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A comparison of the UK and Bahrain

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# Julia Davidson & Elena Martellozzo

## EXPLORING YOUNG PEOPLE'S USE OF SOCIAL NETWORKING SITES AND DIGITAL MEDIA IN THE INTERNET SAFETY CONTEXT

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*This paper explores young people's use of digital media focusing upon the use of social networking sites (SNS) as a means of networking and communication in the context of internet safety. It also considers cultural and gender differences in the use of the medium. It draws upon recent research conducted by the authors in the UK in 2009<sup>1</sup> and in the Kingdom of Bahrain in 2010<sup>2</sup> (the first large-scale research study on young people and internet usage to be conducted in a country in the Middle East). A similar methodological approach was adopted in both studies, which included large random, stratified samples of young people aged 12–18 and focus groups with children aged 7 plus. Both studies investigated internet usage and online behaviours, definitions of risk, awareness of safety and use of SNS. In total, approximately 4,500 young people participated in the research, along with teachers, stakeholders and adults. Findings suggest that young people use digital media in much the same way regardless of the social and cultural contexts, but that culturally gendered perspectives place restrictions upon usage.*

**Keywords** young people; technology; social networking sites; gendered online behaviour; risk; internet safety

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### Introduction

Social networking sites (SNS) and other digital media affect, both positively and negatively, people's life and their social structures such as the family, work and

organization, education, health care and leisure activities (boyd 2007; Davidson & Martellozzo 2008b). This paper presents findings from two studies, one conducted in the UK (Davidson *et al.* 2010)<sup>3</sup> and the other conducted in the Kingdom of Bahrain (Davidson & Martellozzo 2010<sup>4</sup>). This paper represents the first attempt to compare the use of SNS in two very distinct cultures. Data from these two culturally and geographically diverse countries are compared in order to emphasize that the internet does not have any geographical boundaries and that when children and adults navigate this useful tool, they are affected in the same way and are exposed to the same risks, whether they are located in the West or East. However, the comparison does illustrate the differing cultural contexts which affect the use of digital media. The aims of both studies were to explore young people's experience and awareness of internet use and internet/other digital media safety and examine gender-based consumption of this technology.

### *Young people's use of digital media*

Recent comparative work (EU Kids Online) on internet use across 25 European countries reveals that there have been substantial changes between 2005 and 2010. In 2005, 70 per cent of 6–17-year-olds in the European Union (EU) used the internet, and by 2010, this figure rose to 93 per cent. The most striking rise has been among younger children: by 2008, 60 per cent of 6–10-year-olds were online, and in 2010, one-third of 9–10-year-olds who used the internet went online daily. There has also been a substantial difference between 2005 and 2010 concerning the location of use. In 2005, the use of the internet at school was as common as home use. By 2010, 87 per cent of 6–17-year-olds were much more likely to use the internet at home (Livingstone & Haddon 2009). The research conducted by Ofcom (2011) in the UK suggests that 2 in 5 children aged 12–15 now have mobile access to the internet via a smartphone, with ownership being higher among girls; texting is the most popular mobile phone activity; 9 in 10 children access the internet at home; the majority of children access the internet via laptops; younger children are more likely to use the internet for games; three-quarters of 12–15-year-olds with home internet access have set up an SNS profile. The internet provides the opportunity to interact with friends on SNS such as Facebook, Myspace and lately Google Plus and enables young people to access information in a way that previous generations would not have thought possible. The medium also allows users to post detailed personal information, which may be accessed by any site visitor, and provides a platform for peer communication previously unknown (Davidson & Martellozzo 2008a). In Asia, internet access has also grown exponentially. For example, usage in Bangladesh grew 143 per cent between 2000 and 2005. There are now over half a million people with internet access in the region. A recent survey of school children undertaken in Nepal suggests that 81 per cent of 14–18-year-olds (of a sample

of 1,430) were accessing the internet on a weekly basis, 51 per cent of the sample had home access and many children were using internet cafes (Cwin Nepal 2009). In Russia, recent research in large urban centres on children's and teenagers' attitudes and perceptions of the internet reveals that it is the primary information source ahead of television, books and printed mass media for both 14–15-year-olds and 16–17-year-olds (Foundation for Internet Development 2009). Approximately 65 per cent of 16–17-year-olds reported that their parents allow them free use of the internet and do so without imposing any time limit.

There is a growth in the use of alternative devices to go online. Mobile phone use is widespread among children and young people, and an increasing number access the internet via a mobile phone. They make extensive use of the internet using interactive services such as games, SNS and instant messages, increasingly to be found as mobile phone applications. Alternative devices are increasingly being used to go online. The most significant difference between internet usage among children in industrialized countries and that among those in developing countries appears to be the mode of access with children in developing nations increasingly accessing the internet via mobile phones. It has been estimated that there are approximately 376 million subscribers to cell phone technology in the African continent, where this form of technology is more affordable and easily accessed than via PCs (The Independent: Life and Style, 2010).

Gender appears to be a key issue in terms of internet access and usage. A recent UK survey of school children examined the difference in use of the technology between girls and boys. It revealed that girls are more likely than boys to use mobile phones and digital cameras, with boys being more likely than girls to play computer and console games (Eynon 2009). However, recent research suggests that in some developing nations, girls are less likely to have frequent access to the internet than boys (Gasser *et al.* 2010). A large survey of 10,000 girls in 10 Indian cities (Plan India 2010) found that only 4 per cent of 'girls on the street' (Gasser *et al.* 2010, p. 40)<sup>5</sup> had even heard of the internet. Moreover, awareness about the internet varied enormously by city. Access ranged from 13 to 18 per cent of the total sample with wide variation by city. For example, in Kolkata (where poverty is high), only 5 per cent of girls had internet access compared with 36 per cent in Pune. Only 10 per cent of girls using the internet knew how to report online abuse. The authors comment that they found a complete lack of awareness among the respondents about potential online risks. The report concludes that girls who are anyway socially disadvantaged are often denied access to new technology.

### *Young people on SNS*

SNS such as Facebook have revolutionized peer-to-peer communication among young people, offering the opportunity to interact, share information, make

announcements and post thoughts and images. boyd and Ellison (2007) define SNS as:

web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection and (3) view and traverse their list of connections and those made by others within the system. (p. 1)

SNS allow users to post an online representation of their self as they wish others to see them, via a series of comments and photographs. They provide an opportunity for interaction and networking on a scale never seen before or thought possible. The rise in popularity of key sites such as Facebook has prompted the development of online communities with their own behavioural norms and methods of communication and discourse. Young people have largely driven the social networking revolution from its early inception with increasing numbers networking on a regular basis. The research conducted by Ofcom (2011) indicates that 72 per cent of 12–15-year-olds frequently use SNS to interact with friends; similarly, Livingstone *et al.* (2011) in the EU Kids Online survey found that 71 per cent of children aged 9–16 use SNS, although there was some variation by country, and that one-quarter of all 8–11-year-olds (23 per cent) and close to three-quarters of all 12–15-year-olds (70 per cent) have a Facebook profile. An article in the Independent Newspaper (2010) claims that South Africa's largest social network, MXit, is more popular than Facebook and has 27 million subscribers, many of whom are young people.

Our early research found that young people no longer distinguish between the online and offline worlds (Davidson *et al.* 2010). The advent of mobile technology has resulted in a converged online/offline environment in which it is possible to be in contact with friends 24 hours a day from almost anywhere in the world.

Most SNS have a minimum age requirement (13 for Facebook). Nonetheless in the absence of any effective age verification systems, younger children are able to create SNS profiles with a false age, often with parental permission. Livingstone *et al.* (2011) claim that communicating on SNS is the fastest growing online activity among young people with 62 per cent of European 9–16-year-olds using SNS. The data revealed stark age differences with 26 per cent of 9–10-year-olds reporting having their own profile compared with 82 per cent of 15–16-year-olds. Activity on SNS is not class specific with little difference in usage reported across social classes. Research conducted by Lenhart *et al.* (2011) in the United States suggests that 73 per cent of teens use SNS compared with 55 per cent in 2006. Young people in this study were much more likely to have a profile on MySpace, while adults preferred Facebook. The authors found a high incidence of social networking among young people in both the UK and Bahrain in findings reported here, but Livingstone *et al.* (2011) suggest that this varies by country in the EU: the highest incidence of social networking

was found in the Netherlands (80 per cent), Lithuania (76 per cent) and Denmark (75 per cent); the lowest incidence was found in Romania (46 per cent) and Turkey (49 per cent). The use of SNS in the Middle East has soared in recent years; Facebook reports having over 15 million users in the region in 2010, with Egypt and Saudi Arabia Facebook users showing the highest growth, and in the majority of countries, 50 per cent of Facebook users were aged under 25 (Malin 2010). The way in which SNS are used by young people may have a lot to do with geographical, social and cultural issues, but research is yet to explore this concept fully.

### *Online child safety and risk-taking behaviour on SNS*

The advantages of the internet greatly outweigh the disadvantages. However, recent negative headlines have dominated the popular media. Images of predatory paedophiles abusing children online are commonplace, possibly muting the positive educational experience of surfing the net. Resulting public anxiety is likely to be exacerbated by a number of factors, including, for example, the incredible development of the internet and the diffusion of its use, particularly among children, and the wide generational gap whereby children's knowledge and skill in using digital technology often exceed those of their parents. It is interesting to note that findings from the Bahrain study also suggested a very strong social class divide, as has recent research conducted in Qatar (Anser 2012) and Nepal (CWIN, Nepal). This divide may be more evident in developing nations and nations where internet usage is growing, particularly where there is a gulf between those able to afford home and mobile internet access and those unable to afford the technology. However, a recent report in the Independent Newspaper (2010) suggests that there are approximately 376 million subscribers to cell phone technology in the African continent, where this form of technology is more affordable and easily accessed than via PCs, particularly as limited access to electricity and phone land lines makes home internet use an 'expensive luxury'. It is reasonable to suggest that increased availability of inexpensive mobile access will in time serve to shrink the social class divide.

There are a number of risks that young people can be exposed to online that cannot be ignored. Risks such as cyberbullying, harassment, exposure to harmful content and online grooming can position children as vulnerable victims to the point of causing serious harm.

A national random sample of young internet users in the United States (ages 10–17) found that 13 per cent had experienced an unwanted sexual solicitation on the internet (Mitchell *et al.* 2005). Many of these incidents were confined to the internet and are relatively mild in nature. However, the potential for online sexual solicitation and harassment has raised obvious concerns among parents, teachers and mental health professionals. Ongoing research funded by the European Commission Safer Internet Programme (Webster *et al.* 2009) exploring

online grooming behaviour in four European countries suggests that the vast majority of young people appear resilient to approach by online groomers. However, offenders deliberately use SNS to target socially isolated, vulnerable young people who respond well to attention received from online contacts. However, only 12 per cent of young people in the research conducted by Livingstone *et al.* (2011) admitted to having met with an online acquaintance via an SNS whom they had not previously met. There is also some very recent research which suggests that young people in countries which have only recently begun to address internet safety seem more likely to meet with online acquaintances. Research conducted in Brazil suggests that although children are aware that they should not meet with online acquaintances, a substantial proportion still did (43 per cent) (SaferNet Brazil Surveys 2009). A study conducted in Thailand (cited in Gasser *et al.* 2010) suggests that 24 per cent of 7–11-year-olds had met with an online acquaintance whom they had not met before, and in 58 per cent of the cases, the children reported that this led to an unpleasant experience.

Research undertaken in Europe and the United States has also demonstrated that young people do engage in risk-taking behaviour online. Whether online or offline, young people enjoy pushing the boundaries created by adults, as a part of establishing themselves within a group of friends (Hope 2007). The EU Kids Online research (Livingstone & Haddon 2009) suggests that providing personal information is the most common risk-taking behaviour – exhibited by approximately half of online teenagers – with seeing pornography being the second most common risk.

There is a long list of risks that children may encounter when online (see e.g. Hasebrink *et al.*'s (2009) classification of online risks to children). For the purpose of this paper, we refer to online risks as risks that may damage the mental and physical health of children, for example, receiving, downloading and distributing illegal, violent, hateful content; being bullied, stalked or harassed; sharing personal information with people unknown to them, including personal or provocative pictures of themselves; sites encouraging harm and anorexia; and meeting strangers after being groomed. It is important to note that what constitutes a 'stranger' for young people engaged in online activities is different from the popular perception of 'someone not known'. In their article 'Policing the Internet and Protecting Children from Sex Offenders on Line: When Strangers Become Virtual Friends', Davidson and Martellozzo (2005) argue that the term 'stranger' has been redefined by generations. In particular, the new internet generation consider someone whom they have communicated with in the realm of the cyber and never met in real life to be a virtual friend rather than a stranger.

Recent research undertaken in Russia (Foundation for International Development Research 2009) on risk-taking behaviour revealed that more than 50 per cent of young people surveyed gave out personal data on SNS without thinking. The difference between the two age groups in terms of the type of personal data

was that a larger proportion of 16–17-year-olds (23 per cent) appeared to be providing both personal photos and photos of relatives when compared with 11 per cent of 14–15-year-olds doing so.

The extent to which young people add online acquaintances to their SNS friends' lists (thus allowing access to their profile) and their knowledge of privacy setting are also issues explored in the authors' research in the UK and Bahrain and discussed later. It is reasonable to expect that the average child might have approximately 50 'real' friends. It is unlikely that children reporting 100 or more friends have actually met all the contacts. Livingstone *et al.* (2011) suggest that very few children have 300 plus friends on their SNS friends' lists, but 20 per cent had between 100 and 300 friends. There is considerable variation by country with children in the UK, Portugal and Greece reporting the most contacts. However, Livingstone suggests that this does not necessarily indicate that the majority of the children do not exercise caution in their use of SNS and in protecting their personal information. Of those children using SNS, 43 per cent had their profile set to private so that only friends could see it, while 26 per cent had their profile set to public so that it could be freely viewed.

#### *Bahrain: internet usage and social networking*

Bahrain is the world's 110th largest economy by GDP and has a population of 727,785. internet users as of June 2009 were standing at 250,000 or 34.3 per cent of the population (Family Online Safety Institute 2010). internet use has grown considerably in the last decade, given the economic affluence of some sections of Bahraini society. Bahrain is the smallest market in the telecommunications and digital media in the Middle East by population size, but it is also one of the most competitive.

Information technology now forms a core part of the formal education system in many countries, ensuring that each new generation of internet users is more adept than the last. Recent statistics from the International Telecommunications Union suggest that there are currently approximately 403,000 internet users (9/2009) in the Kingdom of Bahrain representing 55 per cent of the population. This represents an almost 50 per cent increase in usage since 2000.

Although to date there has been no research that has explored internet use among young people in Bahrain, one respondent stakeholder in the authors' research claimed that 146,000 young Bahrainis use the SNS Facebook. The Kingdom has a Facebook site which currently has over 11,000 fans,<sup>6</sup> so it is clear that social networking is an activity enjoyed by many young Bahrainis.

In 2008, the total number of mobile subscribers in Bahrain was 1,453,000, and in 2009, the total was 1,583,240, an increase of 9 per cent. This figure includes both contract and pre-paid connections. Currently, the youth population (0–14 years) represents 25.9 per cent of the population. In April 2010, the Telecommunications Regulatory Authority (TRA, a government-funded regulatory

body) of the Kingdom of Bahrain hosted one of the Gulf region's first online safety conferences in Manama, in partnership with the Family Online Safety Institute. Entitled 'Building a National Consensus for Online Safety', it is part of its ongoing 'Bahrain Campaign for Online Safety'. A Memorandum of Understanding between Internet Service Providers was signed at the conference, which sets out an undertaking to actively promote child safety on the internet.

## Methods

The research presented here was conducted by the authors in the UK in 2009 (Davidson *et al.* 2010) on behalf of the NAO and in the Kingdom of Bahrain in 2010 (Davidson and Martellozzo 2010) on behalf of the TRA. The research aimed to explore young people's experience and awareness of internet use and internet–other digital media safety and explored their behaviour on SNS. The methodological approach employed in each study was broadly similar, but differences were driven by the varying aims, focus, and differing requirements of both funders. The NAO study aimed to describe online behaviour and internet safety awareness in the context of an evaluation of an internet safety awareness programme run by the CEOP. The research conducted in Bahrain had a broader scope as the aim was to construct a national framework for internet safety development in the Kingdom based upon an empirical study (Davidson & Martellozzo 2010). This work is now being further developed for expansion to developing countries by the United Nations (Davidson & Hopwood 2011).

In both studies, the research design was as follows: a large-scale, random online survey<sup>7</sup> for children aged 11–17 ( $N = 1,718$  in the UK, stratified by age and gender, and  $N = 2,600$  in Bahrain, stratified by age, gender, religion, social class and school sector) was administered in schools. Furthermore, focus groups with children aged 7–17 and interviews with teachers were carried out. The Bahrain study also included an online survey of over 800 adults aged 18 plus (as the research brief included a focus upon internet safety awareness among adults, the findings from this part of the research are not included here). The research conducted in Bahrain additionally included stakeholder interviews with representatives from the Bahraini internet industry, Government Ministries (Social Development, Education and Health), NGOs, a University and charities. The survey was administered in both English and Arabic and the interviews in the public schools were conducted in Arabic by Arabic-speaking researchers from the University of Bahrain. The data were subsequently translated into English by professional translators. The quantitative data were analysed using SPSS and the qualitative data were analysed using a thematic approach. Ethical permission to conduct the research was granted by Kingston University Ethics Committee in the UK and by the Ministry of Education in the Kingdom of Bahrain.

## Results and discussion

The findings from each survey were largely validated by the child focus group findings, and the data are presented below.

### *Young people's online activities*

It is clear that the use of SNS has become a very popular means of peer-to-peer communication among young people (Livingstone *et al.* 2011; Martellozzo 2012). An analysis of how young people use SNS shows that they have become an integral part of their everyday life. The majority of young people in the UK and Bahrain use SNS. The most common are Facebook, Messenger (MSN), Twitter, Myspace and online games. These findings were validated by the online survey, which shows that social networking, instant messaging and online games are the most popular online activities. Nearly a quarter of young people also buy goods online.

In line with their propensity to spend more time online, both surveys suggest that older children also appear to engage in a wider range of activities online. In particular, those aged 15–16 are more likely than younger people to use the internet for socializing (i.e. to use instant messaging, email and SNS). This finding is supported by a recent study conducted by Ofcom (2011) in the UK with a large sample of children aged 5–15 and their parents, which suggests that there are, however, age differences with younger children aged 8–11 preferring online games to SNS, and 50 per cent of 12–15-year-olds in the sample reported using a smartphone to access SNS at least once a week.

The NAO survey suggested that girls are more likely to use the internet for socializing; this finding is supported by the Ofcom (2011) data which suggest that girls aged 12–15 are more likely to have an active SNS profile than boys. While boys are more likely to play games online and investigate things they are interested in, girls are significantly<sup>8</sup> more likely to use instant messaging, send and receive emails and visit SNS, chat rooms or blogs. This potentially may put girls at higher risk of being victimized online, as they engage in online activities that enable grooming or bullying to take place more frequently than boys. This is a very important finding which was validated by the focus group data, but should be tempered with the finding that boys are less likely to take action in response to a threatening situation than girls.

Similarly, the survey data collected in Bahrain suggest that online activities varied little across groups. Most children use the internet to communicate with friends (62 per cent), send emails (44 per cent), do research (43 per cent), download music and films (48 per cent), play games (44 per cent) and engage in instant messaging (32 per cent). There were no significant gender differences in terms of online communication: boys were just as likely as girls

to use the internet to communicate with friends (61 per cent and 62 per cent, respectively). Girls were more likely to use instant messaging (40 per cent compared with 26 per cent of boys) and were less likely than boys to play online games (36 per cent of girls compared with 50 per cent of boys). There were no significant differences in online activity by age group, but the older groups were slightly more likely to communicate with friends and to send emails. Some commentators have suggested that online SNS are so popular they have brought about a shift in traditional community dynamics (Niknam 2010). According to boyd and Ellison (2007), while early public online communities were structured by topics, more current SNS are structured as personal networks, with individuals being located at the centre of their own community.

### *Young people's online behaviour*

Adolescents have always tested boundaries in challenging adult-imposed rules and questioning parental supervision. In the online world, this behaviour is evident when young people lie about their age, visit sites prohibited by their parents, explore new sexual experiences, keep or break secrets and post personal information. It is evident from research conducted in a wide range of geographical locations and cultural contexts that children's online behaviour is essentially similar in this respect (SaferNet Brazil Surveys 2009; Gasser *et al.* 2011)

The research conducted by Ofcom (2011) suggests that children aged 8–15 are less likely to interact with people not known to them on SNS in 2011 than they were in 2010.<sup>9</sup> However, recent research has not really considered the nature of children's and young people's online relationships. One of the key aims of the UK and Bahrain research studies was to explore the nature of and perceptions about online friendships. Findings showed that having a long list of friends is considered 'cool', and there is a certain currency associated with a long friends' list regardless of whether young people have actually met the 'friends'. This issue was probed during the interviews: 'It is fun to add people you don't know from other countries for example. It is fun to have a lot of friends' (Girl 13 – UK Study).

It is almost like a competition who has the most friends so you keep adding.  
(Girl 12 – Bahrain Study)

Most young people using SNS had between 20 and 300 friends, many of whom were not known. As one of the young people claimed:

No I only know about 100 of them and the other 500 of them I haven't got a clue who they are. (Boy 13 – UK Study)

The quotes given above indicate that interacting with strangers (i.e. adding them as instant messenger or Facebook friends, sharing photographs and exchanging messages) is becoming an accepted behaviour not perceived as ‘risk-taking’ by young people. Indeed, it is apparent from this research and the authors’ ongoing research (Webster *et al.* 2009; Martellozzo 2012) that some of the language used by adults to describe online behaviour is meaningless to young people. However, this activity does imply an element of risk, and it may be argued that although it is difficult to establish the age of the person interacting online with a young person with certainty, technology and particularly the internet ‘have become by far the dominant means by which adults attempt to establish sexual contacts with children’ (Shannon 2007, p. 7). In the United States, researchers such as Wolak *et al.* (2008) claim that chat rooms are by far the most common reported location of initiated sexual relationship. These contentions may be applied to both the West and East showing even more clearly that the internet does not have geographical boundaries and has the capacity to reach all citizens across the globe.

### *Risk-taking behaviour*

The two studies presented here focussed on the extent to which young people engage in behaviour regarded as ‘high risk’. Broadly speaking, high-risk behaviour may include

- sharing a range of personal information with strangers; and<sup>10</sup>
- interacting with strangers (e.g. by adding them as online friends and meeting them).

The UK data suggested that young people consider those whom they have talked to online for some time to be a virtual friend. This is understandable given that some virtual relationships had spanned months and involved a degree of mutual sharing of information. The qualitative data suggested that some young people agreed that if they forge a relationship with a person whom they have met online or were introduced to this person online by someone, they would consider a meeting. However, some of the young people who raised this point said they would only meet with an online friend if they were accompanied by a guardian or a friend:

If I build up the friends and then you really, really want to go and see them I think you should definitely bring a parent or like a young adult, a responsible person someone whose responsible for you or something to act like a guardian for you. (Boy 13 – UK study)

Nevertheless, it was found that some students (particularly older students) would consider meeting a person whom they have not met before. Some

students said that they would meet someone if they have spent a considerable amount of time chatting online and if they could see their real face via a webcam. This finding is confirmed by a previous study conducted by the authors (Davidson *et al.* 2010), where respondents indicated that they would be willing to meet virtual friends if they had been chatting online for some time and felt comfortable with them.

This behaviour clearly affects the degree to which young people are willing to share information and interact with such 'strangers'. The Ofcom (2011) findings indicate that while the majority of 12–15-year-olds would want only their friends on SNS, and we have argued that the definition of 'friend' is broad in this respect, to see personal information, there is a clear difference in perceptions of what might be considered to be 'personal' information; for example, there is a greater willingness to share photographs than to reveal age. This lack of understanding of what constitutes personal information was also evident in the NAO and Bahrain studies. It is important to note here that communicating with strangers and sharing thoughts, ideas, feelings, photographs, etc. are not new internet-related phenomena. In the 1980s, for example, pen-pal was very popular and teenagers were encouraged to write to unknown, long-distance 'friends' as a form of learning a new language, developing writing skills, etc. Today, the internet has allowed these groups of unknown, long-distance friends to multiply at exponential levels, increasing the risk of losing control over who should be included or not in the circle of friends. Livingstone (2009), drawing upon Erikson's early theory of psychosocial development (Erikson 1968), suggests that taking risks is part of a self-actualization process necessary for a child's psychological development. Erikson suggests that a person needs to develop a sense of self-identity to ensure successful transition from childhood to adulthood, pointing to a conflict between identity and role confusion in adolescence that is evident in boundary-testing or risk-taking behaviour known as the *Identity Cohesion* versus *Role Confusion* stage. The theory suggests that most adolescents will emerge from this period of experimentation, or boundary-testing, with greater self-worth and an insight regarding their place in the world (Erikson 1968). Lightfoot (1997) in her research with adolescents tested Erikson's theory and suggests that risk-taking is young people's way of 'framing the world' and can be 'imaginative, inventive (and) uncertain' (p. 1) and that risk-taking is a transitional behaviour as much as part of adolescent behavioural norms as style of clothing and use of language. This is supported by our research with young people who understand online safety messages but are not willing to always act upon the advice (Davidson *et al.* 2010). It seems that young people can be expected to take online risks, but it is clear that the necessary tools and support should be provided to enable exploration of the world in a safe manner. Findings from the authors' and others' research do show that there is still a lot to be achieved as key safety messages are not always taken into account when

socializing online. A substantial proportion of children in the NAO study reported having engaged in high-risk behaviour online:

- 37 per cent had shared an email address;
- 34 per cent provided information about the school they attended;
- 23 per cent provided a mobile number; and
- 26 per cent provided a personal photograph.

There were similar findings from the Bahrain study. However, it was also found that older children took the most risks in terms of online safety and more serious risk than children of a similar age in the UK. They were more likely to have shared personal information with a stranger (22 per cent of 17–18-year-olds compared with 11 per cent of 11–13-year-olds) and to have opened an email attachment from an unknown source (21 per cent of 17–18-year-olds compared with only 10 per cent of 11–13-year-olds). There appears to be a relationship between the sharing of personal information and the willingness to meet online strangers: those children sharing personal information were more likely to have met online strangers.<sup>11</sup> The survey data demonstrate that public school girls were *significantly* more likely to post personal information and to meet with online strangers than private school girls.<sup>12</sup> The qualitative data indicate that most children would freely post on their SNS profile what they do or where they are every day. A small number considered posting what they do as personal information, whereas none of the young people interviewed considered posting their location to be ‘personal’ in any way. Furthermore, a significant number of young people had their public profile set to public and did not know how to set it to private. When this issue was probed, it was clear that there was less awareness among public school children.

These data were supported by the qualitative findings. Some of the children claimed that:

I accepted someone I didn’t know on Facebook and he phoned me, it was an adult man’s voice, I just hung up and didn’t tell my parents. (Girl 14 – Bahrain Study)

My friend was friends with someone on Facebook who was 50 years old. (Girl 15 – Bahrain Study)

I was approached by someone and was chatting with him about travelling, I reported him to Facebook. (Girl 14 – Bahrain Study)

Children attending public schools were more likely to have opened emails (42 per cent compared with 30 per cent of private school children) and email attachments (17 per cent compared with 12 per cent of private school children) from an unknown source and to have shared personal information with online

strangers (17 per cent compared with 12 per cent). These data are validated by the qualitative data, which indicated that there is a lower level of internet safety awareness among public school children. The survey data indicated that 43 per cent (1090) of children had met with an online contact whom they had not met before in person. There was a gender difference as boys were more likely to meet (49 per cent had) than girls (32 per cent had), compared with only 5 per cent of children in the UK study. This difference may be due to the fact that Bahrain has a small population and young people are more likely to be connected via friends and acquaintances, but this still indicates a high level of trust.

### *Online safety and awareness*

As making friends online is part of a wider social trend towards socializing online, there is no reason to expect young people to behave otherwise. This presents problems in terms of the effectiveness of safety messages regarding strangers.

On the one hand, in the UK study, when young people were asked as to what they know about safety online, they seemed very knowledgeable. However, it was interesting to note that although most young people are knowledgeable about the risks that they may encounter online, many of them do not take preventative steps. On the other hand, awareness in the Bahrain study did not seem to be widespread evenly and a clear difference was noted between the private and public sectors. When the question 'what information do you include in your profile?' was asked, it was found that the majority of the public sector children share more detailed information such as personal pictures and current school that they attend than the private sector respondents and have less awareness about privacy settings on SNS. It was found that 88 per cent of girls would not post personal information, whereas 31 per cent of the boys said that they would and 26 per cent that they might. Overall, it can be argued that there is a lack of awareness regarding what is considered personal information and what is not among young people.

### *Gender and unpleasant online experience*

In the UK, it was found that one in five young people had a 'threatening' experience online either from someone they did not know or from someone who was an acquaintance in the form of cyberbullying, sexting<sup>13</sup> or cyber staking. These experiences made the respondents feel uncomfortable. The UK Ofcom (2011) study produced similar findings, suggesting that 13 per cent of 12–15-year-olds had seen something online during the past year that was 'worrying, nasty or offensive' (p. 6) and that 25 per cent of 12–15-year-olds knew someone who had been bullied online.

Findings from research conducted in the Middle East show similar results. In the Bahrain study, respondents were asked if they had been made to feel

‘uncomfortable’ online and 36 per cent reported that they had been made to feel ‘uncomfortable’. The proportion feeling ‘uncomfortable’ increased with age. There was also a clear gender difference; girls (43 per cent) were more likely to have felt ‘uncomfortable’ than boys (32 per cent). The most significant source of the discomfort was identified as cyberbullying on the part of peers.

### *Gender and cultural constraints*

Little research that has explored the use of digital technology among young people has been conducted in the Middle East. One exception is an earlier study conducted by Hijazi-Omari and Ribak (2007) in Palestine. The research explored gender differences in mobile phone use among Palestinian girls and the way in which culturally gendered practices frame the meaning of the use of technology. The authors examined the way in which the use of mobile phones alters social dynamics, relationships and the construction of gender in Palestine. The research suggests that boys give girls mobile phones in order to communicate with them privately and without physical proximity and the girls know that their parents would disapprove and that discovery would lead to harsh punishment and continue to conceal the phones. Although the focus in this research is upon gender dimensions, the behaviour described is also culturally specific and the two are inextricably linked. The authors’ research in Bahrain (although the brief was to not focus specifically upon gender and cultural issues) revealed that cultural issues do impact upon young people’s use of digital media and upon parental response to the use. In some sectors of Bahraini society, for example, the act of removing the veil in an SNS photograph would be considered unacceptable:

We have had cases of Islamic girls that took their veil off in front of the webcam and took photographs of themselves. Then they were deeply upset when their pictures were made public. You can see how their parents felt. (Teacher 3 – Bahrain study)

Stakeholders participating in the Bahrain study indicated that teenage girls interact with teenage boys online, via Instant Messenger or SNS. This social interaction is hidden from parents as it is considered culturally unacceptable. In a similar fashion to the girls in Hijazi-Omari and Ribak’s (2007) study, the girls were aware that their behaviour was breaking cultural norms and that they would be severely punished on discovery, but they still went ahead. It could be argued that the medium allows a freedom of expression previously denied to the girls and a means to conceal the behaviour (although not always effectively). As one stakeholder suggests:

Parents would not approve of this behaviour. It is a cultural issue. (Stakeholder 5 – Bahrain study)

When the interaction was discovered, some of the teenagers were subjected to severe physical punishment on the part of their parents. One respondent suggested that given cultural constraints placed upon some girls, interacting with and meeting strange boys are completely unacceptable and that girls are more controlled by their parents than boys:

Girls shouldn't go out with a boy. This is not accepted in our society. (Stakeholder 6 – Bahrain study)

Unfortunately, a number of these interactions have resulted in the attempted suicide of the girls (there were seven such cases in April 2010, but cases occur on a monthly basis):

We have had cases that the children were assaulted by parents to the degree that they were admitted to the hospital. They would arrive to us with multiple bruises and severe injuries. Sometimes they are beaten up badly with the stick. Even if the parents know that the online relationship was innocent, even if she was just talking they would punish her. They would be punished not necessarily by the father but also by the uncles, the brothers. (Stakeholder 3 – Bahrain study)

It is clear that there is much to be learnt about the way in which gender and culture frame young people's use of digital media and research is in an embryonic form at present.

## Conclusion

There is increasing research evidence to suggest that young people do not distinguish between online and offline environments as a full range of digital media have become an integral part of their lives. It seems more relevant to refer to the converged online and offline environments when referring to young people's behaviour. SNS are now a key platform for communication, enabling instant updates and the possibility of interacting continually and anonymously. It is clear from these studies conducted with two groups of children living in very different contexts that SNS and digital media transcend geographical and social boundaries uniting children in a shared enthusiasm for new technology. However, although children's use of digital media appears to be similar, gendered cultural issues play a significant role in shaping a response to their online behaviours; their online activities are not played

out in a vacuum. As SNS become central in young people's lives, it seems increasingly important to ensure that they are not only aware of safety issues but also understand that everything that they do online is a permanent record of their actions, a digital footprint which may impact negatively upon career opportunities and relationships. It also seems that digital media may assist future generations in challenging cultural practices; it could also be argued on the basis of this research that educational awareness programmes should be culturally sensitive or should at least address cultural issues in the geographical context.

## Notes

- 1 This research was funded by the National Audit Office (NAO).
- 2 This research was funded by the Telecommunications Regulatory Authority.
- 3 This research was co-funded by the NAO and Child Exploitation and Online Protection Centre (CEOP). The research included an online survey of 11–16-year-olds ( $n = 1,808$ ) and focus groups ( $n = 83$ ) of young people.
- 4 Bahrain has been selected as a comparative country to the UK because data were collected as part of a project led by the authors in 2010 on behalf of the Telecommunications Regulatory Authority.
- 5 It is estimated that India has approximately 11 million 'street children'. Children with no fixed abode living and working on the streets (Plan India 2010, p. 41).
- 6 <http://www.facebook.com/pages/Bahrain/13313568716#!/pages/Bahrain/13313568716?v=wall>.
- 7 The survey was administered online in schools to ensure a high response rate. The survey fieldwork in Bahrain was undertaken by an international social research agency – Neilsen. The online questionnaire was tested using cognitive interviewing with a small group of children and was adapted for use in the Bahrain context.
- 8 Cramer's V was used to test for the association between gender and these three responses. The test is both supportive of a gender effect and highly statistically significant at better than 0.01, with V ranging from 0.176 to 0.224. A value of zero would indicate no association; a value of 1 would equal perfect association.
- 9 It should, however, be noted that the data were gathered via face-to-face interviews where parents were sometimes present and this may have impacted upon the validity of the data.
- 10 A stranger may be defined as someone with whom the child may have spoken to online for some time, but has never met in person.

- 11 This finding was established using a multi-linear cross-tabulation analysis between questions exploring the sharing of personal information and meeting online with strangers.
- 12 Standard error of 6.2 per cent,  $p$ -value 0.34,  $t$ -value 0.96 and 5 per cent level of significance.
- 13 Jaishankar (2009) defines sexting as the act of self-photographing a nude body or body parts and sending to others as well texting obscene words to known persons (in most cases) using a mobile phone. Mostly, sexting is done by teenagers, though there are some cases of adults involving in it.

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