THE DIGITAL WORLD OF CHILDREN AND YOUNG ADOLESCENTS

CHILDREN'S EMOTIONAL ENGAGEMENT WITH DIGITAL MEDIA

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INTRODUCTION

This paper is a summary of extensive ethnographic research carried out in the United Kingdom with early adolescents by Barbie Clarke as part of her doctoral study at the University of Cambridge. It has been supplemented by further research carried out by Family Kids and Youth with younger children (aged 5-10 years), carried out in 2010, and it reflects the comments and information supplied by Andrew Harrison, CEO of The Carphone Warehouse, and Marc Goodchild, Head of Children's Interactive at the BBC. It does not however necessarily reflect the views of either the Carphone Warehouse or the BBC. When Barbie Clarke began her research into children's use of digital media in 2006, it was felt that including children from 10 years might be too young. Four years on and we have found it necessary to include children from 5 years of age. The enormous growth of digital media use amongst children and adolescents has been well documented. Early this year media headlines in the United States were dominated by the findings of the Kaiser Foundation Report (Rideout, Foehr, and Roberts, 2010) that claims kids aged 8-18 are spending on average seven hours a day using digital media. The research reported that in the United States 84% of children aged 8-18 years use the Internet at home. In the United Kingdom 82% of children aged 5-15 years now use the Internet at home (Ofcom, 2010).

With these headlines goes alarming speculation that we are producing a generation of screen addicted kids who will have lost the ability to communicate face to face, and worse, will be unable to engage emotionally in healthy relationships with family and peers. This paper seeks to look beyond the headlines, and questions whether in fact digital media is all bad, and what children might be gaining from their emotional engagement with the media. The study looks at emotional engagement with digital technology amongst 5-14 year olds, and includes chat rooms, instant messaging, social networking sites, games consoles and mobile phones as these are currently the main forms of digital social networking.

WHAT ARE THE DEVELOPMENTAL STAGES THAT APPLY TO 5-14 YEAR OLDS?

We extended the research to 5 + years as we realised both anecdotally, and from the quantitative research carried out in the United States and the United Kingdom that children as young as 5 years have adopted digital media. In the United States and the United Kingdom, children are likely to be at school by 5 years old. It is an age when children move from a fantasy world to a reality world, but they are still likely to have an emotional response to many situations, and they are unlikely to be logical. In some educational models such as those advocated in Scandinavia, it is argued that children should not begin to have 'formal' education in

which they are taught numeracy and literacy skills, until the age of 7 (Alexander, et al, 2009). Children at this age are likely to be happy and carefree, and they aspire to be like older children and adults in their lives in terms of their play behaviour. The transition to school and more formal education can bring some bewilderment, at whatever age this begins. Children start to notice that their family is probably different from others they encounter through the friendship networks they begin to establish. By 6-7 years children develop the ability to think in abstract ways, and they are eager to learn. At 7 years children enter what is known as the 'middle age of childhood', and it is the point in a child's life when they begin to be more independent, and friendship can be important, although parents are still the most important influence on their lives. At this age children begin to be a little more rational, and they are able to make decisions for themselves. This is often reflected in children's insistence on what they wear, what sport they do, what activities they prefer. Children aged 7 – 10 years tend to be altruistic. They are not particularly rebellious at this age, and in fact like to abide by rules, and prefer to have certainty and boundaries. It is an exciting time when they are becoming newly independent, but need plenty of back-up and support.

The term 'early adolescence' refers to 10-14 year olds. Early adolescence is an important stage in child development, reflecting a time during which children move away from the world of childhood and prepare for the adult world. An important task of early adolescence is to explore identity and form friendships; it is also a time when emotional communication between friends can be supportive and beneficial. Communicating emotion is important for children's wellbeing (Dunn, et al, 1991; Hubbard and Coie, 1994; Parke et al, 2002; Weare and Gray, 2003). The move from primary school to secondary school (that most children in the United Kingdom experience at 11 years is a major transitional stage (Rudduck, 2004). Primary schools (or elementary schools) tend to be close to where children live and pupil numbers are relatively small. Secondary schools (or high schools) are further away and are far larger, with a greater number of classes and continual movement between lessons, often with different peer groups in different lessons, meaning that children are introduced to a completely different set of peers than those in the closeknit community of primary school. Children can feel under pressure at this age because of the number of transitions they are experiencing and their need for emotional support can therefore increase. Support from parents is important at this time, and can improve a child's feeling of self-worth, although some research shows that this is not always available (Fenzel, 2000). From age 11 it is likely that children will spend more time with their friends than with their parents (Dunn, 2004; Larson et al, 1996), and it is argued that friendship patterns are likely to change, with old friends from primary schools being left behind for new friends at secondary school. In these transitional processes, emotional communication is key to children's wellbeing.

With 15% of 5-7 year olds, 60% of 8-11 year olds and 93% of 12-15 year olds in the United Kingdom now having access to a mobile phone, and 78% of 5-7 year olds, 81% of 8-11 year olds, and 85% of 12-15 year olds in the United Kingdom having access to the Internet at home (Ofcom, 2010), it would seem that there is plenty of opportunity for children to be communicating in an affective or sensitive way. Social networking sites such as Facebook, MySpace and Bebo are now popular means for children to communicate with each other and share their experiences and their lives. Even at age 5-7 years, 37% of children have accessed Facebook, increasing to 66% at age 12-15 (Ofcom, 2010).

WHAT DO WE KNOW ABOUT KIDS AND DIGITAL MEDIA?

The concerned headlines referred to earlier were prompted by Generation M2: Media in the Lives of 8- to 18-Year-Olds, published in the United States in January 2010 by the Kaiser Foundation. It is the third in a series of large-scale, nationally representative surveys by the Foundation about young people's media use. The 2010 report is based on a survey conducted between October 2008 and May 2009 among a nationally representative sample of 2,002 3rd-12th grade students ages 8-18 years, including a self-selected sub sample of 702 respondents who completed seven-day media use diaries, which were used to calculate multitasking proportions. A similar study has been running in the United Kingdom. The Ofcom children's media literacy report has run since 2005, and the third report was published in March 2010. A representative sample of 2,000 children aged 5-15 were interviewed across the United Kingdom in two waves in 2009 (Spring and Autumn). This too had some interesting findings. For example it showed that one in four (25%) of 8-11 year olds have a profile on a social networking site such as Facebook, Bebo or MySpace, even though the minimum age for registering with social networking sites 13 years. The question was not asked of 5-7 year olds. The report also highlighted that:

While there has been some increase in concern about the potential risks associated with internet usage, this is not matched by an increase in the use of rules, internet controls / filtering software, or use of safe search settings on search engine websites among parents of children who use the internet at home. (Ofcom, 2010, Executive Summary, p 2)

In fact somewhat worryingly, the report found that there had actually been a decrease from 49% in 2008 to 43% in 2009 of parents who have controls or filtering software in place.

In the United States a large and comprehensive ethnographic study has been carried out over three years looking at children and young people's use of Digital Media. Findings from The Digital Youth Project (Ito et al, 2008) were published in November 2008. The study has involved four primary research areas which have focused on the everyday lives of young people aged 8 to 20 and their relationship to digital technology. The projects that have been done in the area of 'Networked Sites' (Boyd, 2008; Herring, 2008; Stern, 2008; Willett, 2008), have been highly relevant to our study, although much of it has been focused on young people and the establishment of identity rather than the nature of their emotional communication.

In Europe the final report from the EU Kids Online Network (Livingstone and Haddon, 2009) was published in June 2009, and is probably the most comprehensive report to date that gives an international, but also a European perspective on children's internet use. The overview of European countries (EU Kids Online, 2009) indicates that children's access to the Internet at home is highest in Belgium, Denmark, Netherlands, Spain, Sweden and the United Kingdom, all reaching levels above 90% by age 12 years (see chart 1). This research also indicates that use grows steadily from age 5 years, but reaches a plateau at 12 years. The higher use countries are likely to have more younger children online. The study also indicates that little research has been carried out with younger children, that is children under 13 years.

The report includes a review of 235 research projects covering 18 countries in January 2007, and 390 covering 21 countries in June 2009. Livingstone and Haddon (2009) report that there are gaps in the research carried out to date (see figure 1).

FIGURE 1

PERCEIVED GAPS IN RESEARCH

Perceived gaps in research include:

- ➤ Little research on Web 2.0 use
- ➤ Little research on media literacy
- > Little focus on younger children
- > Little research on parents' experiences of the internet and how they mediate their children's experiences

EU Kid Online Final Report, June 2009 (pp 27)

CONCERNS EXPRESSED ABOUT CHILDREN'S USE OF DIGITAL MEDIA

There is less evidence to show either the nature of children's interaction with digital technology, or the way in which they may be interacting emotionally. Many of the studies have focused on older teenagers and little work has been done that looks specifically at children or early adolescents. What research has been done on children's use of digital technology has tended to focus on the negative aspects of its use (Byron, 2008). The most recent comprehensive study, *EU Kids Online* (Livingstone and Haddon, 2009), has produced a global view of young people and their use of digital media but, as its authors point out, the cost vs. benefit ratio has not yet been fully considered:

The research agenda is heavily led by media/moral panics. While incidence of risky behaviours, as presented in this report, is indicative, there is little known of actual harm to children, whether criminal (e.g. incidence of abuse or abduction), medical (e.g. incidence of youth suicide or self-harm), psychological or other. (Livingstone and Haddon, 2009, p. 320)

Children's wellbeing has come under close scrutiny in the past few years and with it concern and speculation about young people's behaviour and their psychosocial world. In February 2007 (UNICEF, 2007) published an assessment of child wellbeing that ranked the United Kingdom as one of the lowest among industrialised countries. Children's increasing use of digital technology has been cited as a cause for concern by childhood professionals and the media, and linked to general unease about levels of children's happiness (Buckingham, 2009; Byron, 2008; Layard and Dunn, 2009a; Mayo and Nairn, 2009). While an easy target, the use of digital technology is clearly unlikely to be the only reason for increasing childhood depression, a phenomenon that is reflected internationally (DeAngelis, 2004).

THE IMPORTANCE OF EMOTIONAL COMMUNICATION IN CHILDHOOD

Children's perception of emotion begins early. Dunn et al (1981) carried out research with families in Cambridge to find out how the eldest child aged 2-4 behaved towards a younger sibling aged 8-14 months. Mothers reported that most children were helpful towards their younger siblings, but did not always respond to signs of distress from the infants. By 14 months, however, nearly a third of the younger siblings were turning to an older sibling for comfort, and some were also able to offer comfort both to their older siblings, and to parents. This research was based on mothers' reports, and confirmed earlier research (Dunn and Kendrick, 1979) which showed that 80% of older siblings were sympathetic towards their

younger siblings. The conclusions of this research, and corroborated by others over several decades (Harris, 1989; Zahn-Waxler and Radke-Yarrow, 1982), are that children can feel, experience, and express concern and emotion, and *act on it* at an early age; this implies that altruism and the ability to respond to emotional messages is a lesson learned by most children by the age of 2 years. Harris (1989) led research in the Netherlands into children's emotional development, and found that children aged 6 perceived emotion as an "emotionally charged situation that provokes a visible emotional reaction." When children reached age 10, however, it was found that children could re-direct emotions through various processes of distraction, and that they could make a distinction between emotion that was communicated, and emotion that was felt but not expressed.

Parke et al (2002) agree that early parent and family relationships have a direct effect on a child's peer relationship and they cite several research studies that confirm this (Harrist, Pettit, Dodge, and Bates, 1994; Hart, Ladd, and Burleson, 1990; Putallaz, 1987). They write:

Children learn more than specific affective expressions, such as anger or sadness or joy, in the family. They learn a cluster of processes associated with the understanding and regulation of affective displays, which we term 'affect management skills'. It is assumed that these skills are acquired during the course of parent-child interaction, and are available to the child for use in other relationships. Moreover, it is assumed that these skills play a mediating role between family and peer relationships. (Parke et al. 2002)

It is suggested that social competence with peers is related to children's ability to encode and decode emotional messages (Hubbard and Coie, 1994) and that this is also related to children's emotional understanding.

THE ETHNOGRAPHIC RESEARCH: WHAT DOES THIS RESEARCH TELL US ABOUT CHILDREN'S EMOTIONAL ENGAGEMENT WITH DIGITAL MEDIA?

To examine children's and early adolescents' use of digital technology, its effect on their wellbeing, and the nature of their emotional communication using the media, stage 1 of our research was an ethnographic study carried out with 26 children aged 10-14. Stage 2 was with younger children aged 5-10. Using an ethnographic methodology put the research in the context of the children's everyday lives. Carrying out observation and interviews in home and being aware of the social context of the children's lives helped to highlight their interaction with digital media.

Stage 1 of the research included five or six visits to each child's home over two years. Each session lasted two to three hours, and included filmed observation sessions of the children using digital social networking, semi-structured interviews with children and informal interviews with parents. Stage 2 of the research was carried out with 20 children aged 5-10 and sessions lasted 1 – 1 ½ hours. Diaries of their digital use were kept by all the children for one week prior to each visit, and children drew friendship maps at different stages of the research. Between each visit video film and taped interviews were analysed using NVivo8 software, which allowed clarification of filmed observation or findings from interviews to be made at the next visit. The research carried out at Stage 1 also included friendship focus groups each lasting two hours in which the children's friendship networks came together, and an online bulletin board session with the children over three days allowed a final clarification of questions that arose from the research process.

The research shows that whereas early adolescents' widespread adoption of digital technology is deeply embedded in the social context of their lives, for children it represents another form of play. We would argue that emotional engagement with digital media is being used as another means to act out some of the developmental stages and the mental processes of childhood and early adolescence, especially in identity formation, the exploration of friendship, the influence of peers, and the way that emotional support is given and received.

EMOTION, FRIENDSHIP, AND SOCIAL NETWORKING

While this study found that some important events may not be shared on social networking sites, it has shown that the role of digital media in friendship can be significant to children in keeping up communication both for companionship, but also as a source of emotional support. Adults may wonder at the time children aged 10 and over spend on Facebook, MSN and texting their friends, often those they have been with all day at school, but it might be that this provides instant access to an important source of comfort and reassurance.

We discussed earlier the way in which friendship is immensely important to children; it can be a source of support and encouragement. Studies on resilience have shown that children who have a strong peer support system are likely to cope better with difficult family circumstances such as parents with substance abuse, or divorce and separation (Dunn, 2004; Gore and Eckenrode, 1996). Layard and Dunn make the point that parents and teachers need to be aware of just how important friendship is:

Parents and teachers need to take children's friendships seriously. This means encouraging children to make friends, to play and study with friends and to invite them home. When the family considers moving, it should take into account the impact on children's friendships. Children should wherever possible be helped to keep their friends, since they are a major source of strength. This applies when children start school, move school, or move class. (Layard and Dunn, 2009b, p. 48)

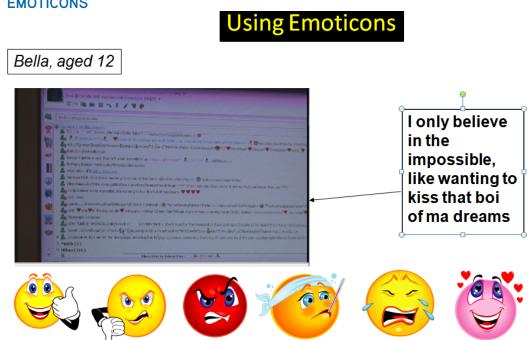
Children in our research frequently signed off their posts with 'BFFE', and there is a sense that children can indeed 'Be Friends Forever'. The ability to stay in contact with friends who had moved away, emigrated or moved to a different school emerged as a strong reason to use digital technology, and the emotional support that was both given and received at times of transition was clearly important to the children. They could stay in touch on-line even though face to face communication was not possible. Molly, for instance, worried about moving to her new secondary school, made some 'best friends' at camp, and kept contact with them on-line despite living several hundred miles away. Robbie and Will, aged 12, missed their friend Paul who had moved to Europe. They knew he was lonely, but they were maintaining regular contact with him through playing on the on-line games site Runescape, and chatting to him through the private chat facility. Although the boys were not addressing Paul's loneliness directly, the fact that they could play on-line, and give each other an update of what was happening in their lives, was kind and supportive. Sometimes such support was given through deliberate displacement such as apparently banal conversations and banter, the posting of photographs to illustrate 'what's up', or the playing of on-line games; at other times children were observed giving direct advice, or using 'emoticons' and 'pokes' (see figures 2 and 3) to express concern, and just to remind their friends that they were there for them.

FIGURE 2 USE OF 'POKES'



Family Kids and Youth 2010





Family Kids and Youth 2010

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EMOTIONAL COMMUNICATION AND DIGITAL TECHNOLOGY

Our study has shown the importance of emotional communication to children's wellbeing. It has become clear, however, that children's engagement with digital technology is viewed by some adults as a threat to their wellbeing. This study argues that such engagement can also be beneficial to early adolescents. Research looking at children's ability to understand and interpret their own emotions, as well as those of others, suggests that those who are better at this are more likely to have happier peer relationships and are less likely to be rejected or have other social difficulties (Ladd, 2005). A lack of friends in adolescence can result in loneliness and depression in adulthood (Berndt, Hawkins, and Jiao, 1999). Emotional communication, the ability to share feelings and concerns and to recognise these in others, is an important part of the process of individuation, and of children's wellbeing. Although there is conjecture about the impact of digital technology on children, there is little research that makes a causal link between childhood wellbeing and children's use of digital technology, and what research has been done is quite old, and US-based (Livingstone and Haddon, 2009).

Barbie Clarke's study has shown that communicating with friends through digital social networking is supportive and encourages friendships. It has also shown, however, that what on the surface appears to be 'emotional communication' using digital technology can sometimes be quite superficial, and can mask some disturbing and difficult events in children's lives that are not necessarily shared with friends on-line. It appears that children are sharing important feelings and concerns, but not necessarily overtly or on-line; they are making choices about the private versus the public arena. SMS texting and speaking on a mobile phone is perceived to be safe, as it is not public. Sharing thoughts and feelings on-line about really important matters is not regarded as safe or intimate enough, not only as it can be viewed in a public arena, but especially because it can be viewed by parents. Although emotion is superficially expressed on-line, and the enthusiastic use of 'emoticons' illustrates this, it is a form of play which helps children to explore their identity and their place in the world; they can 'play' with strong emotions without having to reveal what is really happening in their lives.

The study has been influenced by both the social world that children inhabit, and the psychological processes that were at work when they were using digital technology. The psychosocial paradigm used in this research has allowed us to consider the behaviour of the children in the study not just on-line, but also off-line, as the two are clearly inter-linked. We have been able to reflect on the way in which children exist not just in an on-line world, but also how they relate off-line to their parents, and to their siblings, as well as to their friends, and data collection methods of diary, friendship maps, observation and interview, as well as a research log, helped in this. Much of the previous research that has looked at children's on-line behaviour has not considered the same children in the context of their off-line as well as their on-line behaviour. Taking their on-line behaviour alone might have given very different results. Equally, by returning to visit the same children on several occasions, and by using different methods such as observation and diary keeping, we were able to see not just how the children's digital behaviour changed, often in response to new technology such as Xbox LIVE, but also how the changes in their personal circumstances, and their emergent maturity and move towards early adolescence affected their use of digital media.

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PLAYING WITH IDENTITY

An important theme to emerge in this study was the way in which children established an identity for themselves on-line, one that might be removed from the reality of their lives. It is possible to deliberately adopt a different persona, or to display different emotions through digital technology. While some problems might be deemed too personal or important to share on-line, the playing out of emotions, and the sharing of some problems - which are often discussed at length on-line with a large friendship community - is a way of experimenting with the adult world of relationships.

The research reflected Valentine and Holloway's (2002) findings in that it revealed that many of the exchanges that take place on social networking sites are seemingly inane. Recounting the day to day events of life, however, is a way of making sense of it. As (Lawler, 2008) points out:

We endlessly tell stories about our lives, both to ourselves and to others; and it is through such stories that we make sense of the world, of our relationship to that world and of the relationship between ourselves and other selves. (Lawler, 2008, p. 12)

Identity formation is an important developmental task, especially for the early adolescent. Erikson (1968) argued that part of the establishment of an identity in adolescence was a confusion of different, adopted roles, and necessarily involved an element of risk:

Much of this apparent confusion thus must be considered social play – the true genetic successor of childhood play. Similarly, the adolescent's ego development demands and permits playful, if daring, experimentation in fantasy and introspection. (Erikson, 1968, p. 164)

In our study Rosie, aged 11, had expressed concern, like several of the girls, about body image. Rosie adopted an avatar on Stardoll that was an idealised version of her, only slimmer and older. She also pretended on chat rooms to be a model, only terminating the on-line conversation when she was asked to go on her webcam. Digital media, it appears, might be a source of power as well as information. This sense of empowerment is something that is important to children, and gives them some control over their friendships and relationships. With growing autonomy, children and early adolescents can exert 'digital agency' by playing with their identity on-line. As discussed earlier, children admit to lying about their age, partly because to join a SNS they have to be 13, although many believe they have to be 16. In their view it can be fun and entertaining to experiment with being older. Even though this may sometimes be risky or even dangerous, they believe they are in control.

DIGITAL TECHNOLOGY AS A 'RITE OF PASSAGE'

The transition from primary to secondary school, which occurs for most children in developed countries around the age of 11 or 12, is clearly considered to be an important event in the lives of the children in this study. It is at this age that children are likely to be given a freedom that they have not experienced before, and which they identify therefore with being older. Children at this age are expected to travel to school alone, often leaving early and taking the school bus or public transport. This creates excitement for children, but some anxiety for parents, who try to ensure that their children will at least be ready for any 'emergency'. In the study Jessica had been pleased to show Barbie Clarke her first mobile phone, given to her for her eleventh birthday because she was to start secondary school. The Carphone Warehouse reports

that sales of mobile phones increase in the two weeks before children return to school in the Autumn term, and that sales are largely to children going into Year 7 (age 11-12) of secondary school. Along with the new school uniform and shoes, anxious parents are purchasing their child a mobile phone to ensure that they are 'safe' in their newfound freedom.

As children get older, they see mobile phones as an integral part of their social life, with 78% of 11-17 year olds claiming that having a mobile phone gives them a better social life (LSE and TCPW, 2006). The latest phones are becoming similar to computers, with capacity to access the Internet, including SNSs, and to send email. When asked in earlier research what they thought of other young people who did not own a mobile phone, most adolescents were horrified, with one 13 year old commenting "Oh my God, what are their parents thinking of, that should be reported to social services" (LSE and TCPW 2006, p. 23).

Peer group influence and social identity is important to children where alignment to a group can provide a source of support in times of transition and adjustment such as those that accompanies the move to secondary school. Crowd identification is an important way for young people at this stage to define themselves (Cotterell, 1996) Owning digital technology, such as a mobile phone, is part of the process then of becoming older, especially if others also own one. Similarly the adoption of digital social networking appears to happen around this time, in part to fit in with friends, as well as to be able to communicate with them. Josh's friendship network was Jewish, and the boys in this cohort expressed a collective concern about anti-Semitic behaviour. This group was tight-knit, and they kept up regular contact on-line, but also met frequently off-line, displaying photographs of their encounters on their SNSs. Many of Bob's friendship group adopted some form of digital social networking when they were 11 or 12. Rosie, also 11, was aware that her father might monitor her on-line exchanges, and opted to use her mobile phone for private exchanges. Clarke (2009) argues that the adoption of digital technology by early adolescents is a 'rite of passage', one which enables a certain sense of freedom, a sense of breaking away from the constraints of childhood, and allows some autonomy and independence. Parents are usually unwelcome into this world, and preference for using a laptop or a mobile phone, where communication is less easily monitored, is apparent. This growing autonomy is part of the psychological process of early adolescence. Through the course of the study Barbie Clarke looked at different types of digital communication including chat rooms, email, instant messaging and blogs, but it was interesting that new opportunities arose during this time. For example games consoles such as Xbox Live, and IM on Facebook were introduced, each allowing children to communicate with friends and family, to make new friends in new, virtual communities, and to share thoughts and feelings.

PARENTS AND CHILDREN'S UNDERSTANDING OF DIGITAL TECHNOLOGY

The children in the research had adopted digital media with enthusiasm, and it is interesting that their understanding of what it could offer might differ from many adults. This study suggests that some parents are not recognising or understanding what it is their children are doing with digital technology, nor what they are able to do. Molly's mother, for example, did not let her use SNS's, and yet Molly was communicating with friends on MSN and using the website Club Penguin. While it is an understandable and natural developmental process to keep part of their lives secret and separate from their parents (Erikson, 1968), children and early adolescents are not necessarily being duplicitous. For them the convergence of digital technology is not questioned, it is part of their social world. Taking part in live chat on a games console for instance is fun, it is extending the possibility of play. It is parents, and probably most adults, who

tend to compartmentalise digital technology. Convergence is a difficult concept to comprehend for a generation brought up in the pre-Web 2.0 world where the purpose of a phone was to talk, a computer was for word processing, a TV was for entertainment and information. As Herring (Herring, 2008) points out, children do not question digital media, it is part of their world. She talks of a 'generational digital divide' (2008, p. 86) and this certainly appears to be the case in this research.

CHILDREN'S SOCIAL WORLD ON-LINE AND OFF-LINE

Coleman and Hendry (1999) point out that some children can be unpopular, and that their lack of social encounters means that they do not experience the psychosocial exchanges needed to achieve greater social skills. It could be argued that social networking through digital media allows even the shyest, socially inept, or merely isolated young person an opportunity to experiment with friendship and social exchange in a relatively safe and secure place. In Barbie's research Rachel, Patrick, Will and Robbie were only children, and seemed to spend considerable time alone at home, yet they appeared to gain support and friendship from their digital exchanges. The constant on-line feedback received from friends, delivered mostly in a benign and light-hearted way, helped to establish social relationships that may not have been possible without the social networking made possible through digital technology. Barbie Clarke's study has illustrated the way in which the use of digital social networking, especially SNSs and IM as well as gaming, can facilitate agency, allowing an independence from parents and a connection to peers even when they are not physically with their friends. Those children such as Patrick who was not allowed access to sites such as MSN and Facebook were missing out socially; arrangements were made between friends that they did not know about. Ofcom has referred to the 'digital divide' (Ofcom, 2008b), that is the disadvantage of families without access to the Internet at home. It could be argued that the children who are not allowed access to social networking sites at home, even when the Internet is available, are equally missing out on social relationships.

While the study did not set out to look at social class differences, the children came from a diverse background. There appeared to be no class pattern, in this research, to parental knowledge or understanding of the media, and children's engagement with digital technology. Rosie lived in a very small house on an ex-social housing estate with her older brother and sister, both her parents, and a dog, but her father was knowledgeable about computers and was monitoring her use of digital technology. Her sister also kept her informed about being safe on-line. Patrick, on the other hand, lived alone with his mother in a large semi-detached private house, but his mother was not aware of what he was doing on-line through World of Warcraft. He was not allowed to use social networking sites, but he was regularly speaking to strangers online through the game's site. Rachel lived on her own with her father on a social housing estate, and he 'didn't even know how to turn the computer on'. Tommy lived in a large detached Georgian house with many types of technology available, including TVs, games consoles, and computers, but preferred to play outside on his bike or with friends. What did seem apparent was that there might be a pattern of parental engagement. In those households where parents were available, not working long hours, or distracted by emotional events in their lives, the children seemed to engage less with digital technology, and were less likely to use the media as a source of emotional support.

PRIVATE VS. PUBLIC: IDENTITY AND CULTURAL NARRATIVES USING NEW TECHNOLOGY

Having a sense of space away from adult control is clearly important to children as they reach early adolescence, and this was illustrated in the study by children's wish to keep their on-line social networking largely separate and apart from their parents. Lucey and Reay (2000) argue that adult-free spaces are important to children, and point out that a fear of 'stranger danger' and concerns about road traffic have resulted in a widespread retreat of children from public spaces. The issue of private vs. public space was interlinked with identity. It appeared that the image of perfection posted on their own sites could mask, in the case of the girls, some trauma, or concern, in their lives. In our research, 12 year old Brodie's sister had attempted to commit suicide and the repercussions within the family had been immense. Brodie had appeared to turn to social networking as an escape from the chaotic and difficult environment in which she lived. She felt that she was not allowed to discuss the traumatic event that had happened within the family, but she could lose herself in the self-constructed world of online communication in which she was entirely in control, an empowering experience for her. The increased use of social networking websites allows children to have both a private and a public persona. Users can create a page complete with profile, pictures and a list of their favourite music, and they can customise their page by streaming their favourite music and video. Some commentators see such sites as an extension of the normal wish young people have to express themselves individually:

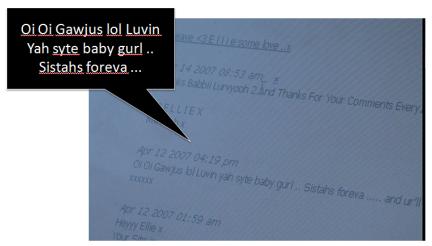
The appeal of these sites lies in the crucial part of the adolescent socialisation process which we all go through ... finding your identity, voice, place and status - the tribe with which you most identify. (Jo Twist, senior research fellow at the Institute for Public Policy Research, BBC, 2006, 7 March)

The media provide an extraordinary quantity of examples of different types of people behaving in different types of ways in different types of situations. Yet just under the surface of this vast flow of images lie systematic patterns of inclusion and exclusion, of conventions and stereotypes, reflecting ideology and social power. All this has significant implications for young people struggling to forge a sense of identity. (Huntemann and Morgan, 2001)

Thomas (2006) argues that children are learning to negotiate their social worlds through their on-line interaction. Our study revealed the extent to which children adopt 'gangsta rap' language found in hip-hop music, and the use of 'slang' or MSN acronyms in their on-line communication. This appears to be a universal cultural narrative, a common language that is adopted on-line that plays with an adult world of risk and danger, but which in reality is naïve and innocent. The widespread use of 'gangsta rap' language in on-line communication and the playing with different roles and expression of sexuality in an apparently adult manner that emerged in this study could be said to have its roots in commercialism. The findings, however, indicate that children might be playing with the 'sophisticated' world of hip-hop music and its attendant language and culture, rather than embracing it. Rachel's exchanges with her friends often finished with 'Sistash foreva' (see figure 3), and Jack asked his friends to 'r8 ma galz' (see figure 4), but these exchanges appeared to be straightforward and simply reflecting a commonly recognised means of banter and exchange.

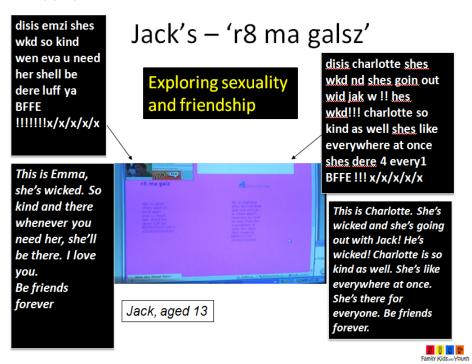
FIGURE 3 PLAYING WITH LANGUAGE

Sistahs Foreva ...



Family Kids and Youth 2010

FIGURE 4
PLAYING WITH LANGUAGE



Professor David Buckingham (2000) argues that children's social and cultural needs are defined through their relationship with the commercial world, but he does not believe that this is necessarily a bad thing, as it is a way of preparing them for the adult world. It is of concern that children have chosen to adopt a language that reflects hip-hop music, as many of the lyrics are violent and derogatory to women and homosexuals. There is a sense though that the popularity of 'gangsta rap' is on the decline. Barack Obama told a campaign rally in South Carolina that rap artists were "degrading their sisters" (Shipman, 2007). It seems also that rap artists are 'softening' their image. Snoop Dogg, famous for his ghetto lyrics, has helped to advertise Pony trainers and artist 50 Cent has been promoting grape-flavoured vitamin water.

Giddens (1991) views the emergence of 'childhood' as a distinctive state, giving children an opportunity to differentiate between the public and the private. Children like to have a life away from parents as they become older and enter early adolescence. They begin to experiment with the outside world, and digital technology allows them to do this. Such communication can be instantaneous, with few constraints of time or space. Some of the messages posted on the sites of children in the study showed they had been sent at two or three o'clock in the morning, which implies they are not sleeping. This view is supported by Dr Mark Berelowitz, Consultant Child and Adolescent Psychiatrist at the Royal Free Hampstead NHS Trust:

Most adults will remember a time when you did not call someone's home after 10pm, unless there was an emergency. But now, the teenager with a mobile, an Internet connection and a TV in the bedroom can carry on communicating with the outside world into the early hours. This can have disastrous consequences for sleep, and for school performance the next day. Berelowitz (as cited in Haste 2005, p. 19)

CONCERNS ABOUT SAFETY AND SECURITY ON-LINE

Children's relationship between their private and public digital world, discussed above, has been linked to concern about children's wellbeing. As we explored earlier, there is concern about children's wellbeing, but it is important to point out that not all children are at risk. An ONS (2004) survey found that one in ten children aged five to 16, had a clinically recognisable mental health disorder, and it is these children who are particularly vulnerable. Older children (11 +) and young people were found to be more prone to a mental health disorder than younger children. Children with an emotional disorder were more likely to come from a single parent family, have a parent with mental health disorder, and they were more likely to live in households with a low income.

Anxiety about children's use of new technology has elicited claims that children are playing less because of electronic games machines and Internet surfing (Morpurgo, 2006). Indeed much of what has historically been written and said about new technology has focused on the potential harm to children. US Attorney General Janet Reno summed this up at a Washington Internet Summit 12 years ago: "It used to be that children could be kept from harm by keeping them at home. Now, cyber predators and child pornographers can reach out to children who innocently spend time learning and playing on the family computer." (Reno, 1997).

While concern about potential paedophiles accessing children through digital media is understandable, it is important to remember that the world has never been entirely safe for children, and it may be that children and young people are doing what they have always done, communicating with each other, but in a different sphere. Interacting with strangers on the Internet can clearly be dangerous for children and young people,

and it seems that cases of young teenagers arranging to meet a 'stranger' that they have met on the Internet are not unusual (CEOP, 2007). Livingstone (2009) concludes in the *EU Kids On-line* report that across all countries, increased use of digital technology appears to correspond with increased on-line risks for children. She does, however, believe that opportunities and risks should be balanced, a view that we would endorse: "Children learn to cope with the world through testing their capacities, adjusting their actions in the light of lessons learned, and so gaining resilience and independence". (Livingstone, 2009, p. 2). A distinction perhaps needs to be made between children and young people deliberately taking risks online, and protecting children from unwittingly exposing themselves to danger.

What is apparent from Barbie Clarke's research is that children are not spending all their time on-line, and have, mostly, healthy and interesting social lives away from digital technology. What is also apparent is that the early adolescents in this study appear to be doing what young people their age have always done, but that digital technology gives them a different context in which to do it. In this study we have also examined their psychological world, and have reflected on the way in which we see their social exchanges on-line, with peers, and with their families, as being a means of playing out the developmental stages of childhood and adolescence, including emotional exchanges, friendship formation, and searching for an identity. We have noted, for example, that while on the surface children might be presenting a positive and upbeat picture of themselves on their SNSs, this might cloak underlying issues such as bullying, or family concerns.

THE IMPORTANCE OF DIGITAL COMMUNICATION TO CHILDREN AND EARLY ADOLESCENTS

It became clear from this ethnographic research that some children were relying on digital technology for emotional communication more than others, and from our sample of over 40 children, it appeared that those children who spent more time alone, because of family break up or because they were only children, became more reliant on digital exchanges than those from larger families. This did not appear to be class driven, nor was it gender driven, but these exchanges did appear to provide emotional support. The nature of the exchanges was different, with adolescent girls spending more time on social networking sites such as Facebook, and boys still using social networking, but using the forum of games sites in order to have digital interaction. While it could be argued that children spending a great deal of time on their own, and on-line, is not good for their wellbeing (Valentine and Holloway, 2002; Byron, 2008), it appeared from this study that family connection, but more especially peer communication, was enhanced by on-line exchanges, no matter how banal these exchanges sometime appeared to be. Children could keep in touch with family members and friends who they were separated from, and friends who they might be seeing on a regular basis could be a source of advice and comfort.

The research also examined what psychological developmental processes are at work in children's and early adolescents' use of digital technology. In particular it looked at identity formation, one of the major tasks of adolescence, and the study showed that identity was played with and different personas adopted in a variety of ways. Sometimes this was a means to find the 'idealised' self (Erikson, 1968), at other times it was a way to try out being different, or to take risks. The research also explored the way in which emotional communication was a feature of digital exchanges, that is the sharing of important emotions and feelings. On the surface, emotion featured highly in children's communication, with protestations of love, loyalty and commitment expressed towards friends. This was part of the 'persona' the children liked to present to the world, alongside their favourite music, film, and funny stories; all experiences were positive, and each friend

was kind and supportive. They were at pains to be in control of these pages, and felt the need to update them regularly so that their friends did not get bored.

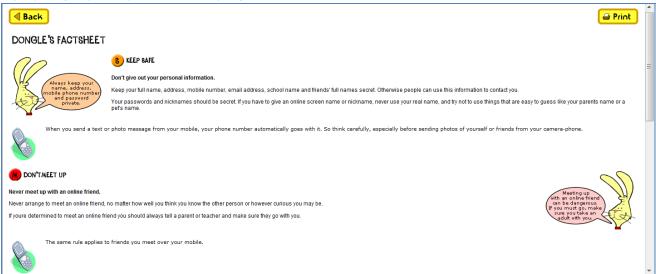
THE SIGNIFICANCE OF THE STUDY

In writing the book that accompanies this study, we found little work that has looked at younger children's use of digital technology, and little that has looked at the nature of children's emotional communication in this context. It is important to remember that new technology has always prompted extreme fear about the effects on those that use it, and especially on children. As Nicholas Carr (2008) points out, in Plato's Phaedrus, Socrates expressed fear about the development of writing affecting peoples' ability to think or memorise things. Carr also points out that the arrival of the printing press in the 15th century led to a fear that the easy availability of books would make men 'less studious' and weaken their minds. Similar fear was expressed about the arrival of TV. As the article 'Fear and the Media' (Rank, 2010) points out, researchers as far back as the 1930s and 1940s expressed concern that children were experiencing nightmares after going to the movies or listening to radio dramas. In the 1950s and early 1960s, the incidence of fears and nightmares was reported in several books about the effect of television on children. Similarly in terms of digital media use, children are not evolving, but are merely adapting to their new environment. The BBC has found that despite this new environment, children still want to relax and have fun, to be challenged and stretched, to feel empowered, to role play, and to share their experiences. Barbie Clarke's study indicates that this is what digital technology is providing for children.

As a broadcaster with two dedicated children's channels and a significant interactive presence, the BBC acknowledges that many of its younger audience are already very prolific online and on social networks in particular. It does not link or promote any of the sites that are targeted at over 13s on its children's services but focuses on alternative, safe, propositions that harness the feeling of being connected without putting children at risk. The BBC's mantra is "better by design" and it supports improved media literacy - as opposed to creating a sanitised view of the online world children currently inhabit.

The BBC has produced content that enable children to express emotional feelings. Bug Bear is for children and invites children to 'Bugtopia' where 'you can create a Bugbear to share your story about stuff going on in your life'. The site includes avatars in the form of 'bugbears' each voicing a different concern left by children, which when clicked on have the voices of children who have related their concerns. For example, click on the character 'I got Cyber bullied' and she tells us that she was upset by having accepted someone she did not know online. She told her mum, and she advises other viewers to be very careful, and delete anyone not known to them. Another says 'I want to have a better relationship with my mum'. The character speaks about her feelings, and asks for advice. The 'Guide Bug Bear' explains how the site works. CBBC's 'Staysafe' site has advice about safe surfing, including 'Dongle's Guide to Be Smart'(see figure 5), and lain and Hacker's guide to safe surfing with advice on safe social networking, online gaming, instant messaging, and downloading files (see figure 6).

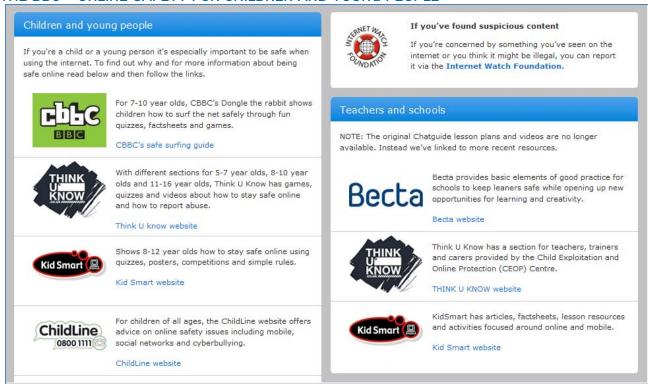
FIGURE 6
DONGLE'S DOWNLOADABLE FACT SHEET



Source: The BBC

FIGURE 7

THE BBC - ONLINE SAFETY FOR CHILDREN AND YOUNG PEOPLE



Source: The BBC

In 2008, The International Youth Advisory Congress on Internet Safety was organised by the Child Exploitation and Online Protection Centre (Ceop), an alliance of British and foreign police forces, computer experts, charities and schools. More than 150 teenagers from 19 different countries attended the five-day conference to voice their opinions to government and industry. Their aim was to draw up a global online charter to be presented to the UN. At the same time the annual Mobile Life survey for the Carphone Warehouse, which polled 6,000 adults and children aged 11-18 in the United Kingdom and the United States, found 10% of the children and young people had met someone in person they originally met on the internet. The study also found most of the parents polled had not checked their children's online history, but 26% of those who had done had found something they were unhappy with. Tania Byron, commenting on the report, suggested that parents should learn how to set privacy settings on home computers and teach children how to report abuse or offensive material. However our research study shows that while children are becoming increasingly aware of dangers that might be posed by digital technology, parents are still left behind. Few parents in our study expressed concerns about privacy settings or filtering software, and some did not know what they were, even those with children under 10 years. This is clearly an area that needs to be addressed with some urgency.

CONCLUSION

There is concern among some social commentators that children who use digital media may socially withdraw from the real world of family and friends, fail to communicate emotionally, becoming obsessed with the on-line world of the screen (Valentine and Holloway, 2002), and thereby miss out on the opportunity for outdoor play. The recently published Good Childhood Enquiry expresses a real concern about social networking sites:

Such sites are an endless source of fascination but they risk encouraging a commoditization of friendship where what counts is not the depth and quality of a friendship, but exactly how many 'friends' you list on your page. Such sites also encourage the view that value is gained through relationships by exhibition – by detailing and publicizing every aspect of your life (in the best light you choose) – and the more people who are watching, the more legitimate a presence you are in your community. (Layard and Dunn, 2009b)

Our study suggests however a far more complex and significant story inherent in children's use of digital media. Children are 'playing' with their identity, adopting different personas and different styles, and constantly changing the look of their sites. Emerging identity is an important aspect of children and early adolescent development and in our existing digital culture children have an immense opportunity to explore their world, be creative, play with identity and experiment with different social mores. Using digital technology is not only entertaining for children, but it is also highly creative and allows them to assert their identity in a totally unique way, checking out what their friends think of their creative endeavours. This research has shown how children are playing out the important developmental tasks of childhood through their digital communication.

There is of course a dark side of the Internet, and there has been concern expressed about 'cyber-bullying' and children being vulnerable to predators. (Wolak, Mitchell, and Finkelhor, 2003) suggest that it is the children who have unhappy relationships in the off-line world who are the more vulnerable on-line, for example forming on-line relationships with people they did not know. It does seem that it is the same children who are vulnerable in the off-line world, perhaps those with insecure attachments or low self-

esteem and with few friends, who are most likely to come to harm. Most of the children in our research were aware of the dangers, knew the need to set their privacy settings, never accepted 'friends' they did not know, and understood that any hint of cyber-bullying should be discussed and reported.

Although there is some risky behaviour involved in this process, children are in an on-line community and therefore they are able to share their experiences with friends who are supportive and protective. The whole process appears to give children a sense of agency: they can feel they are in control of their world. Acknowledging that it may be the same children who are vulnerable in the off-line world who are most likely to come to harm on-line is important. Particular attention needs to be paid by policy makers, teachers and those involved in children's wellbeing to children who are likely to be vulnerable online, those with few friends and little or no support network.

What is perhaps of more concern is parents' lack of knowledge of the Internet. It is important that adults do understand in detail how to protect children on-line and to discuss this with them, because often communication is carried out away from adult viewing. Research needs to be carried out with parents and teachers to establish the extent of their gaps in understanding of children's digital world. Further research also needs to be carried out amongst more vulnerable children, so that a greater understanding of the risks and the benefits can be achieved.

This study has shown that children are doing what they have always done, but in a different social context, and they appear to be gaining from their interaction with digital technology. Emotional support is received and given at important transitional stages such as change of school, change of family circumstances and change of home. The Internet is a source of knowledge for children; they can find out about their world from the relative safely of their home and they can be creative, allowing an expression of freedom – perhaps unavailable to children before – and it can be a secret, adult-free world. They can make choices – who they accept and who they decline – they are in control, and most importantly their digital experiences, if carried out safely, can enhance their wellbeing.

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