and analyse their in-game dialogue and activities (Wernholm and Vigmo, 2015, p. 237). The children only shared information that they felt comfortable with and the researchers did not ask further questions about data they did not share. Thus, the researchers empowered their participants by involving them in a more participatory research process. Therefore, children's understandings and perspectives of their game play were included in the project's overall analysis.

The ethics of conducting this online study were only briefly alluded to. The authors explained that Swedish scholars have to go against the Swedish Research Council to conduct online studies with children (Wernholm and Vigmo, 2015, p. 242). Therefore, perhaps in order to reduce ethical risk to participants and themselves, they remained offline whilst the children played their game.

Rosenberg states that allowing the research process to "be guided increasingly by those we wish to study may also lead our own conceptions to be expanded or even challenged in the process" (2010, p. 24). Children are particularly capable online users, who can sometimes display greater technical ability than their researchers (Holloway and Valentine, 2001, p. 26). However, participatory online research with children still has a long way to go.

The ethical and legal guidelines that are so important to protecting children also have the biggest impact (and limitation) on both researcher's and children's abilities to collaborate in ethnography (Bone, 2005; Cummins, 2006; Richter et al, 2007; Valentine et al, 2001; Wernholm and Vigmo, 2015). In addition, trying to venture into the online field, as an ethnographer with very little empirical research to support this methodology, is proving particularly difficult when going through the research ethics process.

Ethics

According to Mortari and Harcourt, ethics "refers to a focus on that which is deemed right and good. To adopt an ethical stance is to be concerned/solicitous in order to make that which is good" (2012, p. 235). The ethics of conducting a netnography, or any online research where children are concerned are complex, particularly regarding the issues of informed consent, and the public versus private debate.

Regarding the issue of informed consent, the Australian Sociological Association (ASA) states that it should be sought from "those individuals or social groupings directly involved in the research to be undertaken" (2016, no page). The ASA states:

> Thus, sociologists should: (1) inform participants about the purpose and nature of the research and its possible implications for them, (2) make it clear that all have the freedom of choice to participate or not. This includes students […] (2016, n.p.).

Whilst the *National Statement on Ethical Conduct on Human Research* (2015) has similar policies regarding informed consent, it does not give specific guidance about conducting ethical Internet research. In response to this lack of information, Spriggs (2010) compiled the policies around informed consent outlined by the *National Statement*, and included rules for conducting Internet research, in her handbook *Understanding Consent in Research Involving Children: The Ethical Issues*.

The emphasis regarding informed consent is based on the maturity and potential identification of child participants. Spriggs explains that whilst consent is not always required when collecting data within the public domain, "the immature judgement of some young people may mean that a distinction between public and private is not meaningful" (2010, p. 29). Children are more likely to consider their online spaces private if parents or teachers do not see them, whilst some children may not know the difference (Spriggs, 2010, p. 31). Spriggs goes on to state that if recorded and published data "is potentially identifiable, consent is probably needed" and that if there is no "identifiable information, consent may not be needed. But, arguably, it is better to err on the side of safety and obtain consent" (2010, p.29).

This private versus public debate of online data cannot be treated "as a simple dichotomy" according to Rosenberg (2010, p. 27) who also claims that it is an ongoing debate regarding Internet research ethics (2010, p. 24). Rosenberg explains that a space is considered public if (1) "it is publicly accessible" or (2) if it is "perceived as public by participants" (2010, p. 24). Rosenberg states:

> According to the first argument, online phenomena are essentially public if they can be accessed by anyone with an open Internet connection. Moreover, public discourse must always be open for scholarly analysis and critique, and, in lack of restricted entrance, there is no need for consent or even anonymizing. The second and often counter-posed view holds that, though something may be accessible, the general public (including researchers) may not be the intended audience (2010, p. 24).

In agreement with the second opinion, Rosenberg argues that virtual worlds are more private than people realise due to the affordances of the game such as the ability to build a house for example, and exist within spaces separate from other gamers (2010, pp. 29-31). Weintraub also states:

> When an individual is described as pursuing his or her private interest rather than the public interest – or a group is described as pursuing a 'special interest' rather than the public interest – the implication is not necessarily that they are doing it in secret. The criterion involved is the second one: the private is the particular (1997, p. 5).

Whilst online users may be interacting privately within a public space they are not always easily identified. In virtual worlds avatars are designed to conceal the identity of any online gamer. Bell defines avatars as a "digital representation (graphical or textual)… that has agency… and is controlled by a human agent in real time" (2008, p. 3). Virtual world avatars have pseudonyms and an animated appearance that does not resemble their real-life counterpart. Taylor states:

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> In these spaces, the 'look' of any particular user can be altered fairly easily, and names are generally changeable. This means that a solid consistency of identity and body is not a given in any environment. In addition, the off-line identity of any particular user is generally unknown unless specifically disclosed (1999, p. 438).

Thereby, gamers in a virtual world are anonymous to any researcher, however, Spriggs states that, "it is safer not to rely on the idea that the Internet is a public space to justify not seeking consent" from participants (2010, p. 31). Kozinets also advocates for conducting ethical netnography and encourages researchers to obtain consent from parents or caregivers where children and other vulnerable people are concerned (2010, p. 152).

Therefore, whilst research with children has become more acceptable and accessible, there are still certain limitations and grey areas that have not been resolved. Davis states:

> On the one hand, the literature in this area often urges researchers to involve children as much as possible in research, as a moral imperative. On the other hand, researchers usually work within a range of institutional, legal and practical constraints that may limit the extent to which participatory ideals can be realised (2009, p. 154).

Nevertheless, Mortari and Harcourt encourage researchers to persist through the ethical and logistical barriers, as "no argument can resolve in any definitive way, ethical problems, since they are an arduous and endless enterprise" (2012, p. 234).

In addition to this, a large function of many children's virtual worlds is to operate as opportunities for branding and market research—where children's personal information and opinions are gathered (Grimes, 2010; Montgomery, 2000; Steeves, 2006). So while commercial entities are gathering vast amounts of user/child information, 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 (Holloway, 2014).

Current project

The authors are currently researching how young children (5-12 year olds) use virtual worlds. Children of this age group (primary school years) have previously not been examined in the Australian context. Whilst it is a broad age range, it provides more of an opportunity to understand children's online activities. The authors acknowledge that there are differences in skill level within this group, and that there is a younger group (5-8 years) and an older group (9-12 years) within the overall cohort.

In order to understand virtual worlds and their affordances for young children, one of the authors has gained ethics approval to access the sites used by young participants in this project. Therefore, this is not a typical netnography where the researcher examines virtual worlds and draws conclusions based solely on their own observation and participation. Instead, this study includes children in the data collection stage, and empowers them to voluntarily capture some of their online data, which is then discussed with the researcher. However, while knowing that this research would involve ethically sensitive issues, the authors did not foresee to which degree the ethical issues would impinge upon implementing the netnography, or if the first child participant could successfully and ethically capture their own online data.

Ethics

With regards to the current project, the ethical issue of an adult participating in children's virtual worlds; collecting participants' data whilst trying to avoid non-participant gamers; and asking child participants if they would like to voluntarily collect some of their own online data, has been met with varying degrees of ethical and logistical success.

The public versus private debate caused much deliberation and confusion when it came to defining the boundaries of what researchers were allowed to do online in this project. Virtual worlds in particular may

be seen as public, but because of their complex structures they can be used to hide or to be seen, depending on the affordances of the game.

From the authors' perspectives, virtual worlds are publicly accessible spaces within which private conversations can be held. Some online users may not use these spaces to hold private conversations, but because of the various affordances of virtual worlds, respecting the privacy of all gamers has been emphasised.

Ethics approval from various governing bodies, and parental and child consent, were obtained to conduct the current research project. Thus, only informed and consenting participants are observed in virtual worlds and only their data is recorded. All other gamers are avoided and their identities remain anonymous due to the affordances of avatars to keep players anonymous.

The possibility of non-participants' interactions being observed was one major cause for concern that had to be discussed in depth before it passed ethics approval from various organisations. Avoiding non-participants can make data collection challenging as virtual worlds are constantly changing; avatars are continually on the move and players can enter and exit the game at any time. When comparing this to a traditional ethnography it would be as though the researcher were observing their participants within a busy city square, where non-participants were sharing the same space. Therefore, when collecting online data all care is taken to only capture the activities of consenting participants.

The participation of the researcher within virtual worlds was another concern as these are considered children's spaces and again the privacy and protection of children was of utmost importance. Therefore, the researchers' participation within virtual worlds has been scaled back in order to minimise any potential risk to participants and other gamers being influenced by the researchers' presence and the capturing of data. Whilst some participation will help answer the research questions, the full netnographic experience is dulled by these ethical implications, which are necessary, but limiting for a netnographer.

Netnography

The principal researcher in this project only participates in the virtual games used by participants. It is here that the researcher creates an account and their own avatar. The child participants know the name of this avatar so they can identify when the researcher is online. Once online, the researcher tries to experience as much of each virtual world as they ethically can by participating in popular activities, and utilising the affordances of virtual worlds. Whilst participating online the researcher captures the activities of participants to better understand the affordances of virtual worlds, and risks they may pose to children, as well as the required digital skills to play online safely.

There are many different methods for capturing online data, but for this project the method of taking screenshots of child participants' online activities is utilised. The process of capturing screenshots using the affordances provided by a laptop, computer or iPad are simple. The researcher was using an iPad and therefore used the on/off and home buttons, which when pressed simultaneously take a 'photograph' of whatever is on the screen at that time. Taking screenshots is a quick and easy method for capturing data, which is automatically saved in the photo album on the iPad. These screenshots are saved in the photo album on the iPad and can be easily retrieved, or deleted, at any time. So far this method of capturing online data has proved very efficient.

Whilst the researcher's participation in virtual worlds seems sufficient enough for this project, and for now it is, in terms of conducting a traditional netnography this form of online involvement is quite restricted. The researcher limits contact with her participants so they can play their games without being distracted, and avoids all other gamers. Thus the researcher maintains an undercover approach and therefore is not "active and visible to other community members" and does not "contribute to the community and its members" (Kozinets, 2010, p. 96). However, despite these limitations, the researchers in this project have tried to advocate for more child participation.

Participation

Children's ability to contribute was carefully considered in this project. The research design was already completed separately from participants, which was to assure ethics committees and stakeholders that the

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research would follow legal and ethical guidelines, and ensure the protection of children. Thus, upon following routine ethical procedures, it was permitted that child participants could voluntarily take some screenshots of their online game play. Being granted ethics approval to allow children to capture online data broadened future participants' opportunities to have some agency in becoming a (small-scale) researcher in the data collection process. Due to the purely technological nature of data collection this is really the only opportunity, at least in this project, for participants to actively contribute their own data, as well as verbally explaining their choices and actions post online data collection.

Children are informed before the research begins of their right to collect some of their own screenshots, and can do so at any stage of the data collection process. The researcher instructs children about how to take screenshots using the shortcut keys on their own device (usually a computer, laptop or iPad). All children are informed that they must only take screenshots of their own avatar's activities. Whilst this has been a contentious ethical issue questioning the ability of children to capture their own data and avoid other players, it was done so successfully with the first participant in this project.

The first child in this project, who volunteered to capture some of their own data, was instructed over the phone about how to take screenshots on an iPad (using the on/off and home buttons simultaneously). This child played in the popular virtual world *Minecraft* and was in the older age group (9-12 years) in this study, and was able to confidently take screenshots without supervision. Upon collecting these screenshots, the researcher informally discussed them with the participant.

The researcher asked the participant questions about their data, such as: "What is happening in this {image} screenshot?"; "What does this {image} mean to you?"; "Why did you want the researcher to see this?" and other specific questions related to the images. The child discussed with the researcher, the various images they had captured online. These were images of farm constructions that the child had built over a week, a much shorter period of time than it would have taken in the physical realm. These were constructions, which the child had put their time and energy into that would continue to prosper in the virtual realm.

These questions allowed the researcher to gain an understanding of the perspective of the child and why the child wanted to capture this data. The screenshots also added extra insight into the benefits and digital skills this child gained from playing within Minecraft. The children in this study are not analysing their own data, and thus asking for their opinions and perspectives on their own screenshots is one way in which their views can be expressed and included in the overall analysis. It is hoped that other children who participate in this study will also contribute some of their own data to this project.

Discussion/conclusion

The United Nations Convention on the Rights of Children, and the new sociology of childhood have both made great efforts to incorporate children's voices within social research (Prout and James, 1997; UNICEF, 2014). Ethnographic researchers have included participatory approaches to involve children in more active and autonomous roles that contribute to more nuanced understandings of children's perspectives (Abebe, 2009; Evans, 2012; Kellet, 2005, 2011; Levy and Thompson, 2015). However, despite the efforts made in traditional ethnography, netnography, involving children in participatory research, has been minimal (Wernholm and Vigmo, 2015).

Child participation in netnography is limited due to the ethical and methodological challenges of implementing online research. There is a lack of clear policy about obtaining parental and child consent, and the Internet is generally regarded as a public space and sometimes consent is not required (Spriggs, 2010). However, some have argued that the way people use virtual worlds can make them private spaces (Rosenberg, 2010; Spriggs, 2011; Weintraub, 1997).

The debate between the public and private nature of the Internet has seen greater limitations placed on netnographers to be extra cautious when conducting research with children to reduce any potential risk to researchers, child participants, and other online gamers.

According to Mortari and Harcourt trying to resolve these problems can seem futile as ethics "are an arduous and endless enterprise" (2012, p. 234). However, according to Rosenberg: "what ethical dilemmas

do is open up for increased reflexivity not only about the environments we study but our own place in them" (2010, p. 34).

Previous research of children's virtual worlds rarely incorporated children's opinions and data collection abilities during the research process (Black, 2010; Kafai, 2008; Marsh, 2010). Only one study empowered children to collect their own data and to help interpret this data during the analysis process (Wernholm and Vigmo, 2015). Although the child participants were given a large role in the research process, the authors did not observe children as they played online due to ethical constraints.

In contrast, the authors' current research is incorporating a participatory approach in its investigation of young children's use of virtual worlds. The current research uses netnographic methods to observe and participate within virtual worlds. The project also empowers children to voluntarily capture some of their own online data and discuss this with the researcher.

However, the public versus private debate and the protection of children's identity online caused ethical problems. The method of taking screenshots also caused concern regarding the protection of non-participants' online data. Nevertheless, the authors' first child participant was able to successfully capture some of their own online data and discuss this with the principal researcher. These screenshots demonstrated some of the child's digital skills and the benefits they gained when they played online.

Therefore, the academic and broader community's understanding of ethnographic research needs to extend to online spaces and include children. The protection of children is so important, and particularly to researchers, but there needs to be a clear policy about how to conduct netnography with children. Both researchers and children need to be able to fully participate within the research field and to collaborate and contribute in-depth data. Children's participation in ethnographic research gives them agency and autonomy, and the opportunity to share their opinions and reflections of society from their point of view.

The future direction for the current research project is to support children's voluntary participation in capturing screenshots of their game play. This netnographic research of children's use of virtual worlds will hopefully become a resource that can be used by parents, teachers as well as industry professionals and policy makers to help keep children safe online. Hopefully this is just one step towards further large-scale research involving child participants at every stage of the research process.

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References

Abebe, T. (2009). Multiple methods, complex dilemmas: negotiating socioethical spaces in participatory research with disadvantaged children. Children's Geographies, 4(7), 451-465.

Bell, M. W. (2008).Towards a definition of 'virtual worlds'. Journal of Virtual Worlds Research, 1(1), 1-5.

Black, R. W. (2010) The language of Webkinz: Early childhood literacy in an online virtual world. Digital Culture and Education, 1(2).

Black, R. W., Korobkova, K., & Epler, A. (2014). Barbie Girls and Xtractaurs: Discourse and identity in virtual worlds for young children. Journal of Early Childhood Literacy, 2(14), 265-285.

Bone, J. (2005). An ethical journey: Rights and relationships and reflexivity. Australiasian Journal of Early Childhood, 1(30), 1-5.

Cummins, H. (2006). A funny thing happened on the way to the Ethics Board: Studying the meaning of farm life for farm children. Journal of Academic Ethics, (4), 175-188.

Czymoniewicz-Klippel, M. T. (2009). Improper' participatory child research: Morally bad, or not? Reflections from the "Reconstructing Cambodian Childhoods" study. Childhoods Today, 2(3), 1-26.

Darbyshire, P., Schiller, W., & MacDougall, C. (2006). Extending new paradigm childhood research: meeting the challenges of including younger children. Early Child Development and Care, 6(176), 467-472.

Volume 7, ANZCA Special Issue (2016): 5–16.

Davis, J. (2009). Involving Children. In K. Tisdall, J. M. Davis & M. Gallagher (Eds.), Researching with children and young people: research design, methods and analysis (pp. 154-168). London: Sage Publications Ltd.

Denzin, N. K. (1999). Cybertalk and the Method of Instances. In S. G. Jones (Ed.), Doing Internet Research: Critical Issues and Methods for Examining the Net (pp. 107-126). Thousand Oaks, CA: Sage.

Dona, G. (2006). Children as research advisors: Contributions to a 'methodology of participation' in researching children in difficult circumstances. International Journal of Migration, Health and Social Care, 2(2), 22-34.

Evans, R. (2012). Towards a creative synthesis of participant observation and participatory research: Reflections on doing research with and on young Bhutanese refugees in Nepal. Childhood, 2(20), 169-184.

Grimes, S. M. (2010). The digital child at play: How technological, political and commercial rule systems shape children's play in virtual worlds. Doctoral thesis, School of Communication, Simon Fraser University.

Hine, C. (2000). Virtual Ethnography. London: Sage Publications.

Holloway, D. (2014). Digital Play: The challenge of researching young children's Internet use. Australian and New Zealand Communication Association (ANZCA) conference, Jul 9-11 2014, Melbourne Australia, Swinburne University of Technology.

Holloway, S. L & Valentine, G. (2001). 'It's only as stupid as you are': Children's and adult's negotiation of ICT competence at home and at school. Social and Cultural Geography, 1(2), 25-42.

Kafai, Y (2008). Synthetic Play: Girls and boys gaming together and apart in teen virtual worlds. In Y. Kafai, C. Heeter, J. Denner, & J. Sun (Eds.), Beyond Barbie and Mortal Kombat: New perspectives on gender and computer games (pp. 60-85). Cambridge, MA: The MIT Press.

Kellet, M. (2011). Empowering children and young people as researchers: overcoming barriers and building capacity. Child Indicators Research, 2(4), 205-219.

Kellett, M. (2005). How to develop children as researchers: A step by step guide to teaching the research process. Thousand Oaks: Sage.

Khanlou, N., & Peter, E. (2005). Participatory action research: considerations for ethical review. Social Science & Medicine, 10(60), 2333-2340.

Kozinets, R. V. (2010). Netnography: doing ethnographic research online. Los Angeles: Sage.

Leander, K. M., & McKim, K.K. (2003). Tracing the everyday 'Sitings' of adolescents on the Internet: a strategic adaptation of ethnography across online and offline spaces. Education, Communication & Information, 2(3), 211-240.

Levy, R., & Thompson, P. (2015). Creating 'buddy partnerships' with 5- and 11- year old-boys: a methodological approach to conducting participatory research with young children. Journal of Early Childhood Research, 2(13), 137-149.

Lugosi, P. (2006). Between overt and covert research: concealment and disclosure in an ethnographic study of commercial hospitality. Qualitative Inquiry, 3(12), 541-561.

Lysloff, R. T. (2003). Musical Community on the Internet: An On-line Ethnography. Cultural Anthropology, 18(2), 233-263.

Marsh, J. (2010). Young children's play in online virtual worlds. Journal of Early Childhood Research, 1(8), 23-39.

Montgomery, K. (2000). Youth and digital media: A policy research agenda. Journal of Adolescent Health, 2(27), 61-68.

Mortari, L., & Harcourt, D. (2012). 'Living' ethical dilemmas for researchers when researching with children. International Journal of Early Years Education, 3(20), 234-243.

Murthy, D. (2008). Digital ethnography: An examination of the use of new technologies for social research. Sociology, 5(42), 837-855.

National Statement on Ethical Conduct on Human Research. (2015). Chapter 2.2 General requirements for consent. National Statement on Ethical Conduct in Human Research. Retrieved 8 February, 2016 from https://www.nhmrc.gov.au/book/chapter-2-2-general-requirements-consent

Prout, A., & James, A. (1997). A new paradigm for the sociology of childhood? Provenance, promise and problems. In A. Prout & A. James (Eds.), Constructing and reconstructing childhood: Contemporary issues in the sociological study of childhood (2nd ed., pp. 7-32). New York: Routledge Falmer.

Pufall, P. B., & Unsworth, R. P. (2004). Rethinking childhood. New Brunswick: Rutgers University Press.

Richter, M., Groft, J., & Prinsloo, L. (2007). Ethical issues surrounding studies with vulnerable populations: A case study of South African street children. International Journal of Adolescent Medical Health, 2(19), 117-126.

Rosenberg, A. (2010). Virtual world research ethics and the private/public distinction. International Journal of Internet Research Ethics, 12(3), 23-36.

Schaap, F. (2002). The Words that Took Us There: Ethnography in a Virtual Reality. Amsterdam: Aksant Academic Publishers.

Sharf, B. F. (1999). Beyond Netiquette: The Ethics of Doing Naturalistic Discourse Research on the Internet. In S. G. Jones (Ed.), Doing Internet Research: Critical Issues and Methods for Examining the Net (pp. 243-256). Thousand Oaks, California: SAGE.

Shier, H. (2001). Pathways to participation: openings opportunities and obligation. Children & Society, 15, 107-117.

Spriggs, M. (2010). Understanding consent in research involving children: The ethical issues. A Handbook for Human Research Ethics Committees and Researchers. Retrieved 11 February, 2016 from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.542.6712&rep=rep1&type=pdf:

Steeves, V. (2006). It's not child's play: the online invasion of children's privacy. University of Ottawa Law & Technology Journal, 1(3), 169-180.

Taylor, T. L. (1999). Life in Virtual Worlds Plural Existence, Multimodalities, and other Online Research Challenges. American Behavioral Scientist, 3(43), 436-449.

The Australian Sociological Association. (2016). Ethical guidelines, Ethical practice, Research participants. Retrieved 1 March, 2016 from www.tasa.org.au/about-tasa/ethical-guidelines/

UNICEF. (2014). Rights under the Convention on the Rights of the Child. Participation. Retrieved 1 March, 2016 from http://www.unicef.org/crc/index_30177.html

Valentine, G., Butler, R., & Skelton, T. (2001). The ethical and methodological complexities of doing research with 'vulnerable' young people. Ethics, Place & Environment: A Journal of Philosophy & Geography, 2(4), 119-125.

Weintraub, J. A. (1997). The theory and politics of the public/private distinction. In J. A. Weintraub & K. Kumar (Eds.), Public and private in thought and practice: Perspectives on a grand dichotomy (pp. 1-42). Chicago: University of Chicago Press.

Wernholm, M., & Vigmo, S. (2015). Capturing children's knowledge-making dialogues in Minecraft. International Journal of Research and Method in Education, 3(38), 230-246.