



THE UNIVERSITY *of* EDINBURGH

## Edinburgh Research Explorer

### **The Internet and Young People with Additional Support Needs (ASN)**

Risk and Safety.

**Citation for published version:**

Quayle, E, McKenzie, K, Bannon, S & Glynn, T 2015, 'The Internet and Young People with Additional Support Needs (ASN): Risk and Safety.', *Computers in Human Behavior*.  
<https://doi.org/10.1016/j.chb.2014.12.057>

**Digital Object Identifier (DOI):**

[10.1016/j.chb.2014.12.057](https://doi.org/10.1016/j.chb.2014.12.057)

**Link:**

[Link to publication record in Edinburgh Research Explorer](#)

**Document Version:**

Peer reviewed version

**Published In:**

Computers in Human Behavior

**Publisher Rights Statement:**

© Quayle, E., McKenzie, K., Bannon, S., & Glynn, T. (2015). The Internet and Young People with Additional Support Needs (ASN): Risk and Safety. *Computers in Human Behavior*. 10.1016/j.chb.2014.12.057

**General rights**

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

**Take down policy**

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact [openaccess@ed.ac.uk](mailto:openaccess@ed.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.



# **The Internet and Young People with Additional Support Needs (ASN): Risk and Safety**

## **Abstract**

The aim of this study was to investigate the understanding of online risks by young people with Additional Support Needs and this group's ability to manage these risks. Six focus groups with 36 young people (13-18) were run in local schools. Discussions were recorded, transcribed and analysed using Framework Analysis. Two themes were identified 'Identity and Connectedness' and 'Issues relating to Risk'. The theme 'Issues relating to Risk' is presented in the current article. Results showed that young people with ASN are aware of a range of risks online and have developed some strategies to manage these. Issues including supervision and the diverse range of ability within the population are also shown to present barriers to ensuring online safety. The results were discussed in light of literature relating to online risk, safety and potential psychological impact indicating that the internet may also provide important opportunities for young people with ASN to improve psychological well-being.

**Keywords:** Internet, risk, psychological impact, safety, additional support needs.

## **1. Introduction**

The use of the internet by children and adolescents is growing rapidly and is considered to be a major part of children's everyday lives (Ólafsson, Livingstone & Haddon, 2013). Findings show that 93% of American 12-17 year olds were using the internet in 2009 (Lenhart, Purcell, Smith & Zickuhr, 2010), and 60% of a pan-European sample of young people (aged 9-16) were shown to be online almost every day (Livingstone, Haddon, Görzig & Ólafsson, 2011). The impacts of internet use has been of considerable interest in recent literature; including investigation into its potential emotional and psychosocial benefits (Tynes, 2007). However, online risk and the negative psychological impact of the internet on young people remain a concern (Department for Children, Schools & Families, 2008). Livingstone and Smith (2014) reviewed research published since 2008, and concentrated on high quality, empirical studies to examine the nature, prevalence and management of sexual and aggressive risks in the digital age. They found that cyberbullying, contact with strangers, sexual messaging (sexting) and pornography generally affect fewer than one in five adolescents. They conclude that while not all online risks result in self-reported harm, longitudinal studies do indicate a range of adverse emotional and psychosocial consequences, which suggest that some children are more vulnerable than others. Vulnerability may relate to personality, social and digital factors. However, much of the research on online risk is quantitative, and as noted by Smahel and Wright (2014), is aimed at understanding prevalence, definitions and measurement of risks and their psychosocial consequences. There have been fewer research studies that have examined these issues from the perspective of young people. Smahel and Wright's (2014) study used focus group methodology with

children from nine European countries, from different social and cultural backgrounds, and from mainstream schools or youth centres.

### *1.1 Young people with Additional Support Needs*

Although research relating to internet risk and safety in the mainstream population is increasing (Ólafsson et al., 2013), less work has been conducted looking at these issues in young people with Additional Support Needs (ASN). The terms ASN and Special Educational Needs (SEN) are used to describe a group of young people who experience a range of difficulties (Del-Manso, Bailey, Hughes, Findlater & Findlater, 2011) including Attention Deficit Hyperactivity Disorder (ADHD), Autistic Spectrum Disorder (ASD) and other more general social and cognitive deficits, which as a result require the provision of additional support and input within the education system (Education Act, 1996; The Scottish Government, 2004). The term ASN will be used within the current paper to describe individuals who fall within this category. It has been documented that individuals with ASN may constitute as much as 20% of young people within education (Westwood, 2011), although it would appear that in the UK the number of children with special educational needs decreased from 1.55 million pupils (18.7%) in 2013 to 1.49 million pupils (17.9%) in 2014. This is part of a continuing decline since 2010 when 21.1% of pupils had SEN (Department for Education, 2014). However, the percentage of pupils with statements of SEN across all schools in England has remained unchanged in recent years (Department for Education, 2013).

Recent research has indicated that a high percentage of the ASN population are making use of advances in technology for learning, socialising and entertainment, similar to that of other young people (Cerebra, 2012; Didden, Scholte, Korzilius, De Moor, Vermeulen, O'Reilly & Lancioni, 2009; Del-Manso et al., 2011). This

includes: children with ADHD; Asperger's Syndrome (Kowalski & Fedina, 2011); Intellectual Disabilities (ID) and developmental disabilities (Didden et al., 2009). Didden et al. (2009) documented the types of activities young people, aged 9-16, and with intellectual and developmental disabilities, were engaging in online. This included using it as a forum for communication through web-cam (28% of the sample), email (43%) and skype (12%), suggesting that this reflects both synchronous and asynchronous communication (McKenzie & Murray, 2011).

\_\_\_\_\_Livingston, Görzig & Ólafsson (2011) highlighted however, increased risk levels for young people who were reported to have some form of disability (48%), for example learning difficulties, when compared to all young people included in the sample (41%). In addition it was stated that this group can experience greater levels of distress if meeting an online contact offline. One such risk relates to cyberbullying, with Didden et al. (2009) stating that 9% of their sample of 114 young people aged between 12 and 19 with a range of developmental disabilities reported having been bullied online one or more times per week. In another sample, Cross, Piggin, Douglas and Vonkaenel-Flatt (2012) found that 16% of a UK sample of young people with ASN were found to be at risk of persistent cyberbullying over a prolonged period. Cyberbullying may be a source of distress for the ASN population as findings showed that within the sample recruited by Didden et al. (2009), higher rates of cyberbullying were correlated with lower levels of self-esteem and higher reported depressive feelings. Research has also indicated that young people with ASN may be at increased online risk in comparison to those without ASN. Reasons for this may include the group's social naivety (Cerebra, 2012) and range of cognitive deficits, which can impact on their ability to generalise safety strategies and consider long-term consequences of behaviour (Carr, 2006; Mayes & Calhoun, 2004; Westwood, 2011).

Further to this, young people with a range of disabilities may be more likely to engage in risk-taking behaviour than those without (McNamara & Willoughby, 2010).

Del-Manso et al., (2011) employed focus groups to explore internet use by seven females with ASN (aged 13-16) and their understanding of the related benefits and risks. This study demonstrated that while the girls had been taught internet safety rules, many did not fully understand them or showed a lack of understanding in relation to putting safety strategies in place. This study also included a discussion group with parents and teachers. The adults recruited emphasised that the ASN population were particularly vulnerable online for reasons including their being less able to pick up on social cues and to consider the consequences of their actions, as well as being more impulsive. Such difficulties have been suggested to put this group at higher risk when socially interacting online (Didden et al., 2009; Mitchell, Becker-Blease & Finkelhor, 2005; Wiener & Mak, 2009). Kowalski and Fedina (2011) also felt that young people with ASN may be at greater risk simply because their additional needs cause them to “stand out”.

### *1.2 Rationale for Study*

Research suggests that children and young people are faced with a range of online risks, which may have negative short and long term consequences for psychological well-being. Young people with ASN may also be at increased risk when interacting online, however, there has been limited research into this area. Despite young people with ASN increasingly making use of advances in technology, there remains a lack of research investigating how young people with ASN may both perceive and manage potential risks.

The young people with ASN in the current study included those who fell into the Autistic Spectrum Disorder (ASD), Moderate Learning Difficulties (MLD) and

Social, Emotional and Behavioural Difficulties (SEB) categories as documented in The Highland Practice Model (2012). Those selected were considered particularly important to consider however due to documented difficulties ‘off-line’ such as developing friendships (Bellini, 2004; Carr, 2006) as well as experiencing a range of cognitive impairments e.g. impulsivity (Carr, 2006; Fuster, 2002; Mayes & Calhoun, 2004; Westwood, 2011). Furthermore, teaching staff who were consulted did not distinguish between individuals falling within each of the three categories but instead considered them to be unified as a result of a common set of uses and challenges related to their online behaviour.

This study therefore aimed to add to the existing literature by taking a child-centred approach and asking what young people with ASN perceived as online risks. The study will explore the following questions:

1. What risks do young people with ASN identify online which may impact on their psychological well-being?
2. How are young people with ASN managing online risk?

## **2. Method**

### *2.1 Participants*

Thirty-six adolescents (29 male) aged 13 to 18 years were included in a total of six focus groups. This reflects the gender distribution within the schools as boys are two and a half times more likely to have statements of SEN at primary schools and nearly three times more likely to have statements at secondary schools compared to girls (Department for Education, 2014). All participants had some form of Additional Support Needs (ASN).

### *2.2 Design and Procedure*

The study employed a qualitative design, using Framework Analysis (Ritchie & Spencer, 1994) to analyse data collected from six focus groups. Focus groups are collective discussions that aim to explore a particular set of issues, where the interaction and discussion that occurs between group members is key in the generation of data (Kitzinger, 1995). As a result it may be considered that focus groups allow richer and more in-depth data to be collected (Rabiee, 2004). Focus groups are considered to be an appropriate method of data collection in exploratory research (Vaughn, Schumm & Sinagub, 1996) and has also been used in closely related research on perceived online risks (Smahel & Wright, 2014).

Llewellyn and Northway (2008) identified issues relating to running focus groups comprised of individuals with cognitive impairment. These included the need to keep the group members' attention for a set amount of time, and to ensure that all members have the opportunity to contribute. A further issue is the potential for staff supporting group members, if this is required, to influence the contributions made resulting in less accurate findings. However, focus groups have been identified as a valuable method of allowing individuals with learning difficulties to engage in discussion and put forward their views on a particular topic (Barr, McConkey & McConaghie, 2003) although certain adaptations may be required to ensure engagement and the success of focus groups with this population. One important modification related to the duration of groups where it was considered that a break must be included at the mid-point. Attempts were also made to minimise the risk of personal disclosures by making participants aware that the group was not an appropriate setting to discuss such information. Group rules were discussed and agreed upon at the beginning of each group and the researcher re-directed the



discussion when necessary, reassuring the individual that these issues could be explored in a safe space if required.

### *2.3 Researcher Background*

At the time of writing, the first author was a final year trainee on a Doctorate in Clinical Psychology program. She had developed an interest within the current area of research following work with individuals with a range of learning and developmental difficulties. This work had highlighted difficulties experienced by this client group on the internet and the resultant negative impact of these on their mental health. Individuals had described cyberbullying online and contact with unknown people resulting in anxious and depressive symptoms. In addition, this experience had highlighted that some individuals were unsure of how to deal with such issues when they arose, or had made use of unhelpful or risky strategies to manage difficulties.

### *2.4 Ethics and Informed Consent*

Ethical approval was received from the first author's educational institution and from the local education department within the participating area. Informed consent was obtained both from participants and their parents or guardians. These young people were seen as able to give informed consent to the research, as opposed to assent to decisions about participation (Declaration of Helsinki, 1964, amended 2013).

### *2.5 Recruitment*

Participants were required to meet all three of the incorporated inclusion criteria (Text Box 1). Moderate Learning Difficulties (MLD), Social, Emotional and Behavioural difficulties (SEB), and Autistic Spectrum Disorder (ASD) were categories of ASN included in the current study, taken from The Highland Practice Model (The Highland Council, 2012). Recruited participants presented with a range of diagnoses (e.g. ADHD, global developmental delay, unspecified learning difficulties and ASD).

## 2.6 Demographics

Group demographics are reported in Table 1. Reason for ASN data is incomplete for one participant in group six.

**Text Box 1:** Inclusion and exclusion criteria for participant recruitment.

### *Inclusion Criteria*

Participants were required to:

1. Be aged between 13 and 18 years
2. Have ASN which causes them to require additional input within school and falling within at least one of three of the categories included within the Stages of Intervention framework as reason for ASN, taken from the Highland Practice Model (The Highland Council, 2012):
  - a. Autistic Spectrum Disorder (ASD)
  - b. Other Moderate Learning Difficulty (MLD)
  - c. Social, Emotional and Behavioural difficulties (SEB)
3. Receive additional support including work in a small group out with class or 1:1 support, a modified timetable or time out of class.

### *Exclusion Criteria*

Participants were excluded due to:

1. An inability to contribute meaningfully to the group discussion as a result of severe social and communication difficulties, which have been considered to prevent participants from fully engaging (Hoole & Morgan, 2010), as judged by a teacher familiar with the ability of potential participants **Point 10**

Or

2. Falling into the category of Dyslexia alone (included as one of the reasons for ASN within The Highland Practice Model, 2012).

participate. Schools were provided with verbal and written information regarding the project. Discussion meetings with staff members were arranged with schools which had expressed an interest, and these were used to inform the methodology of the research and its ethical management. Teachers subsequently identified potential participants who met the agreed inclusion criteria, and were deemed capable of giving

informed consent, and the first author met with these groups to provide further information about the study and what it would involve. Participants and their parents/guardians received an information sheet detailing the project along with consent forms. Both were required to complete and return the consent forms prior to inclusion in the study.

**Table 1.** Demographic information for participants included in each focus group.

Group	Sex (no.)		Age		Reason for ASN (no.)		
	M	F	Range	Mean (SD <sup>a</sup> )	ASD	MLD	SEB
<b>1</b>	7	1	14-17	(M = 15.75, SD = 1.28)	3	5	
<b>2</b>	4	2	14-16	(M = 14.67, SD = 0.82)	2	4	
<b>3</b>	7	0	13-17	(M = 15.43, SD = 1.72)	5	2	
<b>4</b>	4	2	14-16	(M = 15, SD = 0.63)	1	4	1
<b>5</b>	4	0	15-17	(M = 16.25, SD = 0.96)	3	1	
<b>6</b>	3	2	13-17	(M = 14.6, SD = 0.89)		4	
<b>Total</b>	<b>29</b>	<b>7</b>	<b>13-17</b>	<b>(M = 15.28, SD = 1.21)</b>	<b>14</b>	<b>20</b>	<b>1</b>

Six focus groups with young people took place in six participating schools. Each consisted of a single 120 (maximum) minute session, including a 15-minute break at the halfway point and 15 minutes at the end for de-briefing. The focus groups involved discussion about group members' use of the internet and their awareness and experience of related advantages, risks and possible psychological impact. A focus

---

<sup>a</sup> Standard Deviation (SD)

group guide, in a topic guide format (Arthur & Nazroo, 2003) was developed for the groups (see Appendix A). The group discussions were digitally recorded.

### *2.8 Data Analysis*

The digital recordings were transcribed and data were analysed using Framework Analysis (Ritchie & Spencer, 1994) involving a five-stage process. Familiarisation was achieved by listening to the recordings, reading over the transcriptions and consulting notes taken during groups. At this stage general themes were identified. Following this, a thematic framework, or Index, was developed (Rabiee, 2004) by identifying links between the main ideas and grouping these into emerging themes. The framework (Index) was initially formed using the data from three of the focus groups and was subsequently systematically applied to the whole data set, amending if required, in a process called Indexing. The final stage involved summarising, synthesising and interpreting the data to allow the development of a thematic chart in an attempt to produce a reliable account of the findings (Ritchie, Spencer & O'Connor, 2003).

### *2.9 Ensuring the Quality of Results*

Considerations suggested by Yardley (2000) and guidelines proposed by Elliott, Fischer & Rennie (1999) were adopted to enhance the quality of the analysis. These included making relevant information about the researcher's background and previous experience explicit to the reader; reflecting on the process throughout; keeping notes and a reflective log as an audit trail (Kidd & Parshall, 2000; Rabiee, 2004) and including others in the analysis process. Concurrent coding took place, by two of the other authors, of sections of the transcripts, and discussion at each stage of the analysis.

## **3. Results**

Two main themes were identified within the framework analysis: 'Identity and Connectedness' and 'Issues relating to Risk'. The latter is presented in the current paper and was made up of four sub-themes. These are illustrated using extracts from the focus groups.

1. Awareness and experience of different types of risk
2. Managing risk online
3. Intentional risk-taking behaviours
4. Unintentional risk and 'talking the talk'

A visual representation of the main over-arching theme and corresponding sub-themes can be seen in Figure 1.

### *3.1 Awareness and experience of different types of risk*

This sub-theme, present in all six groups, reflected discussion relating to the different types of risk that participants considered to be present online, including those that group members have encountered as well as others they may be aware of. This included problems online escalating into 'real life' such as arguments on the social networking site Facebook resulting in fights at school, as well as outcomes that seemed outside of what they or their friends may have experienced:

Group 2: *"these two girls kept saying on Facebook there was gonna be a fight and all that and like the fight happened but one girl got a broken nose"*

Group 2: *"you can get like prostitution, you can get like kidnapped and taken like across the world"*

There was also discussion relating to the possibility of personal details and images being exposed, contact with strangers who may be able to influence young people's behaviour and risk to physical safety resulting from exposure to particular online content, such as pro-suicide websites:

Group 3: *“They were selling on the internet they were selling suicide bags”*

In addition, some group discussion focused on the amount of time spent online which was felt may have an impact on an individual in their offline environment:

Group 6: *“I used to be online and you’d be on til like three o’clock in the morning”*

Further to this, discussion also related to risk associated with social interaction, such as talking to strangers, online individuals not being who they say they are, and difficult interactions including hurtful things being posted about others:

Group 1: *“do you remember at school the boys that fell out? And they put on things about each other at school?...they got into trouble didn't they?”*

Group members also discussed experiences of friends hacking into their online accounts and potentially causing difficulties within their social network:

Group 3: *“They [hackers] just wrote comments to my friends and that”*

Group 4: *“online people can like say things and... things like you're nothing but a retard”*

Discussion also highlighted the impact such online issues can have on the group member’s understanding of other’s behaviour and their level of trust:

Group 3: *“when I was I was on the internet and I confided in a friend that I thought was a friend...to tell her something that had happened outside school that was pretty bad, so bad that I had to get the police involved and my mum...and then next thing it was told to a boy in school”*

Related to this were concerns two groups raised regarding the recording of the focus groups. They queried what would happen to the recordings and appeared to be discouraged from discussing certain topics as a result of this:

Group 4: *“Don’t mention anything”*

Group 4: *“Remember we’re being recorded”*

All six focus groups talked about online risks to psychological health and well-being, and causes of emotional distress. This included young people with ASN being exposed to inappropriate sexual content, experiencing difficulties online that they found upsetting and the possibility of being exploited.

Group 2: *“I got angry cause this guy deleted all my stuff and eh eh didn’t let me speak to all my mates and that so I just punched the wall”*

Group 5: *“And one time I had a pop up like a proper dirty pop up like a porn pop up...[felt] disgusted actually...violated...basically means that I felt as if I had done something wrong”*

Group 6: *“Omegle...webcasts at random...they say four out of every five people will probably be doing something sexual...it comes up random you can’t pick what’s next”*

Group members also made reference to possible cyberbullying experiences:

Group 6: *“and then and then they get your number off your facebook and then I started getting texts and we had to report it to the police basically because I was getting called a Sped and all this which means special educated”*

One individual discussed an upsetting event where peers without ASN had encouraged him to view an internet site containing inappropriate content:

Group 3: *“I didn’t know what it was the first time until I was until a pupil said to me \*\*\*\*\* you should go on Redtube and I was like what’s Redtube...so I did and then I was like oh my gosh”*

### *3.2 Managing risk online*

This sub-theme, common across all focus groups and producing the largest number of codes, related to an awareness and use of behaviours to manage online risk. The groups described behaviours that could be, or are being, used as risk-management strategies:

Group 2: *"I asked my dad to change my password so no-one can get it now"*

Group 4: *"Don't put any personal information...where anyone can see it...like your email...your address...telephone number that sort of thing"*

Group 6: *"there are some things that you can do to... like I've got mine...you set up your secure system that when you search for something and it comes up on google...yeah yes greensticks it'll scan each site...to see if there are any obvious viruses"*

Some individuals described deleting the history on their computer as a way of staying safe, although it was not clear how they thought that this might be useful. Additional strategies included: not adding people who were unknown, "If you don't know them, don't add them" (Gp1); reporting problems, "If I'll be perfectly honest the best thing about that would probably have been to contact the police" (Gp 3); maintaining privacy, "Keeping your personal information to yourself is probably the single best thing you can do online" (Gp 3), and being careful of the content that was uploaded "Don't put pictures up that you wouldn't want... your mum to see" (Gp 4).

All six groups highlighted the behaviour of other people in an attempt to keep them safe, for example parents supervising their online activity:

Group 4: *"My mum sometimes looks at the history"*

Group 6: *"yeah she like blocked my Facebook...cause I was talking to \*\*\* too much...spent like hours in the morning, up late, just yap talking too much"*



What was also discussed was how these young people managed to avoid being supervised:

Group 5: *“she asks what I’m doing, she’s asking who I’m speaking to after I come off and I said Oh I’ve just been speaking to the usual \*\*\* and all that’s on my Facebook”*

Group 6: *“I know I know just about every password she could put on”*

Young people also worried that if they spoke to adults about problems on the internet, they may lose their privileges to use it:

Group 4: *“I’d tell my sister cause if I told my mum about something bad I probably won’t get back on the computer again and that’d just be a pain”*

Group 1: *“no, we’re not allowed on Facebook... they’ve blocked Facebook”*

Parental lack of knowledge was also raised as an issue:

Group 5: *“My dad says he doesn’t say anything because he doesn’t know that much he just keeps out of it”*

However, there was also discussion of learning from others (including parents) how to stay safe:

Group 3: *“my mum had a wee talk to me about it, going on dirty websites and all that”*

Group 5: *“they were just being nasty...so my sister said it’s eh about time that we took this off before it gets worse”*

As well as learning from their own previous experience:

Group 2: *“So I reported him and then nothing else, I haven’t seen any comments coming up with friends”*

Group 4: *“I use to have my phone number and address and everything on it [Facebook] but then I took it off again because weird people kept calling me”*

Occasionally reference was made to safety strategies that appeared to mirror the problematic behaviour of others:

Group 4: *“Send abuse back”*

Or to refer to offline contexts rather than online:

Group 3: *“Lock all your back doors”*

### 3.3 Intentional risk-taking behaviours

This sub-theme occurred in all six focus-groups and related to young people with ASN intentionally engaging in behaviours that could put them at risk online. Although it was often unclear as to their motivation for behaving, or claiming to behave in this way, there was some indication that such behaviours could be linked to social pressure to conform or a need by the individual to develop and maintain a particular image:

Group 1: *“no, before you bloke them you can poke them”*

Group 3: *“I went through a stage when I used to watch completely bad things on YouTube”*

Group 4: *“I like downloading programs, software...illegal stuff”*

Group 6: *“And just even if they don’t know the person will just add as many people as they can just random”*

### 3.4 Unintentional risk and ‘talking the talk’

This sub-theme focused on examples of what appeared to be unintentional risk-taking by young people with ASN. This highlighted both the types of behaviours being engaged in and possible reasons as to why this may be the case. Some group members described engaging in risk taking as a result of not being aware that the behaviour is illegal (downloading music) for example:

Group 3: *“No [not illegal] because it’s free”*

Or assuming that a social networking account belonged to a female, and therefore safer to accept a friend-request from, because they had stated this on their profile page:

Group 3: *“Cause it says on her Facebook page gender female”*

In addition, unintentional risk-taking was highlighted which may result from the disparity between what this group of young people seem aware they should do and the reality of putting such strategies into practice:

Group 1: *“You go on them by mistake”*

Group 2: *“I sometimes like add people that I know and then I’m like I don’t even know that person why did I add it?”*

Within the groups individuals often sought advice from others who were more able to provide guidance and information:

Group 3: *“How do you delete your Facebook account?”*

Group 4: *“I’ve learned some things too...that you can delete people off Facebook...and not to click you know that you won a holiday because it’s not a holiday”*

Group 6: *“You can block people though...and you can deny friend requests and say you can only receive messages from friends for instance...that’s why you don’t accept them unless you know them”*

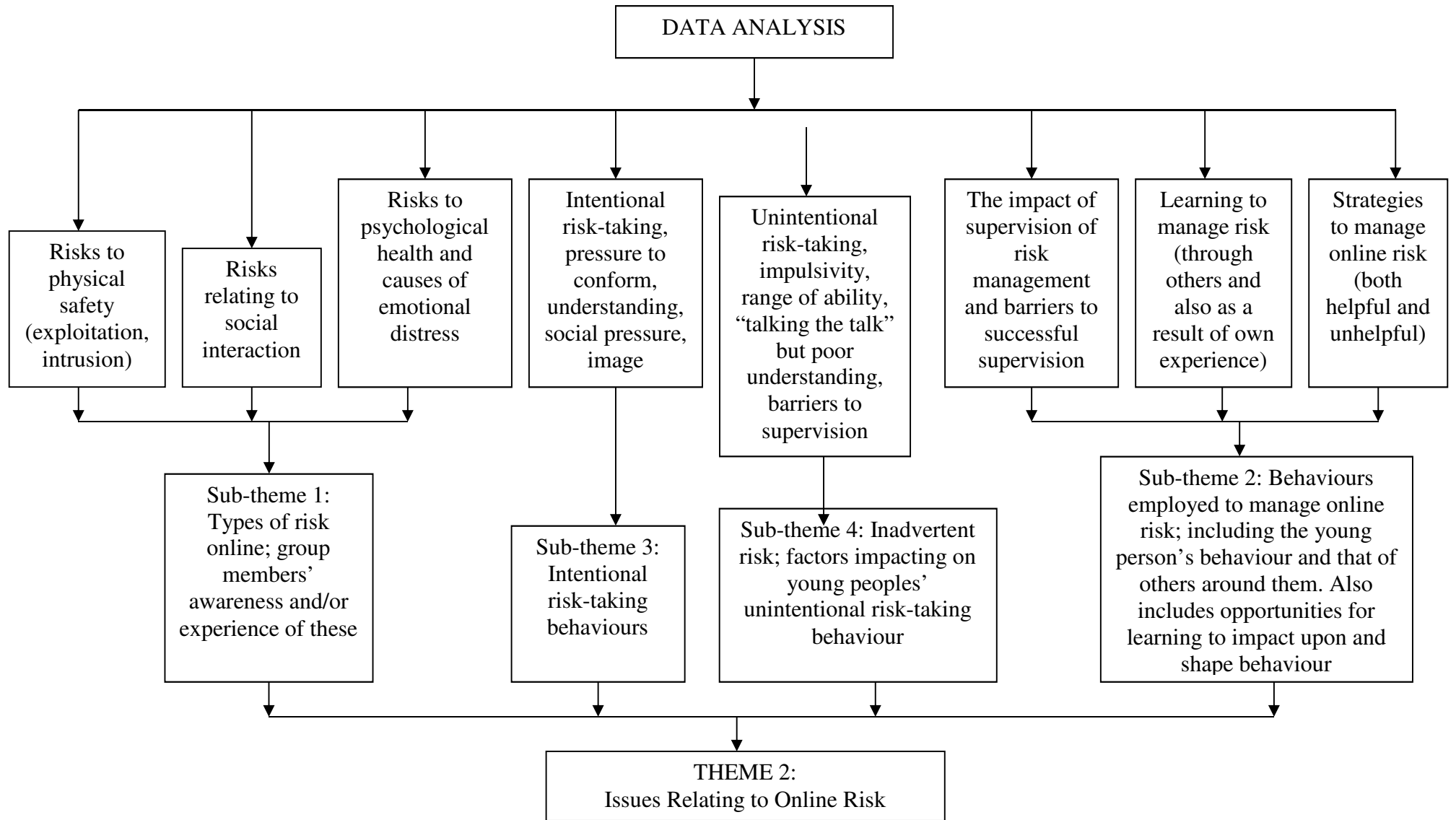
These exchanges of information within the groups seemed to provide opportunity to learn from peers, but this was also mirrored in learning from the experiences of others known to them, “someone drew on my brother’s back and wrote a bad word and then they took a picture of it... and then my brother put it on Facebook” (Gp 4). Safety messages were also noted from educational materials, “once, as the slogan on some of the posters down there say, once the photos online you have no control over it” (Gp

3), and occasionally news stories, “there have been cases in the past... there was one all over the news where a 14-year-old girl that actually got into an online relationship with a supposedly 15-year-old guy... agreed to meet him... it was a 42-year-old man”

(Gp

3).

**Figure 1.** Development of Theme 2 following framework analysis of the data



#### **4. Discussion**

The current results show that the young people with ASN included in the current study show high levels of awareness of online risks, such as cyberbullying (including references to their 'special needs') and exposure to distressing sexual content and behaviour. Some group members appeared to be well aware of the possible dangers and described making use of a range of strategies to manage these. Others appeared less able to successfully manage these risks however, and within the focus groups asked questions of each other about practical approaches to blocking other users and reporting problematic content. Findings indicated that some group members could *talk* about how to stay safe, but were not always able to put these into practice, for example by illustrating that they were unsure how to make a profile private and describing having previously befriended a stranger online. There was also disclosure of intentional risk taking in their online behaviour, while for others, risk taking appeared to be a result of poor understanding of the implications of what they were doing. There was also variation in the level of supervision offered by others, such as parents, to monitor internet use in this group. For some young people supervision was circumvented, and there were also concerns about parental reactions to risk-taking, which were often described as removal of internet or mobile phone privileges.

This is one of the few studies considering young people with ASN and their perceptions of online risk and its management. Other studies have noted that online risk-taking may have serious implications for some young people, with extreme cases of cyberbullying having been linked to suicide completion in adolescents without ASN (Donnerstein, 2012; Mitchell et al., 2005; Valke, De Wever, Van Keer & Schellens, 2011). Exposure to inappropriate sexual content has also been considered to impact on a young person's attitudes to sexual behaviour and in some cases has

been shown to link to earlier engagement in sexual activity (Strasburger, Jordan & Donerstein, 2012). It is unclear what the impact of such exposure may be within the ASN population.

There appears to be considerable overlap between the findings of this study and those reported in previous research with non-ASN populations. The young people within the current focus groups were able to talk about problematic situations that they had either experienced or knew of, such as content that was violent or sexual, as well as sending “friend requests” or communicating with people who were not their own age. There was also reference by some young people to sharing sexual pictures, although less reference than in other studies as a bid to attract peers (e.g. Smahel & Wright, 2014). While there appeared to be considerable discussion about not sharing personal information, it seems likely that this was still commonplace as it was often done without full appreciation at the time that it may be a problem. It is interesting that similar to Smahel and Wright’s (2014) non-ASN sample of younger people, many of the current focus groups included those whose accounts were strongly informed by media stories, which was reflected in a more sensationalist tone. This may suggest additional issues which place young people with ASN at even greater risk than those without, highlighting the importance of research with this population. These include cognitive deficits which may impact on the ASN groups’ ability to cope with and manage any difficulties encountered.

#### *4.1 Range of Ability*

Young people with ASN can present with a range of impairments including attention and concentration problems (e.g. in ADHD) and cognitive deficits impacting on their ability to think abstractly, make decisions and generalise information across environments. This was evidenced in the current study, in that many young people

were able to describe ways, for example, of managing problematic behaviour from others, but in practice often appeared unable to adapt these to situations they encountered. Issues relating to inhibitory control and social problems (e.g. in ASD) are also common in ASN populations (Davidson, Neale & Kring, 2004; Fuster, 2002; Mayes & Calhoun 2007; Westwood, 2011), which may have resulted in some young people resorting to strategies that were likely to also get them into trouble if they had been discovered..

Concrete thinking, describing logical thinking based on concrete events and own experience (Bjorklund, 2005), was demonstrated in some of the online safety strategies put forward by group members, including approaches that may be helpful in offline environments but may not be effective online. This may be of particular importance in relation to inappropriate online sexual behaviour and content, which seemed to cause distress and confusion for some of the young people, and which for others, also led to further inappropriate behaviour as a form of retaliation, also seen in non-ASN adolescents (Livingstone & Brake, 2010). It is unclear whether this might also put them at further risk of exploitation as, in the context of social relationships, it was apparent that information provided by others was often taken at face value. The ASN population also experience specific difficulties understanding social situations and developing age-appropriate, mutually satisfying social relationships (Bellini, 2004; Carr, 2006; Vaughn, Elbaum & Schumm, 1996) and may experience difficulty differentiating between appropriate and inappropriate contact and social conduct norms, placing them at increased risk of exploitation and exposure. This issue was raised by one current participant who had viewed pornographic material having been told to do so by peers without ASN.



#### *4.2 Social Issues*

As well as risk-taking being a result of poor levels of understanding, intentional risk-taking behaviour was also reported within the focus group discussions, which may be linked to social acceptance and peer influence, as has been documented in research with non-ASN adolescents (Gardner & Steinberg, 2005; Steinberg, 2004). Young people reported contacting strangers, acting in ways that may provoke aggression and insults from others and choosing not to put safety strategies in place, despite acknowledgment that such behaviours would put them at increased risk.

Risk-taking is considered a normal aspect of adolescent development, and can include behaviours such as drinking alcohol and misusing illicit substances (Steinberg, 2004). During adolescence the rate of development in the prefrontal cortex, considered to be involved in impulse control (De Luca & Leventer, 2010), develops more slowly than areas involved in pleasure and sensation seeking (Bee & Boyd, 2004; Steinberg, 2004; 2007). This imbalance between the motivational system and the regulatory system (Choudhury & McKinney, 2013) is therefore likely, as in the general adolescent population, to result in young people with ASN being less able to make considered choices and inhibit risk-taking urges as a result of their stage of neurodevelopment. Further to this, as well as the ASN group being considered more likely to engage in risk-taking behaviour than those without ASN (McNamara & Willoughby, 2010), a relationship between social exclusion and risk-taking behaviour has been proposed (Peake, Dishion, Stromshak, Moore & Pfiefer, 2013), indicating that individuals considered to have greater susceptibility to the influence of peers take significantly more risks following social exclusion. Such findings may have implications for the ASN population due to this group commonly experiencing social difficulties and potential social exclusion (Cerebra, 2012).

### *4.3 Supervision*

Results showed that while some parents and guardians were reported to put supervisory strategies in place (blocks to certain sites, limits to time online, and checking history) others did not. Further issues with regards to the quality of what monitoring was in place were also raised, such as how able parents were to monitor online activity when many group members are making use of portable devices to access the internet, including ipods, mobile phones and computer tablets, as has also been shown in the general population (Donnerstein, 2012). It was also clear that many of the young people were, or felt themselves to be, more skilled online than their parents, being able to bypass the blocks and passwords put in place by parents and schools which may undermine such controls.

What was encouraging was that many of the young people looked to parents, other family members and occasionally teachers for advice, and used the information around them to inform their ideas about managing online risk. This was also apparent within the focus groups where peers shared with each other strategies to manage unwelcome behaviour, as well as providing very basic information about how to use certain sites, such as Facebook. The opportunities to learn from others, particularly peers, is important, and much more likely to be sought if it is not accompanied by threats of removal of internet privileges (Agatston, Kowalski & Limber, 2007; Tynes, 2007). One group member within the current study for example, mentioned that she would tell her sister about issues online but not her mum for this reason. These findings have implications in relation to how best to support parents to ensure the safety of the ASN group online, especially where disclosures are made (Robinson, 2013).

### *4.5 Strengths and Limitations*

Focus groups are thought to encourage active participation by group members due to the non-threatening environment (Moffat, Dorris, Connor & Espie, 2009). However, it is possible that some group members may have felt less able to discuss particular issues as a result of knowing the other members, therefore under-playing the issues present. Alternatively young people may have embellished their reported experiences in an attempt to show off to friends.

Limitations may also include the heterogeneity of the ASN group included, as well as the adult group facilitator, use of school facilities in which to run groups and recording equipment, which was noted to cause anxiety for some participants and may have resulted in participants being less forthcoming within discussions. In addition, more male than female participants were recruited within the current study. While this reflects the demographics of this population within schools, it may be that this gave a gendered perspective to the content of some of the discussion, and may have inhibited some of the female participants.

#### *4.6 Conclusion*

The current study shows that the young people with ASN included in the current study are aware of a range of risks when using the internet, some of which may impact adversely on their psychological well-being. They also demonstrate knowledge of multiple strategies to manage problematic content and engagement. Findings highlight variation in ability across this group, with some young people with ASN being aware of risks online and having the ability to put appropriate safety strategies in place, whilst others appeared less able resulting in them putting themselves unintentionally at risk. Furthermore, the results indicated that some young people with ASN may appear to have a greater understanding of particular online issues than they actually do, such as how to make their online profile private, as well

as others engaging in intentional risk-taking behaviours. There was also considerable variation in monitoring and supervision of online behaviour. Further research in this area, perhaps including parents and teachers, would be of benefit to consider how best to support young people with ASN to remain safe whilst making use of the valuable resources available on the internet.

## **6. References**

- Agatston, P. W., Kowalski, R. M. & Limber, S. E. (2007). Students' perspectives on cyber bullying. *Journal of Adolescent Health, 41*, 59-60.
- Arthur, S. & Nazroo, J. (2003). Designing fieldwork strategies and materials. In Ritchie, J. & Lewis, J. (Ed.), *Qualitative research practice. A guide for social science students and researchers* (pp. 109-137). London: Sage.
- Barr, O., McConkey, R., & McConaghie, J. (2003). Views of People with Learning Difficulties about Current and Future Accommodation: the use of focus groups to promote discussion. *Disability & Society, 18*(5), 577-597. doi:10.1080/0968759032000097834
- Bee, H. & Boyd, D. (2004). *The developing child*. (10<sup>th</sup> ed.). Boston: Pearson Education, Inc.
- Bellini, S. (2004). Social skills deficits and anxiety in high-functioning adolescents with autistic spectrum disorders. *Focus on Autism and Other Developmental Disabilities, 19*(2), 78-86. doi: 10.1177/10883576040190020201
- Bjorklund, D. F. (2005). *Children's Thinking: Cognitive Development and Individual Differences*. (4<sup>th</sup> ed.). Belmont, CA: Wadsworth/Thomson Learning.
- Carr, A. (2006). *The handbook of child and adolescent clinical psychology*. (2<sup>nd</sup> ed.). London: Routledge.
- Cerebra (2012). *Learning disabilities, Autism and internet safety: A parent's guide*. Retrieved from

[http://www.netbuddy.org.uk/static/cms\\_page\\_media/101/Learning Disabilities Autism and Internet Safety Parents Guide.pdf](http://www.netbuddy.org.uk/static/cms_page_media/101/Learning_Disabilities_Autism_and_Internet_Safety_Parents_Guide.pdf)

Choudhury, S. & McKinney, K. A. (2013). Digital media, the developing brain and the interpretive plasticity of neuroplasticity. *Transcultural Psychiatry*, 50(2), 192-215.

Cross, E., Piggin, R., Douglas, T. & Vonkaenel-Flatt, J. (2012). *Virtual violence II: Progress and challenges in the fight against cyberbullying*. London: Beat Bullying.

Davidson, G. C., Neale, J. M. & Kring, A. M. (2004). *Abnormal psychology*. (9<sup>th</sup> ed.). Hoboken, NJ: John Wiley & Sons, Inc.

Declaration of Helsinki (1964). *WMA Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects*. Retrieved from <http://www.wma.net/en/30publications/10policies/b3/>

Del-Manso, H., Bailey, A., Hughes, T., Findlater, D. & Findlater, J. (2011). *Internet safety and children with special educational needs*. The Lucy Faithfull Foundation.

Department for Children, Schools & Families (2008). *Safer children in a digital world: The report of the Byron Review*. Retrieved from <http://www.ict.norfolk.gov.uk/content/655/files/safer%20children%20in%20a%20digital%20world.pdf>

Department for Education (2014). *Children with Special Educational Needs 2014: An Analysis*. Retrieved from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/350129/SFR31\\_2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/350129/SFR31_2014.pdf)

Department for Education (2013). *Special Educational Needs in England, 2013*. Retrieved from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/225699/SFR30-2013\\_Text.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/225699/SFR30-2013_Text.pdf)

- Didden, R., Scholte, R. H. J., Korzilius, H., De Moor, J. M. H., Vermeulen, A., O'Reilly, M. & Lancioni, G. E. (2009). Cyberbullying among students with intellectual and developmental disabilities in special educational settings. *Developmental Neurorehabilitation*, 12(3), 146-151.
- Donnerstein, E. (2012). Internet bullying. *Pediatric Clinics of North America*, 59(3), 623-633.
- De Luca, C. R. & Leventer, R. (2010). Developmental trajectories of executive functions across the lifespan. In Anderson, V., Jacobs, R. & Anderson, P. J. (Eds). *Executive Functions and the Frontal Lobes: A Lifetime Perspective*. Psychology Press: New York. (pp. 23-56).
- Education Act (1996). London: HMSO.
- Elliott, R., Fischer, C. T. & Rennie, D. L. (1999). Evolving guidelines for publication of qualitative research studies in psychology and related fields. *British Journal of Clinical Psychology*, 38, 215-229.
- Fuster, J. M. (2002) Frontal lobe and cognitive development. *Journal of Neurocytology*, 31(3-5), 373-385.
- Gardner, M. & Steinberg, L. (2005). Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: An experimental study. *Developmental Psychology*, 41(4), 625-635.
- Hoole, L. & Morgan, S. (2010). 'It's only right that we get Involved': Service-user perspectives on involvement in Learning Disability services. *British Journal of Learning Disabilities*, 39, 5-10.
- Kidd, P. S. & Parshall, M. B. (2000). Getting the focus and the group: Enhancing analytical rigor in focus group research. *Qualitative Health Research*, 10 (3), 293-308.
- Kitzinger, J. (1995). Introducing Focus Groups. *BMJ: British Medical Journal*, (7000). 299.

- Kowalski, R. M. & Fedina, C. (2011). Cyber bullying in ADHD and Asperger Syndrome populations. *Research in Autistic Spectrum Disorders*, 5, 1201-1208.
- Lenhart, Simon & Graziano (2001). *The Internet and Education: Findings of the Pew Internet & American Life Project*. Retrieved from <http://www.eric.ed.gov/PDFS/ED457849.pdf>
- Livingstone, S. & Brake, D. R. (2010). On the rapid rise of social networking sites: new findings and policy implications. *Children & Society*, 24(1), 75-83. doi: 10.1111/j.1099-0860-2009-00243.x
- Livingstone, S., Görzig, A. & Ólafsson, K. (2011). *Disadvantages children and online risk*. LSE, London: EU Kids Online.
- Livingstone, S., Haddon, L., Görzig, A., and Ólafsson, K. (2011). *Risks and safety on the internet: The perspective of European children. Full Findings*. LSE, London: EU Kids Online.
- Livingstone, S., & Smith, P. (2001). Annual Research Review: Harms experienced by child users of online and mobile technologies: the nature, prevalence and management of sexual and aggressive risks in the digital age (English). *Journal Of Child Psychology And Psychiatry And Allied Disciplines*, 55(6), 635-654.
- Llewellyn, P., & Northway, R. (2008). The views and experiences of people with intellectual disabilities concerning advocacy: a focus group study. *Journal Of Intellectual Disabilities*, 12(3), 213-228.
- Machmutow, K., Perren, S., Sticca, F. & Alsaker, F. D. (2012): Peer victimisation and depressive symptoms: can specific coping strategies buffer the negative impact of cybervictimisation? *Emotional and Behavioural Difficulties*, 17(3-4), 403-420.

- McKenzie, K., & Murray, A. (2011). E-learning benefits nurse education and helps shape students' professional identity. *Nursing Times*, 106(5), 17-9.
- McNamara, J. K. & Willoughby, T. (2010). A longitudinal study of risk-taking behaviour in adolescents with Learning Disabilities. *Learning Disabilities Research & Practice*, 25(1), 11-24.
- Mayes, S. D. & Calhoun, S. L. (2007). Learning, attention, writing and processing speed in typical children and children with ADHD, Autism, anxiety, depression, and Oppositional-Defiant Disorder. *Child Neuropsychology: A Journal on Normal and Abnormal Development in Childhood and Adolescence*, 13(6), 469-493. doi: 10.1080/09297040601112773
- Mitchell, K. J., Becker-Blease, K. A. & Finkelhor, D. (2005). Inventory of problematic internet experiences encountered in clinical practice. *Professional Psychology: Research and Practice*, 36(5), 498-509.
- Ólafsson, K., Livingstone, S., & Haddon, L. (2013). *Children's Use of Online Technologies in Europe. A review of the European evidence base*. LSE, London: EU Kids Online.
- Peake, S. J., Dishion, T. J., Stromshak, E. A., Moore, W. E. & Pfeifer, J. H. (2013). Risk-taking and social exclusion in adolescence: Neural mechanisms underlying peer influences on decision making. *NeuroImage*, 82, 23-34.
- Rabiee, F. (2004). Focus-group interview and data analysis. *Proceedings of the Nutrition Society*, 63, 655-660.
- Ritchie, J. & Spencer, L. (1994). Qualitative data analysis for applied policy research. In Bryman, A & Burgess, B. (Ed.), *Analysing Qualitative Data* (pp. 173-194). New York: Routledge.



- Ritchie, J., Spencer, L. & O'Connor, W. (2003). Carrying out Qualitative Analysis. In Ritchie, J. & Lewis, J. (Ed.), *Qualitative Research Practice. A Guide for Social Science Students and Researchers* (pp. 219-262). London: Sage.
- Robinson, E. (2013). Parental involvement in preventing and responding to cyberbullying. *Family Matters*, 92, 68-76.
- Smahel, D. & Wright, M.F. (eds) (2014). *Meaning of online problematic situations for children. Results of qualitative cross-cultural investigation in nine European countries*. London: EU Kids Online, London School of Economics and Political Science.
- Steinberg, L. (2004). Risk taking in adolescence: What changes, and why? *Annals of the New York Academy of Sciences*, 1021, 51-58. doi: 10.1196/annals.1308.005
- Steinberg, L. (2007). Risk taking in adolescence: New perspectives from brain and behavioral Science. *Current Directions in Psychological Science*, 16, 2, 55-59. doi: 10.1111/j.1467-8721.2007.00475.x
- Strasburger, V. C., Jordan, A. B. & Donerstein, E. (2012). Children, adolescents, and the media: Health effects. *Paediatric Clinics of North America*, 59(3), 533-587.
- The Highland Council, (2012). The Highland Practice Model-Delivering Additional Support for Learning. Retrieved from <http://www.highland.gov.uk/NR/rdonlyres/A9BB9324-9F5D-49EC-A4E3-BBBC7937676E/0/WorkingCopyTheHighlandPracticeModelDeliveringASN20123Jan2013.pdf>
- The Scottish Government (2004). Education (Additional Support for Learning) (Scotland) Act 2004, 2004 asp 4.
- Tynes, B.M. (2007). Internet safety gone wild? Sacrificing the educational and psychosocial benefits of online social environments. *Journal of Adolescent Research*, 22(6), 575 – 584.

- Valke, M., De Wever, B., Van Keer, H. & Schellens, &. (2011). Long-term study of safe internet use of young children. *Computers & Education*, 57, 1292-1305.
- Vaughn, S., Elbaum, B. E. & Schumm, J. S. (1996). The effects of inclusion on the social functioning of students with Learning Disabilities. *Journal of Learning Disabilities*, 29(6), 599-608. doi: 10.1177/002221949602900604
- Vaughn, S., Schumm, J., & Sinagub, J. (1996). *Focus group interviews in education and psychology*. Thousand Oaks, Calif. ; London : Sage
- Westwood, P. (2011). *Commonsense methods for children with special educational needs*. (6<sup>th</sup> ed.). Oxon: Routledge.
- Wiener, J. & Mak, M. (2009). Peer victimization in children with Attention-Deficit/Hyperactivity Disorder. *Psychology in Schools*, 46, 116-131.
- Yardley, L. (2000). Dilemmas in qualitative health research. *Psychology and Health*, 15, 215-228.

## **Appendix A: Focus Group Guide**

Focus group guide: First half of group (45 minutes)

### **1) Use of computer (15 minutes)**

Do you use a computer?

What do you use a computer for? (Internet? Online?)

When/Where do you use a computer/go on the internet?

Who knows when you are on the internet?

Are there other ways you can be online/on the internet?

### **2) Friends/relationships (15 minutes)**

What are friends?

Who are your friends?

How do you know them?

Do you have friends on the internet?

What do you do/talk about with your friends on the internet?

Are your friends on the internet the same as your other friends?

### **3) Bad things about the internet (15 minutes)**

Are there any bad things/dangers about the internet?

What are they?

Why are they bad?

Are there things that are not ok for people to do/to happen on the internet?

**What effect can these things have?**

**How might they make the person feel?**

## **Break**

Second half of group (45 minutes)

### **Re-cap point 3) bad things about the internet (10 minutes)**

### **4) Staying safe on the internet (20 minutes)**

What can you/young people do to stay safe/look after your/themselves on the internet?

What can you do to stop bad things happening on the internet?

If something on the internet makes you feel...what can you do?

Who can you talk to/ask about staying safe on the internet? Who can help you?

Are there things that your parents/teachers tell you to do to stay safe on the internet?

What would you do if something bad happened on the internet?

What would you tell your friend to do to stay safe on the internet?

### **5) Good things about the internet (15 minutes)**

Are there good things about the internet/being online?

What are they?

Why are they good?

How can the internet help you?