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## **Early Adolescents' Use of Social Networking Sites to Maintain Friendship and Explore Identity: Implications for Policy**

**Barbie H. Clarke, *University of Cambridge***

### **Abstract**

This paper considers 10-14 year olds' adoption of digital technology, and the way in which the developmental tasks of early adolescence are played out within their everyday lives through their widespread interaction with digital media, considering both the social and the psychological processes that take place. It reflects on the concerns that have been expressed about children's use of digital social networking, but also looks at the benefits to children of using the media, and the implications for policymaking.

The paper recognises that the widespread adoption of digital technology at this age is deeply embedded in the social context of early adolescents' lives. While the mental processes that take place and the developmental stages have not changed, it may be that digital technology is being used to process some of the tasks of early adolescence, especially in identity formation, the importance and the influence of peers, and the way that emotional support is given and received. An ethnographic study was carried out over two years in the homes of twenty-eight children living in the south-east of England. Research included over 30 hours of filmed observation, diaries, friendship maps, individual interviews, friendship focus groups and an online bulletin board.

Early adolescence is viewed as a key stage in which emotional development can affect children's level of wellbeing, and friendship is especially important as they turn from their family to the outside world. In playing with identity, building relationships, maintaining friendships and turning to each other for encouragement and companionship, children gain 'digital agency'. This process may be beneficial and an important source of support and comfort to the young adolescent who is experiencing transition both cognitively, physically, and through change of school.

Policy decisions need to be based on a sound understanding of how children use digital technology, raising awareness of the benefits as well as the potential risks, encouraging peer communication and support, and informing parents and teachers of children's digital world.

**Keywords:** early adolescents, social networking sites, friendship and identity

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## **Introduction**

We hear much about the 'dark side' of the Internet in relation to children and teenagers, but the possible benefits to young people of digital technology are rarely discussed outside the academic community. Although it seems that all teenagers are avid users of social networking sites, a socio-economic digital divide exists in many countries, and in some cases parents' use of the Internet outstrips that of their children (Livingstone & Haddon, 2009). Early adolescents' adoption of social networking sites is a comparatively recent phenomenon, and it may be that policy decisions are not keeping abreast with young people's use of digital technology. This is perhaps understandable: as recently as 2004, the term 'social networking site' (SNS) was not widely recognised when teenagers in the US first discovered MySpace (Boyd & Ellison, 2007). Today the start age appears to become ever younger, despite a minimum age restriction of 13 plus (Ofcom, 2008). Many teachers and parents appear to be unfamiliar with childrens' digital world (Livingstone & Haddon, 2009), and 50 per cent of parents in the UK think that their child knows more about the Internet than they do, with this figure rising to 70 per cent amongst parents of 12-15 year olds (Ofcom, 2009).

This study looks at the way 10-14 year olds, early adolescents, use digital technology to communicate with each other. It embraces the use of mobile phones, e-mail, SNS such as Facebook, MySpace and Bebo, and it has also considered Instant Messaging (IM) such as MSN. Online websites that incorporate games with multiplayer (MMOG), such as World of Warcraft and Runescape, and games consoles that involve live chat such as Xbox LIVE and PS3 are also included. To simplify the multifaceted ways in which children are now communicating using digital technology, I use the term 'digital social networking' to incorporate this digital media. Early adolescence is an interesting time period since it encompasses the transition from pre-teenage years to teenage years and, in the UK, from primary to secondary school. It is a time when young people are developmentally concerned with increasing their autonomy and with shifting the balance in their relationships with peers and adults (McLaughlin & Clarke, 2009). Roeser et al. (2000) describe this as a highly potent period: "Nowhere in the life span other than in infancy is the interplay of individual and collective factors in the composition of human life more pronounced than in the early adolescent years" (p443). Early adolescence is viewed as a key age in which emotional development can affect children's level of wellbeing (Parke et al., 2002; Rutter & Smith, 1995).

The wellbeing of adolescents 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 a report that ranked the UK and the US as lowest among industrialised countries in child wellbeing assessment. Children's increasing use of digital media 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 & Dunn, 2009a; Mayo & Nairn, 2009). Digital social networking technology is still a relatively new and sometimes misunderstood part of early adolescents' lives, and fear has been expressed specifically about the negative and harmful effect it might have on their lives including concern about online predators, cyberbullying, and the possibility of disassociation attached to children's screen lives. As Haddon (2009) points out in the EU Kids Online Report, little is known about the way *children* are actually using digital technology, the way they interact with it on an emotional level, and the ways in which it might affect their psychological and social development. The research described in this paper seeks to help address these issues.

Comprehensive studies of the current knowledge of online communication by children point out that research has tended to focus on older teenagers (Livingstone, 2009), or has been conducted online and is based on self report (Subrahmanyam & Greenfield, 2008). This paper is based on an ethnographic study carried out over two years, and explores the psychosocial influences on the lives of 10-14 year olds through the use of digital social networking. It argues that the widespread adoption of digital technology by early adolescents is deeply embedded in the social context of their lives, and may be beneficial to them. The paper considers early adolescents' changing friendship patterns and exploration of identity within the context of digital social networking, arguing that the digital world encourages early adolescents to have agency with responsibility for shaping their own development. While the mental processes and the developmental stages of early adolescence have not changed, it may be that digital technology is being used to process some of the tasks of early adolescence, especially in identity formation, the importance and the influence of peers, and the way in which emotional support is given and received. While little literature exists so far that addresses these issues for early adolescents, such issues create interesting questions for policy decisions.

## Current Research and Gaps in Research

In the U.S., 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 involved four primary research areas which focused on the everyday lives of young people aged 8 to 20 and their relationship to digital technology. The projects conducted in the area of 'Networked Sites' (boyd, 2008; Herring, 2008b; Stern, 2008; Willett, 2008), have been highly relevant to my research, although much of it focused on teenagers 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 & Haddon, 2009) was published in June 2009 and is probably the most comprehensive report to date that gives an international and European perspective on children's Internet use. The report includes a review of two hundred and thirty-five research projects covering eighteen countries in January 2007, and three hundred and ninety projects covering twenty-one countries in June 2009. The ESRC Seminars (Coleman, Livingstone, Davies, & Lunt, 2009) have also been invaluable in giving a wider and balanced view of children's digital usage, and the way in which it fits with their everyday lives. It is important to note, however, that Livingstone & Haddon (2009) report that there are gaps in the research carried out to date (see Figure 1).

### Figure 1

#### 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)**

Subrahmanyam & Greenfield (2008) point out that most research on adolescents' use of digital communication targets computers, when increasingly much digital communication is now taking place on mobile phones (cell phones) or through games consoles; this may just underline the difficulty of doing research in an area that constantly develops and adapts as digital technology changes and converges. Some interesting work has been done on the use of SNS and adolescent friendship: for instance, Subrahmanyam & Greenfield (2008) and Lampe et al (2006) have shown that adolescents are using SNS's to bolster and support their offline relationships. Lenhart & Madden (2007) found in their research with teenagers that 91 per cent use SNS to keep in touch with friends they see regularly, and 82 per cent to stay in touch with friends they see rarely. Valkenburg, Peter, & Schouten (2006) carried out online research that considered adolescent wellbeing and self-esteem. The research was carried out with 881 adolescents on the friend networking site CU2 ('See You Too'). Based on self-assessment, 78 per cent of these adolescents reported receiving positive feedback from their friends, and for these participants self-esteem was reportedly heightened. For the 7 per cent who reported that they predominantly received negative feedback, participants reported an adverse affect on their self-esteem. In further research, Valkenburg & Peter (2007) ran an online study with 1,210 Dutch children ages 10-17 using an online market research panel. This study indicates the time spent using instant messaging (IM) increased adolescents' sense of wellbeing, and was positively related to the time spent with existing offline friends.

Research on identity and adolescents' use of digital technology is more widespread, although as David Buckingham commented in his review of *Youth, Identity, and Digital Media*, "[i]dentity is an ambiguous and slippery term" (Buckingham, 2008:1), and certainly it can be viewed from many perspectives. Post-modernist theory has been applied to ways of understanding identity online (Haraway, 1991). New media communication challenges our sense of fixed identities, such as gender, social class, and race; further, it could be argued that new media communication is a way of reconstructing society. McKenna (1999) suggests that it might be the lonely and anxious that form meaningful relationships online; however, while her sample included 13 – 19 year olds as well as adults, she does not break her analysis down by age so it is difficult to establish how this affects younger people. Huffaker and Calvert (2005) carried out content analysis on the weblogs of 70 teenagers aged 13-17. They concluded that young people revealed a considerable amount of information online, and over half used 'emoticons'. Huffaker and Calvert (2005) also found that over half of their sample talked about relationships with the opposite sex; 17 per cent

discussed homosexual identity, although they were overwhelmingly male. The authors suggest that discussing 'coming out' online can be empowering for teenagers who are exploring their sexual identity. They believe however that despite the opportunity to present themselves in a fictitious way (i.e., changing gender, age, etc.), most teenagers elect to present themselves in a realistic way: "The online presentations of teenagers demonstrate that blogs are an extension of the real world, rather than a place where people like to pretend" (Huffaker and Calvert, 2005:14).

### **The Present Study**

The empirical study outlined in this paper addresses the issues of Web 2.0 use by early adolescents; that is the way in which children are actively involved in the content of their digital communication. It considers not just what children are doing online but also why they are doing it. The research questions looked at the social and the psychological aspect of early adolescents' use of digital social networking, and used as a theoretical framework the developmental stage of early adolescence, described by Coleman & Hendry (1999:10) as a period of transition characterised by:

1. an eager anticipation of the future;
2. a sense of regret for the stage that has been lost;
3. a feeling of anxiety in relation to the future;
4. a major psychological readjustment;
5. a degree of ambiguity of status during the transition.

The ethnographic research was carried out over a period of two years with twenty-eight children aged 10 – 14 years (13 girls and 15 boys and children adopted their own pseudonyms) all living in south-east England, including rural, suburban and urban areas. Five 'core' children were recruited from an existing panel of over three hundred families living in south-east England run by the UK research company Family Kids and Youth. The 'core' children were aged 10 – 14 and included three boys and two girls; they lived in a mix of social and private housing. Each child recruited was asked to invite six friends to join the research; the resulting sample of twenty-eight children included children from single-parent households and ethnic minorities. It was made clear to the children and their parents that research would last for two years, and that they could withdraw from the study at any time. The research was carried out in their homes, and included five or six visits to each child's home over the 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. Diaries of their digital use were kept by 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 also included friendship focus groups, each lasting two hours, in which friendship networks came together towards the end of the research. Further, an online bulletin board session with the children over three days in the half term holidays (February 2009) allowed a final clarification of questions that arose from the research process.

### **Children and Friendship: The Place of Social Networking Sites**

In the 1950s, H.S. Sullivan (1953) did much work around children's "need of fulfilment and interpersonal competence" (Buhrmester, 1996) and argued that as children develop into early adolescents, there is an increased impulse to meet social needs through intimate friendships. Indeed, adolescents report that they enjoy doing activities more with friends than adults or other acquaintances (Coleman & Hendry, 1999). Similarly, research by Larson and colleagues (Larson, 2002; Larson et al., 1996) based on self-report shows that early adolescents are more likely to spend time talking to friends than any other single activity.

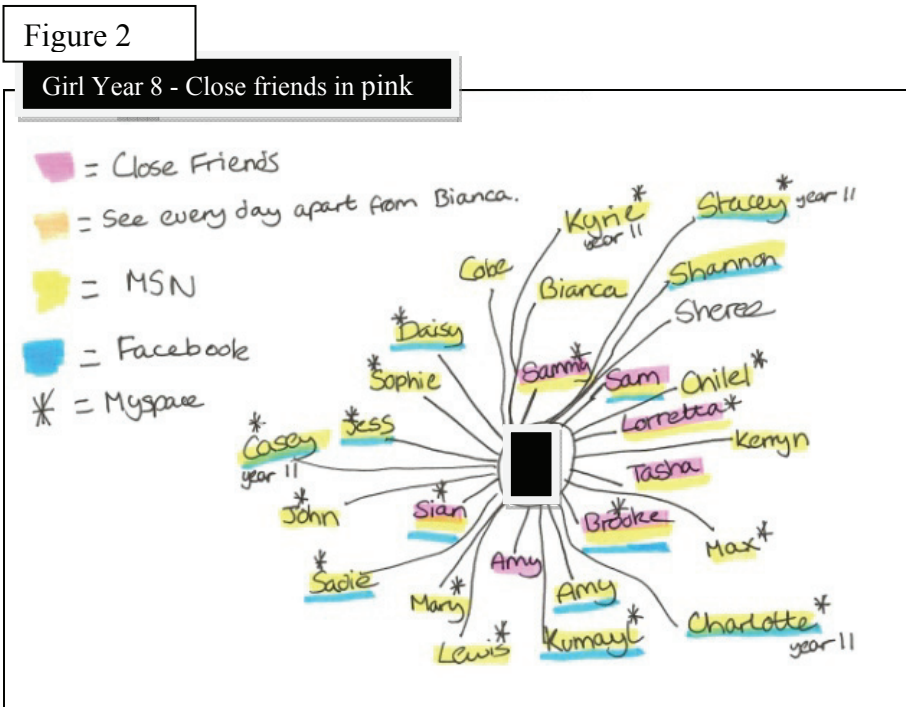
It may be that children's notion of 'friendship' is changing radically today compared to pre-digital days. My research indicates that children have been able to maintain friendships through digital social networking in a way that would not have been possible before; contact is possible between friends in different countries, and friendships are supported online even when face-to-face communication is not possible. It has been argued that there is a link between children's online and offline worlds (boyd, 2008; Donath & boyd, 2004; Subrahmanyam, Smahel, & Greenfield, 2006), and that social networking sites are used to strengthen existing relationships and enhance social ties (Ellison, Steinfeld, & Lampe, 2006; Livingstone, 2008; Pfeil, Arjan, & Zaphiris, in Press). My research suggests that early adolescents tend to categorise themselves and their friends into different typologies:

At school there is like 'the populars' and like the people who don't have many friends – the geeks/nerds/brainy people – I talk to the popular people.

—Rosie, Year 7, aged 12 (online bulletin board).



In some ways, the meaning of friendship is more closely analysed and defined because of online communication; there are simply some things that would not be shared with everyone in a non-digital setting. The early adolescents in my study spoke a great deal about their friends, and I asked them on each occasion I visited them to draw a friendship map, indicating who their friends were, how close they were to them, and how they communicated using digital technology (see Figure 2).



When defining ‘close friends’, they invariably mentioned trust. Trust appears to be one of the most important components in early adolescents’ friendships; because so much is shared, in part through digital communication, it is essential that ‘trust’ is assured.

I feel that I can trust them... and if I just needed to talk to someone (on MSN) I’d ring up one of them first, and if I wanted to see someone I know that I’d always feel welcome...by trust I mean if I

tell them something they won't go and tell someone else, they'll be loyal.

—Jemma, Year 9, aged 14

People in that second circle are people that you hang around with not people that you trust... if you tell them one thing it will go round the whole of year 8.

—Rosanne, Year 8, aged 13

My best friends are the ones I trust the most, the ones I hang around with.

—Robbie, Year 7, aged 12

The definition of digital friendship therefore appears to be highly defined. Despite having, by the end of the research, one thousand and ten 'friends' on her Facebook site, Lily was quite definite about how she defined them.

I have just over one thousand friends on Facebook. I wouldn't say all of these people are my *friends*. They're either close friends, friends, friends of friends, people in my school or relatives.

—Lily, Year 9, aged 14

Lily was also very clear about the level of intimacy that she would share online. While like many of the children in the study she was observed to be quite open in terms of the pictures and descriptions of her day to day life that she posted on her Facebook site, she only accepted those people who in some way were known to her so she did not feel that in any way she would be threatened by predators. In spite of having a vast number of 'friends' on Facebook, Lily's intimate friendship circle was surprisingly limited, and once again 'trust' was mentioned.

I know who're my good friends. I have about three that I would tell everything to. I trust the other ones too but they are just not the people that I tell everything to.

—Lily, Year 9, aged 14

Collecting 'friends' on social networking sites becomes part of the ritual of children's digital communication, and most children appeared to prefer Facebook by the end of the research. Lily was probably not unique in the

huge number of friends she has on her Facebook site, although she scored the highest number in my research.

This process appeared to become almost a game for some of the children, especially as they became more experienced users of social networking sites. For example, Tom had been using social networking sites for a couple of years, mainly because he had two older brothers, and he too had accumulated a large number of friends, despite being only 13. However, like Lily, he was clear about who he would define as a good friend.

On Facebook I have around 700 friends and I'd count about 50 of them as good friends.

—Tom, Year 8, aged 13

Younger children who were just beginning to build friendship networks, often in Year 7 (11-12 year olds in their first year of secondary school in the UK), had more modest numbers and it was noticeable that initially girls appeared to accumulate more friends than boys (although by Year 8 this levelled out).

I have 30 friends on Facebook and I would say 10 are my close friends.

—Will, Year 7, aged 12

I have only just joined so I have 41 friends on Facebook and of that I have 10 good friends plus my family.

—Alex, Year 7, aged 12

I have 108 friends on Facebook and I would say over half of them are good friends of mine.

—Rosie, Year 7, aged 12

### **Stay Connected**

By early adolescence, friendship circles can be wide (Cotterell, 1996), but these networks can be interrupted by changes in circumstances (for example, moving homes or moving schools). Such transition or change can be particularly daunting for early adolescents, and feelings of loneliness and disconnection can occur. For children in my research, the definition of friends became more important in the transition to secondary school at age 11. This transition left many of the children in a somewhat vulnerable position in that they had begun schools where they knew few people and

had to make a real effort to establish new friends. Maintaining friendships was an important aspect of children's digital communication and was reassuring during this time of transition to secondary school. Alex made a move not only to a school where he knew no one, but to a school that was highly academic and challenging for him. He was reassured by his network of old friends with whom he communicated using MSN.

I told a few people about the first day (of new school) when I got lost – I think about three of them came straight back and said 'oh no, I can't believe you got lost on your first day', and then someone else said they got lost as well, and that made me feel much better.

—Alex, Year 7, aged 12

Digital social networking is being used to keep in touch with friends who move away, or who are not seen regularly. Such friends might previously have been lost, but now can be kept in contact with, even though regular meetings are not possible.

My friend Tom moved away from next door and I stay in touch with MSN.

—Bob, Year 7, aged 12

One girl used to go to my school but she moved to another school so I wouldn't be in contact with her now at all without MSN.

—Jessica, Year 6, aged 11

Twelve year old friends Robbie, Will and Patrick regularly played on the games site Runescape with Paul who had moved from the UK to Spain, maintaining dialogue with him through the private chat facility.

My best friend moved to Spain a year ago and it's expensive to call him but we keep in touch on Runescape ... that's how I talk to him, you can chat privately.

—Will, Year 7, aged 12

Molly had met 'best friends' at summer camp and maintained regular contact even though they lived several hundred miles away. Entering a new school in September, she found this communication highly comforting.

I went to (summer camp) and met some friends there and we were there for a week and I can call some of them my best friends because

they're really, really nice and I still talk to some of them on MSN and stuff like that and I only knew them for a week.. in such a short period of time you can become so close to people and I even cried when we had to go back. I got upset when I went there because I had to leave mum and dad behind but I cried when I had to go because I didn't want to go. Most of my closest friends were in my room.

—Molly, Year 7, aged 12

Some of Jemma's friends went away for a three week school trip over the holidays, but Jemma could not join them because her mum and dad could not afford it. She was quite distraught about this, but her friends kept communicating with her and this made her feel included in the trip even though she was not actually present.

That was like a good use of Facebook because you can write on their wall even if they're not online and they upload pictures so you see what they were doing.

—Jemma, Year 9, aged 14

Overall, the children in my research believed that having access to digital social networking was not only a social necessity, but also meant that they seldom felt alone or lonely.

If you are by yourself and you talk to your friends online you have something to do so you don't feel bored.

—Jessica, Year 6, aged 11

When you're bored you can just log in and have conversations with your friends and talk about the day and if you want to meet up and stuff like that which makes it less boring in your day because you're still keeping contact with your friends when you're not allowed to go out.

—Rosie, Year 7, aged 12

I think that you don't feel lonely when you talk to people online cos it feels like you are actually talking to them aloud.

—Will, Year 7, aged 12

If you go on Facebook someone is always online and the same with MSN, you always have someone to talk to.

—Lily, Year 9, aged 14

Lots of my friends go on Facebook so someone is always there to talk to you.

—Will, Year 7, aged 12

### **Web 2.0: Risky behaviour?**

As the technology became increasingly sophisticated over the course of the research, the children appeared to take this in stride, and games sites in particular appeared to create enormous entertainment for children, especially for boys. The introduction of PS3 and Xbox LIVE made connecting remotely to others and playing live with them possible, and boys were knowledgeable about the games sites and games consoles. Jeremy had become an advocate of Xbox LIVE which has the advantage of live speech, like Skype.

You plug in your headphones (to speak live), it's wireless, and you chat and all you do is link up to them and you can play football against them in the same match. I play with my friends lots.

—Jeremy, Year 8, aged 13

Sam, aged 13, used his games console PS3 to play remotely and chat with a friend who had moved to Australia, as well as old friends from his Junior school. He spent quite a bit of time on his own at home when his mum was out at work and his older sister was out with friends. He explained that it was possible to chat in a private function, or in an open chat facility on his PS3.

There are other people who speak in the game and you can either like join them or just speak to your friends. You can hear them talking through Bluetooth. The best games is probably Fifa 08 football game or Resistance, With Resistance I usually play with my friend (remotely) and we can play forty or fifty people at the same time but we wouldn't know them... Resistance is a war game, you get a player and you gain him and get him armour and stuff.

—Sam, Year 8, aged 13

This element of talking to strangers online seems to be a grey area many parents and teachers are not aware of. While cautious about letting their children use social networking sites, parents appeared to lack knowledge about the importance of privacy settings and to be unaware that their children were frequently in open chat facilities where there is little to prevent them speaking to total strangers. Children in the research

consistently acknowledged that there were online dangers, and explained at length to me how they tried to avoid danger, but it does seem to be an area which parents, and possibly teachers, lack knowledge or understanding. Teachers, children felt, are often confused about technology. While parents warn about the dangers of known social networking sites in which privacy settings can be set easily, many are simply unaware of what their children are actually doing when using digital technology. Children welcomed the opportunity to make new 'friends' online, and mostly felt that it was safe to talk to people they did not know; they believed they were careful about not revealing identifying information. Rosie regularly used the site Stardoll that involves adopting an avatar in the form of a doll that is then 'personalised' with different coloured hair and clothes.

I go on daily with friends I've made online. I make dolls and clothes for them. Really Stardoll is safe for any age. It's for teenagers and for smaller people because there is nothing wrong about it apart from you can talk to people you don't know. It's not like any weird people are going to go on Stardoll. You have to make dolls and dress celebrities and stuff, it's quite good. I've made my friend Marnie online through Stardolls, but I've never met her.

—Rosie, Year 7, aged 12

Further, most of the children were highly trusting of who they met online.

If people seem nice (on Runescape) I talk to them but I would never meet in the real world and we talk about the game, and me and my cousin talk about other things as well on the private chat.

—Patrick, Year 7, aged 12

While clearly there is concern about this apparent naivety about who might be online, the children appeared to be aware of real dangers. The parity of potential danger for children in using social networking sites is perhaps countered by the disadvantage of not having access. Patrick, who lives on his own with his mother, is not allowed by his mum to use SNSs or IM.

My mum doesn't let me on it because she says that like on MSN that anyone can talk to you. But you can choose who you talk to, you can't just talk to anyone. She thinks you can and you can't and it's just weird and she doesn't believe me when I tell her I don't know why, all of my friends go on it and I ask her and she just says no –

it's really annoying because I just want to chat to all my friends on there.

—Patrick, Year 7, aged 12

Patrick was actually losing out socially by not being allowed access to a social networking site. He told me that he was going to school and finding out that his friends had made arrangements to meet up, had sent each other invitations to parties or to play football, and he was excluded from this; he complained bitterly that his mother did not understand that all his friends were using it:

Cos they all talk to each other on it every night and every day at school they are all talking about what happened on MSN last night and they all have conversations about it and I can't.. like they say 'do you want to come to my party' and stuff like that.

—Patrick, Year 7, aged 12

While Molly too was not allowed to use social networking sites, she nevertheless used MSN and went into open chat forums; however, she tried to be understanding of her mother's concerns:

I know that it's because my mum's just trying to protect me and stuff ... it's like, oh, this stuff like identity fraud and people like kidnapping people from how they know them on the Internet, it's kind of scared her but I don't, I don't blame her. I mean, I did want a MySpace but it's OK really now.

—Molly, Year 7, aged 12

While upset that they did not have access to a SNS, children were quite forgiving of their parents' fears. As Coleman & Hendry (1999) point out, the majority of parents have a good relationship with their adolescents. Most children thought that parents who did not allow their children to use social networking sites were misguided and probably did not understand the technology very well. For instance, many children made the clear distinction between social networking sites—which have privacy settings—and chat rooms, which are open to anyone. When the subject of parents preventing children from using social networking sites was discussed on the bulletin board during the final stage, children expressed quite strong views:

I would tell them the good uses such as getting in touch with friends from holiday whose numbers they don't have. I would also say how



their friends have it and how they talk about it all the time which would make their daughter feel very excluded from all her friends and cannot join in with the discussion they are having.

—Tamsin, Year 6, aged 11

I would say that you should let your child use social networks as they are a great way of developing friendships with people you are not that friendly with. I no (sic) they are not always but you should trust your child and know that they will be sensible on the networks.

—Jessica, Year 6, aged 11

Patrick, however, as we saw earlier, was an avid user of game sites Runescape and World of Warcraft, as well as Xbox LIVE, all of which have the facility to link up to friends and play games remotely and chat. Sometimes Patrick would talkin the open chat facility and this potentially created a greater threat to his privacy and safety online than if he had used a social networking site with privacy settings. Patrick's mother appeared to be completely unaware of this. Similarly, Molly used MSN (which her mother thought was like email) and regularly went onto Stardoll and chatted with strangers.

### **Identity: Exploring Relationships and Sexuality**

Although the children in my study talked about their friendships and showed me where their friends stood on their social networking maps, it was *observing* and filming exchanges on their digital social networking sites that revealed most about their friendships and the level of emotional communication that took place. It was interesting that while these exchanges might appear to be intimate, they happily shared them with me. The pages observed were highly revealing. Frequent protestations of undying love and loyalty were the norm, and it was clear that these early adolescents were 'playing' with the adult world, exploring their sexuality, and asserting a sense of power and agency over what they did. Rachel, for instance, wrote about her best friend Jodie in terms of adulation (see Figure 3).

There was also a sense of comparing and rating that took place. Like several of the girls, Rachel (age 13) had put her picture onto her MySpace site and invited friends to 'rate' her. Jack (age 13) had a 'r8 ma galz' (Rate my girls) page on his Piczo site (see Figure 4).

Fig 3: Rachel's Piczo Site – ma frndz (my friends) page



*Jodie my oldest friend and my lovely one. You're my best friend for life we have such fun. You are the best, rolling on the floor with laughter. But you are well mad sometimes. You like make me embarrassed ha ha. Love you anyway. We have been everywhere together. Aqua Splash was fantastic. You tried the green slide, wow. Oh my god. I love you, we have had so many good times and not a single argument ...*

Jodieeee ma oldaahhh && ma lvleezz ... You're my bffl were such jokerzzz ... Fox tail rofl jkin :) But ur well gay sumtimes .. u like make me embaressed hehe. Luv u anywayz .. we have been everywhere 2geva aqua splaxh wa well funn u tried the green slide wahey Imaog ... Luv yah we have had so many good times and not a single argument ...

Figure 4: Jack's 'r8 ma galsz' page on Piczo

**Jack's – 'r8 ma galsz'**

disis emzi shes wkd so kind wen eva u need her shell be dere luff ya BFFE !!!!!!!x/x/x/x/x

**Exploring sexuality and friendship**

disis charlotte shes wkd nd shes goin out wid jak w !! hes wkd!!! charlotte so kind as well shes like everywhere at once shes dere 4 every1 BFFE !!! x/x/x/x/x

*This is Emma, she's wicked. So kind and there whenever you need her, she'll be there. I love you. Be friends forever*

Jack, aged 13

*This is Charlotte. She's wicked and she's going out with Jack! He's wicked! Charlotte is so kind as well. She's like everywhere at once. She's there for everyone. Be friends forever.*

Exploring relationships *and* sexuality is an important aspect of early adolescents' search for identity. Turkle (1995) claims that online sexuality, which can include flirting and playing with gender roles, can start at 10 years old.

### **Private vs Public**

Giddens (1991) argued that electronic communication has helped to make the world small and accessible to all, with common goals and concerns, and yet with a greater variety of choice:

In the post-traditional order of modernity, and against the backdrop of new forms of mediated experience, self-identity becomes a reflexively organised endeavour. The reflexive project of the self, which consists in the sustaining of coherent, yet continuously revised, biographical narratives, takes place in the context of multiple choice as filtered through abstract systems (Giddens 1991:5).

He argues that the emergence of 'childhood' as a distinctive state in the modern world means that children can choose what aspect of their lives to make public and what to keep private, and that this in turn impacts how we regard them. In many ways, digital technology allows children more freedom from parents, but the children in my research were keen to make a distinction between the private and public world of digital technology.

I use my phone more. My parents trust me more so I go out more with friends, go to lunch or to (shopping centre). I use my phone more to communicate with them so they know that I'm safe.

—Jeremy, Year 8, aged 13

Early adolescents are especially likely to share intimate thoughts and feelings with friends (Berndt, 1981; Douvan & Adelson, 1966); therefore, privacy is important, and many children in the research expressed a preference for using a laptop rather than the family computer because, as one 11 year old put it:

It's private and mum and dad can't watch what I do.

—Jessica, Year 6, aged 11

Furman & Buhrmester (1992) report that while early and middle adolescent children (Grades 7 – 10) claim to turn to friends for support, pre-adolescent children (Grade 4) depend most on parents. Changes to friendships in early adolescence often occur alongside changes in family relationships (Blos, 1979; Grotevant & Cooper, 1986; Hill & Holmbeck, 1986; Youniss & Smollar, 1985) as adolescence brings with it a concern for self determination and autonomy. The sense that their world is private, separate from their parents', is an important aspect of early adolescence; for the children in my study, while exploring their identity and sexuality, it was preferable that parents were kept separate. This meant that sometimes careful thought was put to the means of communication. If parents were particularly vigilant, this had disadvantages.

Sometimes it's best to send a SMS on your mobile. I like writing in slang and can send smilies and private stuff that isn't saved like MSN... It all gets saved in my dad's history so he can see everything I write. On my phone they don't save so I can write whatever I want.

—Rosie, Year 7, aged 12

### **Identity and Friendship: Processing the Tasks of Early Adolescence**

It seems that children are 'playing' with their identity, exploring their sexuality, adopting different personas and different styles, constantly changing the look of their sites, from the font to the colour, the background, and the photographs they post onto their sites. Emerging identity is an important aspect of 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 SNSs is not only entertaining for children, but 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. At the beginning of my study children were less autonomous in the way they displayed personal pages on their social networking sites, but there was a sense of sharing—children seeing what others had done and 'borrowing' the style.

When you want a skin, which means like a layout, that's what it's called on Bebo and on MySpace it's called layout... at the top see it says Angie's skins and you click on that and it shows all the skins that she has made and you press 'try it on' and it will show you her profile with that skin on and you either pres 'yes', you want it or try

all the other ones on. If I go onto Bella's and I like her one then there are boxes and it says 'use her skin?... I change it every two weeks or whenever I get bored of it.

—Rachel, in Year 7, aged 12

Livingstone (2008) observes that highly 'stylised' SNS sites are a reflection of age, with younger children importing images such as hearts and glitter. However, my research indicates that it may also be a matter of expertise; the more experienced children became online, even by 10 or 11 years, the more they are likely to insert their personal identity in the form of unique photographs, creative text, and tags, rather than imported icons, clip art or logos. Two years after starting the research, the children had become far more sophisticated users: not only were they much more in control of the content that they put up on their SNS, but also their friends could contribute.

I've got all like pictures and different albums and people comment on them, and say there's a picture that they really like, then they say 'can I own this picture?' so you have to remember the tag you put on it ...when you want people to comment you on your pictures you put 'pc4pc' which means picture comments. They comment on you and you comment on them... I love checking to see what people are saying about my pictures all the time.

—Rachel, in Year 8, aged 13

### **Identity and Power at a Click**

The fickle way children change their online SNSs and their profiles is similar to the way an adolescent might change his/her appearance. Online, many children appear to adopt a persona that they acknowledge is not necessarily a true reflection of their sense of self but nevertheless is fun to play with; they are aware of themselves changing:

In the past 18 months my taste in music and friends has changed, and the quality of friends I have now, and I have longer hair.

—Patrick, Year 7, aged 12 <sup>3</sup>/<sub>4</sub>, (online bulletin board)

We used to be best friends but now we have drifted a bit apart. I see her every day at school and on MSN and Facebook. Our interests are now very different. She plays football. I play football a bit but I get bored with it. She's a bit sporty.

—Tamsin, Year 6, aged 11

At this age, children begin to recognise that they are different from their peers, and these differences help to establish their sense of self, but they do not discard the old relationship, maintaining contact through SNSs.

Erikson (1977) believed that the identity of young people had a psychosocial nature: the community in which the child lived shaped their adolescence. In a world that is now much bigger through the “global playground” (Clarke, 2002) of the digital world, this community is now open to many more influences. Kroger (1996) argues that in cultures that are technologically advanced, adolescence is prolonged through education, affluence, smaller family size, longer dependency on parents, and technology that allows teenagers to communicate and interact with each other. danah boyd (2008) aptly describes young people’s obsession with social networking sites as a means of defining who they are, a process she describes as “identity production” which involves them trying to “write themselves into being.” (p129).

Some children were deliberately putting up ‘false’ sites, either because they wanted a site that their parents could not access, or simply just for fun.

A couple of my friends have their own blog up. Somewhere totally different to where they live and they said they were 17 and their date of births. If you did look and work out their date of birth then it would be completely wrong.

—Alex, Year 7, aged 12

There’s a boy at my school and he’s like twelve and said he was thirty-five on his one ...

—Rosie, Year 7, aged 12

Nearly all the children in this research admitted to lying about their age online, partly because to join a SNS they have to be 13, but many believe they have to be 16 (Clarke & Cooke, 2008).

Everyone lies about something, for instance to get on Facebook you have to be over 18. I have.

—Alex, Year 7, aged 12

I definitely think most people lie about their age, even on Facebook you need to be over 16.

—Tom, Year 8, aged 13

For Facebook you have to be a certain age, over 14, and people lie so they can use the site.

—Jessica, Year 6, aged 11

Acknowledging that a fair amount of exaggeration occurs, this can reflect values or strengths that are perceived to enhance their status; however, it can also be fun and entertaining to exaggerate, even though this sometimes may be a little risible or even dangerous.

I think that people show off about themselves so that people will want to become friends with the person so that they will be popular.

—Will, Year 7, aged 12

Some people say they have loads of money, or their uncle is Simon Cowell just so people will like them.

—Jessica, Year 6, aged 11

I have heard at other schools there have been fights and people try to make themselves sound harder by exaggerating how brave or strong they were in a fight.

—Alex, Year 7, aged 12

Valentine & Holloway (2002) found that children who adopt different personas online inevitably choose to be more desirable or more powerful: girls frequently choose to be older, and boys stronger. The opportunity to exaggerate or lie online allows children to experiment with being older and gives them a sense of power—they are in control. In my study, Molly and Rosie are two friends who delight in doing this. Both are slightly overweight, and worry about their weight, but online they can be anyone they choose to be. Robyn has also worried about her weight, and her appearance.

Me and my friends used to have a Habbo Hotel account and you have to be a certain age to go on it<sup>1</sup> and so we lied and when you're on it they lie about themselves like appearance, age, what they do in life, experience etc. But I stopped using it because of some of the people on there, they got a bit worrying!

—Molly, Year 7, aged 12

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<sup>1</sup> The minimum age limit for Habbo Hotel is 13.

‘erm, well I have once or twice .. I have said stuff like ‘oh I am a model’ to get some guy ask for my msn and say like ‘oh will you go on cam’ and stuff like that so I just delete them on the site I am using.

—Rosie, Year 7, aged 12

There’s this slang, it’s like ‘ASL’ and it stands for age sex, which means gender, location, and it means like how old are you, what gender are you and where do you live.. I just make it up, well, I wouldn’t tell them where I lived.

—Robyn, Year 7, aged 12

This can be alarming to adults; however, Rosie, for example, appeared to know what she was doing, had older siblings to advise her, and was one of the most knowledgeable about online security and safety. These online exchanges were mostly either done in the company of friends or reported in full to friends through the online dialogue on their SNS. This group effect can be both reassuring and allow a sense of experimentation. Coleman and Hendry (1999:150) write “crowds provide secondary-school pupils with frequent opportunities to experiment with their identity while maintaining a sense of group belonging.”

### **Early Adolescents’ Digital World: Risk or Benefit?**

I referred earlier to the concern that has been expressed about children using digital technology. Such concerns include potential risk of encountering online paedophiles, likelihood of cyberbullying, and general concern about children losing the ability to communicate face-to-face (Subrahmanyam & Greenfield, 2008). While children in my research were aware of cyberbullying, and some had experienced it, it was mostly dealt with through the friendship group. Unpleasant messages would be forwarded or cut and pasted and sent onto trusted friends, and sometimes lengthy discussion would ensue about content, the perpetrator, and how to deal with each. There is, however, general anxiety about *risk taking* online (Livingstone & Haddon, 2009). A particular gap in research is thought to be in ‘risk research’; that is, the way in which children may take risks when using digital technology, which Haddon (2009) highlights as:

- Why children take risks
- Coping strategies and how successful they are
- The social consequences of risk taking



There is much debate about how new technology might affect children's lives. Some of this is viewed as positive and creative (Carrington, 2005; *The Enquiring Minds Model*: 2006; Sefton-Green, 2004), considering for example how children's familiarity with the Internet, blogging and online gaming can be utilised as learning skills. Others argue that new technology is a danger and threat to children and the state of childhood (Morpurgo, 2006; Palmer, 2006; Valentine & Holloway, 2002; Wynne-Jones, 2009). The Byron Report (Byron, 2008) was commissioned by UK Prime Minister Gordon Brown to "investigate the harmful effects of video games and websites" (Beckford, 2009). The report was published in March 2008 following a six month review of literature, call for evidence, and original qualitative research carried out with children and parents. Her recommendations led to a response from the UK government (DCSF, 2008) which announced its intention to implement her recommendations, including the creation of a new forum: 'The UK Council for Child Internet Safety'. The forum also considers the implementation of better regulation by industry to make the Internet safer for children. Raising awareness of 'e-safety' issues among children, young people, parents and other adults through a public information and awareness campaign, as well as better education that will alert children and teachers to safety online were discussed.

My study suggests that parents are not recognising or understanding what their children are doing with digital technology, nor what they are able to do. It is understandable and natural for children to keep part of their lives secret and separate from their parents; early adolescents are not necessarily being duplicitous. For them, convergence of digital technology is not questioned. Yaking 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 television was for entertainment and information. As Susan Herring (2008) points out, children do not question digital media: it is part of their world.

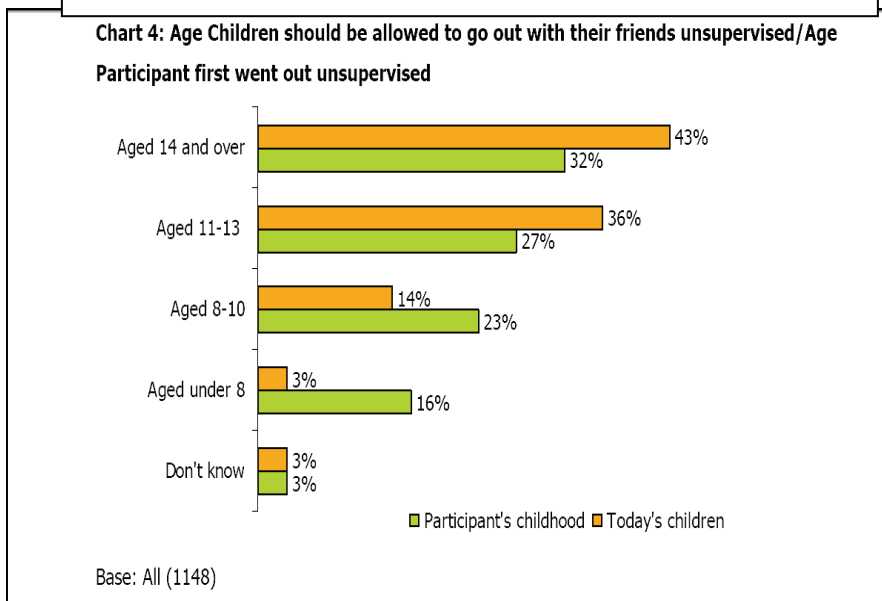
It has been argued that we live in a 'risk averse' society, and that children's freedom is being curtailed by an over protective and anxious view toward children's safety (Cunningham, 2006; Gill, 2007). Cunningham (2006) writes in his book *The Invention of Childhood*:

Perhaps no other generation of adults has been so conscious of the vulnerability of children, or their exposure to risk. Statistically, we know, the dangers of such deaths are no higher than in the past, but

that is not how it is perceived. The cost of maintaining the ideal of the happy childhood is high, not so much in monetary terms as in the protective barriers with which we surround children, perhaps thereby reducing their chances of happiness (Cunningham, 2009: 244).

It has been pointed out for some time that children today have far less freedom than previous generations, with less than one in ten children in the UK allowed to walk to school on their own in 1990 compared to eight out of ten children aged 7 or 8 in 1971 (Hillman, Adams, & Whitelegg, 1993; Wheway & Millward, 1997). The Children's Society (2006) carried out research with a nationally representative sample of UK parents, asking them at what age *they* were allowed out on their own as children, and at what age they thought children today should be allowed out. The results are revealing (see Table 1) in that while nearly a quarter (23 per cent) said they were allowed out on their own aged 8-10 when they were children, only 14 per cent felt it was safe now at this age, and 43 per cent felt that children should not be allowed out on their own until they are aged 14 and over.

**Table 1. The Children's Society (2008): Research carried out by GfKNOP**



In reality, as Layard & Dunn (2009) point out, children are no more likely to be abducted or murdered now than they were twenty or thirty years ago (although, sadly, they *are* more likely to die in a road accident); nevertheless, media coverage of child abduction and murder creates fear and anxiety amongst parents. While there is understandable concern about online risks for children, and considerable research is being carried out to try to assess and measure these risks (Livingstone & Haddon, 2009), it may be that a similar heightened anxiety is being created by the media.

## **Conclusion**

This research has shown how children are playing out the important tasks of adolescence through their digital communication. Friendships are enhanced and extended by keeping in touch through digital technology. This can be in the form of photographs, instant messaging, playing games online, or chatting. Friends have to learn to trust each other and share aspects of their lives. The digital process is highly creative and allows great scope for exploring identity and adopting different personas. Subrahmanyam & Greenfield (2008) wonder whether the ease of digital communication means that adolescents are *less* interested in face-to-face communication. My research would indicate that this is not the case: this ease enhances relationships in the offline world and encourages social ties.

Although there is some risky behaviour involved in this process, children are in an online community and therefore able to share experiences with supportive and protective friends. The whole process appears to give early adolescents a sense of agency; they can feel they are in control of their world. There is, of course, a dark side of the Internet; indeed, there is concern about 'cyberbullying' and children being vulnerable to predators. However, it may be that the same children who are vulnerable in the offline world are most likely to come to harm, perhaps those with insecure attachments, low self-esteem, or few friends. Wolak, Mitchell, & Finkelhor (2003) suggest from their quantitative research with fifteen hundred adolescents looking at Internet Safety that it is the children who have unhappy relationships in the offline world who are more vulnerable online; for example, forming online relationships with people they do not know. Most early adolescents in my research are aware of the dangers, know to use privacy settings, are realistic about their 'friends', and understand that any hint of cyberbullying should be discussed and reported.

## **Policy Implications**

While it is worrisome that some parents are not only unaware of what their children are doing when using digital media, but also not aware of what they could *potentially* be doing, early adolescence is a time when the natural process of separation from parents begins to take place. Susan Herring argues that a “generational digital divide” clearly exists (2008:71), and Subrahmanyam & Greenfield (2008) point out that while peer friendship is supported through digital media, this may be at the expense of parental communication, and more research needs to be carried out on this subject. Clearly, children do need to be protected in terms of their digital social networking, and as Subrahmanyam & Greenfield (2008) point out, online communication for young people can be both positive and negative. Policy decision makers might like to take note that there is a possibility of children losing social ties if they do *not* have access to digital social networking; friendship, support, and communication in the offline world are being extended to their online world. Parents may be trying to protect their children with good intentions by not allowing early adolescents to access SNS, but their inability to understand not only the technology but also what children might gain from using digital social networking is as unfortunate and potentially harmful as not understanding what digital technology is now able to offer. The press and media have been successful at flagging perturbing headlines about cyberbullying and online predators that have understandably alarmed parents and teachers; however, such press and media could be equally harnessed to promote awareness of the benefits children might gain from its use, as well as explaining what is now technically possible (for instance the real possibility of live chat on Xbox or PS3).

In the UK, Internet service providers are self regulated but encouraged to follow the guidelines of the Home Office Task Force for Internet Safety; the UK is regarded internationally as having an excellent record of online child safety (Jackson, 2009). In Europe, self-regulation falls under the ‘European Framework for Safer Mobile use by Young Teenagers and Children 2007’ and ‘The Safer Social Networking Principles for the EU’ (see Figure 5) which was signed in February 2009 by eighteen major social networks active in Europe (Swetenham, 2009). There is a general international consensus that parents can and should help their children online. Australia *has* taken steps to protect children online, although not entirely successfully. The NetAlert online safety initiative launched a national media and public education campaign in 2007 and offered a free Internet filter product that could be downloaded by parents. It took 16 year

old Tom Wood just thirty minutes to bypass the filter when it was launched, and he immediately posted tutorials on how to do this on YouTube (Green, 2009).

Figure 5

<b>Safer Social Networking Principles: The Safer Social Networking Principles for the EU' signed in February 2009</b>
<b>Principle 1: Raise awareness of safety education messages and acceptable use policies to users, parents, teachers and carers in a prominent, clear and age-appropriate manner</b>
<b>Principle 2: Work towards ensuring that services are age-appropriate for the intended audience</b>
<b>Principle 3: Empower users through tools and technology</b>
<b>Principle 4: Provide easy-to-use mechanisms to report conduct or content that violates the Terms of Service</b>
<b>Principle 5: Respond to notifications of illegal content or conduct</b>
<b>Principle 6: Enable and encourage users to employ a safe approach to personal information and privacy</b>
<b>Principle 7: Assess the means for reviewing illegal or prohibited content/conduct</b>

One of the directives of the 'The Safer Social Networking Principles for the EU' (2009), supported by companies such as Facebook, Google, and MySpace, is to promote a collective responsibility amongst a wide range of stakeholders— including service providers, governments, parents, teachers, users and non-governmental organisations—to help safeguard children.. What appear to be missing in this mix are the children themselves. As Herring (2008) points out, "adults create and regulate the media technologies consumed by young people, and profit financially from them" (pp71). Herring calls for a change in paradigm in research on youth and new media from one that has a preoccupation with the technology itself to one that

focuses on young people and their needs. The EU principles do call for greater provision on the part of service providers for “tools and technologies to assist children and young people in managing their experience on their service” (2009:7), and certainly much clearer guidelines in terms of privacy settings are necessary for children and parents. The principles are well founded and, if implemented, will work well, but as the Australian example mentioned earlier illustrates, children will not want to have their ‘territory’ infiltrated by stakeholders if they do not feel they have been consulted in the process.

In my empirical study, I found that in many ways children were self-regulating in terms of what happened to them online. Although they were taking what adults would regard as risks, in many ways they were exerting what could be described as ‘digital agency’, and most importantly, they were not necessarily doing this alone; increasingly, they shared every move, thought and intention with friends online. Children were therefore aware of issues, such as bullying, online; nasty material could be copied and forwarded and discussion would ensue about the nature of this and how to deal with it. While experimenting with being older or different took place, part of the fun of this for early adolescents was to share their experiences, be in control, and know when to stop—such experimentation needs to be acknowledged by policy makers.

It has been suggested that one of the best ways to protect children online is to encourage discussion not just amongst teachers and parents, but also amongst peers (Wrzesien, 2009). My research suggests that informal online peer support already takes place. Livingstone & Haddon (2009) point out that until we understand more about what experiences children have online, it will be difficult to implement policy. Policy decisions, however, need to acknowledge that children—early adolescents in particular—are likely to take some risks, as taking risks is a part of the process of becoming an adult. The friendship, support, and digital agency that transpire through early adolescents’ use of digital social networking needs to be balanced by efforts to raise awareness and support teachers and parents in understanding how children use digital technology. While early adolescents appear to be self regulating in terms of their digital experiences, particular attention does need to be paid to children who are likely to be vulnerable, those with few friends and little or no support network.

## References

- Beckford, M. 2009, 16 March. Children being 'raised in captivity', warns Tanya Byron. *Telegraph.co.uk*.
- Berndt, T. 1981. The effects of friendship on prosocial intentions and behaviour. *Child Development* 52, 638-643.
- Blos, P. 1979. *The adolescent passage*. New York: International Universities Press.
- Boyd, D. 2008. Why Youth (Heart) Social Network Sites: The role of networked publics in teenage social life. In D. Buckingham (Ed.), *MacArthur Foundation Series on Digital Learning* (Vol. Identity Volume). Cambridge, Mass: MIT.
- Boyd, D., & Ellison, N. 2007. Social Network Sites: Definition, History and Scholarship. *Computer-Mediated Communication*, 13(1).
- Buckingham, D. 2008. Introducing Identity. In D. Buckingham (Ed.), *Youth, Identity, and Digital Media* (pp. 1-24). Cambridge, Mass.: Massachusetts Institute of Technology.
- Buckingham, D. 2009. *Rethinking Youth Culture*. Paper presented at the Rethinking Youth Cultures in the Age of Global Media: ESRS Seminar Series 18.2.09, London Knowledge Lab, Institute of Education.
- Buhrmester, D. 1996. Need fulfilment, interpersonal competence, and the developmental contexts of early adolescent friendship. In W. Bukowski, A. Newcomb & W. Hartup (Eds.), *The Company They Keep: Friendship in Childhood and Adolescence*. Cambridge: Cambridge University.
- Byron, T. 2008. *Safer Children in a Digital World: the report of the Byron Review*. London: DCSF.
- Carrington, V. 2005. Txtting: the end of civilisation (again)? *Cambridge Journal of Education*, 35(2), 161-175.
- Clarke, B. 2002. *Do u no wuzzup? The cultural impact of technology on the Net generation*. Paper presented at the ESOMAR Net Effects 5 Berlin Conference. from <http://www.esomar.org/web/publication/>.
- Clarke, B., & Cooke, M. 2008, 2 January. *Children's Emotional Engagement with Web 2.0: how does research fit in?* Paper presented at the Children Seen and Heard: MRS Conference 2 January 2008, Saddlers Wells, London.
- Coleman, J., Livingstone, S., Davies, C., & Lunt, I. 2009. Maximising opportunities for young learners in the digital age, *ESRC Seminar Series: The educational and social impact of new technologies on young people in Britain*. Oxford.

- Coleman, J. C., & Hendry, L. B. 1999. *The Nature of Adolescence* (3 ed.): Routledge.
- Cotterell, J. 1996. *Social Networks and Social Influences in Adolescence*. London: Routledge.
- Cunningham, H. 2006. *The Invention of Childhood*. London: BBC Books, BBC Worldwide Ltd.
- DCSF. 2008. *The Byron Review Action Plan*. Retrieved from.
- Donath, J., & Boyd, D. 2004. Public Displays of Connection. *BT Technology Journal*, 22(4), 71-82.
- Douvan, E., & Adelson, J. 1966. *The adolescent experience*. New York: Wiley.
- Ellison, N., Steinfeld, C., & Lampe, C. 2006, June 19-23. *Spatially bounded online social networks and social capital: the role of Facebook*. Paper presented at the Annual Conference of the International Communication Association, Dresden, Germany.
- The Enquiring Minds Model: context and rationale*. July 2006. Bristol: The Future Lab: available on [http://www.enquiringminds.org.uk/programme/context/new\\_technology.html](http://www.enquiringminds.org.uk/programme/context/new_technology.html) (accessed 15.8.07).
- Erikson, E. 1977. *Toys and Reasons: Stages in the Ritualization of Experience*. New York: W.W. Norton.
- Furman, W., & Buhrmester, D. 1992. Age and Sex Differences in Perceptions of Networks of Personal Relationships. *Child Development*, 63(1), 103-115.
- Giddens, A. 1991. *Modernity and Self-Identity: self and society in the late modern age*. Cambridge: Polity Press.
- Gill, T. 2007. *No Fear: growing up in a risk averse society*. London: Calouste Gulbenkian Foundation.
- The Good Childhood: Evidence Summary One - Friends*. 2006. London: The Children's Society.
- Green, L. 2009. *An Australian perspective on EU Kids Online: Final Report*. Paper presented at the EU Kids Online Final Conference.
- Grotevant, H., & Cooper, C. 1986. Individuation in Family Relationships: A perspective on individual differences in the development of identity and role-taking skills in adolescents. *Human Development*, 29, 82-100.
- Haddon, L. 2009. *EU Kids Online Findings: Research availability and key gaps*. Paper presented at the EU Kids Online Final Conference.
- Haraway, D. 1991. *Simians, cyborgs, and women: the reinvention of nature*. New York: Routledge.



- Herring, S. 2008b. Questioning the Generational Divide: Technology Exoticism and Adult Constructions of Online Youth Identity. In D. Buckingham (Ed.), *Youth, Identity, and Digital Media*. Cambridge, Mass: MIT Press.
- Hill, J., & Holmbeck, G. 1986. Attachment and autonomy during adolescence. *Annals of Child Development*, 3, 145-189.
- Hillman, M., Adams, J., & Whitelegg, J. 1993. *One False Move: A Study of Children's Independent Morbidity*. London: Policy Studies Institute.
- Huffaker, D., & Calvert, S. 2005. Gender, Identity, and Language Use in Teenage Blogs. *Journal of Computer-Mediated Communication: available online at* <http://jcmc.indiana.edu/vol10/issue2/huffaker.html> (accessed 18.7.07), 10(2).
- Ito, M., Horst, H., Bittanti, M., boyd, d., Herr-Stephenson, B., Lange, P., et al. 2008. *Living and Learning with New Media: Summary of Findings from the Digital Youth Project*. Chicago, Illinois: The MacArthur Foundation.
- Jackson, L. 2009. *The value of risk: cycling cyber-highways with stabilizers*. Paper presented at the EU Kids Online Final Conference.
- Kroger, J. 1996. *Identity in adolescence: the balance between self and other*. London: Routledge.
- Lampe, C., Ellison, N., & Steinfeld, C. 2006. *A Face(book) in the Crowd: Social Searching vs Social Browsing*. Paper presented at the 20th Anniversary Conference on Computer Supported Cooperative Work, New York.
- Larson, R. 2002. *Globalization, Societal Change, and New Technologies*. Arbor, MI.
- Larson, R., Richards, M., Moneta, G., Holmbeck, G., & Duckett, E. 1996. Changes in adolescents' daily interactions with their families from ages 10 to 18: Disengagement and transformation. *Developmental Psychology*, 32, 744-754.
- Layard, R., & Dunn, J. 2009. *A Good Childhood: Searching for values in a competitive age*. London: Penguin Books.
- Lenhart, A., & Madden, M. 2007. Social Networking Websites and Teens: An Overview. [www.pewinternet.org](http://www.pewinternet.org) (accessed 9.8.09).
- Livingstone, S. 2008. Taking risky opportunities in youthful content creation: teenagers' use of social networking sites for intimacy, privacy and self-expression. *New Media & Society*, 10, 393-408.
- Livingstone, S., & Haddon, L. 2009. *EU Kids Online: Final report*. London: LSE.

- Mayo, E., & Nairn, A. 2009. *Consumer Kids: How big business is grooming our children for profit*. London: Constable Paperback.
- McKenna, K. 1999. Can you see the real me? Formation and development of interpersonal relationships on the Internet. New York University.
- McLaughlin, C., & Clarke, B. 2009. Relational Matters: a review of the impact of school experience on mental health in early adolescence. *in Press*.
- Morpurgo, M. 2006, 12 September. Modern life leads to more depression among children: Letter to the Editor from 110 signatories. *The Daily Telegraph*.
- Ofcom. 2008. *Social Networking: A quantitative and qualitative research report into attitudes, behaviors and use*. London: Office of Communications (Ofcom).
- Ofcom. 2009. Ofcom Media Literacy Tracker 2009 Wave 1. [www.ofcom.org.uk](http://www.ofcom.org.uk) (accessed 27.7.09).
- Palmer, S. 2006. *Toxic Childhood: how the modern world is damaging our children and what we can do about it*. London: Orion.
- Parke, R., Simpkins, S., McDowell, D., Kim, M., Killian, C., Dennis, J., et al. 2002. Relative Contributions of Families and Peers to Children's Social Development. In P. Smith & C. Hart (Eds.), *Blackwell Handbook of Childhood Social Development*. Oxford, UK: Blackwell.
- Pfeil, U., Arjan, U., & Zaphiris, P. (In Press). Age differences in online social networking: A study of user profiles and the social capital divide among teenagers and older users in MySpace. *Computers in Human Behavior*.
- Roeser, R., Eccles, J., & Sameroff, A. 2000. School as a context of early adolescents' academic and social-emotional development: a summary of research findings. *The Elementary School Journal*, 100(5), 443-471.
- Rutter, M., & Smith, D. 1995. *Psychosocial disorders in young people: time trends their causes*. Chichester: Wiley.
- Sefton-Green, J. 2004. *Literature Review in Informal Learning with Technology Outside School* Bristol: Futurelab (NESTA)
- Stern, S. 2008. Producing Sites, Exploring Identities: Youth Online Authorship. In D. Buckingham (Ed.), *Youth, Identity, and Digital Media* Cambridge, Mass: MIT Press.
- Subrahmanyam, K., & Greenfield, P. 2008. Online Communication and Adolescent Relationships. *The Future of Children*, 18(1), 119-146.

- Subrahmanyam, K., Smahel, D., & Greenfield, P. 2006. Connecting Developmental Constructions to the Internet: Identity Presentation and Sexual Exploration in Online Teen Chat Rooms. *Developmental Psychology*, 42(3), 395-406.
- Sullivan, H. 1953. *The interpersonal theory of psychiatry*. New York: Norton.
- Swetenham, R. 2009. *Safer Internet Programme: Evidence-based European Policy*. Paper presented at the EU Kids Online Final Conference.
- Turkle, S. 1995. *Life on Screen: Identity in the age of the Internet* New York: Simon and Schuster.
- UNICEF. 2007. *Child Poverty in Perspective: An Overview of Child Well-Being in Rich Countries*
- Valentine, G., & Holloway, S. 2002. Cyberkids? Exploring children's identities and social networks in online and offline worlds. *Annals of the Association of American Geographers*, 92(2), 302-319.
- Valkenburg, P., & Peter, J. 2007. Online Communication and Adolescent Well-Being: Testing the Stimulation Versus the Displacement Hypothesis. *Journal of Computer-Mediated Communication*, 12(4), 1-13.
- Valkenburg, P., Peter, J., & Schouten, A. 2006. Friend Networking Sites and Their Relationship to Adolescents' Well-Being and Social Self-Esteem. *Cyber Psychology & Behaviour*, 9(5), 584-590.
- Whewey, R., & Millward, A. 1997. *Child's Play: Facilitating play on housing estates*. London: Chartered Institute of Housing.
- Willett, R. 2008. Consumer Citizens Online: Structure, Agency, and Gender in Online Participation. In D. Buckingham (Ed.), *Youth, Identity, and Digital Media*. Cambridge, Mass: MIT Press.
- Wolak, J., Mitchell, K., & Finkelhor, D. 2003. Escaping or connecting? Characteristics of youth who form close online relationships. *Journal of Adolescence*, 26, 105-119.
- Wrzesien, A. 2009, 11 June. *Plenary Panel: Implications for Policy*. Paper presented at the EU Kids Online, LSE, London.
- Wynne-Jones, J. 2009, 2 August. Archbishop: Facebook a suicide risk. *The Sunday Telegraph*, p. 1.
- Youniss, J., & Smollar, J. 1985. *Adolescent relationships with mothers, fathers, and friends*. Chicago: The University of Chicago Press.