The protection of children online: a brief scoping review to identify vulnerable groups

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Executive summary

Ninety-nine percent of children aged 12-15 use the internet, as do 93% of 8-11 year olds and 75% of 5-7 year olds. New media technology means that the ways in which children are accessing online content are changing and ever evolving. Policy makers need research evidence to inform policies that articulate children's online risks, safeguard them from harm and promote their welfare. The Child Wellbeing Research Centre was commissioned by the Department for Education, working closely with the UK Council for Child Internet Safety (UKCCIS)[1] to explore what is currently known about children's vulnerability to harm from online activity or interactions. This also complements work undertaken by NFER (2010). This scoping review explores levels of intended and unintended exposure to specific risks; the impact of harm suffered by children; and the characteristics of children who may be at highest risk.

Cyberbullying

- Between 8-34% of children and young people in the UK have been cyberbullied
- 30% of a large sample of secondary school pupils in England have been deliberately targeted, threatened or humiliated by the use of mobile phones or the internet
- Girls are twice as likely to experience persistent cyberbullying than boys
- Vulnerable groups at greater risk include children with special educational needs (SEN), children in receipt of free school meals (FSM), children from Black and minority ethnic (BME) groups, children of Gypsy-Roma, Traveller of Irish Heritage, European and East European groups, children from Chinese groups and children of mixed ethnicity
- Exposure to cyberbullying results in significant levels of distress and stress with the highest levels reported in children aged 9-12
- Cyberbullying evokes stronger negative feelings, fear and a sense of helplessness than offline bullying and is linked to school failure, depression, anxiety and psychological problems
- The impersonal nature of online communication means that not all perpetrators intend to cause distress

Meeting online contacts offline, sexual solicitation and grooming

- A large US survey shows that one in 10 children and young people receive sexual solicitations of a distressing or aggressive nature

[1] UKCCIS brings together government, industry and charities to work in partnership to keep children and young people safe online by creating a safer online environment, improving online safety education and raising public awareness of how to enjoy the internet safely.

- US chat room users are four times more likely to receive unwanted sexual solicitations than other groups of children and young people
- UK chat rooms are mostly used by lower socio-economic groups and older teenagers
- 69% of online sexual solicitations involve no attempt at offline contact
- Offenders rarely pretend to be teenagers or deceive victims about their sexual interest; most victims who meet offenders expect to engage in sexual activity
- Young people may be more vulnerable in early adolescence as they become more sexually curious and experimental
- Young people defined as sensation seekers[2] are four times more likely to have met someone offline following online contact
- Victim typologies do not conform to any specific stereotypical assumptions of vulnerability; victims are a heterogeneous group with a range of characteristics
- Some victims of grooming would not be perceived as vulnerable offline
- Understanding the interaction between the offender, online environment and young person is essential to understanding the nature of online grooming, particularly the role of disinhibition.

Pornography and other harmful content

- A US survey reported 42% young people aged 10-17 being exposed to online pornography in a one-year period; 66% of this exposure was unwanted
- 11% of 9-16 year olds reported exposure to pornography in the UK; 24% of these children and young people were not bothered or upset by the experience
- rates of 'unwanted' exposure to pornography are higher amongst teenagers, young people who report being harassed or sexually solicited online or victimised offline, and those who are borderline or clinically depressed
- 'Wanted' exposure rates were higher for teenagers, those who talked online to unknown persons about sex, used the internet at friends' homes, or appeared to have a significant level of rule breaking behaviour
- There is a lack of adequate research on the impact that unwanted or unexpected exposure to pornography has on children and young people
- Seeing violent or hateful content was the third most common risk to young people
- Gaps in the evidence base include research on hateful or racist content, sites promoting self-harm, anorexia or suicide

[2] Slater and colleagues (2004) define 'sensation-seeking' as 'a dispositional tendency to seek out novelty and accept risk as a desirable source of arousal' (p.644).

Gaps in evidence base and recommendations for future research

Further research is required to enhance understanding of:

- The characteristics and circumstances that render some young people more vulnerable than others;
- The interplay between risk and protective factors in influencing outcomes; and
- Effective service responses to reduce the number of children suffering harm as a result of online activities

Background

Ninety-nine percent of children aged 12-15 use the internet, as do 93% of 8-11 year olds and 75% of 5-7 year olds (Ofcom, 2010). Children's use of the internet is also on the rise and new technology means that the ways that children are accessing online content are changing (European commission, 2006, 2008, OECD, 2011). These developments present both opportunities, serving as a channel for children's education, creativity and self expression, as well as a spectrum of risks (OECD, 2011). This ever evolving media landscape raises complex policy challenges but it is important that evidence is used to inform policies to safeguard children from harm and to protect and promote their welfare. The Child Wellbeing Research Centre was commissioned by the Department for Education, working closely with the UK Council for Child Internet Safety (UKCCIS) to undertake a piece of rapid response work to explore what is currently known about children's vulnerability to harm from online activity or interactions. The scoping review also complements work undertaken by NFER to explore children's online risks and safety (NFER, 2010).

Methodology

The OECD's typology of online risks to children suggests that children face: internet technology risks; consumer-related risks; and information and privacy and security risks (OECD, 2011). This scoping review focuses upon ascertaining what published literature reviews and key studies exploring *internet technology risks* (including *content risks*[3] and *contact risks*[4]) reveal about children's exposure and responses to online harm; and what is known about groups of children who might be more vulnerable to specific risks and harm. Given the extremely limited time available to undertake the review[5] the author emailed key experts from the UK Council for Child Internet Safety (UKCCIS) Evidence Group and a network of international child welfare experts[6] and requested that they identify key studies for review by the research team. The most current, methodologically robust studies and relevant studies (from an UK policy perspective) were then prioritised for scrutiny and content analysis to determine what data were available to identify the characteristics and circumstances of children and young people at greatest risk of harm from specific internet technology risks.

Studies were reviewed to explore:

[3] Illegal content; age-inappropriate or harmful content and advice.
[4] Cybergrooming, cyberbullying and cyberstallking and problematic content sharing.
[5] 12 days work conducted in July-August 2011
[6] International Research Network on Transitions to Adulthood for Young People Leaving Public Care (INTRAC).

- Levels of intended and unintended exposure to specific risks;
- Evidence on the impact or harm children suffer; and
- Evidence concerning child, parent and wider family and environmental factors that may influence children's online vulnerability.

Based on the findings the author has identified a number of gaps in the current knowledge base and suggested some priorities for future research to inform strategies to minimise the risks children and young people are exposed to via the Internet.

Defining vulnerability

At a basic level vulnerability can be defined as 'susceptibility to physical or emotional injury' although in practice concepts of harm and 'vulnerability' are rarely defined and tend to be implicitly understood (Millwood Hargrave and Livingstone, 2009). Cross and colleagues (2009) suggest that:

Vulnerable children and young people are not a self-contained or static group. Any child/young person may be vulnerable at some time depending on any one, or a combination of, the risks or challenging life events they face and their resilience (p.9).

This will be influenced not only by the child's developmental needs but also by their parent's capacity to meet these and wider family and environmental factors (Department of Health, 2000). In policy terms certain groups of children are identified as potentially more vulnerable than those in the general population, including, children living away from home, children in need (including those with disabilities), children who have run away from home and children missing from school (HM Government, 2010). Many of these groups include children who would also fall within the UKCISS Vulnerable Champions Group (2010) categorisations of vulnerability offline, that is, children who experience family difficulties and are brought up in chaotic family/home environments, children with disabilities, children with emotional/behavioural difficulties and children who experience 'exclusion of access'[7]. While it should not be automatically assumed that these vulnerabilities are transmitted online, in reviewing the literature, evidence of similarities and differences in the online experiences of these groups compared to their peers was sought.

[7] Operationalised by the group as children who experience 'system neglect' in the sense that they are unable to access services that are universally available to other children. They belong to the more marginalised groups within society such as travellers, asylum seekers, trafficked and migrant communities.

Contact risks

Cyberbullying

Exposure

In the EU Kids Online Survey ranking of risk incidence, cyberbullying featured fourth; affecting one in five or six teenagers[8] (Livingstone et al., 2011). Studies of the situation in the UK suggest that between 8-34% of young people have been cyberbullied[9] (Cross et al. 2009; Livingstone et al., 2010; Smith et al., 2008). Beatbullying's survey of 2,094 secondary school pupils in England found that 30% had been deliberately targeted, threatened or humiliated by an individual or a group through the use of mobile phones or the internet and one in 13 were persistently bullied[10] (Cross et al. 2009). It has also been identified that perpetrators may not necessarily intend to cause upset or distress; the impersonal nature of online communication can mean that what may be perceived as a joke by the sender may cause the recipient distress (Byron, 2008; Cross et al., 2009).

Vulnerable groups

Cross and colleagues (2009) found that *girls* were twice as likely to experience *persistent* cyberbullying than boys; 9% of the survey sample said they were the victim of ongoing bullying (see also Agaston et al., 2007; Gorzig, 2011; Smith et al., 2008; Rivers and Noret, 2009). The Beatbullying survey (Cross et al., 2009) also revealed that traditionally vulnerable groups were at greater risk of *persistent* cyberbullying than their peers. *Children with special educational needs* (*SEN)* and *children in receipt of free school meals (FSM)* were found to be at increased risk, as were certain *children from Black and minority ethnic (BME) groups* (16% SEN, 13% FSM, 9% 'non-vulnerable'). Nearly a quarter of young people classified as '*White other'*, which included *Gypsy-Roma, Traveller of Irish Heritage, European and East European* young people were persistently cyberbullied compared to 11% of White British young people. *Chinese young people and those of mixed ethnicity* were also found to be more vulnerable (15% and 19% respectively). It is also noteworthy that the majority of those who experienced persistent cyberbullying said that this was an extension of offline bullying; this is consistent with a wider body of evidence that bullying tends to originate in traditional settings and then migrates online (Hinduja and Patchin, 2009; Juvonen and Gross, 2008).

[8] Following giving out personal information (one in two); seeing pornography (one in four) and seeing violent or hateful content.
[9] The operational definitions employed vary.
[10] Defined as bullying that happens over a period of months or sometimes years.

Evidence on the impact or harm children suffer

Findings from the Second Youth Internet Survey in the US reveal that around one third of youth aged 10-17 who were harassed online indicated feeling very or extremely upset, and one-third feel at least one symptom of stress following the incident. Children aged 9-12 years old were significantly more likely to report being very distressed (Finkelhor et al, 2000, Ybarra et al., 2006). A higher proportion of girls reported being very upset compared to boys (36% and 26% respectively). Fifty percent of those from lower socio-economic groups also reported being very upset when they were cyberbullied[11] (Ybarra and Mitchell, 2007).

Increasingly it has been acknowledged that cyberbullying differs from traditional bullying because it is not limited by time and space, the perpetrator may not be known and materials may be shared, so a 'single incident can be experienced as multiple attacks' (Cross et al, 2009, p. 19, see also Dooley et al., 2009). Qualitative data suggests that in comparison with traditional forms of bullying, cyberbullying can evoke stronger negative feelings, fear and a sense of helplessness (Spears et al., 2009)[12]. There is also a growing body of evidence that demonstrates links between cyberbullying and school failure, depression, anxiety and psychological problems (Cross et al., 2009; Gorzig, 2011; Livingstone et al., 2010; Perren et al., 2010; Ybarra and Mitchell, 2004). Ybarra and Mitchell (2004) found that aggressor/targets[13] indicate the poorest psychological functioning and are likely to require services to meet their needs (see also Perren et al., 2010; Ybarra and Mitchell, 2007).

Meeting online contacts offline, sexual solicitation and grooming

Exposure

Findings from a nationally representative survey of youth in the US, published in 2000,[14] revealed that one in 10 youth received sexual solicitations of a distressing or aggressive nature; these solicitations were concentrated amongst older youth and 70% were targeted at young women (Finkelhor et al., 2000). Chat room users have also been found to be four times more likely to receive unwanted sexual solicitations (Mitchell, Finkelhor and Wolak, 2001). Research in the UK also suggests that working class and older young people use

[11] The study did not take into account the frequency or intensity of the bullying.

[12] A low number of children in the UK report bullying problems to their parents (European Commission, 2008) and more commonly seek the support of their friends or use online strategies (deleting messages or blocking the bully) (Livingstone et al., 2010).

[13] Young people involved in internet harassment both as aggressor and target ('bully-victim') were also more likely to report poor emotional bonds with their parents than other internet users (Ybarra and Mitchell, 2004).

[14] In another USA study 15% of young people reported being victims of unwanted sexual solicitation at least one in the past year and 3% received these at least once a month or more often (Ybarra, Espelage and Mitchell, 2007).

chat rooms most (Livingstone and Bober, 2005)[15]. However, evidence also suggests that the vast majority of solicitations are from other peers or young adults and in most cases are not designed to engage young people in offline encounters. Wolak and colleagues (2006) found that 69% of solicitations involved no attempt at offline contact. Research also reveals the relative infrequency with which online encounters with strangers result in the exchange of sexual pictures or offline meetings. Mitchell and colleagues (2007a) found that around one in 25 young people had received online requests for sexual pictures in a one year period. Of the 20% (n=300) of internet-using youth who reported online victimization, 45% (n=136) received requests for pictures from the perpetrator. Of these, 48% (n=65) received requests for sexual pictures; only one youth actually complied. Findings from the EU Kids Online Study found that 30% of the sample had made contact with people who they did not previously know offline but that it was rare for young people to meet new online contacts offline; 9% had done so and one in 10 of these had been bothered by the meeting[16].

Vulnerable groups

The National Juvenile Online Victimization study (N-Jov) in the US revealed that 99% of victims of internet initiated sex crimes against minors were aged 13-17 years old; 48% were aged 13-14 (Wolak, Mitchell and Finkelhor, 2003). The majority of victims are pubertal girls. Yet surveys also illustrate that many young people's media literacy increases with age and therefore young people's vulnerability cannot be explained simply by virtue of naivety or a lack of understanding of potential dangers (Lansdown, 2010). It is noteworthy that only 5% of offenders in the N-Jov study pretended to be teenagers and offenders rarely deceive victims about their sexual interest; most victims who meet offenders expect to engage in sexual activity (Wolak et al., 2008). Wolak and colleagues (2008) identify that the age profile of victims spans important developmental shifts and they concluded that:

The factors that make youths vulnerable to seduction by online molesters are complex and related to immaturity, inexperience, and the impulsiveness with which some youth respond to and explore normal sexual urges (Wolak et al., 2008, p.116).

[15] The UK Cybercrime Survey estimated that 850,000 cases of unwanted online sexual approaches were made in chat rooms in 2006 and 238 offences of meeting a child following sexual grooming recorded.

[16] The Irish Webwise survey found that 7% of young people reported offline meetings and of this group 24% reported that the person they met reported to be a child but was an adult (Webwise, 2006). The UK Children Go Online study (Livingstone and Bober, 2005) found that 8% of young people said they had met with someone whom they first met online; the vast majority told a friend or parent and, generally, went with a friend to the meeting. A European study (Larsson, 2003) reported a figure of 14%.

Others have also highlighted how young people may be more vulnerable in early adolescence as they become more sexually curious and experimental (Palmer, 2004; Peter et al., 2005). Livingstone and Helsper (2007) found that decisions to engage in relatively risky activities of making and meeting online friends seems to depend on a particular balance of online and offline characteristics; but those who were high sensation seekers[17] were four times more likely than those who were not sensation seekers to have met someone offline.

However, the Child Exploitation and Online Protection Centre's (CEOP) analysis suggests that victim typologies do not appear to conform to any specific stereotypical assumptions of vulnerability and that victims are a heterogeneous group (cited in UKCISS, 2010). Palmer (in UKCISS, 2010) also highlights that some victims of grooming she has worked with would not be perceived as vulnerable offline. In contrast, in the US there is growing evidence that suggests that certain factors may render specific groups of children more vulnerable than others. Analysis of data from the Second Youth Internet Safety Survey revealed that high-risk youth (defined as those who had experienced sexual, physical abuse, or high parent conflict in the past year) have unique patterns of internet use and an increased likelihood of being sexually solicited on the Internet (Wells and Mitchell, 2008). That is, compared to other young people those at high risk were more likely to be:

- Between the ages of 13 and 17 (almost twice as likely);
- African American (twice as likely); and
- Use the internet on a mobile phone (almost twice as likely).[18]

Those who talked to known friends online were less likely to also report concurrent high-risk experiences, whereas those who engaged in aggressive behaviour were about twice as likely to also report high risk experiences. Overall, although causal inference cannot be made,

[17] Slater and colleagues (2004) define 'sensation-seeking' as 'a dispositional tendency to seek out novelty and accept risk as a desirable source of arousal' (p.644).
[18] Beebe and colleagues (2004) identified heightened vulnerability amongst chat room users, with use of this forum being consistently, positively, and significantly associated with adverse psychological and environmental factors and engagement in risk behaviours among boys and girls. Factors included, among others, self esteem, sadness, feeling unable to discuss problems with parents, familial alcohol or drug use, physical abuse, sexual abuse.

controlling for other demographic and Internet use characteristics, those youth who reported receiving an aggressive sexual solicitation were 2.5 times as likely to indicate that they had experienced physical abuse, sexual abuse or high parental conflict (Wells and Mitchell, 2008, p. 5-6).

Lansdown (2010) in his summary of the existing research evidence suggests that:

Adolescents who have been victims of childhood abuse may be at particular risk because they are more likely to visit chat rooms, be solicited sexually online and offline, and receive aggressive sexual solicitations than their non-abused peers. The research identifies three possible pathways linking offline experiences and risks of online sexual solicitation:

- *Young people are more at risk in environments where there is a high level of conflict with parents leading to, for example, poor supervision or communication/poor emotional bonds with carers* (Ybarra and Mitchell, 2004).
- *Young people who have experienced sexual abuse or assault offline are particularly vulnerable to sexual exploitation online. They may for example, be more likely to exhibit sexualised behaviours and have poorer self esteem, which placed them at risk* (Mitchell, Ybarra and Finkelhor, 2007b).
- *Young people who have experienced parental conflict, or sexual or physical abuse may have pre-existing mental health problems which places them at high risk in the online environment* (Wells et al., 2006) (Lansdown, 2010, p.46).

The EU Safer Internet Project (ROBERT)(Ainsaar and Loof, 2011) outlines a range of individual and environmental risk factors associated with children and young people becoming victims of internet-related sexual abuse but is clear that these factors are complex and intertwined. It identifies online risk-taking behaviour as the most important and most studied of these risk factors:

It is apparent that the more young people are open to online sexual activities (especially flirting and having sexual conversations with strangers), the more probable it is that they may become victims of sexual harassment, solicitation or grooming (Soo and Bodanovskaya in Ainsaar and Loof, 2011, p. 49)

The European Online Grooming Project (Davidson et al. 2011) looks at the issue of online grooming from the perpetrators' perspective and early findings showed that online grooming

can only be fully understood through the nature of the interaction between the offender, the online environment and the young person and in particular the role of online disinhibition. Whilst safety messages appear to be getting through to the majority of resilient young people, there appears to be a group of young people susceptible to online grooming characterised by vulnerability factors that include; low self-esteem, loneliness, self-harming behaviour, family break-up, and incidence of ongoing sexual abuse by other offenders.

Evidence on the impact or harm children suffer

Research demonstrates the harm that childhood sexual abuse can have upon victims in both the immediate and longer term (see Choo, 2009). In-depth qualitative research with 14 young people who were actual or potential victims of online sexual predators when they were aged 12-14 (Palmer, in UKCISS, 2010) revealed a reluctance amongst young people to report abuse and often a denial about its occurrence; in part this appears to be connected to young people's 'complicity' because they were active participants in sexually explicit dialogue with perpetrators (see also Svedin in Ainsaar and Loof, 2011) and were often willing to be involved in sexual activity with their 'boyfriend'. During the counselling process young people reported feeling 'shame', 'feeling foolish' and 'broken hearted'. Quantitative research also highlights a range of health issues experienced by victims of online sexual exploitation, including a high prevalence of depression; 71% of females and 68% males were exhibiting signs of this. A range of other difficulties were apparent, including: parent-child conflict (83% of females; 81% of males); specific life stressors (34% of females; 45% of males) anxiety or phobias (45% of females; 55% of males); social withdrawal (35% of females; 39% of males); disciplinary problems in the home (47% of females; 58% of males); disciplinary problems at school (30% of females; 45% of males); sexual victimisation (56% of females; 55% of males); sexual acting out (35% of females; 32% of males) (Wells and Mitchell, 2007).

Content risks

Pornography

Exposure

In the US, 42% of a nationally representative sample of 1500 young people aged 10-17 reported being exposed to online pornography in the past year; of those 66% reported only unwanted exposure (Wolak et al., 2007). In contrast, the EU Kids Online study (Livingstone et al., 2010) found much lower rates of reported exposure to sexual images; 14% of 9-16 year olds across all countries said that they had seen images that were 'obviously sexual'. For example, showing naked people or people 'having sex' and just 2% of children reported having seen extreme content. Despite variations in reported exposure rates these studies

concluded that the majority of children and young people do not report having been upset by the experience.

Vulnerable groups

Wolak and colleagues' (2007) study of internet users aged 10-17 found that rates of 'unwanted' exposure to pornography were higher amongst teenagers, young people who reported being harassed or sexually solicited online or interpersonally victimised offline, and those who were borderline or clinically depressed. 'Wanted' exposure rates were higher for teenagers, those who talked online to unknown persons about sex, used the internet at friends' homes, or appeared to have a significant level of rule breaking behaviour.

Evidence on the impact or harm children suffer

Exploration of similarities and differences in the impact exposure had on different groups revealed that of the 11% of children in the UK who reported seeing sexual images online; 24% had been bothered by what they had seen. At an EU level the study found that among those who had been bothered by sexual images online, almost half were either fairly (28%) or very (16%) upset at what they saw. There was no significant difference between boys and girls as to how upset they were but younger children aged 9-12 were more likely to be very upset, as are children from lower SES homes (Livingstone et al., 2010, p. 58). Overall, however, Lansdown (2010) concludes that there is a lack of adequate research on the impact that unwanted or unexpected exposure to pornography has on children and young people.

Other harmful content or advice

EU Kids Online (Livingstone et al., 2011) found that seeing violent or hateful content was the third most common risk to young people and had been experienced by approximately one third of teenagers. Dooley and colleagues (2009) also highlight the large amount of violence-related content that is readily available on the internet. However, in spite of this, little research has been undertaken to explore the nature or level of violent content encountered, or to examine youth generated content (for example, self-produced videos uploaded to YouTube) (Dooley et al., 2009; ISTTF, 2008; Livingstone et al., 2011). Gaps in the research base have also been highlighted in respect of other problematic content including hateful or racist content, sites promoting self-harm, anorexia or suicide (Dooley et al., 2009; NFER, 2010).

Gaps in evidence base and recommendations for future research

The scoping review revealed and focused on a growing body of quantitative descriptive data on children and young people's access to the internet, their patterns of use, awareness of potential risks and the actions that are taken by users and their parents to safeguard children online. However, what is currently available provides at best a partial and somewhat US-centric picture of who may be particularly vulnerable to specific contact and content risks. Understanding of the complex interplay of factors that contribute to this is also limited (see also NFER, 2010). Further research is required to enhance understanding of:

- The characteristics and circumstances that render some young people more vulnerable than others;
- The interplay between risk and protective factors in influencing outcomes (with acknowledgement of the role and contribution that young people's behaviour may play in heightening risk); and
- Effective service responses to reduce the number of children suffering harm as a result of online activities.

In prioritising future research on these issues it is important that[19]:

- Decisions are informed by information on the numbers of children affected by specific risks as well as emerging information about the consequences for children's immediate and long term welfare;
- Consideration is given to engaging in cross-national studies to avoid difficulties associated with the use of different definitions and methodological approaches. Such studies also facilitate understanding of common issues and challenges and identification of what may be country and/or context specific;
- Efforts are made to establish common operational definitions for key terms and concepts to maximise opportunities for shared learning and comparison of findings within and between countries;
- Consideration is given to investing in longitudinal studies using mixed methods (there is scope to include the use of peer research methodology to minimise power imbalances between participants and researchers. This has been successfully employed in research with looked after children (Munro et al., 2011);
- In-depth qualitative research is undertaken that facilitates a more nuanced understanding of how children and young people's life experiences (within the wider

[19] These recommendations are broadly in line with the conclusions of other studies (see for example, Dooley et al., 2009; ISTFF, 2008; Livingstone et al., 2011; Livingstone and Haddon, 2008)

family and environmental context) shape their online decision making and the impact of online experiences on their wellbeing;

- That research is multi-disciplinary (and that some studies include developmental psychologists to explore possible links between the onset of puberty, risk taking and harm);
- The views and experiences of frontline-practitioners (including police, health professionals and social workers) are sought to explore both their experiences of working with victims and/or perpetrators and their knowledge and the strengths and limitations in current service responses;
- Research explores other digital technologies available, including for example, smart phones, tablets and related Internet applications, video games;
- The views and experiences of younger children are explored more fully given their increasing internet use; and
- Knowledge gaps including (but not exclusively) challenging content (self-harm, suicide, pro-anorexia, hate/racism) are addressed (see also NFER, 2010).

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